



BID NUMBER: LDPWRI-B/20309

APPOINTMENT OF A CONTRACTOR FOR THE DEMOLITIONS OF ADMIN BLOCK, 14 CLASSROOMS AND TANK HOUSE, RENOVATIONS TO 28 ENVIROLOO TOILETS AND THE CONSTRUCTION OF MEDIUM ADMIN, 17 CLASSROOMS, 3 GRADE R CLASSROOMS AND 1 x 4 SEATER WATERBORNE TOILETS AT VALLAMBROSA PRIMARY SCHOOL IN MOPANI DISTRICT

for

LIMPOPO DEPARTMENT OF EDUCATION (LDOE),

LIMPOPO PROVINCE

FRAMEWORK CATEGORY A (7GB AND ABOVE)

Issued by:

Limpopo Department of Public Works, Roads and Infrastructure
Works Towers Building
43 Church Street
Polokwane
0700

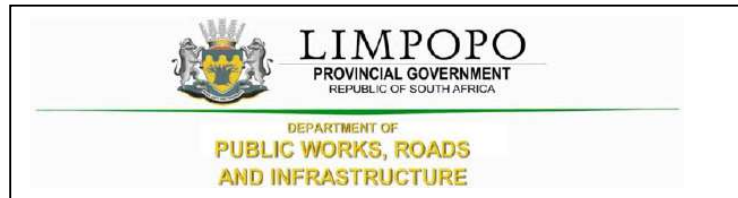
Contact Person: General Queries

Name : Mr NJ Motsopye,
Tel No. : 015 284 7126
Email : motsopyen@dpw.limpopo.gov.za

Technical: Technical Queries

Name : Mr K Modjadji
Tel No. : 083 673 5436
Email : ModjadjiM@dpw.limpopo.gov.za

Name of the Bidder :



CONTENTS

THE TENDER

Part T1: Tendering procedures

T1.1 Tender notice and invitation to tender

T1.2 Tender data

Part T2: Returnable documents

T2.1 List of returnable documents

T2.2 Returnable schedules

THE CONTRACT

Part C1: Agreements and Contract data

C1.1 Form of offer and acceptance

C1.2 Contract data

Joint Venture Agreement (If Applicable)

Part C2: Pricing data

C2.1 Part 1 - Pricing Instructions

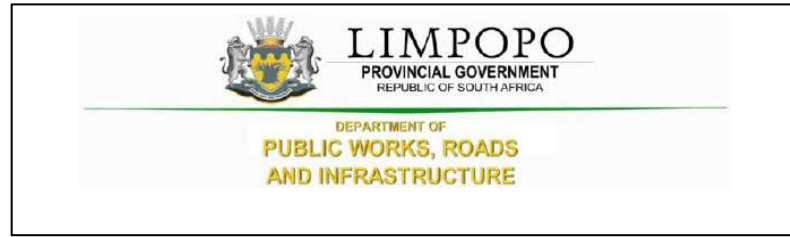
C2.2 Part 2 - Bills of Quantities

Part C3: Scope of Works

C3.1 Special Notes to Bidders

C3.2 OHS Specifications

Part C4 Drawings



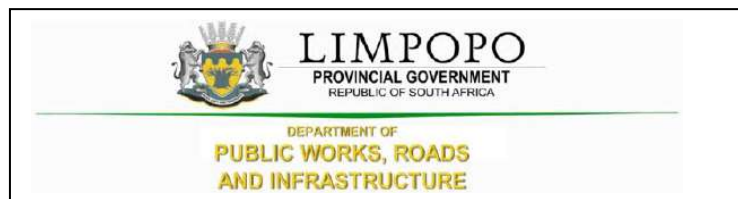
PART T1: TENDERING PROCEDURE

T1.1 Tender Notice and Invitation to Tender

The Limpopo Department of Public Works, Roads and Infrastructure invites tenderers from contractors appointed on the framework agreement on category A for **APPOINTMENT OF A CONTRACTOR FOR THE DEMOLITIONS OF ADMIN BLOCK, 14 CLASSROOMS AND TANK HOUSE, RENOVATIONS TO 28 ENVIROLOO TOILETS AND THE CONSTRUCTION OF MEDIUM ADMIN, 17 CLASSROOMS, 3 GRADE R CLASSROOMS AND 1 x 4 SEATER WATERBORNE TOILETS AT VALLAMBROSA PRIMARY SCHOOL IN MOPANI DISTRICT FOR LIMPOPO DEPARTMENT OF EDUCATION (LDOE)** for a period of 20 months. It is estimated that tenderers must have a CIDB contractor grading designation of **7 GB** or higher.

The conditions of the CIDB Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts **Gazette Notice No. 36190 of 25 February 2013** will be applicable on this project

Project Name	APPOINTMENT OF A CONTRACTOR FOR THE DEMOLITIONS OF ADMIN BLOCK, 14 CLASSROOMS AND TANK HOUSE, RENOVATIONS TO 28 ENVIROLOO TOILETS AND THE CONSTRUCTION OF MEDIUM ADMIN, 17 CLASSROOMS, 3 GRADE R CLASSROOMS AND 1 x 4 SEATER WATERBORNE TOILETS AT VALLAMBROSA PRIMARY SCHOOL IN MOPANI DISTRICT FOR LIMPOPO DEPARTMENT OF EDUCATION (LDOE) FOR A PERIOD OF 20 MONTHS.	
Tender Number	LDPWRI- B/20309	
Tender documents availability	Limpopo Department of Public Works, Roads and Infrastructure website	
Address for submission of tenders	DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE. Physical address: Corner River and Blaauwberg Streets, Ladanna, 0699.	
Closing date of the tender	As per Tender invite	
Closing time of the tender	As per Tender invite	
Compulsory briefing meeting (<i>Tenderers must sign the attendance register in the name of the tendering entity. Addenda (if any) will be issued only to those tendering entities appearing on the attendance register</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
	Meeting venue	As per Tender invite
	Date	As per Tender invite
	Time:	As per Tender invite
Evaluation criteria	<ol style="list-style-type: none"> 1. Compliance with mandatory or compulsory requirements 2. Risk assessment on current projects 3. Price 4. Preference 	
Mandatory or Compulsory Requirements (<i>failure to submit or comply with these requirements will lead to automatic disqualification</i>)	Only tenderers who are appointed on category A registered with the Construction Industry Development Board (CIDB) with designation of 7 GB or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations are eligible to have their tenders evaluated	
	Priced Bills of Quantities	
	SBD 1.	
	Declaration on the status of Administration compliance.	
	Completed and signed Form of Offer	



T1.2 Tender Data

Clause number	Tender Data
	<p>The conditions of tender are the Standard Conditions of Tender as contained in Annex C of Board Notice 423 of 2019 in Government Gazette No. 42622 of 08 August 2019, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. (See www.cidb.org.za) which are reproduced without amendment or alteration for the convenience of tenderers as an Annexure to this Tender Data.</p> <p>The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.</p> <p>The contractor shall achieve in the performance of the contract the Contract Participation Goals (CPG) relating to the engagement of targeted enterprises as established in the CIDB Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts Gazette Notice No. 36190 of 25 February 2013. In this case, contractor shall provide a minimum Contract Participation Goal (CPG) of 5% of the total project value and develop targeted enterprises stated under C3 of this document.</p> <p>The following variations, amendments and additions to the Standard Conditions of Tender as set out in the Tender Data below shall apply to this tender. Add the following to clauses in Standard Conditions of Tender:</p>
C.1.1	The Employer is the Department of Public Works, Roads and Infrastructure

C.1.2	<p>The Tender</p> <p>Part T1: Tendering procedures T1.1 Tender notice and invitation to tender T1.2 Tender data</p> <p>Part T2: Returnable documents T2.1 List of returnable documents T2.2 Returnable schedules</p> <p>The Contract Part C1: Agreements and contract data C1.1 Form of offer and acceptance C1.2 Contract data C1.3 Joint Venture Agreement (If Applicable)</p> <p>The Contract Part C2: Pricing data C2.1 Pricing instructions C2.2 Bills of Quantities</p> <p>Part 3: Scope of work C3.1 Special Notes to Bidders C3.2 OHS Specifications</p> <p>Part 4: Site information C4 Drawings</p>
C.1.4	<p>The employer's representative is:</p> <p>Name : Mr K Modjadji Tel No. : 083 673 5436 Email : ModjadjiM@dpw.limpopo.gov.za</p> <p>However, all communications related to this bid should be directed to the persons indicated under Enquires on this tender document.</p> <p>Attention is also drawn to the fact that verbal information, given by the Employer's agent during site visits/clarification meetings or at any other time prior to the award of the Contract, will not be regarded as binding on the Employer. Only information issued formally by the Employer in writing to Tenderers will be regarded as amending the Tender Documents.</p>
C.1.5	The employer reserve to cancel the tender prior to the award of the tender.
C1.6.2	A competitive negotiation procedure will not be followed.
C1.6.3	A two-stage system will not be followed.
C.2.1	<p>Eligibility in respect of CIDB grading</p> <p>Only tenderers who are appointed on framework agreement category A and registered with the Construction Industry Development Board (CIDB) with designation of 7 GB or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, are eligible to have their tenders evaluated.</p>
C2.2	<p>Cost of tendering</p> <p>The tenderer accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.</p>

C.2.7	<p>Compulsory site briefing</p> <p>A compulsory briefing meeting will be held as per Tender invite</p> <p>Tenderers must sign the attendance list in the name of the tendering entity. Addenda (if any) will be issued only to those tendering entities appearing on the attendance list.</p>
C.2.11	<p>Alterations to the documents</p> <p>Bidders are required to not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations</p>
C.2.12	<p>Alternative tender offer</p> <p>No alternative tender offer is permitted in this tender.</p>
C.2.13.2	<p>Replace sub-clause C.2.13.2 with the following;</p> <p>Return all returnable documents to the employer after completing them in their entirety by writing in non-erasable black ink (Black pen)</p>
C.2.13.3	<p>Parts of each tender offer communicated on paper shall be submitted as an original</p>
C.2.13.4	<p>The tender shall be signed by a person duly authorized to do so.</p>
C.2.13.5	<p>The employer's details and address for delivery of tender offers and identification details that are to be shown on each tender offer package are:</p> <p>Location of tender box: DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE. Physical address: Corner River and Blaauwberg Streets, Ladanna, 0699 Identification details: Sealed Tender with Tender reference number, Title of Tender and the closing date and time of the tender.</p>
C.2.15.1	<p>The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender. Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.</p>
C.2.16.1	<p>The tender offer validity period is 12 weeks or 90 days.</p>
C.2.16.2	<p>The tender accepts that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2. 16.1 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).</p>
C.3.1	<p>The tenderer is required to indicate how they claim points for each preference point system and attached relevant supporting documents. The specific goals for claiming of preference points include the following:</p> <ul style="list-style-type: none"> - Persons who had no franchise in national elections prior to 1983 and 1993 - Women - Disabled persons - Promotion of SMMEs - Enterprises located in Limpopo Province - Promotion of youth - South African owned enterprises

	<p>CIDB Grading Certificate</p> <p>Tenders are required to provide proof of registration with the CIDB register of contractors indicating the category of registration, grading as well as the CRS number of the tenderer.</p> <p>Letter of Good Standing</p> <p>Tenderer's are required to submit, bound with the tender submission, a letter of good standing from the compensation commissioner indicating that the bidder is in good standing.</p>
C3.2	<p>Notwithstanding any requests for confirmation of receipt of Addenda issued, the tenderer shall be deemed to have received such addenda if the employer can show proof of transmission thereof (or a notice in respect thereof) via electronic mail, facsimile or registered post.</p>
C.3.4.1	<p>Tenders will not be opened immediately after the closing time for tenders.</p>
C.3.11	<p>The tenderers will be evaluated in four stages</p> <ul style="list-style-type: none"> (i) Stage 1: Compliance with mandatory requirements as stated in Part T1.1 (ii) Stage 2: Risk assessment on current projects (iii) Stage 3: Price (iv) Stage 4: Preference <p>The technical capacity (functionality) of the contractors will not be evaluated any further during evaluation of the RFQ. However, the contractors will be required to declare the status of their key staff and any administrative compliance. In cases where there are changes in the key staff, the contractor should provide CVs and qualifications of the new staff to LDPWR&I. The new staff should have similar skills, qualifications and experience as the staff submitted during tender. Similarly, the contractors will be expected to provide an update on any changes in their administrative compliances – and should submit the required SBD document/forms in such cases.</p> <p>The award will only be issued to contractors with valid Tax Clearance certificates, active CIDB grading and the contractor who meets all the legislative requirement – this shall be verified by SCM in line with the departmental SCM Policy.</p> <p>The total value of current projects for a contractor under consideration cannot exceed twice the maximum value of their relevant CIDB grade.¹</p> <ul style="list-style-type: none"> a) Stage 1: Administrative Compliance: The Compliance or compulsory documents and returnables are detailed in Section T.2.1 of this tender document. Failure to submit, complete or comply with these requirements will lead to automatic disqualification. b) Stage 2: Risk assessment on current projects <p>The total value of current projects for a contractor under consideration cannot exceed twice the maximum value of their relevant CIDB grade.</p>

Stage 3 and 4:

The procedure for final evaluation of responsive tenders is Method 2 (Financial offer and preference). The total number of tender evaluation points (T_{EV}) shall be determined in accordance with the following formula.

$$T_{EV} = N_{FO} + N_P$$

- a) N_{FO} is the number of tender evaluation points awarded for the financial offer made. The score for financial offer is calculated using the following formula:

$$P = A * \left(1 - \frac{(P_o - P_m)}{P_m}\right)$$

Where:

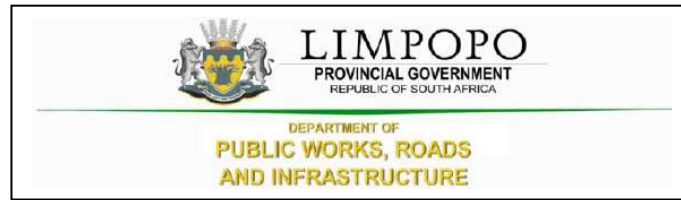
A is 80 since the estimated financial value of works inclusive of VAT is equals or is less than R 50,000,000.00.

P is the points awarded to the bid under consideration

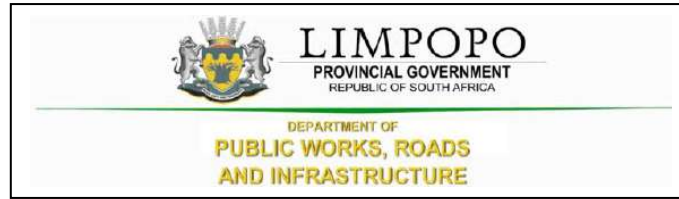
P_m is the lowest Comparative bid price

P_o is the comparative price under consideration

- b) N_P is the number of tender evaluation points awarded for preferences claimed in accordance with the Preferencing Schedule in 3.18



PART T2: RETURNABLE DOCUMENTS



T2.1 : LIST OF RETURNABLE DOCUMENTS

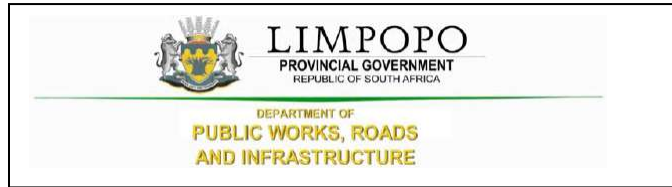
The following documents will form part of the documents submitted to the Contractors as part of the Request for Proposals:

- 2.1 Fully completed Form of Offer
- 2.2 Bills of Quantities
- 2.3 Record of Addenda to tender documents (if applicable)
- 2.4 Proposed amendments and qualifications (if applicable)
- 2.5 Proof of specific goal for award of the preference points as determined on the Request for Proposal
- 2.6 SBD 1.
- 2.7 SBD 6.1
- 2.8 Declaration on the status of Administration compliance.
- 2.9 CIDB grading certificate
- 2.10 CSD Report
- 2.11 Tax clearance certificate
- 2.12 Declaration of current projects

Failure by the service provider to submit or complete item 2.1, 2.2, 2.3, 2.4, 2.6, 2.8, and 2.12 will render their proposal not responsive and will not be considered.

Failure by the service provider to fully complete SBD 6.1 item 4.3 to 4.6 (Declaration with regard to company/firm) will render their proposal not responsive and will not be considered.

The bidder should also not appear on the National Treasury's list of black listed entities.



T 2.2: RETURNABLE SCHEDULE

	Document Name	Returnable document
1.	Fully completed Form of Offer	<input type="checkbox"/> Yes <input type="checkbox"/> No
2.	Priced Bills of Quantities	<input type="checkbox"/> Yes <input type="checkbox"/> No
3.	Record of Addenda to tender documents (if applicable)	<input type="checkbox"/> Yes <input type="checkbox"/> No
4.	Proposed amendments and qualifications (if applicable)	<input type="checkbox"/> Yes <input type="checkbox"/> No
5.	Proof of specific goals for award of the preference points	<input type="checkbox"/> Yes <input type="checkbox"/> No
6.	SBD 1. Invitation to Tender	<input type="checkbox"/> Yes <input type="checkbox"/> No
7.	SBD 6.1: Reference Points claim form in terms of the Preferential Procurement Regulations 2022 or amended	<input type="checkbox"/> Yes <input type="checkbox"/> No
8.	Declaration on the status of Administration compliance.	<input type="checkbox"/> Yes <input type="checkbox"/> No
9.	Proof of CIDB class grading: 7GB or higher.	<input type="checkbox"/> Yes <input type="checkbox"/> No
10.	CSD Summary report	<input type="checkbox"/> Yes <input type="checkbox"/> No
11.	Original tax clearance certificate or tax pin	<input type="checkbox"/> Yes <input type="checkbox"/> No
12.	Declaration of current projects	<input type="checkbox"/> Yes <input type="checkbox"/> No



Declaration on the status of administrative compliance

Please indicate, by circling either **Yes** or **No**, whether the administrative information submitted with the original framework tender documents have changed or not. If yes, kindly provide the particulars below with any supporting documents.

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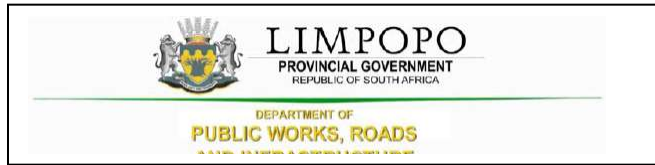
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.....

Signed _____ Date _____

Name _____ Position _____

Enterprise _____



Record of Addenda to tender documents

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

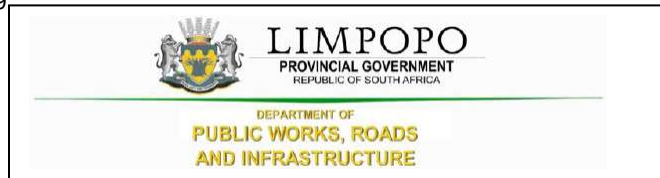
	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signed Date

Name Position

Tenderer



Proposed amendments and qualifications

The Tenderer should record any deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such deviations and qualifications in a covering letter to his tender and refer ence such letter in this schedule.

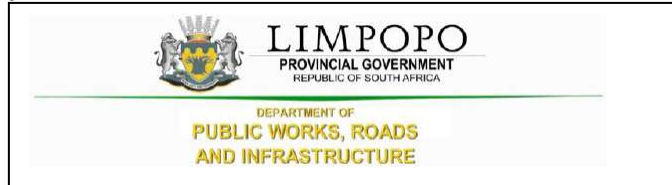
The Tenderer's attention is drawn to clause 5.8 of SANS 10845-3 regarding the employer's handling of material deviations and qualifications.

Page	Clause or item	Proposal

Signed _____ Date _____

Name _____ Position _____

Tenderer _____



SBD 1

PART A: INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE LIMPOPO DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE

BID NUMBER:	LDPWRI-B/20309	CLOSING DATE	As per Tender Advert	CLOSING TIME:	As per Tender Advert
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DESCRIPTION **REFURBISHMENT AND ADDITIONS AT VALLAMBROSA PRIMARY SCHOOL IN MOPANI DISTRICT**

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)

DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE.

Physical address: Corner River and Blaauwberg Streets, Ladanna, 0699.

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO

CONTACT PERSON	Mr. NJ Motsopye				
TELEPHONE NUMBER	0152847126	E-MAIL ADDRESS	motsopyen@dpw.limpopo.gov.za		
CONTACT PERSON (TECHNICAL)	Mr. K Modjadji				
TELEPHONE NUMBER	083 673 5436	E-MAIL ADDRESS	ModjadjiM@dpw.limpopo.gov.za		

SUPPLIER INFORMATION

NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER THE QUESTIONNAIRE BELOW]
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QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	<input type="checkbox"/> YES <input type="checkbox"/> NO
DOES THE ENTITY HAVE A BRANCH IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	<input type="checkbox"/> YES <input type="checkbox"/> NO

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.

PART B: TERMS AND CONDITIONS FOR BIDDING

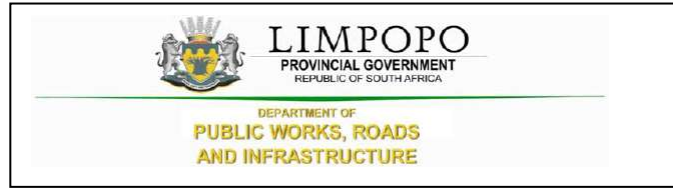
1. BID SUBMISSION:
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT , 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM.
2. TAX COMPLIANCE REQUIREMENTS
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID .

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:
(Proof of authority must be submitted e.g. company resolution)

DATE:



SBD 6.1

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 To be completed by the organ of state

(delete whichever is not applicable for this tender).

- a) ~~The applicable preference point system for this tender is the 90/10 preference point system.~~
- b) The applicable preference point system for this tender is the 80/20 preference point system.
- c) Either the 90/10 or 80/20 preference point system will be applicable in this tender. The lowest/highest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

CONTRACT No. LDPWRI-B/20309

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

$$Ps = 80 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right) \text{ or } Ps = 90 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)$$

Where

- Ps = Points scored for price of tender under consideration
- Pt = Price of tender under consideration
- Pmin = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

$$Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right) \text{ or } Ps = 90 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$$

Where

- Ps = Points scored for price of tender under consideration
- Pt = Price of tender under consideration
- Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

4.3. (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or

CONTRACT No. LDPWRI-B/20309

(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,
then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Persons who had no franchise in national elections prior to 1983 and 1993 (Attach certified copy of South African ID as proof)	2	6		
Women (Attach Director's certified copy of South African ID as proof + company registration documents)	1	3		
Disabled persons (Attach letter from a Health Professional as proof)	1	2		
Promotion of SMMEs (Attach latest financial statement as proof)	1	2		
Enterprises located in Limpopo Province (Attach proof of address / Lease agreement as proof)	2	4		
Promotion of youth (Attach Director's certified copy of South African ID as proof)	1	1		
South African owned enterprises (Attach Director's certified copy of South African ID as proof + company registration documents)	2	2		

DECLARATION WITH REGARD TO COMPANY/FIRM

4.4. Name of company/firm.....

4.5. Company registration number:

4.6. TYPE OF COMPANY/ FIRM

- Partnership/Joint Venture / Consortium
- One-person business/sole propriety
- Close corporation
- Public Company
- Personal Liability Company
- (Pty) Limited
- Non-Profit Company
- State Owned Company

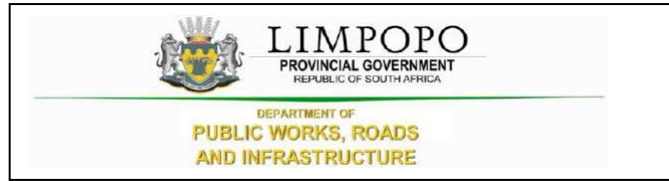
[TICK APPLICABLE BOX]

4.7. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person’s conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and

- (e) forward the matter for criminal prosecution, if deemed necessary.

.....	
SIGNATURE(S) OF TENDERER(S)	
SURNAME AND NAME:
DATE:
ADDRESS:



DECLARATION OF CURRENT PROJECTS

Current value refers to current value of projects for both General Building (GB) and Civil Engineering (CE).

Please list the current projects which your company is busy executing in the table below.

If no projects at the moment the tender must indicate/write on this table.

Misrepresentation of facts will render your bid non-responsive.

Table 1 List of current projects executed by the bidder

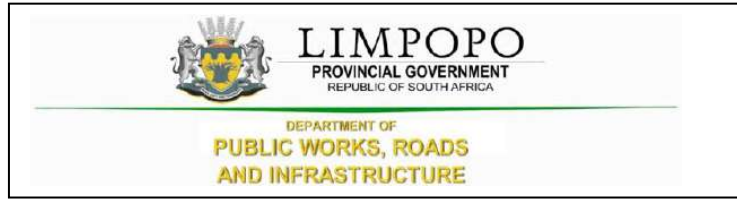
1. Do you have the current projects being executed Yes/No?
2. Please note that it is compulsory to answer the question above and if the answer is yes, complete the table below. Failure by the service provider/tenderer to answer the question above or complete the table below will render their proposal not responsive and will not be considered.

Project Description	Project Value	Start date	Planned end date	Client Name	Contact Person number

Signed Date

Name Position

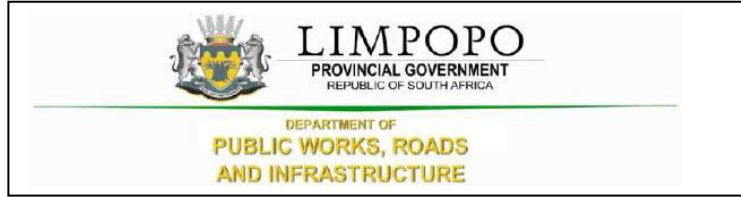
Enterprise



THE CONTRACT



PART C1: AGREEMENT AND CONTRACT DATA



C1.1. FORM OF OFFER AND ACCEPTANCE

Offer

The employer, identified in the acceptance signature block, has solicited offers to enter into a contract in respect of the following works:

REFURBISHMENT AND ADDITIONS AT VALLAMBROSA PRIMARY SCHOOL IN MOPANI DISTRICT

The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the tender schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorized, signing this part of the Form of Offer and Acceptance, the tenderer offers to perform all of the obligations and liabilities of the contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

THE OFFERED TOTAL OF THE PRICE INCLUSIVE OF VALUE ADDED TAX IS (CONTRACT PRICE)

Rand (in words); R.....

.....

(in figures) R.....

This offer may be accepted by the employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the tender data, whereupon the tenderer becomes the party named as the contractor in the conditions of contract identified in the contract data.

Signature(s) -----

Name(s) -----

Capacity -----

For the tenderer: -----

Name & signature of witness -----

Date

Acceptance (To be completed by the employer – not the bidder)

By signing this part of this Form of Offer and Acceptance, the *Employer* identified below accepts the tenderer's Offer. In consideration thereof, the *Employer* shall pay the Consultant the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the *Employer* and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the *Employer* during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the *Employer's* agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the tenderer (now *Consultant*) within five working days of the date of such receipt notifies the *Employer* in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

For the Employer

Signature

Name

Capacity

Name and address of organization

Signature and Name of Witness

Signature

Name

Capacity

Schedule of Deviations

- 1 Subject
- Details
-
-
-

- 2 Subject
- Details
-
-
-

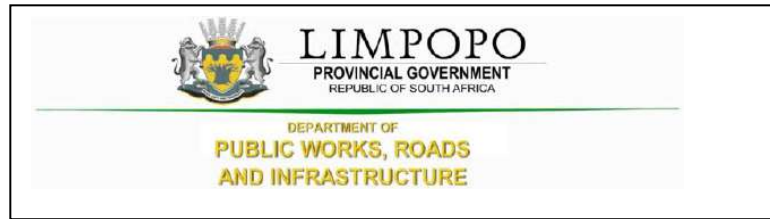
- 3 Subject
- Details
-
-
-

- 4 Subject
- Details
-
-
-

By the duly authorised representatives signing this agreement, the *Employer* and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the returnable schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Tenderer and the *Employer* during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

.....



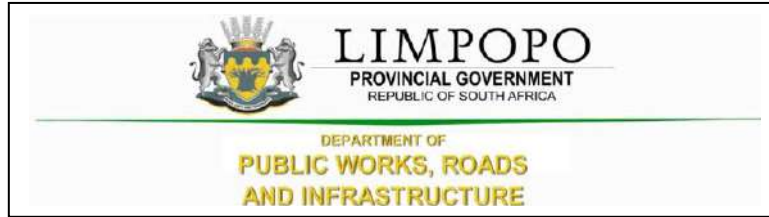
C2.1 CONTRACTDATA

The Conditions of Contract are clauses 1 to 41 of the **JBCC Series 2000 Principal Building Agreement (Edition 4.1 of March 2005)** published by the Joint Building Contracts Committee.

Copies of these conditions of contract may be obtained from the Association of South African Quantity Surveyors (011-3154140), Master Builders Association (011-205-9000; 057- 3526269) South African Association of Consulting Engineers (011-4632022) or South African Institute of Architects (051-4474909; 011-4860684; 053-8312003;)

The JBCC Principal Building Agreement makes several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities, and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the JBCC Principal Building Agreement.

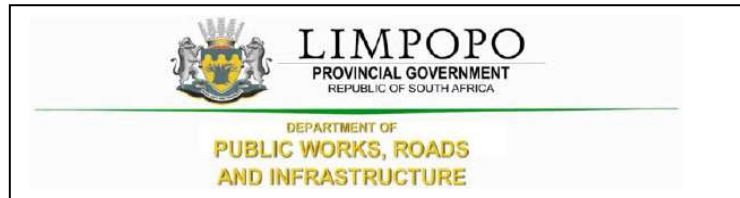
The contractor shall achieve in the performance of the contract the Contract Participation Goals (CPG) relating to the engagement of targeted enterprises as established in the **CIDB Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts Gazette Notice No. 36190 of 25 February 2013.**"



PART C2: PRICING DATA

C2.1 Pricing instruction

- The Bills of Quantities have been drawn up in accordance with the Standard System of Measuring Building Work in accordance with the provisions of the Model Bills of Quantities or Electrical Work, published by the South African Association of Quantity Surveyors, (July, 2005).
- The agreement is under the JBCC N/S Subcontractor Agreement for use with the JBCC PBA (Edition 4.1 code 2101 March 2005) form of contract with Preliminaries (Code 2103 May 2005) incorporating the State Provisions of cl 41.0.
- It will be assumed that prices included in the Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders.
- The prices and rates in these Bills of Quantities are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices will be used as a basis for assessment of payment for additional work that may have to be carried out.
- An item against which no price is entered will be considered to be covered by the other prices or rates in the Bills of Quantities. A single lump sum will apply should a number of items be grouped together for pricing purposes.
- The Contract Data and the standard form of contract referenced therein must be studied for the full extent and meaning of each and every clause set out in Section 1 (Preliminaries) of the Bills of Quantities.
- The Bills of Quantities is not intended for the ordering of materials. Any ordering of materials, based on the Bills of Quantities, is at the Contractor's risk.
- The bidder shall set aside a minimum of 5 % of the project value for sub-contractor/s and determine the amount to be paid for the Contract Participation Goal (CPG).



PART C2.2: BILLS OF QUANTITIES

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Item No	Quantity	Rate	Amount
<u>SECTION NO. 1</u>			
<u>BILL NO. 1</u>			
<u>PRELIMINARIES</u>			
<u>NOTE</u>			
i) The agreement is to be the JBCC Series 2000 Principal Building Agreement (Edition 4.1) prepared by the Joint Building Contracts Committee, March 2005			
ii) The preliminaries are to be the JBCC Series 2000 Preliminaries prepared by the Joint Building Contracts Committee, March 2005 edition and shall be deemed to be incorporated herein			
iv) Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading			
iii) Tenderers are referred to the abovementioned documents for the full intent and meaning of each clause thereof (hereinafter referred to by heading and clause number only) for which such allowance must be made as may be considered necessary			
v) Where any item is not relevant to this specific contract such item is marked N/A (signifying "not applicable")			
vi) If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories, where "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value and "T" denotes an amount in proportion to time			
Carried Forward			R
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

Brought Forward

R

vii) Any reference to the words "Tender" or "Tenderer" herein and/or in any other documentation shall be construed to have the same meaning as the words "Bid" or "Bidder"

SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT

Definitions (A1)

1 Definitions and interpretation (clause 1)

Clause 1.1 Definition of "**Agreement**" is amended by replacing it with the following:

Agreement means the agreement arising from the signing of the Form of Offer and Acceptance by the parties.

Clause 1.1 Definition of "**Bills of Quantities**" is amended by adding the following:

"...and the Pricing Instructions contained in the Pricing Data" after the word measuring system.

Clause 1.1 Definition of "**Contract Documents**" is amended by adding the following:

".....this Agreement and all other documents referenced therein.." after the word this document

Clause 1.1 Definition of "**Contract Drawings**" is amended by replacing it with the following:

Contract Drawings means the drawings upon which the tender was accepted and used in preparing the bills of quantities and are available for viewing at the offices of the Principal Agent at the time of tender

Clause 1.1 Definition of "**Contract Sum**" is amended by replacing it with the following:

Contract Sum means the total of prices in the Form of Offer and Acceptance.

Carried Forward

R

Section No. 1
 PRELIMINARIES
 Bill No. 1
 PRELIMINARIES
CLUSTER G

Brought Forward		R	
<p>Clause 1.1 Definition of "Schedule" is amended by adding the following:</p> <p>".....and in the Contract Data". at the end on the sentence ending with agreement</p> <p>Clause 1.1 Definition of "Commencement Date" is added:</p> <p>"Commencement date" means the date that the agreement, made in terms of the Form of Offer and Acceptance, comes into effect</p> <p>Clause 1.1 Definition of "Construction Guarantee" is amended by replacing it with the following:</p> <p>"Construction guarantee" means guarantee at call obtained by the contractor from an institution approved by the employer in terms of the employer's construction guarantee form as selected in the schedule</p> <p>Clause 1.1 Definition of "Construction Period" is amended by replacing it with the following:</p> <p>"Construction period" means the period commencing on the commencement date and ending on the date of practical completion</p> <p>Clause 1.1 Definition of "Corrupt Practice" is added:</p> <p>"Corrupt Practice" means the offering , giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution</p> <p>Clause 1.1 Definition of "Fraudulent Practice" is added:</p> <p>"Fraudulent Practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any tenderer and includes collusive practice among tenderers (prior to or after the tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the tenderer of the benefits of free and open</p>			
Carried Forward		R	
<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>			

Brought Forward				R
competition.				
Clause 1.1 Definition of " Interest " is amended by replacing it with the following:				
" Interest " means the interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be the rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999).				
Clause 1.1 Definition of " Principal Agent " is amended by replacing it with the following:				
" Principal Agent " means the person or entity appointed by the employer and named in the schedule . In the event of a principal agent not being appointed, then all the duties and obligations of a principal agent as detailed in the agreement shall be fulfilled by a representative of the employer as named in the schedule .				
Clause 1.1 Definition of " Security " is amended by replacing it with the following:				
Security " means the form of security provided by the employer or contractor , as stated in the schedule , from which the contractor or employer may recover expense or loss				
1.6 Any notice given may be delivered by hand, sent by prepaid registered post or telefax. Notice shall be presumed to have been duly given when:				
1.6.4 No clause				
	Fixed	Item		
	Value Related	Item		
Carried Forward				R
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	Time Related	Item		
	<u>Objective and Preparation (A2 - A14)</u>			
2	Offer, acceptance and performance (clause 2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
3	Documents (clause 3)			
	Clause 3.2.1 is amended by replacing "14.1" with "14.0"			
	Clause 3.7 is amended by the addition of the following:			
	The contractor shall supply and keep a copy of the JBCC Series 2000 Principal Building Agreement and Preliminaries applicable to this contract on the site , to which the employer, principal agent and agents shall have access at all times.			
	Clause 3.10 is amended by replacing the second reference to " principal agent " with the word " employer "			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
4	Design responsibility (clause 4)			
	Contractor is permitted to design the prefabricated building to the satisfaction or written approval from the client			
	Fixed	Item		
	Value Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	Time Related	Item		
5	Employer's agents (clause 5)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
6	Contractor's site representative (clause 6)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
7	Compliance with laws and regulations (clause 7)			
	Note: A separate clause has been included in Section C: Specific Preliminaries of the bills of quantities for the contractor to have the opportunity to price for all the requirements of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
8	Works risk (clause 8)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward		R	
9	<p>Indemnities (clause 9)</p> <p>Clause 9.0 is amended by adding Clause 9.1.4:</p> <p>The contractor indemnifies and holds harmless the employer against all liability, losses, claims, damages, penalties, actions, proceedings or judgments (collectively referred to as "Losses") arising from any infringement of letters, patent design, trademark, name, copyright or other protected rights in respect of any machine, plant, work, materials, thing, system or method of using, fixing, working or arrangement used or fixed or supplied by the contractor, but such indemnity shall not cover any use of the equipment of part thereof otherwise than in accordance with the provisions of the specification. All payments and royalties payable in one sum or by installments or otherwise shall be included by the contractor in the price and shall be paid by him to those to whom they may be payable. The contractor shall reimburse the employer for all legal and other costs and expenses, including without limitation attorney's fees on attorney-client scale incurred by the employer in connection with investigation, defending or settling any Losses in connection with pending or threatening litigation in which the employer is a party.</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>			
10	<p>Works insurances (clause 10)</p> <p>Clause 10.0 is amended by the addition of the following clauses</p> <p>10.5 Damage to the Works</p> <p>(a) Without in any way limiting the contractor's obligations in terms of the contract, the contractor shall bear the full risk of damage to and/or destruction of the works by whatever cause during construction of the works and hereby indemnifies and holds harmless the</p>	<p>Item</p> <p>Item</p> <p>Item</p>		
	Carried Forward		R	
	<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>			

<p style="text-align: center;">Brought Forward</p> <p>employer against any such damage. The contractor shall take such precautions and security measures and other steps for the protection and security of the works as the contractor may deem necessary</p> <p>b) The contractor shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the works and to rebuild, restore, replace and/or repair the works</p> <p>(c) The employer shall carry the risk of damage to or destruction of the works and material paid for by the employer that is the result of the excepted risks as set out in 10.6</p> <p>(d) Where the employer bears the risk in terms of this contract, the contractor shall, if requested to do so, reinstate any damage or destroyed portions of the works and the costs of such reinstatement shall be measured and valued in terms of 32.0 hereof</p> <p>10.6 Injury to Persons or loss of or damage to Properties</p> <p>(a) The contractor shall be liable for and hereby indemnifies the employer against any liability, loss, claim or proceeding whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever arising out of or in the course of or caused by the execution of the works unless due to any act or neglect of any person for whose actions the employer is legally liable</p> <p>(b) The contractor shall be liable for and hereby indemnifies the employer against any liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the site, whether belonging to or under the control of the employer or any other body or person, arising out of or in the course of or by reason of the execution of the works unless due to any</p>		R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>		R	

<p style="text-align: center;">Brought Forward</p> <p>act or neglect of any person for whose actions the employer is legally liable</p> <p>(c) The contractor shall, upon receiving a contract instruction from the principal agent, cause the same to be made good in a perfect and workmanlike manner at his own cost and in default thereof the employer shall be entitled to cause it to be made good and to recover the cost thereof from the contractor or to deduct the same from amounts due to the contractor</p> <p>(d) The contractor shall be responsible for the protection and safety of such portions of the premises placed under his control by the employer for the purpose of executing the works until the issue of the certificate of practical completion</p> <p>(e) Where the execution of the works involves the risk of removal of or interference with support to adjoining properties including land or structures or any structures to be altered or added to, the contractor shall obtain adequate insurance and will remain adequately insured or insured to the specific limit stated in the contract against the death of or injury to persons or damage to such property consequent on such removal or interference with the support until such portion of the works has been completed</p> <p>(f) The contractor shall at all times proceed immediately at his own cost to remove or dispose of any debris and to rebuild, restore, replace and/or repair such property and to execute the works</p>		R	
<p>10.7 High risk insurance</p> <p>In the event of the project being executed in a geological area classified as a "High Risk Area", that is an area which is subject to highly unstable subsurface conditions that might result in catastrophic ground movement evident by sinkhole or doline formation the following will apply:</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>		R	

Brought Forward			R
<p>10.7.1 Damage to the works</p> <p>The contractor shall, from the commencement date of the works until the date of the certificate of practical completion bear the full risk of and hereby indemnifies and holds harmless the employer against any damage to and/or destruction of the works consequent upon a catastrophic ground movement as mentioned above.</p> <p>The contractor shall take such precautions and security measures and other steps for the protection of the works as he may deem necessary</p> <p>When so instructed to do so by the principal agent, the contractor shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the works and to rebuild, restore, replace and/or repair the works, at the contractor's own costs.</p> <p>10.7.2 Injury to persons or loss of or damage to property</p> <p>The contractor shall be liable for and hereby indemnifies and holds harmless the employer against any liability, loss, claim or proceeding arising at any time during the period of the contract whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above</p> <p>The contractor shall be liable for and hereby indemnifies the employer against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the site, whether belonging to or under the control of the employer or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the period of the contract</p> <p>10.7.3 It is the responsibility of the contractor to ensure that he has adequate insurance to cover his risk and liability as mentioned in 10.7.1 and 10.7.2. Without limiting the contractor's obligations in terms of the</p>			
Carried Forward			R
<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>			

	Brought Forward			R
	contract, the contractor shall, within twenty-one (21) calendar days of the commencement date but before commencement of the works , submit to the employer proof of such insurance policy, if requested to do so			
	10.7.4 The employer shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the contractor's default of his obligations as set out in 10.7.1; 10.7.2 and 10.7.3. Such losses or damages may be recovered from the contractor or by deducting the same from any amounts still due under this contract or under any other contract presently or hereafter existing between the employer and the contractor and for this purpose all these contracts shall be considered one indivisible whole			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
11	Liability insurances (clause 11)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
12	Effecting insurances (clause 12)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
13	No clause (clause 13)			
		Item		
14	Security (clause 14)			
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

Brought Forward			R
14.0 Replace the entire clause 14.0 with the following:			
14.0 Security			
14.1 In respect of contracts with a contract sum up to R1 million, the security to be provided by the contractor to the employer will be a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT)			
14.1.1 The payment reduction of the value certified in a payment certificate shall be <i>mutatis mutandi</i> in terms of 31.8(A)			
14.1.2 The employer shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employer's entitlement shall take precedence over his obligations to refund the payment reduction security or portions thereof to the contractor			
14.2 In respect of contracts with a contract sum above R1 million, the contractor shall have the right to select the security to be provided in terms of 14.3, 14.4, 14.5, 14.6, or 14.7 as stated in the schedule . Such security shall be provided to the employer within twenty-one (21) calendar days from commencement date . Should the contractor fail to select the security to be provided or should the contractor fail to provide the employer with the selected security within twenty-one (21) calendar days from commencement date , the security in terms of 14.7 shall be deemed to have been selected.			
14.3 Where the security as a cash deposit of ten per cent (10%) of the contract sum (excluding VAT) has been selected:			
14.3.1 The contractor shall furnish the employer with a cash deposit equal in value to ten per cent (10%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date .			
14.3.2 Within twenty-one (21) calendar days of the date of practical completion of the works the employer			
Carried Forward			R
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

<p style="text-align: center;">Brought Forward</p> <p>shall reduce the cash deposit to an amount equal to three per cent (3%) of the contract value (excluding VAT), and refund the balance to the contractor.</p> <p>14.3.3 Within twenty-one (21) calendar days of the date of final completion of the works the employer shall reduce the cash deposit to an amount equal to one per cent (1%) of the contract value (excluding VAT) and refund the balance to the contractor.</p> <p>14.3.4 On the date of payment of the amount in the final payment certificate, the employer shall refund the remainder of the cash deposit to the contractor.</p> <p>14.3.5 The employer shall be entitled to recover expense and loss from the cash deposit in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employer's entitlement shall take precedence over his obligations to refund the cash deposit security or portions thereof to the contractor.</p> <p>14.3.6 The parties expressly agree that neither the employer nor the contractor shall be entitled to cede the rights to the deposit to any third party.</p> <p>14.4 Where security as a variable construction guarantee of ten percent (10%) of the contract sum (excluding VAT) has been selected:</p> <p>14.4.1 The contractor shall furnish the employer with an acceptable variable construction guarantee equal in value to ten per cent (10%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date</p> <p>14.4.2 The variable construction guarantee shall reduce and expire in terms of the Variable Construction Guarantee form included in the invitation to tender</p> <p>14.4.3 The employer shall return the variable construction guarantee to the contractor within fourteen (14) calendar days of it expiring</p> <p>14.4.4 Where the employer has a right of recovery against the contractor in terms of 33.0, the employer</p> <p style="text-align: center;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>	R	
	R	

Brought Forward		R	
shall issue a written demand in terms of the variable construction guarantee			
14.5 Where security as a fixed construction guarantee of five per cent (5%) of the contract sum (excluding VAT) and a five per cent (5%) payment reduction of the value certified in the payment certificate (excluding VAT) has been selected:			
14.5.1 The contractor shall furnish a fixed construction guarantee to the employer equal in value to five per cent (5%) of the contract sum (excluding VAT)			
14.5.2 The fixed construction guarantee shall come into force on the date of issue and shall expire on the date of the last certificate of practical completion			
14.5.3 The employer shall return the fixed construction guarantee to the contractor within fourteen (14) calendar days of it expiring			
14.5.4 The payment reduction of the value certified in a payment certificate shall be in terms of 31.8(A) and 34.8			
14.5.5 Where the employer has a right of recovery against the contractor in terms of 33.0, the employer shall be entitled to issue a written demand in terms of the fixed construction guarantee or may recover from the payment reduction or may do both			
14.6 Where security as a cash deposit of five per cent (5%) of the contract sum (excluding VAT) and a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT) has been selected:			
14.6.1 The contractor shall furnish the employer with a cash deposit equal in value to five per cent (5%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date			
14.6.2 Within twenty-one (21) calendar days of the date of practical completion of the works the employer shall refund the cash deposit in total to the contractor			
Carried Forward		R	
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

Brought Forward			R	
14.6.3 The payment reduction of the value certified in a payment certificate shall be <i>mutatis mutandi</i> in terms of 31.8(A)				
14.6.4 Where the employer has a right of recovery against the contractor in terms of 33.0, the employer may issue a written notice in terms of 33.4 or may recover from the payment reduction or may do both				
14.7 Where security as a payment reduction of ten per cent (10%) of the value certified in the payment certificate (excluding VAT) has been selected:				
14.7.1 The payment reduction of the value certified in a payment certificate shall be <i>mutatis mutandi</i> in terms of 31.8(B)				
14.7.2 The employer shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employer's entitlement shall take precedence over his obligations to refund the payment reduction or portions thereof to the contractor				
14.8 Payments made by the guarantor to the employer in terms of the fixed or variable construction guarantee shall not prejudice the rights of the employer or contractor in terms of this agreement				
14.9 Should the contractor fail to furnish the security in terms of 14.2 the employer , in his sole discretion, and without notification to the contractor , is entitled to change the contractor's selected form of security to that of a ten per cent (10%) payment reduction of the value certified in the payment certificate (excluding VAT), where after 14.7 shall be applicable				
Fixed		Item		
Value Related		Item		
Time Related		Item		
Carried Forward			R	
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G				

	Brought Forward		R	
	<u>Execution (A15 - A23)</u>			
15	Preparation for and execution of the works (clause 15) Clause 15.1.1 is amended by replacing it with: No clause Clause 15.1.2 is amended by replacing it with: The security selected in terms of 14.0 Clause 15.1 is amended by the addition of the following clause: 15.1.4 An acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) or latest edition, revision and ammendments, within twenty-one (21) calendar days of commencement date Clause 15.2.1 is amended by replacing it with the following clause: Give the contractor possession of the site within ten (10) working days of the contractor complying with the terms of 15.1.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
16	Access to the works (clause 16)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
17	Contract instructions (clause 17)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
18	Setting out of the works (clause 18)			
	<p><i>The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc. exist in order that the necessary arrangements may be made for the rectification of any such encroachments</i></p> <p><i>The contractor shall perform tolerance control checks regularly throughout the contract period and report on this at regular interval to the Principal Agent in the approved format. Should the contractor fail to comply with this requirement to the satisfaction of the the Principal Agent, progressively as the structure is being constructed, the Employer will commission a Registered Land Surveyor to do so on the Contractor's behalf and at the Contractor's Expense.</i></p>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
19	Assignment (clause 19)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward			R
20	Nominated sub-contractors (clause 20)			
	Clause 20.0			
	Clause 20.1.3 is amended by replacing it with the following:			
	No Clause			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
21	Selected sub-contractors (clause 21)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
22	Employer's direct contractors (clause 22)			
	<i>The Contractor shall allow the direct contractors and employers agents access to the work, allocate reasonable space in the building for storage of their materials, tools and equipment, all to the satisfaction of the Principal Agent. The contractor shall also allow the direct contractors, etc. free of charge, use of their ablution facilities and water and power supply to the and shall in no way hinder or prevent the execution of their works. Attendance may be priced against the relevant specified items in the bills of quantities.</i>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
23	Contractor's domestic sub-contractors (Clause 23)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>COMPLETION</u>			
	<u>Completion (A24-A30)</u>			
24	Practical completion (clause 24)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
25	Works completion (clause 25)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
26	Final completion (clause 26)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
27	Latent defects liability period (clause 27)			
	Fixed	Item		
	Value Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward			R
	Time Related	Item		
28	Sectional completion (clause 28)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
29	Revision of date of practical completion (clause 29)			
	Clause 29.1.1 shall be deemed to be omitted and replaced by the following:			
	Inclement weather shall be defined as weather in excess of the average rainfall (volume and period) for each calendar month over the past ten (10) years as recorded by the nearest commonly recognised weather bureau in the region of the project			
	It shall be deemed that the contractor has adequately allowed in his programme and tendered rates for expenses which might result from delays due to average or below rainfall as described above			
	Add Clause 29.9 as follows:			
	Revision to the date for practical completion shall only be considered when work on the critical path of the agreed programme for the works is delayed.”			
	Add Clause 29.10 as follows:			
	Clause 29.10 - Acceleration			
	Clause 29.10.1 Irrespective of whether or not the principal agent rules that the contractor is entitled to an extension of time or a revision of the date for practical completion , the principal agent shall nevertheless, at any time, be entitled to instruct the contractor in writing to accelerate the			
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward		R
	<p>progress of the remaining works to ensure that the works are completed by the original date for practical completion or revised date as the case may be.</p> <p>Clause 29.10.2 Upon receipt of such instruction, the contractor shall take all necessary steps to ensure that the works are completed timeously including the provision by him of additional resources, plant, manpower, etc and the working overtime or additional overtime beyond that contemplated at the time of tender (at all times adhering to the regulations and requirements of all authorities) and by all other adequate and proper means and methods. The contractor shall prove that such steps are being taken if called upon to do so.</p> <p>Clause 29.10.3 The contractor's entitlement to compensation arising out of or in respect of any revision to the date for practical completion that may have been granted by the principal agent or alternatively where the principal agent has instructed the contractor to accelerate, shall be adjudicated strictly in terms of clause 32.</p>		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
30	<p>Penalty for non-completion (clause 30)</p> <p>Clause 30 is amended by replacing reference to 36.3 at end of sentence with 36.0</p> <p>The penalty per calender day shall be calculated at 0.05% of contract sum excluding contingency allowance and CPAP</p>		
	Fixed	Item	
	Value Related	Item	
	Carried Forward		R
	<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>		

	Brought Forward		R
	Time Related	Item	
	Payment (A31 - A35)		
31	<p>31.5.2 Security adjustments in terms of 14.0 or 31.8</p> <p>31.8 Amend as follows:</p> <p>31.8(A) Where a security is selected in terms of 14.1; 14.5 or 14.6, the value of the works in terms of 31.4.1 and of the materials and goods in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:</p> <p style="padding-left: 40px;">31.8(A).1 Ninety-five per cent (95%) of such value in interim payment certificates issued up to the date of practical completion</p> <p style="padding-left: 40px;">31.8(A).2 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion</p> <p style="padding-left: 40px;">31.8(A).3 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms of 34.6</p> <p style="padding-left: 40px;">31.8(A).4 One hundred per cent (100%) of such value in the final payment certificate in terms of 34.6 except where the amount certified is in favour of the employer. In such an event the payment reduction shall remain at the adjustment level applicable to the final payment certificate.</p> <p>31.8(B) Where security is a payment reduction in term of 14.7 has been selected the value of the works in terms of 31.4.1 and materials and goods in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:</p> <p style="padding-left: 40px;">31.8(B).1 Ninety per cent (90%) of such value in interim payment certificates issued up to the date of practical completion</p>		
	Carried Forward		R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G		

	Brought Forward		R
	<p>31.8(B).2 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion</p> <p>31.8(B).3 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms of 34.6</p> <p>31.8(B).4 One hundred per cent (100%) of such value in the final payment certificate in terms of 34.6 except were the amount certified is in favour of the employer. In such an event the payment reduction shall remain at the adjustment level applicable to the final payment certificate</p> <p>Clause 31.9 is amended by replacing "seven (7) calender days" with "thirty (30) calender days" and by deleting the words "subject to the contractor giving the employer a tax invoice for the amount due</p> <p>31.12 Delete the following: "Payment shall be subject to the employer giving the contractor a tax invoice for the amount due."</p>		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
32	<p>Adjustment to the contract value (clause 32)</p> <p>Clause 32.0</p> <p>Clauses 32.5.1, 32.5.4 and 32.5.7 are amended by the addition of the following at the end of the sentence:</p> <p>"due to no fault of the contractor"</p>		
	Fixed	Item	
	Carried Forward		R
	<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>		

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	Value Related	Item		
	Time Related	Item		
33	Recovery of expense and loss (clause 33)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
34	Final account and final payment (clause 34)			
	Clause 34.0			
	Clause 34.2 is amended by inserting # next to 34.2			
	Clause 34.8 is amended by replacing with " The principal agent shall certify one hundred per cent (100%) of the amount of the final account in the final payment certificate ."			
	Clause 34.13 is amended by replacing "seven (7) calendar days " with "thirty (30) calendar days " and deleting the words "subject to the employer giving the contractor a tax invoice for the amount due"			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
35	Payment to other parties (clause 35)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward		R
	<u>Cancellation (A36-A39)</u>		
36	<p>Cancellation by employer - contractor's default (clause 36)</p> <p>Clause 36.1 is amended by the additions of the following clauses:</p> <p>36.1.3 refuses or neglects to comply strictly with any of the conditions of contract</p> <p>36.1.4 estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa</p> <p>36.1.5 in the judgement of the employer, has engaged in corrupt or fraudulent practices in competing for or in executing the contract</p> <p>Clause 36.3 is amended by removing the reference to "No clause" and replacing the words "principal agent" with "employer"</p> <p>Clause 36.0 is amended by the addition of the following clause:</p> <p>Clause 36.7 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 date stated 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</p>		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
	Carried Forward		R
	<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>		

Brought Forward			R
37	<p>Cancellation by employer - loss and damage (clause 37)</p> <p>Clause 37.3.5 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"</p> <p>Clause 37.0 is amended by the addition of the following clause:</p> <p>37.5 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 date stated 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</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>	
38	<p>Cancellation by contractor - employer's default (clause 38)</p> <p>Clause 38.5.4 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"</p> <p>Clause 38.0 is amended by the addition of the following clause:</p> <p>Clause 38.7 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 date stated 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</p> <p style="text-align: right;">Fixed</p>	<p>Item</p>	
Carried Forward			R
<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	Value Related	Item		
	Time Related	Item		
39	Cancellation - cessation of the works (clause 39) Clause 39.3.5 is amended by the addition of the following at the end of the sentence: "within one-hundred and twenty (120) working days of completion of such report"			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>Dispute Settlement (A40)</u>			
40	Disputes Settlement (clause 40) Clause 40.2.2 is amended by replacing "one (1) year" with "three (3) years" Clause 40.6 is amended by removing the reference to: No clause Clause 40.7.1 is amended by replacing "(10)" with "(15)" and by the addition of the following: Whether or not mediation resolves the dispute, the parties shall bear their own cost concerning the mediation and equally share the costs of the mediator and related costs.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>State Provision (A41)</u>			
41	State Substitutions (clause 41)			
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

Brought Forward	R
<p>Delete in the Substitute Provisions (41.0 State Clauses) clauses 40.2.1, 40.2.2, 40.3, 40.4, 40.5 and 40.6 and replace with the following:</p> <p>40.1 Should any dispute between the employer, his agents or principal agent on the one hand and the contractors on the other arise out of this agreement, such dispute shall be referred to adjudication.</p> <p>40.2 Adjudication shall be conducted in accordance with the edition of the JBCC Rules for Adjudication current at the time when the dispute is declared. The party, which raises the dispute, shall select three adjudicators from the panel of adjudicators published by the South African Institution of Civil Engineering or Association of Arbitrators (Southern Africa), determine their hourly fees and confirm that these adjudicators are available to adjudicate the dispute in question. The other party shall then select within 7 days one of the three nominated adjudicators, failing which the chairman for the time being of the Association of Arbitrators (Southern Africa) shall nominate an adjudicator. The adjudicator shall be appointed in terms of the Adjudicators Agreement set out in C1.4 .</p> <p>40.3 If provided in the schedule, a dispute shall be finally settled by a single Arbitrator to be agreed on between the parties or, failing such agreement within 28 days after referring the dispute to Arbitration, an Arbitrator nominated by the chairman for the time being of the Association of Arbitrators (Southern Africa). Any such reference shall be deemed to be a submission to the arbitration of a single arbitrator in terms of the Arbitration Act (Act No 42 of 1965, as amended), or any legislation passed in substitution therefore. In the absence of any other agreed procedure, the arbitration shall take place in accordance with the Rules for the Conduct of Arbitrations issued</p>	R
Carried Forward	R
<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>	

	Brought Forward		R	
	by the Association of Arbitrators (Southern Africa) which are current at the time of the referral to arbitration. The Arbitrator shall, in his award, set out the facts and the provisions of the contract on which his award is based.			
	40.4 If the schedule provides for court proceedings to finally resolve disputes, disputes shall be determined by court proceedings.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>Contract Variables (A41)</u>			
42	The Schedule (clause 42)			
	<i>Tenderers are referred to the Contract Data and Notes to Tenderes for variable pertaining to this contract</i>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>SECTION B: PRELIMINARIES</u>			
	<u>Definition and interpretation (B1)</u>			
43	Definition and interpretation			
	See also clause A1.0 of Section A for additional and/or amended definitions which shall apply equally to this Section			
	Fixed	Item		
	Value Related	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward			R
	Time Related		Item	
	<u>Documents (B2)</u>			
44	Checking of documents (B2.1)			
	<i>These bills of quantities:</i>			
	<i>(1) contain pages and annexes as indexed, and;</i>			
	<i>(2) are in multiple procurement format, i.e. all trades are fully measured with minor budgetary allowances</i>			
	<i>Items in these bills of quantities are to be read and priced in conjunction with and the descriptions regarded as amplified by the Model Preambles for Trades, 2008 edition, as recommended and published by the Association of South African Quantity Surveyors and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained</i>			
	Fixed		Item	
	Value Related		Item	
	Time Related		Item	
45	Provisional bills of quantities (B2.2)			
	Yes			
	Fixed		Item	
	Value Related		Item	
	Time Related		Item	
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
46	Availability of construction documentation (B2.3) <i>The minor budgetary allowances included in this document will be separately procured, based on multiple procurement of selected sub-contractors during the construction period</i>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
47	Interests of agents (B2.4)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
48	Priced documents (B2.5)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
49	Tender submission (B2.6) <i>Notwithstanding anything contained in this clause tenders shall be valid for a period of ninety (90) days from the closing date of tenders</i> <i>Clause 2.6 is amended by replacing "JBCC Form of Tender" with "Form of Offer and Acceptance C1.1"</i>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward			R
	<u>The site (B3)</u>			
50	Defined works area (B3.1)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
51	Geotechnical investigation (B3.2)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
52	Inspection of the site (B3.3)			
	<i>Tenderers are instructed to familiarise themselves before submission of their tender with regard to the relevant local site conditions, site accessibility, the nature of operations required, availability of labour and any conditions pertaining thereto, together with conditions relating to unloading, carting and storage of materials, equipment and tools required for the works.</i>			
	<i>No claims for extras arising from the contractor having failed to comply with this clause will be entertained</i>			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
53	Existing premises occupied (B3.4)	Fixed	Item	
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	Value Related	Item		
	Time Related	Item		
54	Previous work - dimensional accuracy (B3.5)			
	<i>Work executed under a previous contract and the extent thereof will be pointed out to the contractor by the principal agent on handing over of the site</i>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
55	Previous work - defects (B3.6)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
56	Services - known (B3.7)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
57	Services - unknown (B3.8)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
58	Protection of trees, etc (B3.9)			
	Fixed	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	Value Related	Item		
	Time Related	Item		
59	Articles of value (B3.10)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
60	Inspection of adjoining properties, etc (B3.11)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>Management of contract (B4)</u>			
61	Management of the works (B4.1)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
62	Programming for the works (B4.2)			
	Clause B4.2 is hereby amended by the addition of the following:			
	Programme:			
	The contractor and the principal agent shall agree to a Contract Programme for the control of the Works.			
	The contractor shall submit a draft of the Contract Programme and method statement to the principal agent for approval together with the tender.			
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

Brought Forward		R	
<p>The contractor shall ensure that the contract programme:</p> <ol style="list-style-type: none"> 1. Shall be prepared and drawn up to comply in all respects with the requirements of this Agreement. 2. shall be drawn up using logic developed during the tender period and complies with the planning requirements of the Client. 3. shall be in accordance with the dates given herein for possession and practical completion; and 4. shall be in sufficient and approved detail to ensure effective control of the work, including all items necessary to enable calculations to be made for the distribution of finance during the cashflow analysis. 5. shall be accompanied by a full written method statement <p>The principal agent shall examine and comment on the contract programme and method statement within two weeks of its submission.</p> <p>Following on these comments the contractor shall amend the contract programme and method statement as may be necessary and submit the final contract programme and method statement to the principal agent for approval within a further two weeks thereafter.</p> <p>The contract programme shall be processed by computer and be presented to the principal agent in the form of logic charts and bar charts in such a way as to determine the critical path and the float on non-critical activities. All supporting printouts must be available to the principal agent on demand.</p> <p>The acceptance by the principal agent of the contract programme, or any revision thereof, does not necessarily sanction the accuracy of validity of the network logic, the correctness of individual activities in terms of description or duration, the comprehensiveness of networks or the discrepancies between drawings and any other documents presented by the contractor, and in no way relieves the responsibility of the contractor to comply with the requirements of the Agreement.</p>			
Carried Forward		R	
<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>			

Brought Forward		R	
<p>No policy decisions other than the planning requirements, procedures and policies provided, will be enforced on the contractor regarding construction of the project and the contractor shall be responsible at all times for ensuring the accuracy, validity and reasonableness of programming information.</p> <p>Documentation will not be available in complete detail at the date of award of the contract. Non-availability of information will not be deemed an excuse for non-presentation of programmes. In the event of inadequate information, the contractor shall estimate the predicted time applications on available information and quality the submission accordingly.</p> <p>Development of the contract programme and method statement</p> <p>Within two weeks of award of the contract, the contractor shall submit an updated contract programme and written method statement which shall include the latest information in sufficient detail to permit comprehensive monitoring.</p> <p>Progress of the works will be monitored by the principal agent. The contractor shall liaise with the principal agent in order to provide whatever information is required to facilitate such monitoring.</p> <p>Revisions to the contract programme</p> <p>Revisions to the contract programme may be introduced periodically by the contractor subject to compliance with the contract completion and handover dates.</p> <p>Providing the required consultation between the relevant parties has highlighted the implications of the required changes, the programming strategy on the project may be changed and the changes noted and specified on logic charts delivered to the principal agent. The changes to the programme will be recorded as firm and binding once the principal agent has sanctioned the said changes.</p> <p>A revision to the programme will not invalidate the contractual completion dates and applications for</p>			
<p>Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>		R	

<p style="text-align: center;">Brought Forward</p> <p>extensions of time will be processed by the principal agent in accordance with the conditions of contract.</p> <p>Should the contractor fail to submit a request for revision to the construction programme , progress monitoring shall be based on the latest revised programme sanctioned by the principal agent.</p> <p>The contractor shall make all his necessary revisions on the approved network sheets clearly marking, inter-alia, the logic changes and duration changes. These will then be processed by the necessary parties and then approved in the normal manner.</p> <p>Progress Monitoring</p> <p>The contractor shall provide regular progress reports showing actual and expected progress against the latest contract programme. Progress reports shall be submitted at each site progress meeting and shall outline the progress against key target dates and deviation which has occurred against the most recently updated control programme due to the progress reflected in the as-built construction programme.</p> <p>The status of each activity must also be reported as follows:</p> <p>Target - If the activity is not complete, the latest predicted completion date shall be supplied.</p> <p>Start - If the activity has commenced, the actual date shall be supplied.</p> <p>Finish - If the activity is complete, the actual completion date shall be supplied.</p> <p>Problems which may occur during execution of the contract must be specifically identified in progress reports under a separate section of the contractor's report.</p> <p>Should problems occur during the execution of the contract or the scope of work be increased or decreased, the contractor may be requested to increase</p>		R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>		R	

<p style="text-align: center;">Brought Forward</p> <p>the extent or the detail of the programme.</p> <p>The principal agent may recommend action to be taken by the contractor, including the revision of resource levels, but this information will not be binding on the contractor unless the recommendations are enforced in terms of the conditions of contract by the principal agent and will in no way relieve the contractor's responsibility to comply with the requirements of the Agreement.</p> <p>Extension of time</p> <p>Any extension of time which is granted by the principal agent will be annotated to affect selected activities in the programme and the associated activities will be incorporated by revisions to the programme by the contractor. Should the additional activities or the extension of time on existing activities fall on a non-critical area of the programme, extension will be limited to the activities affected by the said additional activities or extensions and the contract dates shall not be affected. If, however, the additional activities fall on the critical path, the principal agent shall take this into account when granting any extension of time in terms of the conditions of contract.</p> <p>The contractor agrees that the contract completion date (i.e. the date for practical completion) has been stipulated in the contract for the benefit of the employer, so that, without derogating from the generality of the foregoing principle it is provide that:</p> <ol style="list-style-type: none"> 1. The contractor shall not be entitled to deliver the site and the works to the employer prior to the contract completion date and 2. Should there for any reason be any float period indicated in the contract programme prior to the contractual completion date then this float period shall be utilized to absorb any delays or extensions of time without affecting the contract completion date. 3. The contractor shall, at all times, ensure that, notwithstanding the approval or sanctioning, reviewing or inspection of a programme or any 		R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>		R	

Brought Forward		R
<p>revision of a programme by the principal agent in the foregoing terms, practical completion and completion of the works shall take place strictly in accordance with this Agreement.</p> <p>A defective or faulty programme, even if so sanctioned, approved, reviewed or inspected by the principal agent, shall therefore not constitute a cause for granting an extension of time for completion of the works or for entitling the contractor to the payment by the employer in terms of the contract of any loss, compensation or damage whatsoever.</p> <p>The contractor acknowledges that the principal agent's foregoing participation in the approval of development of, revisions to and updating of the Contract Programme shall take place in consultation with the principal agent. The contractor shall therefore provide the principal agent with such co-operation and/or information and/or access as they may reasonably require for such purposes.</p>		
	Fixed	Item
	Value Related	Item
	Time Related	Item
63	Progress meetings (B4.3)	
	Fixed	Item
	Value Related	Item
	Time Related	Item
64	Technical meetings (B4.4)	
	Fixed	Item
	Value Related	Item
	Time Related	Item
Carried Forward		R
<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>		

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
65	Labour and plant records (B4.5)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>Samples, shop drawings and manufacturer's instructions (B5)</u>			
66	Samples of materials (B5.1)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
67	Workmanship samples (B5.2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
68	Shop drawings (B5.3)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
69	Compliance with manufacturer's instructions (B5.4)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

		Brought Forward		R	
	<u>Temporary works and plant (B6)</u>				
70	Deposits and fees (B6.1)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
71	Enclosure of the works (B6.2)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
72	Advertising (B6.3)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
73	Plant, equipment, sheds and offices (B6.4)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
74	Main notice board (B6.5)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
		Carried Forward		R	
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

		Brought Forward		R	
75	Subcontractors notice board (B6.6)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<u>Temporary services (B7)</u>				
76	Location (B7.1)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
77	Water (B7.2)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
78	Electricity (B7.3)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
79	Telecommunication facilities (B7.4)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
		Carried Forward		R	
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
80	Ablution facilities (B7.5)			
	Fixed	Item		
	Value Related	Item		
81	Time Related	Item		
	<u>Prime cost amounts (B8)</u>			
82	Responsibility for prime cost amounts (B8.1)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>Attendance on nominated and selected subcontractors (B9)</u>			
83	General attendance (B9.1)			
	The schedule rates providing for attendance on nominated subcontractors and other contractors , will be adjusted only if the scope of the work has changed			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
84	Special attendance (B9.2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
85	Commissioning - Fuel, water and electricity (B9.3)			
	Fixed	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

			R
	Brought Forward		
	Value Related	Item	
	Time Related	Item	
	<u>Financial aspects (B10)</u>		
86	Statutory taxes, duties and levies (B10.1)		
	<i>Provision is made in the summary of these bills of quantities for the inclusion of Value Added Tax (VAT)</i>		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
87	Payment of preliminaries (B10.2)		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
88	Adjustment of preliminaries (B10.3)		
	Clauses B10.3.1 and B10.3.2 are amended by replacing "within fifteen (15) working days of taking possession of the site " with "when submitting his priced bills of quantities "		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
89	Payment certificate cash flow (B10.4)		
	Fixed	Item	
	Carried Forward		R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G		

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	Value Related	Item		
	Time Related	Item		
	<u>General (B11)</u>			
90	Protection of works (B11.1)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
91	Protection/isolation of existing/sectionally occupied works(B11.2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
92	Site security (B11.3)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
93	Notice before covering work (B11.4)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
94	Disturbance (B11.5)			
	Fixed	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
BILLS OF QUANTITIES
VALLAMBROSA PRIMARY SCHOOL
LDPW-B/20309

	Brought Forward			R
	Value Related	Item		
	Time Related	Item		
95	Enviromental disturbance (B11.6)			
	Fixed	Item		
	Time Related	Item		
	Value Related	Item		
96	Works cleaning and clearing (B11.7)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
97	Vermin (B11.8)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
98	Overhand work (B11.9)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
99	Instruction manuals and guarantees (B11.10)			
	Fixed	Item		
	Value Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	Time Related	Item		
100	As built information (B11.11)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
101	Tenant installations (B11.12)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>Schedule of variables (B12)</u>			
102	Pre-tender information (B12.1)			
	<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>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	12.1.1 Provisional bills of quantities (B12.1.1)			
	The quantities are provisional:	Yes		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward		R
12.1.2 Availability of construction documentation (B12.1.2) Construction documentation is complete: Yes			
12.1.3 Interest of agents (B12.1.3) No			
12.1.4 Defined works area (B12.1.4) <i>The area of the works to be occupied by the contractor, any restriction on the area and the limit of access or exit will be pointed out to the contractor by the principal agent on handing over of the site</i>			
12.1.5 Geotechnical investigation (B12.1.5) The geotechnical report is available for viewing at the offices of the Principal Agent No			
12.1.6 Existing premises occupied (B12.1.6) [3.4] Specific requirements: The contractor shall execute the works with as little noise and disturbance as possible			
12.1.6 Existing premises occupied [3.4] Specific requirements: The contractor shall execute the works with as little noise and disturbance as possible			
12.1.7 Previous work - Dimensional accuracy (B12.1.7) [3.5] Details: No additional details No			
	Carried Forward		R
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward		R
12.1.8 Previous work - defects			
[3.6] Details: No additional details			
12.1.9 Services - known (B12.1.9)			
Existing services and points of connection are shown on the site plan and/or will be pointed out on site by the principal agent			
12.1.10 Protection of trees			
[3.9] Specific requirements: No trees to be damaged or removed except those specifically designated in writing by the Architect			
12.1.11 Inspection of adjoining properties			
[3.11] Specific requirements: None			
12.1.12 Enclosure of the works			
[6.2] Specific requirements: Areas where work is taking place shall at all times be blocked off by appropriate means			
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, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times.			
	Carried Forward		R
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward		R
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 a notice board size 3 x 3m constructed of suitable boarding with flat smooth surface and with edging bead 19mm thick round outer edges and projecting 12mm from face of boarding and rounded on front edge. 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. The board is to be painted ivory white and the bead and 12mm wide dividing lines dark green. All wording shall be inscribed in dark green as per the coat of arms for SA. All wording shall be inscribed in dark green painted sans serif lettering.			
12.1.15 Subcontractors' notice board			
[6.6] A notice board is required (yes/no) NO Specific requirements:			
12.1.16 Water			
[7.2] Option A (by contractor) (yes/no) YES			
12.1.17 Electricity			
[7.3] Option A (by contractor) (yes/no) YES			
	Carried Forward		R
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward	
		R
12.1.18 Telecommunications		
[7.4] Telephone (yes/no) YES		
YES Facsimile (yes/no)		
YES E-mail (yes/no)		
12.1.19 Ablution facilities		
[7.5] Option A (by contractor) (yes/no) YES		
NO Option B (by employer) (yes/no)		
12.1.20 Protection of existing/sectionally occupied works		
[11.2] Protection is required (yes/no) YES		
12.1.21 Special attendance		
The contractor must obtain information from all subcontractors at tender stage regarding special attendance that might be required and make allowance for each and every subcontract that requires special attendance		
[9.2] Subcontractor (1) Details:		
Subcontractor (2) Details:		
Subcontractor (3) Details:		
	Carried Forward	R
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G		

	Brought Forward			R
	12.1.22 Protection of the works			
	[11.1] Specific requirements: All work that requires protection during construction must be adequately protected up to practical completion by the contractor			
	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			
103	Post-tender information (B12.2)			
	All post-tender information for this section will be determined once tender is awarded			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	12.2.1 Payment of preliminaries			
	[10.2] Option A (prorated) (yes/no)			
	YES			
	Option B (calculated) (yes/no)			
	NO			
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward			R
	12.2.2 Adjustment of preliminaries			
	[10.3] Option A (three categories) (yes/no)			
	YES			
	Option B (detailed breakdown) (yes/no)			
	NO			
	12.2.3 Additional agreed preliminaries items			
	Details:			
	None			
104	Other post tender information (B12.3)			
	All post-tender information for this section will be determined once tender is awarded			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<u>SECTION C: SPECIFIC PRELIMINARIES</u>			
	Section C contains specific preliminary items which apply to this contract except where N/A (Not Applicable) appears against an item			
105	Clause 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 understood by the the tenderer he shall, before submitting his tender, obtain clarification in writing from the principal agent			
	Fixed	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward			R
	Value Related	Item		
	Time Related	Item		
106	Clause C2 - General Preambles			
	The "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the trades is deemed to be included herein 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	Item		
	Value Related	Item		
	Time Related	Item		
107	Clause C3 - Site instructions			
	All site instructions issued on site shall be recorded in writing within seven (7) calendar days in site instruction book (A4 size and triplicate carbon format), which is to be provided and maintained by the contractor. The said site instruction book shall be kept on site at all times for the exclusive use of recording site instructions only			
	Site instructions may be issued by the architect or any of the consultants only. Copies of the site instructions are to be submitted to the architect and quantity surveyor within seven (7) calendar days of such recording in the site instruction book			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward			R
108	<p>Clause C4 - Trade Names</p> <p>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</p> <p>If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>			
		Item		
		Item		
		Item		
109	<p>Clause C5 - Overtime</p> <p>Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorized and indicated in writing, prior to the execution thereof, that costs for such overtime will to be borne by the employer</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>			
		Item		
		Item		
		Item		
110	<p>Clause C6 - As-built drawings</p> <p>The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the principal agent and the structural engineer for their records</p> <p style="text-align: right;">Fixed</p>			
		Item		
	Carried Forward			R
	<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>			

	Brought Forward			R
	Value Related	Item		
	Time Related	Item		
111	Clause C5 - Labour record			
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
112	Clause C6 - Plant record			
	At the end of each calendar week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
113	Clause C7 - Cession of monies			
	The contractor may cede his rights or claims to any monies due or to become due to him under this contract with written approval from the employer			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

Brought Forward		R
<p>Clause C8 - Occupational Health and Safety Act</p> <p>The contractor shall comply with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993), as well as all new occupational health and safety acts requirement regarding the compliance of Covid 19</p> <p>It is required of the contractor to thoroughly study the latest 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.</p> <p>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 A31.0 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.</p> <p>Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification 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.</p> <p>PART A-OHS ACT COMPLIANCE-IMPLEMENTATION OF THE HEALTH AND SAFETY - Construction health & safety documentation</p>		
<p style="text-align: center;">Carried Forward</p> <p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>		R

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
114	Clause C8.1.1 - Prepare and compile H&S plan as per site specification Health and safety Specifications (Section C3, Scope of Work), OHS Act & Regulations			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
115	Clause C8.1.2 - Allow for the preparation and compilation of the site specific health and safety file, and a health and safety working file			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
116	Clause C8.1.3 - Appointment of a Registered Construction health and safety officer for the duration of the Contract as per Section 8(5) of the Construction Regulations 2014			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	PART B-OHS ACT COMPLIANCE-IMPLEMENTATION OF THE HEALTH AND SAFETY - Personal Protective Clothing & Equipment			
117	Clause C8.2.1 - Foot protection (steel toe cap, gum boots, etc)			
	Fixed	Item		
	Value Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	Time Related	Item		
118	Clause C8.2.2 - Clothing (Overalls Depicting Contractors Company name/identification)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
119	Clause C8.2.3 - Glove (leather, PVC, Acid Resistant, etc) Item			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
120	Clause C8.2.4 - Head Protection: Hardhats with air vents Colour Coded - Supervisory (Red) Labour (Green)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
121	Clause C8.2.5 - Ear protection (earmuffs with 30% protective value) Item			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
122	Clause C8.2.6 - Eye Protection (Face Shield, Goggles, Spectacles, etc)			
	Fixed	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	Value Related	Item		
	Time Related	Item		
123	Clause C8.2.7 - Visibility (luminous high visibility safety vests/ jackets/ bibs/ etc)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
124	Clause C8.2.8 - Harness(double stranded safety harness with pylon hooks)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
125	Clause C8.2.9 - Portable ladders A-frame, extendable, length, material, etc.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
126	Clause C8.2.9 - Portable ladders A-frame, extendable, length, material, etc.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward		R	
127	Clause C8.2.10 - Barricading/ Demarcation (Supply, Install & Removal) Demarcation perimeter (fence, shade netting, corrugated iron, shutter board, hard Barricade etc)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward			R
	PART C-OHS ACT COMPLIANCE-IMPLEMENTATION OF THE HEALTH AND SAFETY - Occupational medical surveillance			
128	Clause C8.3.1 - Entry Medical Examinations by a SASOHN registered Occupational Health Nurse or a SASOM registered Occupational Medical Practitioner			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
129	Clause C8.3.2 - Exit Medical Examination			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
130	Clause C8.3.3 -Provision of a first aid kit			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
131	Clause C8.3.4 - Provision of a fire-fighting measures			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward			R
	PART D-OHS ACT COMPLIANCE-IMPLEMENTATION OF THE HEALTH AND SAFETY Education, training, signage			
132	Clause C8.4.1 - Health and safety induction site access cards			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
133	Clause C8.4.2 - Basic First Aid training level one			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
134	Clause C8.4.3 - Health and Safety representative			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
135	Clause C8.4.4 - Construction (firefighting. General information, prohibitory, mandatory, warning, hazchem, photo luminescent, etc)			
	Fixed	Item		
	Value Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	Time Related	Item		
136	Clause C8.4.5 - Health and Safety information display board in site office (emergency evacuation flow diagram, emergency contact numbers, electrical, general, etc)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
137	Clause C8.4.6 -Health and safety charts (OHS Act, Basic Conditions of Employment Act)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	PART E - OHS AC COMPLIANCE - IMPLEMENTATION OF THE HEALTH AND SAFETY Covid-19 Compliance management			
138	Clause C8.5.1 - Covid - 19 related signage and posters			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward			R
139	Clause C8.5.2- 2 x 3ply cloth masks			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
140	Clause C8.5.2- hand sanitizers with 70% alcohol content			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
141	Clause C8.5.3 Decontamination agent / surface sanitizers			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
142	Clause C8.5.4 Surgical Gloves (for security and cleaning team)			
	Fixed	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward			R
	Value Related	Item		
	Time Related	Item		
143	Clause C8.5.5 Non-contact thermometers			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
144	Clause C8.5.6 Physical barriers to ensure social distancing (Compliance to Section 22 of the Covid-19 OHS Directive)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
145	Clause C9 - Viewing of the school areas			
	The site is situated in a school area and the tenderer must arrange with the responsible school staff to obtain permission to enter the site for tendering purposes			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

	Brought Forward		R	
148	<p>Clause C12 - Security Check of Personnel</p> <p>The principal agent may require the contractor to have his personnel and workmen, or a certain number of them, security classified</p> <p>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</p> <p style="text-align: right; margin-right: 100px;">Fixed Value Related Time Related</p>			
	Carried Forward		R	
	<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>			

	Brought Forward			R
149	<p>Clause C13 - HIV/Aids Awareness</p> <p>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</p> <p>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 31.0 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</p>			
	Fixed		Item	
	Value Related		Item	
	Time Related		Item	
150	<p>Clause C13.1 - Awareness Champion</p> <p>Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification</p>			
	Fixed		Item	
	Value Related		Item	
	Time Related		Item	
	Carried Forward			R
	<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>			

	Brought Forward		R
151	Clause C13.2 - Awareness Workshop		
	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	Item	
	Value Related	Item	
	Time Related	Item	
152	Clause C13.3 - 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	Item	
	Value Related	Item	
	Time Related	Item	
153	Clause C13.4 - 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	Item	
	Value Related	Item	
	Time Related	Item	
	Carried Forward		R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G		

	Brought Forward			R
154	<p>Clause C13.5- Monitoring</p> <p>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</p> <p style="text-align: right; margin-right: 100px;">Fixed</p> <p style="text-align: right; margin-right: 100px;">Value Related</p> <p style="text-align: right; margin-right: 100px;">Time Related</p>			
	Carried to Final Summary			R
	<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G</p>			

Item No		Quantity	Rate	Amount
	<p><u>SECTION 2</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO 1</u></p> <p><u>DEMOLITIONS</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades as well as Engineering Specifications attached to these documents.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>User note</u></p> <p><u>Note:</u></p> <p>All usable material from the demolitions should be kept safety and handed over to the Principal Agent who shall sign for all material received.</p> <p><u>View site</u></p> <p><u>Demolishing and removing</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 contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained</p>			
	Carried Forward		R	
	<p>Section No. 2 DEMOLITIONS OF ADMIN BLOCKS, 14 CLASSROOMS Bill No. 1 Demolitions CLUSTER G</p>			

	Brought Forward				
	<u>Explosives</u>				R
	No explosives whatsoever may be used for demolition purposes unless otherwise stated				
	<u>General</u>				
	Water supply pipes and other piping in ground 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				
	Unless otherwise described all materials are to become the property of the contractor and are to be removed from the site				
1	Single storey existing tank house structure with approximate 24m2 (hand over usable items to school)	No	1		
2	Single storey existing Administration building with approximate 120m2 with double pitched roof comprising, concrete surface bed, one brick external walls, one brick and half brick internal walls and corrugated roof covering on prefabricated timber trusses (hand over usable items to school)	No	1		
3	Single storey existing 3 classroom structure with approximate 218m2 with double pitched roof comprising, concrete surface bed, one brick external walls, one brick and half brick internal walls and corrugated roof covering on prefabricated timber trusses (hand over usable items to school)	No	2		
4	Single storey existing 4 classroom structure with approximate 290m2 with double pitched roof comprising, concrete surface bed, one brick external walls, one brick and half brick internal walls and corrugated roof covering on prefabricated timber trusses (hand over usable items to school)	No	2		
	Carried to Final Summary				R
	Section No. 2 DEMOLITIONS OF ADMIN BLOCKS, 14 CLASSROOMS Bill No. 1 Demolitions CLUSTER G				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.3</u></p> <p><u>BILL NO. 1</u></p> <p><u>ALTERATIONS</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades</p> <p><u>REMOVAL OF EXISTING WORK:</u></p> <p>NATURE OF WORK: Tenderers are advised to visit the site and to satisfy themselves as to the nature and extent of the work to be done and provide in their tenders any items not specifically mentioned which they may deem necessary for the proper completion of the work.</p> <p>DIMENSIONS The Contractor is advised to take all dimensions affecting the existing buildings on the site, as he will be held solely responsible for all new work being of the correct size.</p> <p>PIPES, ETC Special care is to be taken not to interfere unnecessarily with any supply pipes or other piping that may be met with and found necessary to disconnect or cut, are to be effectively stopped off and any new connections that may be necessary are to be made with proper fittings and to the satisfaction of the Principal Agent to whom due notice must be given of any alterations to the existing services.</p> <p>PROTECTION In taking down and removing existing work the utmost care is to be observed to avoid any structural or other damage to the remaining portions of the buildings. The Contractor must also protect all work not removed such as walls, floors, doors, windows or other joinery, loose and fixed fittings and electrical appliances, etc. from damage during the progress of the work and provide all necessary materials for doing so. The Contractor will be held solely responsible for any damage to persons or property and for the safety of the structure throughout the whole of this Contract and must</p>			
	Carried Forward		R	
	<p>Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 1 Alterations CLUSTER G</p>			

Brought Forward		R
<p>make good at his own expense any damage that may occur.</p> <p>OLD USABLE MATERIALS from the alterations/demolitions are to become the property of the Client. Old materials for re-use are to be carefully removed, stored and protected from injury including making good any damaged or defective parts as required before fixing. Old reusable materials are to be handed over to the Client are to be carefully removed and neatly stacked on site where directed. The remainder of the old materials and all rubbish to be immediately carted away and the site left clean and unencumbered. The Contractor should allow for removing of rubble from site on daily basis, failing which the client might stop the construction until the site has been cleaned. None of the old stock bricks from the pulling down are to be re-used for any new work. Materials to be handed over to the Client should be kept safely and handed over to the School Governing Body or the school principal who shall sign for all materials received.</p> <p>MATERIALS, ETC The materials to be used and work to be done to be similar in all respects to that described for new work insofar as they concur. All work in making good is to be properly jointed to the existing.</p> <p>Unless otherwise stated, all usable material from the demolitions should be kept safely and handed over to the school governing body or the school principal who shall sign for all material received.</p> <p><u>Taking out and removing ironmongery</u></p>		
1	<p>Locksets, etc. No</p>	294
<p><u>Taking out and removing doors, windows, etc from brickwork to be demolished</u></p>		
2	<p>Timber single door and frame 813 x 2032mm high No</p>	42
Carried Forward		R
<p>Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 1 Alterations CLUSTER G</p>		

	Brought Forward			R
	<u>SERVICING OF DOORS AND WINDOWS</u>			
3	Replace window stays, handles and pegs	No	42	
4	Replace door striker plate	No	42	
	<u>MAKING GOOD OF FINISHES ETC</u>			
	<u>Making good screed</u>			
5	Floors in patches	m2	56	
Carried Forward to Summary of Section No. 3				
Section No. 3				
RENOVATIONS TO 28 ENVIROLOO TOILETS				
Bill No. 1				
Alterations				
CLUSTER G				
				R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.3</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.4</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
	Carried Forward		R	
	<p>Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 2 Capentry and Joinery CLUSTER G</p>			

Brought Forward			R	
<p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>PREFABRICATED ROOF TRUSSES</u></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>				
Carried Forward			R	
<p>Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 2 Capentry and Joinery CLUSTER G</p>				

	Brought Forward		R
<p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m² commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p>			
	Carried Forward		R
<p>Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 2 Carpentry and Joinery CLUSTER G</p>			

Brought Forward			R	
<p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p> <p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m² and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p>				
Carried Forward			R	
<p>Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 2 Capentry and Joinery CLUSTER G</p>				

Brought Forward		R
<p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p> <p><u>Specific specifications for roof trusses</u></p> <p>Unless otherwise described, the following specifications will apply:</p> <p>1 All trusses to be with a 10° pitch</p> <p>2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres</p> <p><u>ROOFS</u></p> <p><u>Sundries</u></p> <p>1 Two coats creosote on sawn timbers m2 30</p> <p><u>EAVES, VERGES, ETC</u></p> <p><u>"Everite FC77" pressed fibre-cement</u></p> <p>2 15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips m 107</p> <p><u>SKIRTINGS</u></p> <p><u>Wrought meranti</u></p> <p>3 19 x 76mm Skirting including 19mm quadrant bead nailed m 253</p> <p><u>DOORS, ETC</u></p> <p><u>Wrought meranti doors hung to steel frames</u></p> <p>4 914 x 2032 x 44 mm thick heavy duty exterior quality horizontally slatted double sided saligna door fitted to comply with sabs 545 exterior grade or latest revision. No 14</p>		
Carried Forward		R
<p>Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 2 Capentry and Joinery CLUSTER G</p>		

	Brought Forward			R
5	<p><u>Semi solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame</u></p> <p>813 x 2032 x 44 mm thick interior grade flush hollow core single timber door with 3 mm ply on both sides with 2 consolidated edges fitted to comply with sabs 545 in pressed steel frame. all painted to architect's colour schedule</p>	No	28	
Carried Forward to Summary of Section No. 3				R
Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 2 Capentry and Joinery CLUSTER G				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.3</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.5</u></p> <p><u>IRONMONGERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs</p> <p><u>Finishes to ironmongery</u></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p> <p><u>CATCHES,CABIN HOOKS, ETC</u></p> <p><u>"Solid"</u></p>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No 42		
	<p><u>LOCKS</u></p> <p style="text-align: right;">Carried Forward</p>		R	
	<p>Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 3 Ironmongery CLUSTER G</p>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward				R
	<u>"Solid" or similar approved</u>				
2	"Code 630" padlock	No	14		
3	"Code 2252-76SC" three lever upright lockset	No	28		
4	"Code 460/313" Blesbok four lever lockset	No	28		
	<u>DOOR CLOSERS AND FLOOR SPRINGS</u>				
	<u>"Dorma" or similar approved</u>				
	<u>SUNDRIES</u>				
	<u>"Solid" or similar approved</u>				
5	Dorma "Code 255" door stop plugged	No	294		
6	Chromium plated toilet roll holder plugged to brickwork	No	196		
	Carried Forward to Summary of Section No. 3				R
	Section No. 3				
	RENOVATIONS TO 28 ENVIROLOO TOILETS				
	Bill No. 3				
	Ironmongery				
	CLUSTER G				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.3</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 6</u></p> <p><u>METALWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>Descriptions</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p><u>Drawings</u></p> <p>Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc</p> <p><u>WELDED SCREENS, GATES, ETC</u></p> <p><u>Gates to external doors</u></p> <p><u>STEEL WINDOWS, DOORS, ETC</u></p>			
	Carried Forward		R	
	<p>Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 4 Metalwork CLUSTER G</p>			

	Brought Forward			R
1	<u>"Nty" or similar approved steel residential windows with burglar bars to all sashes</u> 500 x 600mm standard "standard type" galvanised mild steel window frame. manufactured to comply with sabs 727. frames to be factory primed with zinc phosphate primer to comply with sabs 1319	No	7	
Carried Forward to Summary of Section No. 3				R
Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 4 Metalwork CLUSTER G				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.3</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.7</u></p> <p><u>PLASTERING</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>GRANOLITHIC</u></p> <p><u>Untinted granolithic on concrete</u></p> <p><u>SCREEDS</u></p> <p><u>Screeds on concrete</u></p>			
1	30mm Thick on floors	m2	35	
	Carried Forward to Summary of Section No. 3			R
	Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 5 Plastering CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.3</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.9</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p>			
	Carried Forward		R	
	<p>Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 6 Plumbing and Drainage CLUSTER G</p>			

Brought Forward		R
<u>SANITARY FITTINGS (PROVISIONAL)</u>		
1	600mm x 500mm inset washtrough, manufactured from grade 18/10 ss, stainless steel with radiused internal corners and provision for a 40mm diameter. outlet. fitted with approved 2no.plain extended chrome plated, complete with sliding wall flanges, un-slotted sink waste with back nut, plug with stirrup, chain a. sink installation height = 900mm affl. cut out size 535 x 425mm	No 7
<u>WASTE UNIONS, ETC</u>		
2	32mm "301CP" Basin waste union	No 7
<u>TRAPS, ETC</u>		
<u>Plastic bib tap</u>		
3	22mm BSP Plastic Polypipe Polyfast BIB Tap Wall Flange	No 7
<u>TRAPS, ETC</u>		
<u>"Marley"</u>		
4	32 x 50mm Deep seal "P" or "S" trap	No 7
<u>Extra over class 0 copper pipes for capillary fittings</u>		
5	15mm Fittings	No 105
6	22mm Fittings	No 140
<u>TESTING</u>		
7	Provide all necessary apparatus, water, etc for and test the whole of the Sanitary Plumbing and Water Supply installation to the satisfaction of the Project Manager, replace any defective work free of charge and leave perfect	Item
Carried Forward		R
Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 6 Plumbing and Drainage CLUSTER G		

	Brought Forward			R
	<u>Enviroloo Unit</u>			
8	Replace existing ventilation extraction unit including the outlet vent pipe	No	28	
	<u>Cleaning of existing enviroloo system</u>			
9	Clean and remove waste on the enviroloo bucket using approved chemicals without damaging the toilet system	No	28	
Carried Forward to Summary of Section No. 3				
Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 6 Plumbing and Drainage CLUSTER G				R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.3</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.10</u></p> <p><u>GLAZING</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>GLAZING TO STEEL WITH PUTTY</u></p> <p><u>4mm Rough cast glass</u></p>			
1	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	8	
	Carried Forward to Summary of Section No. 3			R
	Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 7 Glazing CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.3</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.11</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>DESCRIPTIONS</u></p> <p>Descriptions of paintwork shall be deemed to include for all cutting in</p> <p><u>PAINT SPECIFICATIONS</u></p> <p>All painting shall be done in accordance with "Plascon-Evans" specifications</p> <p style="text-align: center;">-----</p> <p><u>PAINTWORK ETC TO EXISTING WORK</u></p> <p><u>ON FIBRE-CEMENT</u></p> <p><u>Plascon Sure Coat Gloss Enamel to exterior new fibre cement (NW 174).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.</u></p>			
1	On fascias and barge boards	m2	187	
	Carried Forward			R
	<p>Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 8 Paintwork CLUSTER G</p>			

	Brought Forward			R
	<u>ON METAL</u>			
	<u>Plascon Velvagio Satin to exterior new mild steel (NW 683).Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.</u>			
2	On door frames	m2	49	
3	On windows with burglar bars	m2	34	
4	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	24	
	<u>PAINTWORK ETC TO NEW WORK</u>			
	<u>ON WOOD</u>			
	<u>Apply 3no. clear eggshell varnish for interior to comply with sabs 887 type 01, thin down first coat with mineral turpentine as per manufacturer instructions, allowing each coat to dry overnight, apply wood preservative to exposed exterior wood to saturte the surface, with each coat soaking in before further coats, apply until no further soaking takes place</u>			
5	On doors	m2	172	
	Carried Forward to Summary of Section No. 3			R
	Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS Bill No. 8 Paintwork CLUSTER G			

Section No. 3

RENOVATIONS TO 28 ENVIROLOO TOILETS

SECTION SUMMARY - RENOVATIONS TO 28 ENVIROLOO TOILETS

Bill No		Page No	Amount
1	Alterations	76	
2	Capentry and Joinery	82	
3	Ironmongery	84	
4	Metalwork	86	
5	Plastering	87	
6	Plumbing and Drainage	90	
7	Glazing	91	
8	Paintwork	93	
	Carried to Final Summary		R
	Section No. 3 RENOVATIONS TO 28 ENVIROLOO TOILETS CLUSTER G		

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.1</u></p> <p><u>FOUNDATIONS</u></p> <p><u>EARTHWORKS</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Nature of ground</u></p> <p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p> <p><u>Excavation for working space in rock</u></p> <p>Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over" bulk excavation or trench and hole excavation as the case may be</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>			
	Carried Forward		R	
	<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 1 Foundations CLUSTER G</p>			

	Brought Forward			R
	<u>Filling</u>			
	Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material			
	<u>Soil poisoning</u>			
	Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent			
	<u>SITE CLEARANCE, ETC.</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	562	
	<u>REMOVAL TREES, ETC.</u>			
	<u>Taking out and removing, grubbing up roots and filling holes.</u>			
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	4	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	233	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
4	Soft rock	m3	54	
	Carried Forward			R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 1 Foundations CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Brought Forward			R
5	Hard rock	m3	50
	<u>Extra over all excavations for carting away</u>		
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	76
	<u>Risk of collapse of excavations</u>		
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	361
	<u>Keeping excavations free of water</u>		
8	Keeping excavations free of all water other than subterranean water		Item
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>		
9	Under floors, steps, paving, etc	m3	97
	<u>Approved G6 filling supplied and carted by the contractor and compacted in layers not exceeding 150mm to 95% Mod AASHTO density</u>		
10	Backfilling to trenches, holes, etc	m3	157
11	Under floors, steps, paving etc.	m3	56
	<u>Compaction of surfaces</u>		
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	354
	<u>Prescribed density tests on filling</u>		
	<u>SOIL POISONING</u>		
	Carried Forward		
	R		
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 1 Foundations CLUSTER G		

	Brought Forward			R
	<u>Soil insecticide</u>			
13	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	354	
14	To bottoms and sides of trenches etc	m2	512	
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>25MPa/19mm concrete</u>			
15	Strip footings	m3	26	
	<u>TEST CUBES</u>			
16	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	5.0	
	<u>BRICKWORK</u>			
	<u>Brickwork of NFP bricks in class II mortar</u>			
17	Half brick walls	m2	92	
18	One brick walls	m2	171	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Joint forming material in movement joints:</u>			
	<u>Brickwork reinforcement</u>			
19	75mm wide reinforcement built in horizontally.	m	506	
20	150mm Wide reinforcement built in horizontally	m	528	
	Carried Forward			R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 1 Foundations CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)</p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p>			
	Carried Forward		R	
	<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G</p>			

	Brought Forward			R
	<u>Formwork</u>			
	Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use			
	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			
	Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described			
	Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high 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"			
	<u>UNREINFORCED CONCRETE</u>			
	<u>20MPa/19mm concrete</u>			
1	Surface beds	m3	2	
2	Surface beds cast in panels on waterproofing.	m3	51	
3	Aprons cast in panels to falls	m3	12	
	Carried Forward			R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			

	Brought Forward				R
4	Ramps	m3	1		
5	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	102		
	<u>REINFORCED CONCRETE</u>				
	<u>25MPa/19mm concrete</u>				
6	Slabs including beams and inverted beams	m3	6		
	<u>CONCRETE SUNDRIES</u>				
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>				
7	Surface beds, slabs, etc	m2	354		
8	Ramp to falls	m2	6		
	<u>Finishing top surfaces of concrete smooth with a wood float</u>				
9	Aprons to falls	m2	122		
	<u>FORMWORK</u>				
	<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>				
	<u>Rough formwork to sides</u>				
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	89		
	<u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u>				
	Carried Forward				R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G				

	Brought Forward			R
	<u>Smooth formwork to soffits</u>			
11	Slabs	m2	6	
	<u>Permanent formwork to soffits</u>			
	<u>TEST CUBES</u>			
12	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	10.0	
	<u>MOVEMENT JOINTS ETC</u>			
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u>			
	<u>Saw cut joints</u>			
13	Saw cut joints in top of concrete	m	5	
	<u>REINFORCEMENT</u>			
	<u>High tensile steel reinforcement to structural concrete work</u>			
14	12mm Diameter	t	3.50	
15	10mm Diameter bars	t	2.80	
	<u>REINFORCEMENT (PROVISIONAL)</u>			
	<u>Fabric reinforcement</u>			
16	Steeledale Mesh standard square fabric mesh, nominal mass 1,93 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 193), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.	m2	354	
	Carried Forward to Summary of Section No. 4			R
	Section No. 4			
	CONSTRUCTION OF MEDIUM ADMIN BLOCK			
	Bill No. 2			
	Concrete, Formwork and Reinforcement			
	CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 3</u></p> <p><u>MASONRY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>BRICKWORK</u></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>Linings to concrete</u></p> <p>Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties</p> <p><u>Hollow walls etc</u></p> <p>Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p> <p><u>Reinforced brick lintels</u></p> <p>Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous</p>			
	Carried Forward		R	
	<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 3 Masonry CLUSTER G</p>			

Brought Forward			R
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SUPERSTRUCTURE</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
1	Piers	m3	3
2	L-shaped piers	m3	0.5
3	Half brick walls	m2	265
4	Half brick walls in beamfilling.	m2	27
5	One brick walls	m2	409
<u>Joint forming material in movement joints:</u>			
<u>Brickwork reinforcement</u>			
6	75mm Wide reinforcement built in horizontally	m	853
7	150mm Wide reinforcement built in horizontally	m	1,282
<u>Turning pieces</u>			
8	230mm Wide turning piece to lintels etc	m	69
<u>"Allied Concrete" prestressed fabricated lintels</u>			
9	110 x 75mm Lintels in lengths not exceeding 3m	m	15
Carried Forward			R
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 3 Masonry CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Brought Forward			R
<u>Galvanised wire ties etc</u>			
10	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	56
<u>FACE BRICKWORK</u>			
<u>Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>			
11	Extra over brickwork for face brickwork	m2	355
12	Extra over for facing in piers, including bonding and pointed with recesses joints on all exposed faces	m2	6
13	Extra over for facings in beamfilling for face brickwork	m2	75
<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
14	Extra over brickwork for brick-on-edge header course lintel	m	28
<u>Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
15	220mm Wide sill set sloping and slightly protecting outside	m	19
16	Coping on top of one brick wall	m	8
<u>NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS</u>			
Carried Forward			R
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 3 Masonry CLUSTER G			

		Brought Forward			R
17	<p><u>Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations.</u></p> <p>15mm x 150mm Wide sills set flat and slightly projecting</p>	m	45		
<p>Carried Forward to Summary of Section No. 4</p> <p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 3 Masonry CLUSTER G</p>					R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.4</u></p> <p><u>WATERPROOFING</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Waterproofing</u></p> <p>Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. 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><u>DAMP-PROOFING OF WALLS AND FLOORS</u></p> <p><u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u></p>			
1	In walls	m2	60	
	<p><u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u></p>			
2	Under surface beds	m2	354	
	<p><u>JOINT SEALANTS ETC</u></p>			
	Carried Forward			R
	<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 4 Waterproofing CLUSTER G</p>			

	Brought Forward				
3	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u> 6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	233		R
Carried Forward to Summary of Section No. 4					
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 4 Waterproofing CLUSTER G					
					R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.5</u></p> <p><u>ROOF COVERINGS ETC</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>General</u></p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use</p> <p><u>Sizes</u></p> <p>All items are measured net unless otherwise described</p> <p><u>Flashings, trimming plates, etc.</u></p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable</p> <p>All items are unless otherwise described measured net</p>			
	Carried Forward		R	
	<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 5 Roof Coveringss, etc CLUSTER G</p>			

Brought Forward			R
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u>			
1	Roof covering with pitch not exceeding 50 degrees	m2	354
2	Ridge capping 550mm girth	m	38
3	Hip capping 550mm girth	m	42
4	Gable trim 550mm girth	m	24
<u>STEEL LOUVRES</u>			
<u>"NTY Steelworks" or similar approved</u>			
5	Triangular steel louvre size 3000x 500mm high fixed to timber purlins including watertight heading joints, necessary sealing strips, fixing accessories, etc	No	4
Carried Forward to Summary of Section No. 4			R
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 5 Roof Coveringss, etc CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
	Carried Forward		R	
	<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 6 Capentry and Joinery CLUSTER G</p>			

Brought Forward			R
<p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>PREFABRICATED ROOF TRUSSES</u></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>			
Carried Forward			R
<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 6 Capentry and Joinery CLUSTER G</p>			

	Brought Forward		R
<p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m² commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p>			
	Carried Forward		R
<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 6 Carpentry and Joinery CLUSTER G</p>			

Brought Forward			R	
<p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p> <p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m² and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p>				
Carried Forward			R	
<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 6 Capentry and Joinery CLUSTER G</p>				

Brought Forward				R
<p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p> <p><u>Specific specifications for roof trusses</u></p> <p>Unless otherwise described, the following specifications will apply:</p> <p>1 All trusses to be with a 10° pitch</p> <p>2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres</p> <p><u>ROOFS</u></p> <p><u>The following in plate nailed timber roof truss construction</u></p> <p><u>The following is applicable in respect of roof trusses</u></p> <p>The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes</p> <p>Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)</p> <p><u>Allow for the preparation and submission of the following documents in respect of all buildings</u></p> <p>1 Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication</p> <p>2 Design certificate indicating the licensed programme used, SANS specifications adhered to, general procedures and loadings adopted, sizes and grading of timber components, details, etc.</p>				
	Item			
	Item			
Carried Forward				R
<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 6 Capentry and Joinery CLUSTER G</p>				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
3	Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Principal Agent		Item	
	<u>Sawn softwood</u>			
4	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for adminstration block approximately 355m2 on plan (Refer to architect's drawings attached to these bills of quantities)	No	1	
	<u>Sawn softwood grade 4</u>			
5	38 x 114mm Wall plates	m	88	
	<u>Sundries</u>			
6	Two coats creosote on sawn timbers	m2	24	
	<u>EAVES, VERGES, ETC</u>			
	<u>"Everite FC77" pressed fibre-cement</u>			
7	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	86	
	<u>SKIRTINGS</u>			
	<u>Wrought meranti</u>			
8	19 x 76mm Skirting including 19mm quadrant bead nailed	m	325	
	<u>DOORS, ETC</u>			
	Carried Forward			R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 6 Capentry and Joinery CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Brought Forward		R
<u>Wrought meranti doors hung to steel frames</u>		
9	44mm Framed and ledged batten door 914 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No 2
<u>Solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame</u>		
10	40mm Door 813 x 2032mm high	No 10
<u>FITTINGS</u>		
<u>The following in four wrot Meranti slatted benches in waiting area:</u>		
11	32 x 69 mm Twice chamfered slat screwed from underside to steel supports with and including steel brackets.	m 44
<u>Joinery Fittings, etc.</u>		
12	Provide the amount of R250 000.00 (Two Hundred Fifty Thousand Rand) for the supply and installation of Joinery Fittings by Specialists	Item 250,000.00
13	Allow for giving every facility to Specialists as described	Item
14	Allow for profit on above if required	Item
<u>Admin Furniture, etc.</u>		
15	Provide the amount of R210 000.00 (Two Hundred Ten Thousand Rand) for the supply and installation of admin furniture by Specialists	Item 350,000.00
16	Allow for giving every facility to Specialists as described	Item
17	Allow for profit on above if required	Item
Carried Forward to Summary of Section No. 4		R
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 6 Capentry and Joinery CLUSTER G		

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.7</u></p> <p><u>CEILING , ETC.</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></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 elsewhere</p> <p><u>CEILING CONSTRUCTION, CORNICES, ETC.</u></p> <p><u>Insulation</u></p>			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	354	
	<u>Sawn softwood</u>			
2	38 x 114mm Ceiling joists (Provisional)	m	85	
	Carried Forward			R
	<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 7 Ceilings, Partitions and Access Flooring CLUSTER G</p>			

Brought Forward		R
<u>"Rhino" gypsum plasterboard cornices</u>		
3	75mm Coved cornices m	325
<u>NAILED UP AND SCREWED UP CEILINGS</u>		
<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>		
4	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails. m2	354
5	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening No	8
Carried Forward to Summary of Section No. 4		
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 7 Ceilings, Partitions and Access Flooring CLUSTER G		
		R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.8</u></p> <p><u>IRONMONGERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs</p> <p><u>Finishes to ironmongery</u></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p> <p><u>CATCHES,CABIN HOOKS, ETC</u></p> <p><u>"Solid"</u></p> <p><u>LOCKS</u></p>			
	Carried Forward		R	
	<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 8 Ironmongery CLUSTER G</p>			

	Brought Forward				R
	<u>"Solid" or similar approved</u>				
1	"Code 630" padlock	No	2		
2	"Code 460/313" Blesbok four lever lockset	No	12		
	<u>DOOR CLOSERS AND FLOOR SPRINGS</u>				
	<u>"Dorma" or similar approved</u>				
3	Dorma TS91/EN3 slide channel door closer - Non hold open (Silver)	No	4		
4	Dorma DPH301C 150 x 19mm stainless steel "D" shaped straight bolt-through pull handle (St/Steel)	No	4		
	<u>SUNDRIES</u>				
	<u>"Solid" or similar approved</u>				
5	Dorma "Code 255" door stop plugged	No	16		
	<u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u>				
	<u>"Vitrex" or similar approved</u>				
6	Pinning boards 2400 x 1200mm high fixed to brickwork	No	2		
7	Pinning boards 3000 x 1200mm high fixed to brickwork	No	4		
	<u>LETTERS, NAMEPLATES, ETC</u>				
	<u>"Union" or similar approved</u>				
8	150 x 150mm Stainless steel plate engraved with "female" sign (St/Steel)	No	1		
9	150 x 150mm Stainless steel plate engraved with "male" sign (St/Steel)	No	1		
	Carried Forward				R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 8 Ironmongery CLUSTER G				

Brought Forward			R
10	150 x 150mm Stainless steel plate engraved with electrical symbol (St/Steel)	No	2
11	150 x 150mm Stainless steel plate engraved with "running man RH" sign (St/Steel)	No	4
12	150 x 150mm Stainless steel plate engraved with a "Fire Hose Reel" sign (St/Steel)	No	1
13	150 x 150mm Stainless steel plate engraved with "Fire Extinguisher" sign (St/Steel)	No	6
14	150 x 150mm Stainless steel plate engraved with a "Arrow sign" sign (St/Steel)	No	11
15	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "KITCHEN"	No	1
16	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "STAFF ROOM"	No	1
17	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "STATIONERY STORE"	No	1
18	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "RECEPTION"	No	1
19	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "SICK ROOM"	No	1
20	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "PRINCIPAL"	No	1
21	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "PRINT ROOM"	No	1
22	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "VICE PRINCIPAL"	No	1
23	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "GENERAL OFFICE"	No	1
Carried Forward			R
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 8 Ironmongery CLUSTER G			

Brought Forward			R
24	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "WAITING AREA"	No	1
25	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "STRONG ROOM"	No	1
<u>BATHROOM FITTINGS</u>			
<u>"Buchel" or similar approved</u>			
26	19mm Diameter chromium plated towel rail 600mm long including end brackets	No	2
<u>"Kimberly-Clark" or similar approved</u>			
27	Kimberly-Clark® Professional MR2 Satin finish Stainless Steel toilet tissue dispenser (code: SA426130), overall size 130 x 135 x 256mm high, installed by a Kimberly Clark® installation team.	No	2
28	Kimberly-Clark® Professional Reflex® MK2 Stainless Steel hand towel dispenser (code: SA426125), overall size 310 x 280 x 400mm high, installed by a Kimberly Clark® installation team.	No	2
29	Kimberly-Clark® Professional Foam soap dispenser colour stainless steel, overall size 134 x 120 x 250mm high, installed by a Kimberly Clark® installation team.	No	2
<u>"Nampak" or similar approved</u>			
30	Vandal resistant 2 roll holder complete fitments or similar approved	No	2
<u>VERTICAL BLINDS</u>			
<u>"Luxaflex" or similar approved</u>			
31	Vertical blind system, not exceeding 2000mm high, consisting of 70mm wide vanes, powder coated aluminium headrail 44.8 x 26.5mm high, fitted with wheeled runners, connected by grey acetal spacer links with and including all necessary components to manufacturer's specifications	m	56
Carried Forward to Summary of Section No. 4			R
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 8 Ironmongery CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 9</u></p> <p><u>METALWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>Descriptions</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p><u>Drawings</u></p> <p>Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc</p> <p><u>WELDED SCREENS, GATES, ETC</u></p> <p><u>Gates to external doors</u></p> <p><u>PRESSED STEEL DOOR FRAMES</u></p> <p><u>1,2mm Double rebated frames suitable for one brick walls</u></p>			
1	Frame for door 914 x 2032mm high and fixed fanlight 305mm high	No	10	
	Carried Forward			R
	<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 9 Metalwork CLUSTER G</p>			

Brought Forward			R
<u>STEEL WINDOWS, DOORS, ETC</u>			
<u>"Nty" or similar approved steel residential windows with burglar bars to all sashes</u>			
2	Window type SWE 418, size 1511 x 1264mm high	No	14
3	Window type SWE 37S, size 1022 x 949mm high	No	3
4	Window type SWE 31S, size 533 x 949mm high	No	5
5	Window type SWE 47, size 2000 x 1264mm high	No	1
<u>STEEL STRONGROOM DOORS, VENTILATORS, ETC</u>			
<u>"Gunnebo SA" or similar approved strongroom doors etc. suitable for 230mm walls fixed to brickwork or concrete</u>			
6	Mutual Austen Safes DS50/2/HD SABS Category 2 (Heavy Duty) left hand strongroom with 2 x 7-lever security keylock, overall size 850 x 1860mm high with and including powder coated finish	No	1
7	Double ended strongroom ventilator	No	1
<u>STEEL ROLLER SHUTTERS ETC</u>			
<u>"Wispeco" or similar approved roller shutters fixed to brickwork or concrete</u>			
<u>ALUMINIUM WINDOWS, DOORS, ETC</u>			
<u>Doors, windows, etc to be manufactured by an approved firm of specialists, to be of the best quality and design truly squared and unless otherwise described, prepared to receive galzing beads from the outside. All opening portions must fit perfectly on all faces and be so hung as to open and close freely without binding at any point. Wherever possible, all angles and intersections to be welded by electric welding, argon or arc welding. A sample window is to be submitted to the Architect for approval before the work is put in hand.</u>			
Carried Forward			R
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 9 Metalwork CLUSTER G			

Brought Forward		R
<p><u>The frames generally are to be suitable for brickwork, blockwork, or concrete reveals. They are to be fitted with fixing lugs of 2,8mm aluminium 13mm wide x 100mm long welded to framing, one near each corner and intermediately not more than 300mm apart to sides top and bottom. Where concrete reveals, etc the frames are to be countersunk holed for and fitted with the necessary screws at the centres as for the lugs above.</u></p> <p><u>Immediately after the windows, doors, etc, have been delivered on to site, they are to be thoroughly overhauled, and all necessary adjustment or repairs made before they are fixed in position. Where they come into contact with brickwork, blockwork, concrete, steel, etc, the framing is to be treated with bituminuos paint in an approved manner. The windows, doors, etc, are to be placed in their positions for building in and adjusted to open and close properly and are to be securely structured to prevent distortion whilst the brickwork and lintols, are being built.</u></p> <p><u>On completion of all other work the windows, doors, are to be adjusted as necessary and rendered in a complete and satisfactory state of repair and in working order.</u></p> <p><u>General. All rates for doors, windows, shopfronts etc , should include for all galzing as specified.</u></p> <p><u>Glazing beads: All door, etc to be fitted with galzing beads, unless otherwise described, mitred at angles and screwed on.</u></p> <p><u>Glass and Glazing: All functional glass must be delivered to site cut to size and ready for installation and must be classified to indicate grade and thickness. Labels must remain on each piece of glass until it is glazed, inspected and officially accepted in writing by the employer, thereafter an insurance letter will follow absolving the contractor of responsibilty.</u></p>		
Carried Forward		R
<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 9 Metalwork CLUSTER G</p>		

<p style="text-align: center;">Brought Forward</p> <p><u>AAAMSA guide</u></p> <p>All windows, doors, etc shall comply with and meet the minimum recommended performance requirements as set out in the General Specification for Architectural Aluminium and Glass Products (Third Edition) as published by the Association of Architectural Aluminium Manufacturers of South Africa (AAAMSA)</p> <p>The following specifications are to be complied with:</p> <p>Aluminium alloy extrusion: BS 1474 Aluminium alloy sheets: SANS 903 Anodising: SANS 999 Neoprene performed seals and gaskets: SATM C542 Powder coat finishing: SANS 1274</p> <p><u>Finish</u></p> <p>The windows, doors, etc shall be natural anodised to a thickness of 25 micron and shall comply with SABS 999 and 1407</p> <p><u>Glass</u></p> <p>Glazing to be with patent rubber gaskets with glazing beads and comply with BS 952. Thickness of glass shall be in accordance with table 1 (Part N : Glazing). Safety glass shall comply with SABS 1263. The National Building Regulations shall be observed with regard to the specification of safety glass</p> <p><u>Design indemnity</u></p> <p>The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed</p> <p><u>Drawings</u></p> <p>Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc</p>		R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 9 Metalwork CLUSTER G</p>		R	

	Brought Forward			R
	<u>Pricing.</u>			
	All window prices should include aluminium louvres as shown			
	<u>General</u>			
	Workshop drawings to be approved by the architect before manufacture			
	<u>Ironmongery</u>			
	Prices for windows shall allow for two standard stainless steel side/top hung friction hinges and one bronze anodised aluminium handle per opening sash. Prices for doors shall allow for two pairs of standard flush bolts to double doors and one-and-a-half pairs of standard hinges per door leaf.			
	<u>Natural anodised series 340 aluminium windows, doors, etc including sub-frames, fixing, silicone sealant all round, ironmongery and glazed with 6,38mm clear laminated safetyglass unless otherwise stated</u>			
8	Purpose made aluminium viewing panel size 2000 x 1110mm high in two equal fixed panes	No	1	
9	Purpose made sliding viewing panel size 2000 x 1110mm high in three equal leafs (W6 & W5)	No	2	
10	Purpose made aluminium double door in two equal leafs size 1575 x 2100mm high overall (D1)	No	2	
	Carried Forward to Summary of Section No. 4			R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 9 Metalwork CLUSTER G			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 10</u>			
	<u>PLASTERING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>GRANOLITHIC</u>			
	<u>Untinted granolithic on concrete</u>			
1	25mm Thick on floors and landings	m2	68	
	<u>SCREEDS</u>			
	<u>Screeds on concrete</u>			
2	30mm Thick on floors	m2	310	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork</u>			
3	On walls	m2	821	
4	On narrow widths	m2	35	
	<u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u>			
	Carried Forward			R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 10 Plastering CLUSTER G			

	Brought Forward				
	<u>Brass</u>				R
5	3 x 32mm Flat section brass dividing strips between different floor finishes	m	13		
Carried Forward to Summary of Section No. 4					
Section No. 4					
CONSTRUCTION OF MEDIUM ADMIN BLOCK					
Bill No. 10					
Plastering					
CLUSTER G					
					R

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.11</u>			
	<u>TILING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	<u>WALL TILING</u>			
	<u>Glazed ceramic wall tiles (PC R110,00/m2 VAT excl.) fixed with adhesive to plaster (plaster elsewhere)</u>			
1	On walls	m2	122	
2	On narrow widths	m2	5	
	<u>FLOOR TILING</u>			
	Carried Forward			
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 11 Tiling CLUSTER G			R

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	<u>300 x 300 x 11,5mm Ceramic floor tiles (PC R120.00/m2 VAT excl.) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted waterproof jointing compound</u>			
3	On floors and landings	m2	354	
4	Skirting formed of ceramic tile cut to 300 x 75mm high	m	26	
Carried Forward to Summary of Section No. 4				R
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 11 Tiling CLUSTER G				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.12</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>"Polylink" polypropylene pipes:</u></p> <p>Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints</p> <p>Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G</p>			R

Brought Forward	R
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p> <p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p> <p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p> <p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>Vitrified clay pipes:</u></p> <p>Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid</p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p>	
Carried Forward	R
<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G</p>	

Brought Forward		R
<p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Lead pipes and fittings</u></p> <p>All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel</p>		
Carried Forward		R
<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G</p>		

	Brought Forward		R
<p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Septic tanks</u></p> <p>Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p>			
	Carried Forward		R
<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G</p>			

Brought Forward	R
<p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steelbasins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>Steel sectional water tanks</u></p> <p>Tanks shall comply with SABS CKS 114</p> <p><u>"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u></p> <p>Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described</p>	R
Carried Forward	R
<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G</p>	

Brought Forward			R
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc			
<u>RAINWATER DISPOSAL</u>			
<u>0,6mm Galvanised sheet iron with "Chromadek" finish on one side</u>			
1	100 x 125mm Eaves gutters with beaded front edge	m	66
2	Extra over eaves gutter for angle	No	8
3	Extra over eaves gutter for stopped end	No	2
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	8
5	100mm Diameter rainwater pipes	m	25
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	8
7	Extra over rainwater pipe for shoe	No	8
<u>STORMWATER CHANNELS</u>			
<u>15 MPa/20 mm concrete</u>			
<u>SOIL DRAINAGE</u>			
<u>uPVC pipes</u>			
8	110mm Pipes vertically or ramped to cleaning eye etc (no excavation)	m	6
9	110mm Pipes laid in and including trenches not exceeding 1m deep	m	150
Carried Forward			R
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Brought Forward			R
<u>Extra over uPVC pipes for fittings</u>			
10	110mm Access bend	No	4
11	110mm Access junction	No	3
12	110mm Bend	No	3
13	110mm Junction	No	3
14	110mm uPVC rodding eye cover in end of pipe	No	2
<u>Pre-cast concrete gulleys</u>			
15	110mm Dished gulley not exceeding 1m deep with 150mm steel grate and standard concrete gulley surround	No	1
<u>Concrete pipes:</u>			
<u>Inspection chambers (covers elsewhere)</u>			
16	Inspection chamber 450 x 600mm x exceeding 750mm and not exceeding 1000mm deep internally	No	1
<u>Covers, etc</u>			
17	450 x 600mm x 74kg Type 8A cast iron double seal manhole cover and frame	No	1
<u>Sundries</u>			
18	100mm Cast iron "ABC" cleaning eye	No	3
19	Precast concrete inspection eye marker slab set in ground	No	5
20	110mm Rodding eye	No	3
21	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	2
Carried Forward			R
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward				R
22	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock	m3	2		
	<u>SANITARY FITTINGS</u>				
	<u>"Vaal" or similar approved</u>				
23	Vaal Sanitaryware 510 x 405mm Hibiscus White vitreous china lavatory basin (Code : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code 8448Z0).	No	3		
24	Vaal Sanitaryware Hibiscus White vitreous china close coupled washdown suite comprising 90° outlet open rim pan (product code 772600) and matching 6/3 litre front dual flush cistern (product code 710539) including "PARKER AVANT" toilet seat	No	2		
	<u>WASTE UNIONS ETC</u>				
	<u>"Cobra Watertech" or similar approved</u>				
25	38mm "Cobra 316" unslotted waste and plug with chain	No	3		
	<u>TRAPS ETC</u>				
	<u>"Marley" or similar approved</u>				
26	40mm Flexi butyl rubber trap with reseal "P" trap	No	1		
	<u>Chromium plated</u>				
27	32 x 40mm Bottle trap	No	3		
	<u>CATCH PITS ETC</u>				
	<u>The following in stormwater catchpits, junction boxes and inlet manholes</u>				
	<u>TAPS, VALVES, ETC</u>				
	Carried Forward				R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Brought Forward			R
<u>"Cobra Watertech" or similar approved</u>			
28	Cobra Ref. 166/041 wall type "Star" sink mixer with overarm swivel outlet	No	1
29	Cobra Watertech 15mm chrome plated hi-waste elbow action pillartap with blue indicator for cold water (Code: 504-21B), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412).	No	6
30	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	8
<u>SANITARY PLUMBING</u>			
<u>uPVC pipes</u>			
31	50mm Pipes	m	9
32	50mm Pipes laid in and including trenches not exceeding 1m deep	m	16
33	110mm Pipes	m	65
<u>Extra over uPVC pipes for fittings</u>			
34	50mm Bend	No	6
35	50mm Access bend	No	4
36	50mm BSP adaptor	No	2
37	50mm "GI Two-way" vent valve	No	1
38	110mm Bend	No	4
39	110mm Access bend	No	2
40	110mm Pan Connector	No	2
41	110mm "GI Two-way" vent valve	No	1
Carried Forward			R
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward				R
	<u>Sundries</u>				
	<u>WATER SUPPLIES</u>				
	<u>Class 16 uPVC pressure pipes with solvent welded joints</u>				
42	32mm Pipes laid in and including trenches not exceeding 1m deep	m	30		
43	50mm Pipes laid in and including trenches not exceeding 1m deep	m	25		
	<u>Extra over class 16 uPVC pressure pipes for fittings with solvent welded joints</u>				
44	32mm Bend	No	3		
45	32mm Reducer	No	2		
46	32mm Tee	No	4		
47	50mm Bend	No	3		
48	50mm Tee	No	2		
49	35 x 50 x 35mm Junction	No	1		
	<u>Class 0 copper pipes</u>				
50	15mm Pipes	m	85		
51	22mm Pipes	m	65		
	<u>Extra over class 0 copper pipes for capillary fittings</u>				
52	15mm Fittings	No	44		
53	22mm Fittings	No	37		
	<u>Brass</u>				
54	15mm Fullway gate valve	No	1		
	Carried Forward				R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward				R
55	22mm Fullway gate valve	No	1		
	<u>Rainwater Tanks</u>				
56	Provide a sum of R125 000,00 (One Hundred and Twenty Five Thousand Rand) for the supply and installation of Rainwater tanks complete by Specialists		Item		125,000.00
57	Allow for giving every facility to Specialists as described		Item		
58	Allow for profit on above if required		Item		
	<u>Sundries</u>				
	<u>ELECTRIC WATER HEATERS</u>				
	<u>"Kwikot" or similar approved</u>				
59	Kwikot 150 Litre Slimline 600 Dual electric water heater (Code : ESG-100) complying with SABS 151-2002, overall size 990 x 480mm high, operating at 400kPa with temperature and pressure safety relief valve including 20mm female draincock with inlet compression. Geyser to be installed horizontally in roof space with 1160 x 560mm wide polyethylene drip tray with union and back nut connected to 20mm PVC overflow pipe taken out at eaves (Code : GSTP-1200) and 15mm pipe work including two 15mm vacuum breakers (Code : KHN4.150CX) installed on hot and cold water supply. Installation to include a 15mm 400kPa Kwikot Mono control and expansion relief valve (Code : KHN3.104), all in accordance with SANS 10254, connected to single phase electrical power supply with isolator 1m away from connection on geyser.	No	1		
	<u>FIRE APPLIANCES ETC</u>				
	Carried Forward				R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward				
	<u>'Chubb' or similar approved</u>				R
60	4.5kg Dry chemical powder fire extinguisher, including standard hard wood backing plugged and backing finished with one coat dark stain and two coats clear suede polyurethane varnish	No	6		
61	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1		
Carried Forward to Summary of Section No. 4					R
Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G					

Item No		Quantity	Rate	Amount
	<u>SECTION NO.4</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 13</u>			
	<u>GLAZING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>4mm Clear float glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	3	
2	Panes exceeding 0,5m2 and not exceeding 2m2	m2	22	
	<u>4mm Rough cast glass</u>			
3	Panes exceeding 0,5m2 and not exceeding 2m2	m2	4	
	<u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u>			
	<u>4 mm Silvered float glass copper backed mirrors with 10 mm bevelled and polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>			
4	Mirror 400 x 600mm high with four (4) screws	No	3	
	Carried Forward to Summary of Section No. 4			
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 13 Glazing CLUSTER G			R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.4</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 14</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>DESCRIPTIONS</u></p> <p>Descriptions of paintwork shall be deemed to include for all cutting in</p> <p><u>PAINT SPECIFICATIONS</u></p> <p>All painting shall be done in accordance with "Plascon-Evans" specifications</p> <p style="text-align: center;">-----</p> <p><u>PAINTWORK ETC TO NEW WORK</u></p> <p><u>ON FLOATED PLASTER</u></p>			
	Carried Forward		R	
	<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 14 Paintwork CLUSTER G</p>			

	Brought Forward			R
	<u>Plascon Polvin Super Acrylic to interior new cement plaster (NW 205).Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Polvin Super Acrylic (EPL) with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.</u>			
1	On internal walls	m2	699	
	<u>ON SMOOTH CONCRETE</u>			
	<u>Prepare surfaces and remove all loose material, and rinse. Apply flexible crackfiller to holes and cracks, one coat plaster primer and two coats Plascon Professional Copolymer Acrylic paint</u>			
2	On ceilings, beams, walls and columns	m2	12	
	<u>ON FIBRE-CEMENT</u>			
	<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
3	On ceilings and cornices	m2	354	
	<u>Plascon Sure Coat Gloss Enamel to exterior new fibre cement (NW 174).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.</u>			
4	On fascias and barge boards	m2	53	
	Carried Forward			R
	Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 14 Paintwork CLUSTER G			

Brought Forward			R
	<p><u>Plascon Sure Coat Gloss Enamel to interior new fibre cement (NW 274).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 4 years in a C1 - inland environment.</u></p>		
5	On window sills not exceeding 300 mm girth	m	99
	<u>ON METAL</u>		
	<p><u>Plascon Velvaglo Satin to exterior new mild steel (NW 683).Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.</u></p>		
6	On door frames	m2	23
7	On strong room doors	m2	5
8	On windows with burglar bars	m2	69
9	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	28
10	On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high	m	99
	<u>ON WOOD</u>		
	Carried Forward		R
	<p>Section No. 4 CONSTRUCTION OF MEDIUM ADMIN BLOCK Bill No. 14 Paintwork CLUSTER G</p>		

Brought Forward			R
	<p><u>Plascon Velvagio Satin to interior new wood (NW 571). Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.</u></p>		
11	On doors	m2	35
	<u>Three coats matt varnish</u>		
12	On doors	m2	11
13	On skirtings, rails, cornices etc not exceeding 300 mm girth	m	325
Carried Forward to Summary of Section No. 4			R
Section No. 4			
CONSTRUCTION OF MEDIUM ADMIN BLOCK			
Bill No. 14			
Paintwork			
CLUSTER G			

	Section No. 4			
	CONSTRUCTION OF MEDIUM ADMIN BLOCK			
	SECTION SUMMARY - CONSTRUCTION OF MEDIUM ADMIN BLOCK			
Bill No		Page No		Amount
1	Foundations	99		
2	Concrete, Formwork and Reinforcement	103		
3	Masonry	107		
4	Waterproofing	109		
5	Roof Coveringss, etc	111		
6	Capentry and Joinery	118		
7	Ceilings, Partitions and Access Flooring	120		
8	Ironmongery	124		
9	Metalwork	129		
10	Plastering	131		
11	Tiling	133		
12	Plumbing and Drainage	145		
13	Glazing	146		
14	Paintwork	150		
	Carried to Final Summary			
	Section No. 4			
	CONSTRUCTION OF MEDIUM ADMIN BLOCK			
	CLUSTER G			
			R	

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.1</u></p> <p><u>FOUNDATIONS</u></p> <p><u>EARTHWORKS</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Nature of ground</u></p> <p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p> <p><u>Excavation for working space in rock</u></p> <p>Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over" bulk excavation or trench and hole excavation as the case may be</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>			
	Carried Forward		R	
	<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 1 Foundations CLUSTER G</p>			

Brought Forward					
				R	
<u>Filling</u>					
Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material					
<u>Soil poisoning</u>					
Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent					
<u>SITE CLEARANCE, ETC.</u>					
<u>Site clearance</u>					
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	470		
<u>REMOVAL TREES, ETC.</u>					
<u>Taking out and removing, grubbing up roots and filling holes.</u>					
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	1		
<u>EXCAVATION, FILLING, ETC</u>					
<u>Excavation in earth not exceeding 2m deep</u>					
3	Trenches	m3	121		
<u>Extra over trench and hole excavations in earth for excavation in</u>					
4	Soft rock	m3	12		
Carried Forward				R	
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 1 Foundations CLUSTER G					

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Brought Forward			R
5	Hard rock	m3	6
	<u>Extra over all excavations for carting away</u>		
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	62
	<u>Risk of collapse of excavations</u>		
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	302
	<u>Keeping excavations free of water</u>		
8	Keeping excavations free of all water other than subterranean water		Item
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>		
9	Under floors, steps, paving, etc	m3	63
	<u>Approved G6 filling supplied and carted by the contractor and compacted in layers not exceeding 150mm to 95% Mod AASHTO density</u>		
10	Backfilling to trenches, holes, etc	m3	59
11	Under floors, steps, paving etc.	m3	32
	<u>Compaction of surfaces</u>		
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	212
	<u>Prescribed density tests on filling</u>		
13	"Modified AASHTO Density" test	No	10
Carried Forward			R
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 1 Foundations CLUSTER G			

Brought Forward				R
<u>SOIL POISONING</u>				
<u>Soil insecticide</u>				
14	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	212	
15	To bottoms and sides of trenches etc	m2	605	
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>				
<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
<u>25MPa/19mm concrete</u>				
16	Strip footings	m3	36	
<u>Fabric reinforcement</u>				
17	Type 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	212	
<u>TEST CUBES</u>				
18	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	10.0	
<u>BRICKWORK</u>				
<u>Brickwork of NFP bricks in class II mortar</u>				
19	One brick walls	m2	152	
<u>BRICKWORK SUNDRIES</u>				
Carried Forward				R
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 1 Foundations CLUSTER G				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

				R
	Brought Forward			
	<u>Joint forming material in movement joints:</u>			
20	12mm Fibre board built in vertically between brick skins.	m2	85	
	<u>Brickwork reinforcement</u>			
21	150mm Wide reinforcement built in horizontally	m	836	
	<u>FACE BRICKWORK</u>			
	<u>Face bricks (Purchase price of R 4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>			
22	Extra over brickwork for face brickwork	m2	39	
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R 4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
23	Coping on top of one brick wall	m	29	
	Carried Forward to Summary of Section No. 5			R
	Section No. 5			
	CONSTRUCTION OF 3 GRADE R CLASSROOMS			
	Bill No. 1			
	Foundations			
	CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)</p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p>			
	Carried Forward		R	
	<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G</p>			

Brought Forward		R
<p><u>Formwork</u></p> <p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself</p> <p>Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described</p> <p>Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"</p> <p>B - Waterborne Toilet Block D - Gate House E - Demolitions F - Alterations G - Provisional Amounts H - 2 Classroom Block I - Admin Block J - Nutrition Centre</p> <p><u>REINFORCED CONCRETE</u></p>		
Carried Forward		R
<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G</p>		

Brought Forward			R
<u>20MPa/19mm concrete</u>			
1	Surface beds cast in panels on waterproofing	m3	19
2	Aprons cast in panels to falls	m3	7
3	Ramps	m3	1
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
4	Surface beds, slabs, etc	m2	212
5	Ramp to falls	m2	6
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
6	Surface beds, slabs, etc	m2	212
7	Aprons to falls	m2	82
<u>FORMWORK</u>			
<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>			
<u>Rough formwork to sides</u>			
8	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	22
<u>TEST CUBES</u>			
9	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith. (Provisional)	Sets	5.0
Carried Forward			R
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			

Brought Forward			R
<u>MOVEMENT JOINTS ETC</u>			
<u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u>			
10	15mm Joints exceeding 300mm high (Provisional)	m	14
<u>Saw cut joints</u>			
11	Saw cut joints in top of concrete (Provisional)	m	37
<u>DIVIDING STRIPS, ETC.</u>			
12	6 x 38mm Angle iron step guard cast into concrete with 3 x 6mm anchors	m	2
<u>REINFORCEMENT (PROVISIONAL)</u>			
<u>Fabric reinforcement</u>			
13	Steeledale Mesh standard square fabric mesh, nominal mass 1,93 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 193), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.	m ²	212
Carried Forward to Summary of Section No. 5			R
Section No. 5			
CONSTRUCTION OF 3 GRADE R CLASSROOMS			
Bill No. 2			
Concrete, Formwork and Reinforcement			
CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 3</u></p> <p><u>MASONRY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>BRICKWORK</u></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>Linings to concrete</u></p> <p>Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties</p> <p><u>Hollow walls etc</u></p> <p>Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p> <p><u>Reinforced brick lintels</u></p> <p>Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous</p>			
	Carried Forward		R	
	<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 3 Masonry CLUSTER G</p>			

Brought Forward			R
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SUPERSTRUCTURE</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
1	345 x 345mm Piers	m3	1
2	Half brick walls in beamfilling.	m2	30
3	Half brick.	m2	75
4	One brick walls	m2	209
<u>Brickwork reinforcement</u>			
5	75mm Wide reinforcement built in horizontally	m	385
6	150mm Wide reinforcement built in horizontally	m	767
<u>Turning pieces</u>			
7	230mm Wide turning piece to lintels etc	m	30
<u>"Allied Concrete" prestressed fabricated lintels</u>			
8	110 x 75mm Lintels in lengths not exceeding 3m (Provisional)	m	6
<u>Galvanised wire ties etc</u>			
9	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork (Provisional)	No	118
Carried Forward			R
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 3 Masonry CLUSTER G			

Brought Forward			R
<u>FACE BRICKWORK</u>			
<u>Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>			
10	Extra over brickwork for face brickwork	m2	172
11	Extra over for facing in piers, including bonding and pointed with recesses joints on all exposed faces	m2	16
12	Extra over for facings in beamfilling for face brickwork	m2	30
<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
13	Extra over brickwork for brick-on-edge header course lintel	m	28
<u>Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
14	Coping on top of one brick wall	m	30
15	220mm Wide sill set sloping and slightly protecting outside	m	26
<u>NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS</u>			
<u>Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations.</u>			
16	15mm x 150mm Wide sills set flat and slightly projecting	m	26
Carried Forward to Summary of Section No. 5			R
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 3 Masonry CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.4</u></p> <p><u>WATERPROOFING</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Waterproofing</u></p> <p>Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. 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><u>DAMP-PROOFING OF WALLS AND FLOORS</u></p> <p><u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u></p>			
1	In walls	m2	35	
	<p><u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u></p>			
2	Under surface beds	m2	212	
	<p><u>JOINT SEALANTS ETC</u></p>			
	Carried Forward			R
	<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 4 Waterproofing CLUSTER G</p>			

	Brought Forward				
3	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u> 6 x 10mm In expansion joints including raking out of expansion joint filler as necessary (Provisional)	m	5	R	
Carried Forward to Summary of Section No. 5					
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 4 Waterproofing CLUSTER G					
				R	

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.5</u></p> <p><u>ROOF COVERINGS ETC</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>General</u></p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use</p> <p><u>Sizes</u></p> <p>All items are measured net unless otherwise described</p> <p><u>Flashings, trimming plates, etc.</u></p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable</p> <p>All items are unless otherwise described measured net</p>			
	Carried Forward		R	
	<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 5 Roof Coveringss, etc CLUSTER G</p>			

Brought Forward			R
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>0,58mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u>			
1	Roof covering with pitch not exceeding 50 degrees	m2	742
2	Ridge capping 550mm girth	m	16
3	Hip capping 550mm girth	m	9
4	Gable trim 550mm girth	m	40
<u>STEEL LOUVRES</u>			
<u>"NTY Steelworks" or similar approved</u>			
5	Triangular steel louvre size 3000x 500mm high fixed to timber purlins including watertight heading joints, necessary sealing strips, fixing accessories, etc	No	2
Carried Forward to Summary of Section No. 5			R
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 5 Roof Coveringss, etc CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
	Carried Forward		R	
	<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 6 Capentry and Joinery CLUSTER G</p>			

Brought Forward			R
<p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>PREFABRICATED ROOF TRUSSES</u></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>			
Carried Forward			R
<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 6 Capentry and Joinery CLUSTER G</p>			

	Brought Forward		R
<p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m² commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p>			
	Carried Forward		R
<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 6 Carpentry and Joinery CLUSTER G</p>			

Brought Forward			R	
<p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p> <p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m² and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p>				
Carried Forward			R	
<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 6 Capentry and Joinery CLUSTER G</p>				

Brought Forward				R
<p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p> <p><u>Specific specifications for roof trusses</u></p> <p>Unless otherwise described, the following specifications will apply:</p> <p>1 All trusses to be with a 10° pitch</p> <p>2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres</p> <p><u>ROOFS</u></p> <p><u>The following in plate nailed timber roof truss construction</u></p> <p><u>The following is applicable in respect of roof trusses</u></p> <p>The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes</p> <p>Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)</p> <p><u>Allow for the preparation and submission of the following documents in respect of all buildings</u></p> <p>1 Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication</p> <p>2 Design certificate indicating the licensed programme used, SANS specifications adhered to, general procedures and loadings adopted, sizes and grading of timber components, details, etc.</p>				
	Item			
	Item			
Carried Forward				R
<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 6 Capentry and Joinery CLUSTER G</p>				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
3	Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Principal Agent		Item	
	<u>Sawn softwood</u>			
4	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for Grade R Classroom block approximately 403m2 on plan (Refer to architect's drawings attached to these bills of quantities)	No	1	
5	Roof construction to mono pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for Grade R Play Area Classroom Block approximately 40m2 on plan (Refer to architect's drawings attached to these bills of quantities)	No	1	
	<u>Sawn softwood grade 4</u>			
6	38 x 114mm Wall plates	m	71	
7	50 x 220mm Timber Beam	m	25	
	<u>Sundries</u>			
8	Two coats creosote on sawn timbers	m2	24	
	<u>EAVES, VERGES, ETC</u>			
	<u>"Everite FC77" pressed fibre-cement</u>			
9	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	75	
	<u>SKIRTINGS</u>			
	Carried Forward			R
	Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 6 Carpentry and Joinery CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
BILLS OF QUANTITIES
VALLAMBROSA PRIMARY SCHOOL
LDPW-B/20309

	Brought Forward				R
	<u>Wrought meranti</u>				
10	19 x 76mm Skirting including 19mm quadrant bead nailed	m	90		
	<u>DOORS, ETC</u>				
	<u>Wrought meranti doors hung to steel frames</u>				
11	44mm Framed and ledged batten door 813 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D1)	No	3		
	<u>Solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame</u>				
12	40mm Door 813 x 2032mm high	No	8		
	<u>JOINERY FITTINGS</u>				
	<u>Money Provision:</u>				
13	Provide a sum of R150 000,00 (One Hundred Fifty Thousand Rand) for supply and installation of joinery works by the specialist which was not clearly defined at the time of tender			Item	150,000.00
	<u>Money Provision:</u>				
14	Provide a sum of R200 000,00 (Two Hundred Fifty Thousand Rand) for supply and installation of Toys supplied by the specialist which was not clearly defined at the time of tender			Item	250,000.00
	Carried Forward to Summary of Section No. 5				
	Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 6 Capentry and Joinery CLUSTER G				R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.7</u></p> <p><u>CEILING , ETC.</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></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 elsewhere</p> <p><u>CEILING CONSTRUCTION, CORNICES, ETC.</u></p> <p><u>Insulation</u></p>			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	163	
	<u>Sawn softwood</u>			
2	38 x 114mm Ceiling joists (Provisional)	m	496	
	Carried Forward			R
	<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 7 Ceilings, Partitions and Access Flooring CLUSTER G</p>			

Brought Forward				R
	<u>"Rhino" gypsum plasterboard cornices</u>			
3	75mm Coved cornices	m	119	
<u>NAILED UP AND SCREWED UP CEILINGS</u>				
	<u>9mm "RHINO BOARD" ceiling board with H-profile primed steel jointing cover strips over joints</u>			
4	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	163	
5	Sloping ceilings including 38 x 38mm sawn softwood branderling at 450mm centres	m2	51	
6	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	3	
Carried Forward to Summary of Section No. 5				
Section No. 5				
CONSTRUCTION OF 3 GRADE R CLASSROOMS				
Bill No. 7				
Ceilings, Partitions and Access Flooring				
CLUSTER G				
				R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.8</u></p> <p><u>IRONMONGERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs</p> <p><u>Finishes to ironmongery</u></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p> <p><u>CATCHES,CABIN HOOKS, ETC</u></p> <p><u>"Solid"</u></p>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	5	No	
	<p><u>LOCKS</u></p>			
	Carried Forward			R
	<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 8 Ironmongery CLUSTER G</p>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	<u>"Solid"</u>			
2	"Code 630" padlock	No	3	
3	"Code 460/313" Blesbok four lever lockset	No	11	
	<u>SUNDRIES</u>			
	<u>"Solid" or similar approved</u>			
4	Dorma "Code 255" door stop plugged	No	11	
	<u>"Vitrex" or similar approved</u>			
5	Pinning boards 2400 x 1200mm high fixed to brickwork	No	2	
6	2000 x 1300 mm White Porcelain magnetic marker board	No	2	
	Carried Forward to Summary of Section No. 5			R
	Section No. 5			
	CONSTRUCTION OF 3 GRADE R CLASSROOMS			
	Bill No. 8			
	Ironmongery			
	CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 9</u></p> <p><u>METALWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>Descriptions</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p><u>Drawings</u></p> <p>Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc</p> <p><u>STEEL HANDRAILS, BALUSTRADES, ETC</u></p> <p><u>Welded handrails to walkways</u></p>			
1	<p>Horizontal welded balustrading 1000mm high formed of 50 x 50 x 3mm thick square hollow section top and bottom rails, with uprights formed of 50 x 50 x 3mm thick square hollow section steel at 986mm centres, the balustrading with two diagonal cross members formed of 50 x 25 x 3mm thick hollow section and welded to steel columns (e/m) at 3000mm centres</p>	m	26	
	Carried Forward			R
	<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 9 Metalwork CLUSTER G</p>			

Brought Forward		R
2	Raking welded balustrading 1000mm high formed of 50 x 50 x 3mm thick square hollow section top and bottom rails, with uprights formed of 50 x 50 x 3mm thick square hollow section steel at 986mm centres, the balustrading with two diagonal cross members formed of 50 x 25 x 3mm thick hollow section and welded to steel columns (e/m) at 3000mm centres	m 24
3	100 x 100 x 5mm Thick base plate, four times holed and welded to bottom of posts (e/m)	No 5
4	Extra over last for closed end to 50 x 50mm rails	No 4
5	M16 x 100mm expansion bolt	No 20
<u>SUNDRY METALWORK</u>		
<u>The following in identical steel support columns</u>		
6	Bolts, complete with nuts and two washers each	kg 9
7	100 x 100 x 5mm Tubular section columns 3050mm high	No 7
8	100 x 6mm Flat section fixing plate 120mm, twice holed for bolt and welded to top end of tubular section column (Provisional)	No 7
9	200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section column	No 7
10	12mm Diameter x 75mm long sleeved masonry anchor (Provisional)	No 7
<u>WELDED SCREENS, GATES, ETC</u>		
Carried Forward		R
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 9 Metalwork CLUSTER G		

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	<u>Gates to external doors</u>			
11	Gate and frame 900 x 2100mm high complete (G1)	No	2	
	<u>1,2mm Double rebated frames suitable for one brick walls</u>			
12	Frame for door 914 x 2032mm high	No	8	
	<u>1,2mm Double rebated frames suitable for one brick walls</u>			
13	Frame for door 914 x 2032mm high	No	3	
	<u>STEEL WINDOWS, DOORS, ETC</u>			
	<u>"Nty" or Similar approved steel residential windows with burglar bars to all sashes</u>			
14	NTY Standard School type window size 889 x 853mm high (W1)	No	20	
15	NTY Standard School type window size 533 x 653mm high (W2)	No	9	
16	NTY Standard School type window size 533 x 390mm high (W3)	No	4	
	Carried Forward to Summary of Section No. 5			R
	Section No. 5			
	CONSTRUCTION OF 3 GRADE R CLASSROOMS			
	Bill No. 9			
	Metalwork			
	CLUSTER G			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 10</u>			
	<u>PLASTERING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SCREEDS</u>			
	<u>ScreeDs on concrete</u>			
1	30mm Thick on floors	m2	212	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork</u>			
2	On walls	m2	309	
3	On narrow widths	m2	9	
	Carried Forward to Summary of Section No. 5			
	Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 10 Plastering CLUSTER G			R

Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.11</u>			
	<u>TILING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	<u>WALL TILING</u>			
	<u>200 x 200 x 10mm Glazed ceramic tiles flush pointed with tinted jointing fixed to cement plaster with plastic nosing at corners (PC R180,00/m2 Vat excl. delivered to site)</u>			
1	On walls	m2	121	
2	On narrow widths, etc.	m2	9	
	<u>FLOOR TILING</u>			
	Carried Forward			R
	Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 11 Tiling CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	<u>300 x 300 x 11,5mm Ceramic floor tiles (PC R120.00/m2 VAT excl.) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted waterproof jointing compound</u>			
3	On floors and landings	m2	635	
4	Skirting formed of ceramic tile cut to 300 x 75mm high	m	119	
Carried Forward to Summary of Section No. 5				R
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 11 Tiling CLUSTER G				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.12</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>"Polylink" polypropylene pipes:</u></p> <p>Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints</p> <p>Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 12 Plumbing and Drainage CLUSTER G</p>			R

Brought Forward	R
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p> <p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p> <p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p> <p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>Vitrified clay pipes:</u></p> <p>Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid</p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p>	
Carried Forward	R
<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 12 Plumbing and Drainage CLUSTER G</p>	

Brought Forward		R
<p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Lead pipes and fittings</u></p> <p>All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel</p>		
Carried Forward		R
<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 12 Plumbing and Drainage CLUSTER G</p>		

Brought Forward			R	
<p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p>				
<p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p>				
<p><u>Septic tanks</u></p> <p>Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions</p>				
<p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p>				
<p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p>				
Carried Forward			R	
<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 12 Plumbing and Drainage CLUSTER G</p>				

<p>Brought Forward</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steelbasins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>Steel sectional water tanks</u></p> <p>Tanks shall comply with SABS CKS 114</p> <p><u>"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u></p> <p>Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described</p>	<p>R</p>
<p>Carried Forward</p> <p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 12 Plumbing and Drainage CLUSTER G</p>	<p>R</p>

Brought Forward			R
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc			
<u>RAINWATER DISPOSAL</u>			
<u>0,6mm Galvanised sheet iron with "Chromadek" finish on one side</u>			
1	100 x 125mm Eaves gutters with beaded front edge	m	71
2	Extra over eaves gutter for angle	No	12
3	Extra over eaves gutter for stopped end	No	12
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	12
5	100mm Diameter rainwater pipes	m	36
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	12
7	Extra over rainwater pipe for shoe	No	12
<u>SANITARY FITTINGS</u>			
<u>White Vitreous China</u>			
8	Vaal Sanitaryware 580 x 510mm concorde vanity ceramic fireclay drop-in-vanity basin colour white with two taphole including integrated overflow and chainstay hole, fitted into opening in vanity top. Sealed silicone sealant where basin rim meets vanity top.	No	3
9	Vaal Sanitaryware 635 x 485mm Hibiscus White vitreous china vanity basin with universal half pedistal (code 715222) including two semi punched taphole and integrated overflow and chainstay hole, bolted to wall with two 10mm bolts	No	1
Carried Forward			R
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 12 Plumbing and Drainage CLUSTER G			

Brought Forward			R
10	Vaal Sanitaryware White vitreous china low level washdown suite comprising 90° outlet pan with enlarged pedestal and matching 9 litre cistern complete with lid, flushpipe and fitments	No	4
11	Vaal Sanitaryware Protea Paraplegic white vitreous china floor mounted paraplegic washdown suite (product code 7300SC) comprising 90° outlet pan and matching 9 litre cistern, including DPE heavy duty thermoplastic A1 deluxe double flap seat, lid, fitments and purpose-made chromium plated side flush lever.	No	1
<u>"Citimetal or Similar and approved" stainless steel</u>			
12	Franke Nouveau Model Nvn611 Grade 304 18/10 polished stainless steel single end bowl inset sink, size 800 x 460mm wide with one 340 x 370 x 149mm deep bowl, fitted onto cupboard (elsewhere specified) including 90mm waste fitting (Code: 300651) and PVC traps (traps elsewhere specified). Sink guaranteed for 25 years against corrosion and supplied with protective plastic coating for transport and handling and to be removed once sink is made operational.	No	1
<u>WASTE UNIONS ETC</u>			
<u>"Cobra Watertech or Similar and approved"</u>			
13	38mm "Cobra 301" basin chrome plated unslotted waste and plug with chain	No	4
14	38mm "Cobra 316" unslotted waste and plug with chain	No	4
<u>TRAPS, ETC</u>			
<u>"Cobra Watertech or Similar and approved"</u>			
15	40mm Chrome plated deep seal Bottle trap with outlet of 50mm PVC pipe (Code 340)	No	3
Carried Forward			R
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 12 Plumbing and Drainage CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Brought Forward			R
<u>"Marley or Similar and approved"</u>			
16	40mm Deep seal "P" or "S" trap	No	1
<u>TAPS, VALVES, ETC</u>			
<u>"Cobra Watertech or Similar and approved"</u>			
17	"Cobra Ref. 231/350" Angle regulating valve	No	1
18	Cobra Ref 1111-15 CP "Stella" pillar tap	No	1
19	Cobra Watertech Ref. 266/041/10 sink mixer with aerated swivel spout and concealed connection	No	1
<u>Brass</u>			
20	22mm Stopcock	No	1
21	22mm Fullway gate valve	No	1
22	22mm Non-return valve	No	1
23	15mm 1050RB in-line strainer	No	1
24	PA3.132 "Masterflo 1" pressure control valve with vacuum breaker	No	1
<u>WATER SUPPLIES</u>			
<u>Class 0 copper pipes</u>			
25	15mm Pipes	m	35
26	22mm Pipes	m	22
27	28mm Pipes	m	22
<u>Extra over class 0 copper pipes for capillary fittings</u>			
28	15mm Fittings	No	5
Carried Forward			R
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 12 Plumbing and Drainage CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
BILLS OF QUANTITIES
VALLAMBROSA PRIMARY SCHOOL
LDPW-B/20309

Brought Forward				R
29	22mm Fittings	No	16	
30	28mm Fittings	No	22	
<u>PVC gulley</u>				
31	110mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert	No	1	
<u>Sundries</u>				
32	300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground	No	1	
33	100mm Cast iron "ABC" cleaning eye	No	1	
34	Type 3B cast iron valve box	No	1	
<u>TESTING</u>				
35	Testing water pipe system		Item	
<u>ELECTRIC WATER HEATERS</u>				
Carried Forward				R
Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 12 Plumbing and Drainage CLUSTER G				

	Brought Forward			R
	<u>"Kwikot or Similar and approved"</u>			
36	"Kwikot Megaflo" 100 Litre Slimline 600 Dual electric water heater (Code : ESG-100) complying with SABS 151-2002, overall size 990 x 480mm high, operating at 400kPa with temperature and pressure safety relief valve including 20mm female draincock with inlet compression. Geyser to be installed horizontally in roof space with 1160 x 560mm wide polyethylene drip tray with union and back nut connected to 20mm PVC overflow pipe taken out at eaves (Code : GSTP-1200) and 15mm pipe work including two 15mm vacuum breakers (Code : KHN4.150CX) installed on hot and cold water supply. Installation to include a 15mm 400kPa Kwikot Mono control and expansion relief valve (Code : KHN3.104), all in accordance with SANS 10254, connected to single phase electrical power supply with isolator 1m away from connection on geyser.	No	1	
	<u>FIRE APPLIANCES ETC</u>			
	<u>'Chubb'</u>			
37	9kg Dry chemical powder fire extinguisher, including standard hard wood backing plugged and backing finished with one coat dark stain and two coats clear suede polyurethane varnish	No	2	
38	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1	
	Carried Forward to Summary of Section No. 5			R
	Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 12 Plumbing and Drainage CLUSTER G			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.5</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 13</u>			
	<u>GLAZING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>4mm Clear float glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	2	
2	Panes exceeding 0,5m2 and not exceeding 2m2	m2	18	
	<u>4mm Rough cast glass</u>			
3	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	1	
	<u>MIRRORS, ETC</u>			
	<u>6mm Silvered float glass copper backed mirrors with polished edges, holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>			
4	Mirror 300 x 450mm high with four brass screws	No	4	
	Carried Forward to Summary of Section No. 5			
	Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 13 Glazing CLUSTER G			R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.5</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 14</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>PAINTWORK ETC TO NEW WORK</u></p> <p><u>ON FLOATED PLASTER</u></p> <p><u>Plascon Polvin Super Acrylic to interior new cement plaster (NW 205).Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Polvin Super Acrylic (EPL) with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.</u></p>			
1	On internal walls	m2	188	
	<p><u>ON FIBRE-CEMENT</u></p> <p><u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u></p>			
2	On ceilings and cornices	m2	163	
	Carried Forward			R
	<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 14 Paintwork CLUSTER G</p>			

Brought Forward			R
3	<p><u>Plascon Sure Coat Gloss Enamel to exterior new fibre cement (NW 174).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.</u></p> <p>On fascias and barge boards</p>	m2	19
4	<p><u>Plascon Sure Coat Gloss Enamel to interior new fibre cement (NW 274).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 4 years in a C1 - inland environment.</u></p> <p>On window sills not exceeding 300 mm girth</p>	m	26
<u>ON METAL</u>			
5	<p><u>Plascon Velvagio Satin to exterior new mild steel (NW 683).Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.</u></p> <p>On door frames</p>	m2	13
6	<p>On windows with burglar bars</p>	m2	38
Carried Forward			R
<p>Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 14 Paintwork CLUSTER G</p>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
7	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	11	
8	On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high	m	71	
	<u>ON WOOD</u>			
	<u>Plascon Velvagio Satin to interior new wood (NW 571).Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.</u>			
9	On doors <u>Three coats matt varnish</u>	m2	39	
10	On doors	m2	39	
11	On skirtings, rails, cornices etc not exceeding 300 mm girth	m	90	
	Carried Forward to Summary of Section No. 5			R
	Section No. 5 CONSTRUCTION OF 3 GRADE R CLASSROOMS Bill No. 14 Paintwork CLUSTER G			

				Amount
Bill No		Page No		
	Section No. 5			
	CONSTRUCTION OF 3 GRADE R CLASSROOMS			
	<u>SECTION SUMMARY - CONSTRUCTION OF 3 GRADE R CLASSROOMS</u>			
1	Foundations	156		
2	Concrete, Formwork and Reinforcement	160		
3	Masonry	163		
4	Waterproofing	165		
5	Roof Coverings, etc	167		
6	Capentry and Joinery	174		
7	Ceilings, Partitions and Access Flooring	176		
8	Ironmongery	178		
9	Metalwork	181		
10	Plastering	182		
11	Tiling	184		
12	Plumbing and Drainage	194		
13	Glazing	195		
14	Paintwork	198		
	Carried to Final Summary		R	
	Section No. 5			
	CONSTRUCTION OF 3 GRADE R CLASSROOMS			
	CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.1</u></p> <p><u>FOUNDATIONS</u></p> <p><u>EARTHWORKS</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Nature of ground</u></p> <p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p> <p><u>Excavation for working space in rock</u></p> <p>Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over" bulk excavation or trench and hole excavation as the case may be</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>			
	Carried Forward		R	
	<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 1 Foundations CLUSTER G</p>			

		Brought Forward		R
	<u>Filling</u>			
	Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material			
	<u>Soil poisoning</u>			
	Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent			
	<u>SITE CLEARANCE, ETC.</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	1,242	
	<u>REMOVAL TREES, ETC.</u>			
	<u>Taking out and removing, grubbing up roots and filling holes.</u>			
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	15	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	355	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
4	Soft rock	m3	35	
	Carried Forward			R
	Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 1 Foundations CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Brought Forward			R
5	Hard rock	m3	18
	<u>Extra over all excavations for carting away</u>		
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	200
	<u>Risk of collapse of excavations</u>		
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	889
	<u>Keeping excavations free of water</u>		
8	Keeping excavations free of all water other than subterranean water		Item
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>		
9	Under floors, steps, paving, etc	m3	133
	<u>Approved G6 filling supplied and carted by the contractor and compacted in layers not exceeding 150mm to 95% Mod AASHTO density</u>		
10	Backfilling to trenches, holes, etc	m3	190
11	Under floors, steps, paving etc.	m3	204
	<u>Compaction of surfaces</u>		
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	828
	<u>Prescribed density tests on filling</u>		
13	"Modified AASHTO Density" test	No	50
Carried Forward			R
Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 1 Foundations CLUSTER G			

		Brought Forward		R
<u>SOIL POISONING</u>				
<u>Soil insecticide</u>				
14	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	828	
15	To bottoms and sides of trenches etc	m2	666	
<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>				
<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>				
<u>25MPa/19mm concrete</u>				
16	Strip footings	m3	107	
<u>Fabric reinforcement</u>				
17	Type 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	828	
<u>TEST CUBES</u>				
18	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	15.0	
<u>BRICKWORK</u>				
<u>Brickwork of NFP bricks in class II mortar</u>				
19	One brick walls	m2	409	
<u>BRICKWORK SUNDRIES</u>				
		Carried Forward		R
Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 1 Foundations CLUSTER G				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

				R
	Brought Forward			
	<u>Joint forming material in movement joints:</u>			
20	12mm Fibre board built in vertically between brick skins.	m2	72	
	<u>Brickwork reinforcement</u>			
21	150mm Wide reinforcement built in horizontally	m	2,244	
	<u>FACE BRICKWORK</u>			
	<u>Face bricks (Purchase price of R 4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>			
22	Extra over brickwork for face brickwork	m2	237	
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R 4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
23	Coping on top of one brick wall	m	245	
	Carried Forward to Summary of Section No. 6			R
	Section No. 6			
	CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS			
	Bill No. 1			
	Foundations			
	CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)</p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p>			
	Carried Forward		R	
	<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G</p>			

Brought Forward		R
<p><u>Formwork</u></p> <p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p> <p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself</p> <p>Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described</p> <p>Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described</p> <p>Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"</p> <p>B - Waterborne Toilet Block D - Gate House E - Demolitions F - Alterations G - Provisional Amounts H - 2 Classroom Block I - Admin Block J - Nutrition Centre</p> <p><u>REINFORCED CONCRETE</u></p>		
Carried Forward		R
<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G</p>		

Brought Forward			R
<u>20MPa/19mm concrete</u>			
1	Surface beds cast in panels on waterproofing	m3	74
2	Aprons cast in panels to falls	m3	27
3	Ramps	m3	9
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
4	Surface beds, slabs, etc	m2	160
5	Ramp to falls	m2	6
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
6	Surface beds, slabs, etc	m2	667
7	Aprons to falls	m2	318
<u>FORMWORK</u>			
<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>			
<u>Rough formwork to sides</u>			
8	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	230
<u>TEST CUBES</u>			
9	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith. (Provisional)	Sets	15.0
Carried Forward			R
Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			

Brought Forward			R
<u>MOVEMENT JOINTS ETC</u>			
<u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u>			
10	15mm Joints exceeding 300mm high (Provisional)	m	50
<u>Saw cut joints</u>			
11	Saw cut joints in top of concrete (Provisional)	m	233
<u>DIVIDING STRIPS, ETC.</u>			
12	6 x 38mm Angle iron step guard cast into concrete with 3 x 6mm anchors	m	9
<u>REINFORCEMENT (PROVISIONAL)</u>			
<u>Fabric reinforcement</u>			
13	Steeledale Mesh standard square fabric mesh, nominal mass 1,93 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 193), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.	m ²	828
Carried Forward to Summary of Section No. 6			R
Section No. 6			
CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS			
Bill No. 2			
Concrete, Formwork and Reinforcement			
CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 3</u></p> <p><u>MASONRY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>BRICKWORK</u></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>Linings to concrete</u></p> <p>Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties</p> <p><u>Hollow walls etc</u></p> <p>Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p> <p><u>Reinforced brick lintels</u></p> <p>Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous</p>			
	Carried Forward		R	
	<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 3 Masonry CLUSTER G</p>			

Brought Forward				R
<u>Face bricks</u>				
Bricks shall be ordered timeously to obtain uniformity in size and colour				
<u>Pointing</u>				
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
<u>SUPERSTRUCTURE</u>				
<u>Brickwork of NFP bricks in class II mortar</u>				
1	L-shaped piers	m3	5	
2	Half brick walls in beamfilling.	m2	171	
3	One brick walls	m2	900	
<u>Brickwork reinforcement</u>				
4	150mm Wide reinforcement built in horizontally	m	3,303	
<u>Turning pieces</u>				
5	230mm Wide turning piece to lintels etc	m	52	
<u>"Allied Concrete" prestressed fabricated lintels</u>				
6	110 x 75mm Lintels in lengths not exceeding 3m (Provisional)	m	52	
<u>Galvanised wire ties etc</u>				
7	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork (Provisional)	No	150	
<u>FACE BRICKWORK</u>				
Carried Forward				R
Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 3 Masonry CLUSTER G				

Brought Forward			R
	<u>Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>		
8	Extra over brickwork for face brickwork	m2	900
9	Extra over for facing in piers, including bonding and pointed with recesses joints on all exposed faces	m2	37
10	Extra over for facings in beamfilling for face brickwork	m2	129
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>		
11	Extra over brickwork for brick-on-edge header course lintel	m	51
	<u>Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>		
12	Coping on top of one brick wall	m	145
13	220mm Wide sill set sloping and slightly protecting outside	m	38
	<u>NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS</u>		
	<u>Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations.</u>		
14	15mm x 150mm Wide sills set flat and slightly projecting	m	39
Carried Forward to Summary of Section No. 6			R
Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 3 Masonry CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.4</u></p> <p><u>WATERPROOFING</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Waterproofing</u></p> <p>Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. 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><u>DAMP-PROOFING OF WALLS AND FLOORS</u></p> <p><u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u></p>			
1	In walls	m2	98	
	<p><u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u></p>			
2	Under surface beds	m2	828	
	<p><u>JOINT SEALANTS ETC</u></p>			
	Carried Forward			R
	<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 4 Waterproofing CLUSTER G</p>			

	Brought Forward				
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>				R
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary (Provisional)	m	18		
Carried Forward to Summary of Section No. 6					
Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 4 Waterproofing CLUSTER G					R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.5</u></p> <p><u>ROOF COVERINGS ETC</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>General</u></p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use</p> <p><u>Sizes</u></p> <p>All items are measured net unless otherwise described</p> <p><u>Flashings, trimming plates, etc.</u></p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable</p> <p>All items are unless otherwise described measured net</p>			
	Carried Forward		R	
	<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 5 Roof Coveringss, etc CLUSTER G</p>			

Brought Forward			R
<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
<u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u>			
1	Roof covering with pitch not exceeding 50 degrees	m2	1,837
2	Ridge capping 550mm girth	m	78
3	Hip capping 550mm girth	m	96
4	Gable trim 550mm girth	m	24
<u>STEEL LOUVRES</u>			
<u>"NTY Steelworks" or similar approved</u>			
5	Triangular steel louvre size 3000x 500mm high fixed to timber purlins including watertight heading joints, necessary sealing strips, fixing accessories, etc	No	6
Carried Forward to Summary of Section No. 6			R
Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 5 Roof Coveringss, etc CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
	Carried Forward		R	
	<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery CLUSTER G</p>			

Brought Forward		R
<p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>PREFABRICATED ROOF TRUSSES</u></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>		
Carried Forward		R
<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery CLUSTER G</p>		

	R	
Brought Forward		
<p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m² commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p>		
Carried Forward		
<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 6 Carpentry and Joinery CLUSTER G</p>	R	

Brought Forward				R
<p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p> <p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m² and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p>				
Carried Forward				R
<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery CLUSTER G</p>				

Brought Forward				R
<p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p> <p><u>Specific specifications for roof trusses</u></p> <p>Unless otherwise described, the following specifications will apply:</p> <p>1 All trusses to be with a 10° pitch</p> <p>2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres</p> <p><u>ROOFS</u></p> <p><u>The following in plate nailed timber roof truss construction</u></p> <p><u>The following is applicable in respect of roof trusses</u></p> <p>The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes</p> <p>Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)</p> <p><u>Allow for the preparation and submission of the following documents in respect of all buildings</u></p> <p>1 Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication</p> <p>2 Design certificate indicating the licensed programme used, SANS specifications adhered to, general procedures and loadings adopted, sizes and grading of timber components, details, etc.</p>				
	Item			
	Item			
Carried Forward				R
<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery CLUSTER G</p>				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
3	Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Principal Agent		Item	
	<u>Sawn softwood</u>			
4	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for 3 classroom approximately 280m2 on plan (Refer to architect's drawings attached to these bills of quantities)	No	3	
	<u>Sawn softwood grade 4</u>			
5	38 x 114mm Wall plates	m	235	
6	50 x 220mm Timber Beam	m	89	
	<u>Sundries</u>			
7	Two coats creosote on sawn timbers	m2	69	
	<u>EAVES, VERGES, ETC</u>			
	<u>"Everite FC77" pressed fibre-cement</u>			
8	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	249	
	<u>SKIRTINGS</u>			
	<u>Wrought meranti</u>			
9	19 x 76mm Skirting including 19mm quadrant bead nailed	m	418	
	<u>DOORS, ETC</u>			
	Carried Forward			R
	Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 6 Carpentry and Joinery CLUSTER G			

Brought Forward		R
	<u>Wrought meranti doors hung to steel frames</u>	
10	44mm Framed and ledged batten door 813 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D1)	
	No	9
	<u>FITTINGS</u>	
	<u>Shelving to various stores</u>	
	<u>"Novalam" particle board with white melamine laminated finish on one side</u>	
11	16mm Tops, shelves, sides, divisions, etc	m2 426
	<u>Classroom School Furnitures, etc</u>	
12	Provide the sum of R450 000,00 (Four Hundred Fifty Thousand Rands) for classroom school furniture by Specialists	Item 450,000.00
13	Allow for giving every facility to Specialists as described	Item
14	Allow for profit on above if required	Item
Carried Forward to Summary of Section No. 6		R
Section No. 6		
CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS		
Bill No. 6		
Carpentry and Joinery		
CLUSTER G		

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.7</u></p> <p><u>CEILING , ETC.</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></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 elsewhere</p> <p><u>CEILING CONSTRUCTION, CORNICES, ETC.</u></p> <p><u>Insulation</u></p>			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	667	
	<u>Sawn softwood</u>			
2	38 x 114mm Ceiling joists (Provisional)	m	1,721	
	Carried Forward			R
	<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 7 Ceilings, Partitions and Access Flooring CLUSTER G</p>			

Brought Forward				R
	<u>"Rhino" gypsum plasterboard cornices</u>			
3	75mm Coved cornices	m	526	
<u>NAILED UP AND SCREWED UP CEILINGS</u>				
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>			
4	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	667	
5	Sloping ceilings including 38 x 38mm sawn softwood branderling at 450mm centres	m2	107	
6	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	9	
Carried Forward to Summary of Section No. 6				
Section No. 6				
CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS				
Bill No. 7				
Ceilings, Partitions and Access Flooring				
CLUSTER G				
				R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.8</u></p> <p><u>IRONMONGERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs</p> <p><u>Finishes to ironmongery</u></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p> <p><u>CATCHES,CABIN HOOKS, ETC</u></p> <p><u>"Solid"</u></p>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	9	
	<p><u>LOCKS</u></p>			
	Carried Forward			R
	<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 8 Ironmongery CLUSTER G</p>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	<u>"Solid"</u>			
2	"Code 630" padlock	No	9	
3	"Code 460/313" Blesbok four lever lockset	No	9	
	<u>SUNDRIES</u>			
	<u>"Solid" or similar approved</u>			
4	Dorma "Code 255" door stop plugged	No	9	
	<u>"Algoran Shelvit" with standard epoxy powder coated finish</u>			
5	Double slot wall bands plugged	m	144	
6	457mm Shelf bracket	No	476	
	<u>"Vitrex" or similar approved</u>			
7	Pinning boards 2400 x 1200mm high fixed to brickwork	No	18	
8	Vitrex system enamelled green folding type writing board, with wall mounted centre board 4000 x 1220mm high with chalk rail and two swing leaves each 1200 x 1220mm high plugged	No	9	
	Carried Forward to Summary of Section No. 6			R
	Section No. 6			
	CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS			
	Bill No. 8			
	Ironmongery			
	CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 9</u></p> <p><u>METALWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>Descriptions</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p><u>Drawings</u></p> <p>Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc</p> <p><u>SUNDRY METALWORK</u></p> <p><u>The following in identical steel support columns</u></p>			
1	Bolts, complete with nuts and two washers each	kg	70	
2	100 x 100 x 5mm Tubular section columns 3050mm high	No	66	
	Carried Forward			R
	<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 9 Metalwork CLUSTER G</p>			

	Brought Forward			R
3	100 x 6mm Flat section fixing plate 120mm, twice holed for bolt and welded to top end of tubular section column (Provisional)	No	54	
4	200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section column	No	55	
5	12mm Diameter x 75mm long sleeved masonry anchor (Provisional)	No	55	
<u>WELDED SCREENS, GATES, ETC</u>				
<u>Gates to external doors</u>				
6	Gate and frame 900 x 2100mm high complete (G1)	No	15	
<u>1.2mm Double rebated frames suitable for one brick walls</u>				
7	Frame for door 914 x 2032mm high	No	15	
<u>STEEL WINDOWS, DOORS, ETC</u>				
<u>"Nty" steel residential windows with burglar bars to all sashes</u>				
8	NTY Standard School type window "Code 5/2" size 1143 x 1332mm high (W1)	No	6	
Carried Forward to Summary of Section No. 6				R
Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 9 Metalwork CLUSTER G				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.6</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 10</u>			
	<u>PLASTERING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SCREEDS</u>			
	<u>ScreeDs on concrete</u>			
1	30mm Thick on floors	m2	1,800	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork</u>			
2	On walls	m2	2,360	
3	On narrow widths	m2	50	
	Carried Forward to Summary of Section No. 6			R
	Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 10 Plastering CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.11</u></p> <p><u>TILING</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</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><u>FLOOR TILING</u></p> <p><u>300 x 300 x 11,5mm Ceramic floor tiles (PC R120.00/m2 VAT excl.) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted waterproof jointing compound</u></p>			
1	On floors and landings	m2	1,800	
2	Skirting formed of ceramic tile cut to 300 x 75mm high	m	560	
	Carried Forward to Summary of Section No. 6			R
	<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 11 Tiling CLUSTER G</p>			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.12</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>"Polylink" polypropylene pipes:</u></p> <p>Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints</p> <p>Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage CLUSTER G</p>			R

Brought Forward		R
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p> <p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p> <p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p> <p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>Vitrified clay pipes:</u></p> <p>Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid</p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p>		
Carried Forward		R
<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage CLUSTER G</p>		

Brought Forward		R
<p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Lead pipes and fittings</u></p> <p>All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel</p>		
Carried Forward		R
<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage CLUSTER G</p>		

Brought Forward		R
<p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Septic tanks</u></p> <p>Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p>		
Carried Forward		R
<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage CLUSTER G</p>		

<p style="text-align: center;">Brought Forward</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steelbasins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>Steel sectional water tanks</u></p> <p>Tanks shall comply with SABS CKS 114</p> <p><u>"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u></p> <p>Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described</p>	R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage CLUSTER G</p>	R	

Brought Forward			R
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc			
<u>RAINWATER DISPOSAL</u>			
<u>0,6mm Galvanised sheet iron with "Chromadek" finish on one side</u>			
1	100 x 125mm Eaves gutters with beaded front edge	m	380
2	Extra over eaves gutter for angle	No	30
3	Extra over eaves gutter for stopped end	No	10
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	30
5	100mm Diameter rainwater pipes	m	120
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	30
7	Extra over rainwater pipe for shoe	No	30
<u>FIRE APPLIANCES ETC</u>			
<u>'Chubb'</u>			
8	9kg Dry chemical powder fire extinguisher, including standard hard wood backing plugged and backing finished with one coat dark stain and two coats clear suede polyurethane varnish	No	15
9	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	5
Carried Forward to Summary of Section No. 6			R
Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage CLUSTER G			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.6</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 13</u>			
	<u>GLAZING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>4mm Clear float glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	12	
2	Panes exceeding 0,5m2 and not exceeding 2m2	m2	215	
	<u>4mm Rough cast glass</u>			
3	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	81	
	Carried Forward to Summary of Section No. 6			
	Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 13 Glazing CLUSTER G			R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.6</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 14</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>PAINTWORK ETC TO NEW WORK</u></p> <p><u>ON FLOATED PLASTER</u></p> <p><u>Plascon Polvin Super Acrylic to interior new cement plaster (NW 205).Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Polvin Super Acrylic (EPL) with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.</u></p>			
1	On internal walls	m2	563	
	<p><u>ON FIBRE-CEMENT</u></p> <p><u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u></p>			
2	On ceilings and cornices	m2	712	
	Carried Forward			R
	<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 14 Paintwork CLUSTER G</p>			

Brought Forward			R
3	<p><u>Plascon Sure Coat Gloss Enamel to exterior new fibre cement (NW 174).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.</u></p> <p>On fascias and barge boards</p>	m2	114
4	<p><u>Plascon Sure Coat Gloss Enamel to interior new fibre cement (NW 274).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 4 years in a C1 - inland environment.</u></p> <p>On window sills not exceeding 300 mm girth</p>	m	97
<u>ON METAL</u>			
5	<p><u>Plascon Velvagio Satin to exterior new mild steel (NW 683).Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.</u></p> <p>On door frames</p>	m2	17
6	<p>On windows with burglar bars</p>	m2	259
Carried Forward			R
<p>Section No. 6 CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS Bill No. 14 Paintwork CLUSTER G</p>			

	Brought Forward			R
7	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	34	
8	On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high	m	456	
	<u>ON WOOD</u>			
	<u>Three coats matt varnish</u>			
9	On doors	m2	34	
10	On skirtings, rails, cornices etc not exceeding 300 mm girth	m	336	
Carried Forward to Summary of Section No. 6				
Section No. 6				
CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS				
Bill No. 14				
Paintwork				
CLUSTER G				
				R

	Section No. 6			
	CONSTRUCTION OF 3 x 3 CLASROOM BLOCKS			
	SECTION SUMMARY - CONSTRUCTION OF 3 x 3 CLASROOM BLOCKS			
Bill No		Page No		Amount
1	Foundations	204		
2	Concrete, Formwork and Reinforcement	208		
3	Masonry	211		
4	Waterproofing	213		
5	Roof Coveringss, etc	215		
6	Capentry and Joinery	222		
7	Ceilings, Partitions and Access Flooring	224		
8	Ironmongery	226		
9	Metalwork	228		
10	Plastering	229		
11	Tiling	230		
12	Plumbing and Drainage	236		
13	Glazing	237		
14	Paintwork	240		
	Carried to Final Summary			
	Section No. 6			
	CONSTRUCTION OF 3 x 3 CLASROOM BLOCKS			
	CLUSTER G			
			R	

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.7</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.1</u></p> <p><u>FOUNDATIONS</u></p> <p><u>EARTHWORKS</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Nature of ground</u></p> <p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p> <p><u>Excavation for working space in rock</u></p> <p>Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over" bulk excavation or trench and hole excavation as the case may be</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>			
	Carried Forward		R	
	<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 1 Foundations CLUSTER G</p>			

	Brought Forward			R
	<u>Filling</u>			
	Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material			
	<u>Soil poisoning</u>			
	Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent			
	<u>SITE CLEARANCE, ETC.</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	720	
	<u>REMOVAL TREES, ETC.</u>			
	<u>Taking out and removing, grubbing up roots and filling holes.</u>			
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	8	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	177	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
4	Soft rock	m3	35	
	Carried Forward			R
	Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 1 Foundations CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Brought Forward			R
5	Hard rock	m3	35
	<u>Extra over all excavations for carting away</u>		
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	92
	<u>Risk of collapse of excavations</u>		
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	472
	<u>Keeping excavations free of water</u>		
8	Keeping excavations free of all water other than subterranean water		Item
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>		
9	Under floors, steps, paving, etc	m3	108
	<u>Approved G6 filling supplied and carted by the contractor and compacted in layers not exceeding 150mm to 95% Mod AASHTO density</u>		
10	Backfilling to trenches, holes, etc	m3	177
11	Under floors, steps, paving etc.	m3	108
	<u>Compaction of surfaces</u>		
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	720
	<u>Prescribed density tests on filling</u>		
13	"Modified AASHTO Density" test	No	20
Carried Forward			R
Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 1 Foundations CLUSTER G			

	Brought Forward			R
	<u>SOIL POISONING</u>			
	<u>Soil insecticide</u>			
14	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	720	
15	To bottoms and sides of trenches etc	m2	649	
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>25MPa/19mm concrete</u>			
16	Strip footings	m3	44	
	<u>TEST CUBES</u>			
17	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	10.0	
	<u>BRICKWORK</u>			
	<u>Brickwork of NFP bricks in class II mortar</u>			
18	One brick walls	m2	236	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Joint forming material in movement joints:</u>			
19	12mm Fibre board built in vertically between brick skins.	m2	20	
	<u>Brickwork reinforcement</u>			
20	150mm Wide reinforcement built in horizontally	m	694	
	Carried Forward			R
	Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 1 Foundations CLUSTER G			

Brought Forward			R
<u>FACE BRICKWORK</u>			
<u>Face bricks (Purchase price of R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>			
21	Extra over brickwork for face brickwork	m2	177
<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
22	Coping on top of one brick wall	m	58
Carried Forward to Summary of Section No. 7			R
Section No. 7			
CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS			
Bill No. 1			
Foundations			
CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.7</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)</p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p>			
	Carried Forward		R	
	<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G</p>			

	Brought Forward			R
	<u>Formwork</u>			
	Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use			
	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			
	Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described			
	Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high 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"			
	<u>UNREINFORCED CONCRETE</u>			
	<u>20MPa/19mm concrete</u>			
1	Surface beds	m3	9	
2	Surface beds cast in panels on waterproofing.	m3	108	
3	Aprons cast in panels to falls	m3	8	
	Carried Forward			R
	Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward				R
4	Ramps	m3	6		
5	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	152		
	<u>REINFORCED CONCRETE</u>				
	<u>25MPa/19mm concrete</u>				
	<u>CONCRETE SUNDRIES</u>				
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>				
6	Surface beds, slabs, etc	m2	720		
7	Ramp to falls	m2	17		
	<u>Finishing top surfaces of concrete smooth with a wood float</u>				
8	Surface beds, slabs, etc	m2	104		
9	Aprons to falls	m2	182		
	<u>FORMWORK</u>				
	<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>				
	<u>Rough formwork to sides</u>				
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	60		
	Carried Forward				R
	Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G				

Brought Forward				R
<u>TEST CUBES</u>				
11	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	20.0	
<u>MOVEMENT JOINTS ETC</u>				
<u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u>				
12	15mm Joints exceeding 300mm high	m	20	
<u>Saw cut joints</u>				
13	Saw cut joints in top of concrete	m	124	
<u>REINFORCEMENT</u>				
<u>High tensile steel reinforcement to structural concrete work</u>				
14	12mm Diameter	t	4.00	
15	10mm Diameter bars	t	3.18	
<u>REINFORCEMENT (PROVISIONAL)</u>				
<u>Fabric reinforcement</u>				
16	Steeledale Mesh standard square fabric mesh, nominal mass 1,93 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 193), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.	m2	720	
Carried Forward to Summary of Section No. 7				R
Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.7</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 3</u></p> <p><u>MASONRY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>BRICKWORK</u></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>Linings to concrete</u></p> <p>Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties</p> <p><u>Hollow walls etc</u></p> <p>Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p> <p><u>Reinforced brick lintels</u></p> <p>Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous</p>			
	Carried Forward		R	
	<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 3 Masonry CLUSTER G</p>			

Brought Forward				R
<u>Face bricks</u>				
Bricks shall be ordered timeously to obtain uniformity in size and colour				
<u>Pointing</u>				
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
<u>SUPERSTRUCTURE</u>				
<u>Brickwork of NFP bricks in class II mortar</u>				
1	L-shaped piers	m3	3	
2	One brick walls	m2	802	
<u>Joint forming material in movement joints:</u>				
3	12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2	163	
<u>Brickwork reinforcement</u>				
4	150mm Wide reinforcement built in horizontally	m	2,359	
<u>Turning pieces</u>				
5	230mm Wide turning piece to lintels etc	m	65	
<u>"Allied Concrete" prestressed fabricated lintels</u>				
6	110 x 75mm Lintels in lengths not exceeding 3m	m	6	
<u>Galvanised wire ties etc</u>				
7	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	92	
<u>FACE BRICKWORK</u>				
Carried Forward				R
Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 3 Masonry CLUSTER G				

Brought Forward			R
	<u>Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>		
8	Extra over brickwork for face brickwork	m2	708
9	Extra over for facing in piers, including bonding and pointed with recesses joints on all exposed faces	m2	25
10	Extra over for facings in beamfilling for face brickwork	m2	80
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>		
11	Extra over brickwork for brick-on-edge header course lintel	m	65
	<u>Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>		
12	220mm Wide sill set sloping and slightly protecting outside	m	65
13	Coping on top of one brick wall	m	58
	<u>NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS</u>		
	<u>Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations.</u>		
14	15mm x 150mm Wide sills set flat and slightly projecting	m	65
Carried Forward to Summary of Section No. 7			R
Section No. 7			
CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS			
Bill No. 3			
Masonry			
CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.7</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.4</u></p> <p><u>WATERPROOFING</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Waterproofing</u></p> <p>Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. 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><u>DAMP-PROOFING OF WALLS AND FLOORS</u></p> <p><u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u></p>			
1	In walls	m2	69	
	<p><u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u></p>			
2	Under surface beds	m2	687	
	<p><u>JOINT SEALANTS ETC</u></p>			
	Carried Forward			R
	<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 4 Waterproofing CLUSTER G</p>			

	Brought Forward				
3	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u> 6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	124		R
Carried Forward to Summary of Section No. 7					
Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 4 Waterproofing CLUSTER G					
					R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.7</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.5</u></p> <p><u>ROOF COVERINGS ETC</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>General</u></p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use</p> <p><u>Sizes</u></p> <p>All items are measured net unless otherwise described</p> <p><u>Flashings, trimming plates, etc.</u></p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable</p> <p>All items are unless otherwise described measured net</p>			
	Carried Forward		R	
	<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 5 Roof Coveringss, etc CLUSTER G</p>			

	Brought Forward			R
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u>			
1	Roof covering with pitch not exceeding 50 degrees	m2	728	
2	Ridge capping 550mm girth	m	52	
3	Hip capping 550mm girth	m	64	
4	Gable trim 550mm girth	m	16	
	<u>STEEL LOUVRES</u>			
	<u>"NTY Steelworks" or similar approved</u>			
5	Triangular steel louvre size 3000x 500mm high fixed to timber purlins including watertight heading joints, necessary sealing strips, fixing accessories, etc	No	4	
	Carried Forward to Summary of Section No. 7			R
	Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 5 Roof Coveringss, etc CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.7</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
	Carried Forward		R	
	<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery CLUSTER G</p>			

Brought Forward			R	
<p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>PREFABRICATED ROOF TRUSSES</u></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>				
Carried Forward			R	
<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery CLUSTER G</p>				

Brought Forward				R
<p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m² commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p>				
Carried Forward				R
<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 6 Carpentry and Joinery CLUSTER G</p>				

Brought Forward			R	
<p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p> <p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m² and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p>				
Carried Forward			R	
<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery CLUSTER G</p>				

Brought Forward				R
<p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p> <p><u>Specific specifications for roof trusses</u></p> <p>Unless otherwise described, the following specifications will apply:</p> <p>1 All trusses to be with a 10° pitch</p> <p>2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres</p> <p><u>ROOFS</u></p> <p><u>The following in plate nailed timber roof truss construction</u></p> <p><u>The following is applicable in respect of roof trusses</u></p> <p>The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes</p> <p>Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)</p> <p><u>Allow for the preparation and submission of the following documents in respect of all buildings</u></p> <p>1 Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication</p> <p>2 Design certificate indicating the licensed programme used, SANS specifications adhered to, general procedures and loadings adopted, sizes and grading of timber components, details, etc.</p>				
	Item			
	Item			
Carried Forward				R
<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery CLUSTER G</p>				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
3	Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Principal Agent		Item	
	<u>Sawn softwood</u>			
4	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for 4 classroom block 370m2 on plan (Refer to architect's drawings attached to these bills of quantities)	No	2	
	<u>Sawn softwood grade 4</u>			
5	38 x 114mm Wall plates	m	152	
6	50 x 220mm Timber Beam	m	52	
	<u>Sundries</u>			
7	Two coats creosote on sawn timbers	m2	46	
	<u>EAVES, VERGES, ETC</u>			
	<u>"Everite FC77" pressed fibre-cement</u>			
8	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	148	
	<u>SKIRTINGS</u>			
	<u>Wrought meranti</u>			
9	19 x 76mm Skirting including 19mm quadrant bead nailed	m	334	
	<u>DOORS, ETC</u>			
	Carried Forward			R
	Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 6 Carpentry and Joinery CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward		R	
	<u>Wrought meranti doors hung to steel frames</u>			
10	44mm Framed and ledged batten door 813 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	16	
	<u>FITTINGS</u>			
	<u>Shelving to various stores</u>			
	<u>"Novalam" particle board with white melamine laminated finish on one side</u>			
11	16mm Tops, shelves, sides, divisions, etc	m2	379	
	<u>Classroom School Furnitures, etc</u>			
12	Provide the sum of R400 000,00 (Four Hundred Thousand Rands) for classroom school furniture by Specialists		Item	400,000.00
13	Allow for giving every facility to Specialists as described		Item	
14	Allow for profit on above if required		Item	
	Carried Forward to Summary of Section No. 7		R	
	Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 6 Carpentry and Joinery CLUSTER G			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.7</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.7</u>			
	<u>CEILING , ETC.</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions:</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere			
	<u>CEILING CONSTRUCTION, CORNICES, ETC.</u>			
	<u>Insulation</u>			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	572	
	<u>Sawn softwood</u>			
2	38 x 114mm Ceiling joists (Provisional)	m	1,042	
	Carried Forward			R
	Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 7 Ceilings, Partitions and Access Flooring CLUSTER G			

	Brought Forward				R
	<u>"Rhino" gypsum plasterboard cornices</u>				
3	75mm Coved cornices	m	772		
	<u>NAILED UP AND SCREWED UP CEILINGS</u>				
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>				
4	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	572		
5	Sloping ceilings including 38 x 38mm sawn softwood branderling at 450mm centres	m2	138		
6	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	8		
	Carried Forward to Summary of Section No. 7				R
	Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 7 Ceilings, Partitions and Access Flooring CLUSTER G				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.7</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.8</u></p> <p><u>IRONMONGERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs</p> <p><u>Finishes to ironmongery</u></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p> <p><u>CATCHES,CABIN HOOKS, ETC</u></p> <p><u>"Solid"</u></p>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	8	
	<p><u>LOCKS</u></p>			
	Carried Forward			R
	<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 8 Ironmongery CLUSTER G</p>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward				R
	<u>"Solid" or similar approved</u>				
2	"Code 630" padlock	No	8		
3	"Code 460/313" Blesbok four lever lockset	No	16		
	<u>DOOR CLOSERS AND FLOOR SPRINGS</u>				
	<u>"Dorma" or similar approved</u>				
	<u>SUNDRIES</u>				
	<u>"Solid" or similar approved</u>				
4	Dorma "Code 255" door stop plugged	No	16		
	<u>"Algoran Shelvit" with standard epoxy powder coated finish</u>				
5	Double slot wall bands plugged	m	116		
6	457mm Shelf bracket	No	316		
	<u>STEEL CUPBOARDS</u>				
	<u>Aproved steel lockers with standard baked enamel finish</u>				
7	G10 Double door steel cupboard 914 x 457 x 1828mm high with five shelves bolted to brickwork	No	8		
	<u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u>				
	<u>"Vitrex" or similar approved</u>				
8	Pinning boards 2400 x 1200mm high fixed to brickwork	No	16		
9	2000 x 1300 mm White Porcelain magnetic marker board	No	8		
	<u>LETTERS, NAMEPLATES, ETC</u>				
	Carried Forward				R
	Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 8 Ironmongery CLUSTER G				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward				
	<u>"Union" or similar approved</u>				R
10	150 x 150mm Stainless steel plate engraved with a "Fire Hose Reel" sign (St/Steel)	No	2		
11	150 x 150mm Stainless steel plate engraved with "Fire Extinguisher" sign (St/Steel)	No	8		
12	150 x 150mm Stainless steel plate engraved with a "Arrow sign" sign (St/Steel)	No	8		
Carried Forward to Summary of Section No. 7					
Section No. 7					
CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS					
Bill No. 8					
Ironmongery					
CLUSTER G					R

Item No		Quantity	Rate	Amount
	<u>SECTION NO.7</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 9</u>			
	<u>METALWORK</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>Descriptions</u>			
	Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described			
	<u>Drawings</u>			
	Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc			
	<u>SUNDRY METALWORK</u>			
	<u>The following in identical steel support columns</u>			
1	Bolts, complete with nuts and two washers each	kg	500	
2	76 x 76 x 3mm Tubular section columns 3050mm high	No	30	
	Carried Forward			R
	Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 9 Metalwork CLUSTER G			

	Brought Forward			R
3	75 x 6mm Flat section fixing plate 120mm, twice holed for bolt and welded to top end of tubular section column (Provisional)	No	30	
4	200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section column	No	30	
5	12mm Diameter x 75mm long sleeved masonry anchor	No	30	
<u>WELDED SCREENS, GATES, ETC</u>				
<u>Gates to external doors</u>				
6	Gate and frame 900 x 2100mm high complete (G1)	No	8	
<u>PRESSED STEEL DOOR FRAMES</u>				
<u>1,2mm Double rebated frames suitable for one brick walls</u>				
7	Frame for door 813 x 2032mm high	No	8	
<u>STEEL WINDOWS, DOORS, ETC</u>				
<u>"Nty" or similar approved steel residential windows with burglar bars to all sashes</u>				
8	NTY Standard School type window "Code 5/2" size 1143 x 1272mm high (W1)	No	72	
9	NTY Standard School type window "Code 5/2" size 1143 x 859mm high (W2)	No	8	
Carried Forward to Summary of Section No. 7				R
Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 9 Metalwork CLUSTER G				

Item No		Quantity	Rate	Amount
	<u>SECTION NO.7</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 10</u>			
	<u>PLASTERING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>GRANOLITHIC</u>			
	<u>Untinted granolithic on concrete</u>			
1	25mm Thick on floors and landings	m2	137	
	<u>SCREEDS</u>			
	<u>Screeds on concrete</u>			
2	30mm Thick on floors	m2	509	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork</u>			
3	On walls	m2	685	
4	On narrow widths	m2	37	
	Carried Forward to Summary of Section No. 7			
	Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 10 Plastering CLUSTER G			R

Item No		Quantity	Rate	Amount
	<u>SECTION NO.7</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.11</u>			
	<u>TILING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	<u>FLOOR TILING</u>			
	<u>300 x 300 x 11,5mm Ceramic floor tiles (PC R120.00/m2 VAT excl.) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted waterproof jointing compound</u>			
1	On floors and landings	m2	687	
2	Skirting formed of ceramic tile cut to 300 x 75mm high	m	772	
	Carried Forward to Summary of Section No. 7			R
	Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 11 Tiling CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.7</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.12</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>RAINWATER DISPOSAL</u></p> <p><u>0,6mm Galvanised sheet iron with "Chromadek" finish on one side</u></p>			
1	100 x 125mm Eaves gutters with beaded front edge	m	176	
2	Extra over eaves gutter for angle	No	8	
	Carried Forward			R
	<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage CLUSTER G</p>			

	Brought Forward			R
3	Extra over eaves gutter for outlet for 100mm diameter pipe	No	8	
4	100mm Diameter rainwater pipes	m	32	
5	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	8	
6	Extra over rainwater pipe for shoe	No	8	
	<u>STORMWATER CHANNELS</u>			
	<u>15 MPa/20 mm concrete</u>			
7	Stormwater channel cast in panels	m3	76	
	<u>FIRE APPLIANCES ETC</u>			
	<u>'Chubb' or similar approved</u>			
8	9kg Dry chemical powder fire extinguisher, including standard hard wood backing plugged and backing finished with one coat dark stain and two coats clear suede polyurethane varnish	No	8	
9	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	2	
	Carried Forward to Summary of Section No. 7			R
	Section No. 7			
	CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS			
	Bill No. 12			
	Plumbing and Drainage			
	CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.7</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 14</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>DESCRIPTIONS</u></p> <p>Descriptions of paintwork shall be deemed to include for all cutting in</p> <p><u>PAINT SPECIFICATIONS</u></p> <p>All painting shall be done in accordance with "Plascon-Evans" specifications</p> <p style="text-align: center;">-----</p> <p><u>PAINTWORK ETC TO NEW WORK</u></p> <p><u>ON FLOATED PLASTER</u></p>			
	Carried Forward		R	
	<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 14 Paintwork CLUSTER G</p>			

Brought Forward			R
1	<p><u>Plascon Polvin Super Acrylic to interior new cement plaster (NW 205).Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Polvin Super Acrylic (EPL) with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.</u></p> <p>On internal walls</p>	m2	686
<u>ON FIBRE-CEMENT</u>			
2	<p><u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u></p> <p>On ceilings and cornices</p>	m2	710
3	<p><u>Plascon Sure Coat Gloss Enamel to exterior new fibre cement (NW 174).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.</u></p> <p>On fascias and barge boards</p>	m2	148
4	<p><u>Plascon Sure Coat Gloss Enamel to interior new fibre cement (NW 274).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 4 years in a C1 - inland environment.</u></p> <p>On window sills not exceeding 300 mm girth</p>	m	184
Carried Forward			R
<p>Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 14 Paintwork CLUSTER G</p>			

Brought Forward			R
<u>ON METAL</u>			
<u>Plascon Velvaglo Satin to exterior new mild steel (NW 683).Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.</u>			
5	On door frames	m2	20
6	On windows with burglar bars	m2	230
7	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	30
8	On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high	m	176
<u>ON WOOD</u>			
<u>Plascon Velvaglo Satin to interior new wood (NW 571).Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.</u>			
9	On doors	m2	56
Carried Forward			R
Section No. 7 CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS Bill No. 14 Paintwork CLUSTER G			

	Brought Forward			R
	<u>Three coats matt varnish</u>			
10	On doors	m2	56	
11	On skirtings, rails, cornices etc not exceeding 300 mm girth	m	334	
Carried Forward to Summary of Section No. 7				
Section No. 7				
CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS				
Bill No. 14				
Paintwork				
CLUSTER G				R

	Section No. 7			
Bill No		Page No	Amount	
	CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS			
	SECTION SUMMARY - CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS			
1	Foundations	246		
2	Concrete, Formwork and Reinforcement	250		
3	Masonry	253		
4	Waterproofing	255		
5	Roof Coveringss, etc	257		
6	Capentry and Joinery	264		
7	Ceilings, Partitions and Access Flooring	266		
8	Ironmongery	269		
9	Metalwork	271		
10	Plastering	272		
11	Tiling	273		
12	Plumbing and Drainage	275		
13	Glazing	276		
14	Paintwork	280		
	Carried to Final Summary		R	
	Section No. 7			
	CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS			
	CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.8</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.1</u></p> <p><u>FOUNDATIONS</u></p> <p><u>EARTHWORKS</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Nature of ground</u></p> <p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p> <p><u>Excavation for working space in rock</u></p> <p>Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over" bulk excavation or trench and hole excavation as the case may be</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>			
	Carried Forward		R	
	<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 1 Foundations CLUSTER G</p>			

Brought Forward					
<u>Filling</u>					
Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material					
<u>Soil poisoning</u>					
Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent					
<u>SITE CLEARANCE, ETC.</u>					
<u>Site clearance</u>					
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	117		
<u>REMOVAL TREES, ETC.</u>					
<u>Taking out and removing, grubbing up roots and filling holes.</u>					
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	4		
<u>EXCAVATION, FILLING, ETC</u>					
<u>Excavation in earth not exceeding 2m deep</u>					
3	Trenches	m3	12		
<u>Extra over trench and hole excavations in earth for excavation in</u>					
4	Soft rock	m3	1		
Carried Forward					R
Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 1 Foundations CLUSTER G					

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Brought Forward			R
5	Hard rock	m3	1
	<u>Extra over all excavations for carting away</u>		
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	11
	<u>Risk of collapse of excavations</u>		
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	62
	<u>Keeping excavations free of water</u>		
8	Keeping excavations free of all water other than subterranean water		Item
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>		
9	Under floors, steps, paving, etc	m3	18
	<u>Approved G6 filling supplied and carted by the contractor and compacted in layers not exceeding 150mm to 95% Mod AASHTO density</u>		
10	Backfilling to trenches, holes, etc	m3	55
11	Under floors, steps, paving etc.	m3	18
	<u>Compaction of surfaces</u>		
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	117
	<u>Prescribed density tests on filling</u>		
13	"Modified AASHTO Density" test	No	10
Carried Forward			R
Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 1 Foundations CLUSTER G			

	Brought Forward			R
	<u>SOIL POISONING</u>			
	<u>Soil insecticide</u>			
14	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	58	
15	To bottoms and sides of trenches etc	m2	83	
	<u>CONCRETE, FORMWORK AND REINFORCEMENT</u>			
	<u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>15MPa/19mm concrete</u>			
16	Blinding	m3	3	
	<u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u>			
	<u>25MPa/19mm concrete</u>			
17	Foundation beams	m3	12	
18	Surface beds on waterproofing	m3	5	
	<u>CONCRETE SUNDRIES</u>			
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
19	Surface beds, slabs, etc	m2	58	
	<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>			
	Carried Forward			R
	Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 1 Foundations CLUSTER G			

	Brought Forward				R
	<u>Rough formwork to sides</u>				
20	Edges, risers, ends and reveals exceeding 300mm not exceeding 700mm high or wide	m	37		
	<u>REINFORCEMENT</u>				
	<u>High tensile steel reinforcement to structural concrete work</u>				
21	10mm Diameter bars	t	0.18		
22	12mm Diameter bars	t	0.15		
23	20mm Diameter bars	t	0.43		
	<u>TEST CUBES</u>				
24	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	20.0		
	<u>BRICKWORK</u>				
	<u>Brickwork of NFP bricks in class II mortar</u>				
25	Half brick walls	m2	20		
	<u>BRICKWORK SUNDRIES</u>				
	<u>Brickwork reinforcement</u>				
26	75mm Wide reinforcement built in horizontally	m	73		
	<u>FACE BRICKWORK</u>				
	<u>Face bricks (Purchase price of R 4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>				
27	Extra over brickwork for face brickwork	m2	20		
	Carried Forward to Summary of Section No. 8				R
	Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 1 Foundations CLUSTER G				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO8</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.2</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)</p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p>			
	Carried Forward		R	
	<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G</p>			

Brought Forward		R
<u>Formwork</u>		
Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use		
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		
Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described		
Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high 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"		
<u>UNREINFORCED CONCRETE</u>		
<u>20MPa/19mm concrete</u>		
1	Aprons cast in panels to falls	m3 6
2	Ramps	m3 2
3	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m 56
Carried Forward		R
Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G		

Brought Forward			R
<u>CONCRETE SUNDRIES</u>			
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
4	Surface beds, slabs, etc	m2	58
5	Ramp to falls	m2	6
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
6	Aprons to falls	m2	70
<u>FORMWORK</u>			
<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>			
<u>Rough formwork to sides</u>			
7	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	62
<u>TEST CUBES</u>			
8	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	10.0
<u>MOVEMENT JOINTS ETC</u>			
<u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u>			
<u>Saw cut joints</u>			
9	Saw cut joints in top of concrete	m	28
<u>REINFORCEMENT</u>			
Carried Forward			R
Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			

	Brought Forward			R
	<u>REINFORCEMENT (PROVISIONAL)</u>			
	<u>Fabric reinforcement</u>			
10	Steeledale Mesh standard square fabric mesh, nominal mass 1,93 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 193), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.	m2	44	
	Carried Forward to Summary of Section No. 8			
	Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.8</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 3</u></p> <p><u>MASONRY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>BRICKWORK</u></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>Linings to concrete</u></p> <p>Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties</p> <p><u>Hollow walls etc</u></p> <p>Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p> <p><u>Reinforced brick lintels</u></p> <p>Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous</p>			
	Carried Forward		R	
	<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 3 Masonry CLUSTER G</p>			

Brought Forward			R
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<u>SUPERSTRUCTURE</u>			
<u>Brickwork of NFP bricks in class II mortar</u>			
1	Half brick walls	m2	91
2	One brick walls	m2	154
<u>Brickwork reinforcement</u>			
3	75mm Wide reinforcement built in horizontally	m	268
4	150mm Wide reinforcement built in horizontally	m	453
<u>Turning pieces</u>			
5	230mm Wide turning piece to lintels etc	m	4
<u>"Allied Concrete" prestressed fabricated lintels</u>			
6	110 x 75mm Lintels in lengths not exceeding 3m	m	4
<u>Galvanised wire ties etc</u>			
7	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	24
<u>FACE BRICKWORK</u>			
Carried Forward			R
Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 3 Masonry CLUSTER G			

Brought Forward			R
	<u>Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>		
8	Extra over brickwork for face brickwork	m2	154
9	Extra over for facings in beamfilling for face brickwork	m2	15
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>		
10	Extra over brickwork for brick-on-edge header course lintel	m	4
	<u>Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>		
11	220mm Wide sill set sloping and slightly protecting outside	m	4
12	Coping on top of one brick wall	m	8
	<u>NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS</u>		
	<u>Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations.</u>		
13	15mm x 150mm Wide sills set flat and slightly projecting	m	4
Carried Forward to Summary of Section No. 8			R
Section No. 8			
CONSTRUCTION OF 6 WATERBORNE TOILET SEATS			
Bill No. 3			
Masonry			
CLUSTER G			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.8</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.4</u>			
	<u>WATERPROOFING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Waterproofing</u>			
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. 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			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	14	
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
2	Under surface beds	m2	58	
	Carried Forward to Summary of Section No. 8			R
	Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 4 Waterproofing CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.8</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.5</u></p> <p><u>ROOF COVERINGS ETC</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>General</u></p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use</p> <p><u>Sizes</u></p> <p>All items are measured net unless otherwise described</p> <p><u>Flashings, trimming plates, etc.</u></p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable</p> <p>All items are unless otherwise described measured net</p>			
	Carried Forward		R	
	<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 5 Roof Coveringss, etc CLUSTER G</p>			

	Brought Forward			R
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u>			
1	Roof covering with pitch not exceeding 50 degrees	m2	112	
	<u>STEEL LOUVRES</u>			
	<u>"NTY Steelworks" or similar approved</u>			
2	Triangular steel louvre size 1500x 500mm high fixed to timber purlins including watertight heading joints, necessary sealing strips, fixing accessories, etc	No	4	
	Carried Forward to Summary of Section No. 8			R
	Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 5 Roof Coveringss, etc CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.8</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
	Carried Forward		R	
	<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 6 Capentry and Joinery CLUSTER G</p>			

Brought Forward			R	
<p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>PREFABRICATED ROOF TRUSSES</u></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>				
Carried Forward			R	
<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 6 Capentry and Joinery CLUSTER G</p>				

	R	
Brought Forward		
<p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m² commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p>		
Carried Forward		
<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 6 Carpentry and Joinery CLUSTER G</p>	R	

Brought Forward			R	
<p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p> <p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m² and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p>				
Carried Forward			R	
<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 6 Capentry and Joinery CLUSTER G</p>				

Brought Forward				R
<p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p> <p><u>Specific specifications for roof trusses</u></p> <p>Unless otherwise described, the following specifications will apply:</p> <p>1 All trusses to be with a 10° pitch</p> <p>2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres</p> <p><u>ROOFS</u></p> <p><u>The following in plate nailed timber roof truss construction</u></p> <p><u>The following is applicable in respect of roof trusses</u></p> <p>The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes</p> <p>Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)</p> <p><u>Allow for the preparation and submission of the following documents in respect of all buildings</u></p> <p>1 Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication</p> <p>2 Design certificate indicating the licensed programme used, SANS specifications adhered to, general procedures and loadings adopted, sizes and grading of timber components, details, etc.</p>				
	Item			
	Item			
Carried Forward				R
<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 6 Capentry and Joinery CLUSTER G</p>				

Brought Forward			R
3	Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Principal Agent	Item	
	<u>Sawn softwood</u>		
4	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for waterborne toilet block approximately 22m2 on plan (Refer to architect's drawings attached to these bills of quantities)	No	2
	<u>Sawn softwood grade 4</u>		
5	38 x 114mm Wall plates	m	56
	<u>Sundries</u>		
6	Two coats creosote on sawn timbers	m2	12
	<u>EAVES, VERGES, ETC</u>		
	<u>"Everite FC77" pressed fibre-cement</u>		
7	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	56
	<u>DOORS, ETC</u>		
	<u>Wrought meranti doors hung to steel frames</u>		
8	44mm Framed and ledged batten door 813 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	4
	<u>Solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame</u>		
9	40mm Door 813 x 2032mm high	No	8
	Carried Forward to Summary of Section No. 8		R
	Section No. 8		
	CONSTRUCTION OF 6 WATERBORNE TOILET SEATS		
	Bill No. 6		
	Capentry and Joinery		
	CLUSTER G		

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.8</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.7</u></p> <p><u>CEILING , ETC.</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></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 elsewhere</p> <p><u>CEILING CONSTRUCTION, CORNICES, ETC.</u></p> <p><u>Insulation</u></p>			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	58	
	<u>Sawn softwood</u>			
2	38 x 114mm Ceiling joists (Provisional)	m	14	
	Carried Forward			R
	<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 7 Ceilings, Partitions and Access Flooring CLUSTER G</p>			

Brought Forward		R
<u>"Rhino" gypsum plasterboard cornices</u>		
3	75mm Coved cornices m	56
<u>NAILED UP AND SCREWED UP CEILINGS</u>		
<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>		
4	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails. m2	58
5	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening No	2
Carried Forward to Summary of Section No. 8		
Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 7 Ceilings, Partitions and Access Flooring CLUSTER G		
		R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.8</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.8</u></p> <p><u>IRONMONGERY</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs</p> <p><u>Finishes to ironmongery</u></p> <p>Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded</p> <p><u>CATCHES,CABIN HOOKS, ETC</u></p> <p><u>"Solid"</u></p>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	12	
	<p><u>LOCKS</u></p>			
	Carried Forward			R
	<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 8 Ironmongery CLUSTER G</p>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward				R
	<u>"Solid" or similar approved</u>				
2	"Code 630" padlock	No	4		
3	"Code 460/313" Blesbok four lever lockset	No	4		
4	293/E41 WC indicator bolt with keep fixed to metal	No	8		
	<u>LETTERS, NAMEPLATES, ETC</u>				
	<u>"Union" or similar approved</u>				
5	150 x 150mm Stainless steel plate engraved with "female" sign (St/Steel)	No	3		
6	150 x 150mm Stainless steel plate engraved with "male" sign (St/Steel)	No	2		
	<u>BATHROOM FITTINGS</u>				
	<u>"Nampak" or similar approved</u>				
7	Vandal resistant 2 roll holder complete fittings or similar approved	No	8		
	Carried Forward to Summary of Section No. 8				R
	Section No. 8				
	CONSTRUCTION OF 6 WATERBORNE TOILET SEATS				
	Bill No. 8				
	Ironmongery				
	CLUSTER G				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.8</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 9</u></p> <p><u>METALWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>Descriptions</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p><u>Drawings</u></p> <p>Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc</p> <p><u>WELDED SCREENS, GATES, ETC</u></p> <p><u>Gates to external doors</u></p>			
1	Gate and frame 900 x 2100mm high complete (G1)	4	No	
	<p><u>PRESSED STEEL DOOR FRAMES</u></p>			
	Carried Forward			R
	<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 9 Metalwork CLUSTER G</p>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	<u>1,2mm Double rebated frames suitable for half brick walls</u>			
2	Frame for door 813 x 2032mm high	No	8	
	<u>1,2mm Double rebated frames suitable for one brick walls</u>			
3	Frame for door 914 x 2032mm high	No	4	
<u>STEEL WINDOWS, DOORS, ETC</u>				
	<u>"Nty" or similar approved steel residential windows with burglar bars to all sashes</u>			
4	Window type NC 1, size 533 x 949mm high	No	8	
Carried Forward to Summary of Section No. 8				
Section No. 8				
CONSTRUCTION OF 6 WATERBORNE TOILET SEATS				
Bill No. 9				
Metalwork				
CLUSTER G				
				R

Item No		Quantity	Rate	Amount
	<u>SECTION NO.8</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 10</u>			
	<u>PLASTERING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>GRANOLITHIC</u>			
	<u>Untinted granolithic on concrete</u>			
	<u>SCREEDS</u>			
	<u>Screeds on concrete</u>			
1	30mm Thick on floors	m2	58	
	<u>INTERNAL PLASTER</u>			
	<u>Cement plaster on brickwork</u>			
2	On walls	m2	420	
	Carried Forward to Summary of Section No. 8			
	Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 10 Plastering CLUSTER G			R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.8</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.11</u></p> <p><u>TILING</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</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><u>FLOOR TILING</u></p> <p><u>300 x 300 x 11,5mm Ceramic floor tiles (PC R120.00/m2 VAT excl.) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted waterproof jointing compound</u></p>			
1	On floors and landings	m2	58	
2	Skirting formed of ceramic tile cut to 300 x 75mm high	m	75	
	Carried Forward to Summary of Section No. 8			R
	<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 11 Tiling CLUSTER G</p>			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.8</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO.12</u></p> <p><u>PLUMBING AND DRAINAGE</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p style="text-align: center;">-----</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>"Polylink" polypropylene pipes:</u></p> <p>Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints</p> <p>Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured</p> <p style="text-align: right;">Carried Forward</p> <p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 12 Plumbing and Drainage CLUSTER G</p>			
			R	

Brought Forward		R	
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p> <p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p> <p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p> <p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>Vitrified clay pipes:</u></p> <p>Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid</p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p>			
Carried Forward		R	
<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 12 Plumbing and Drainage CLUSTER G</p>			

Brought Forward		R
<p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p> <p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Lead pipes and fittings</u></p> <p>All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel</p>		
Carried Forward		R
<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 12 Plumbing and Drainage CLUSTER G</p>		

	Brought Forward		R
<p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Septic tanks</u></p> <p>Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p>			
	Carried Forward		R
<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 12 Plumbing and Drainage CLUSTER G</p>			

Brought Forward			R
<p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steelbasins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>Steel sectional water tanks</u></p> <p>Tanks shall comply with SABS CKS 114</p> <p><u>"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u></p> <p>Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described</p>			
Carried Forward			R
<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 12 Plumbing and Drainage CLUSTER G</p>			

Brought Forward			R
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc			
<u>RAINWATER DISPOSAL</u>			
<u>0,6mm Galvanised sheet iron with "Chromadek" finish on one side</u>			
1	100 x 125mm Eaves gutters with beaded front edge	m	56
2	Extra over eaves gutter for angle	No	8
3	Extra over eaves gutter for stopped end	No	4
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	8
5	100mm Diameter rainwater pipes	m	32
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	8
7	Extra over rainwater pipe for shoe	No	8
<u>SOIL DRAINAGE</u>			
<u>uPVC pipes</u>			
8	110mm Pipes vertically or ramped to cleaning eye etc (no excavation)	m	20
9	110mm Pipes laid in and including trenches not exceeding 1m deep	m	140
<u>Extra over uPVC pipes for fittings</u>			
10	110mm Access bend	No	8
11	110mm Access junction	No	8
Carried Forward			R
Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 12 Plumbing and Drainage CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Brought Forward			R
12	110mm Bend	No	16
13	110mm Junction	No	4
14	110mm uPVC rodding eye cover in end of pipe	No	8
	<u>Sundries</u>		
15	100mm Cast iron "ABC" cleaning eye	No	2
16	Precast concrete inspection eye marker slab set in ground	No	2
17	110mm Rodding eye	No	2
18	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	4
19	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock	m3	4
	<u>SANITARY FITTINGS</u>		
	<u>"Vaal" or similar approved</u>		
20	Vaal Sanitaryware 510 x 405mm Hibiscus White vitreous china lavatory basin (Code : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code 8448Z0).	No	5
21	Vaal Sanitaryware Hibiscus White vitreous china close coupled washdown suite comprising 90° outlet open rim pan (product code 772600) and matching 6/3 litre front dual flush cistern (product code 710539) including "PARKER AVANT" toilet seat	No	8
	<u>WASTE UNIONS ETC</u>		
	<u>"Cobra Watertech" or similar approved</u>		
22	38mm "Cobra 316" unslotted waste and plug with chain	No	4
	Carried Forward		R
	Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 12 Plumbing and Drainage CLUSTER G		

	Brought Forward			R
	<u>TRAPS ETC</u>			
	<u>"Marley" or similar approved</u>			
	<u>Chromium plated</u>			
23	32 x 40mm Bottle trap	No	4	
	<u>CATCH PITS ETC</u>			
	<u>The following in stormwater catchpits, junction boxes and inlet manholes</u>			
	<u>TAPS, VALVES, ETC</u>			
	<u>"Cobra Watertech" or similar approved</u>			
24	Cobra Watertech 15mm chrome plated hi-waste elbow action pillartap with blue indicator for cold water (Code: 504-21B), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412).	No	8	
25	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	8	
	<u>SANITARY PLUMBING</u>			
	<u>uPVC pipes</u>			
26	50mm Pipes	m	20	
27	50mm Pipes laid in and including trenches not exceeding 1m deep	m	52	
28	110mm Pipes	m	24	
	<u>Extra over uPVC pipes for fittings</u>			
29	50mm Bend	No	80	
30	50mm Access bend	No	8	
	Carried Forward			R
	Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 12 Plumbing and Drainage CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward				R
31	50mm BSP adaptor	No		4	
32	50mm "GI Two-way" vent valve	No		2	
33	110mm Bend	No		8	
34	110mm Access bend	No		8	
35	110mm Pan Connector	No		8	
36	110mm "GI Two-way" vent valve	No		2	
	<u>Sundries</u>				
	<u>WATER SUPPLIES</u>				
	<u>Class 16 uPVC pressure pipes with solvent welded joints</u>				
37	32mm Pipes laid in and including trenches not exceeding 1m deep	m		46	
	<u>Extra over class 16 uPVC pressure pipes for fittings with solvent welded joints</u>				
38	32mm Bend	No		8	
	<u>Class 0 copper pipes</u>				
39	15mm Pipes	m		48	
40	22mm Pipes	m		46	
	<u>Extra over class 0 copper pipes for capillary fittings</u>				
41	15mm Fittings	No		68	
42	22mm Fittings	No		50	
	<u>Brass</u>				
43	15mm Fullway gate valve	No		2	
	Carried Forward				R
	Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 12 Plumbing and Drainage CLUSTER G				

		Brought Forward			
44	22mm Fullway gate valve	No	2		R
Carried Forward to Summary of Section No. 8 Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 12 Plumbing and Drainage CLUSTER G					R

Item No		Quantity	Rate	Amount
	<u>SECTION NO.8</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 13</u>			
	<u>GLAZING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			

	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>4mm Clear float glass</u>			
1	Panes exceeding 0,5m2 and not exceeding 2m2	m2	86	
	<u>4mm Rough cast glass</u>			
2	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	4	
	<u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u>			
	<u>4 mm Silvered float glass copper backed mirrors with 10 mm bevelled and polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>			
3	Mirror 400 x 600mm high with four (4) screws	No	4	
	Carried Forward to Summary of Section No. 8			
	Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 13 Glazing CLUSTER G			R

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.8</u></p> <p><u>BUILDING WORK</u></p> <p><u>BILL NO. 14</u></p> <p><u>PAINTWORK</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>DESCRIPTIONS</u></p> <p>Descriptions of paintwork shall be deemed to include for all cutting in</p> <p><u>PAINT SPECIFICATIONS</u></p> <p>All painting shall be done in accordance with "Plascon-Evans" specifications</p> <p style="text-align: center;">-----</p> <p><u>PAINTWORK ETC TO NEW WORK</u></p> <p><u>ON FLOATED PLASTER</u></p>			
	Carried Forward		R	
	<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 14 Paintwork CLUSTER G</p>			

	Brought Forward			R
	<u>Plascon Polvin Super Acrylic to interior new cement plaster (NW 205).Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Polvin Super Acrylic (EPL) with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.</u>			
1	On internal walls	m2	335	
	<u>ON FIBRE-CEMENT</u>			
	<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
2	On ceilings and cornices	m2	58	
	<u>Plascon Sure Coat Gloss Enamel to exterior new fibre cement (NW 174).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.</u>			
3	On fascias and barge boards	m2	7	
	<u>Plascon Sure Coat Gloss Enamel to interior new fibre cement (NW 274).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 4 years in a C1 - inland environment.</u>			
	<u>ON METAL</u>			
	Carried Forward			R
	Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 14 Paintwork CLUSTER G			

Brought Forward			R
<p><u>Plascon Velvaglo Satin to exterior new mild steel (NW 683).Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.</u></p>			
4	On door frames	m2	10
5	On windows with burglar bars	m2	4
6	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	8
7	On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high	m	112
<u>ON WOOD</u>			
<p><u>Plascon Velvaglo Satin to interior new wood (NW 571).Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.</u></p>			
8	On doors	m2	26
Carried Forward			R
<p>Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 14 Paintwork CLUSTER G</p>			

	Brought Forward				R
9	<u>Three coats matt varnish</u> On doors	m2	15		
	Carried Forward to Summary of Section No. 8				R
	Section No. 8 CONSTRUCTION OF 6 WATERBORNE TOILET SEATS Bill No. 14 Paintwork CLUSTER G				

	Section No. 8			
Bill No		Page No	Amount	
	CONSTRUCTION OF 6 WATERBORNE TOILET SEATS			
	SECTION SUMMARY - CONSTRUCTION OF 6 WATERBORNE TOILET SEATS			
1	Foundations	286		
2	Concrete, Formwork and Reinforcement	290		
3	Masonry	293		
4	Waterproofing	294		
5	Roof Coverings, etc	296		
6	Capentry and Joinery	302		
7	Ceilings, Partitions and Access Flooring	304		
8	Ironmongery	306		
9	Metalwork	308		
10	Plastering	309		
11	Tiling	310		
12	Plumbing and Drainage	320		
13	Glazing	321		
14	Paintwork	325		
	Carried to Final Summary		R	
	Section No. 8			
	CONSTRUCTION OF 6 WATERBORNE TOILET SEATS			
	CLUSTER G			

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.9</u></p> <p><u>EXTERNAL WORK</u></p> <p><u>BILL NO. 1</u></p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades as well as Engineering Specifications attached to these documents.</p> <p><u>EARTHWORKS (PROVISIONAL)</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>NOTE</u></p> <p>All earthworks shall comply with the requirements of the latest relevant SABS 1200 Specifications: 1200C; 1200D;1200DM</p> <p><u>Nature of ground</u></p> <p>The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with soft rock</p> <p><u>Specific Requirements of imported G6 material</u></p> <p>The imported material must conform to the following criteria:</p> <p>(1) Minimum CBR at 93% Mod. AASHTO Density: 15 (2) Minimum swell at 100% Mod. AASHTO Density: 1,5% (3) Maximum PI: 12 (4) Maximum size particles in material: 63mm (5) Grading modulus: $2,7 \geq GM \geq 0,75$</p>			
	Carried Forward		R	
	<p>Section No. 9 EXTERNAL WORKS Bill No. 1 Bulk Earthworks CLUSTER G</p>			

	Brought Forward			R
	<u>Carting away of excavated material</u>			
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site			
	<u>BULK EXCAVATION, FILLING, ETC</u>			
	<u>Excavations</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc for paving and bulk site clearance	m2	2,480	
	<u>Open face excavation in earth over sloping site</u>			
2	Open face excavation	m3	1,439	
	<u>Extra over bulk excavation in earth for excavation in</u>			
3	Soft rock	m3	144	
4	Hard rock	m3	72	
	<u>Extra over all excavations for carting away</u>			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	1,086	
	<u>Risk of collapse of excavations</u>			
6	Sides of trench and hole excavations not exceeding 1 500mm deep	m2	185	
	<u>Keeping excavations free of water</u>			
7	Keeping excavations free of all water other than subterranean water		Item	
	Carried Forward			R
	Section No. 9 EXTERNAL WORKS Bill No. 1 Bulk Earthworks CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
8	Earth filling obtained from excavations compacted to 95% Mod AASHTO density	m3	372	
	<u>Earth filling supplied by the contractor compacted to 95% Mod AASHTO density</u>			
	The following to be natural selected gravel layers evenly spread and consolidated in layers and dimensions as specified and on the drawings. All thicknesses to be consolidated thicknesses.			
	Where described as "imported" the gravel to be supplied and carted on by the contractor from an approved borrow pit			
9	150mm Imported G6 material compacted to 95% mod. AASHTO density	m3	372	
10	150mm Imported G7 material compacted to 95% mod. AASHTO density	m3	372	
	<u>Prescribed density tests on filling</u>			
11	"Modified AASHTO Density" test	No	10	
12	Maximum dry density and optimum moisture content (MOD)	No	10	
	Carried Forward to Summary of Section No. 9			R
	Section No. 9 EXTERNAL WORKS Bill No. 1 Bulk Earthworks CLUSTER G			

Item No		Quantity	Rate	Amount
	<u>SECTION NO.9</u>			
	<u>EXTERNAL WORKS</u>			
	<u>BILL NO. 2</u>			
	<u>PARKING AND PAVINGS</u>			
	Materials and workmanship must be in accordance to the following SABS 1200 specifications:			
	C - Site clearance			
	D - Earthworks			
	DM - Earthworks (Roads, subgrade)			
	M - Roads (General)			
	ME - Sub-base			
	MF - Base			
	MK - Kerb and Channeling			
	MM - Ancillary Roadworks			
	<u>ACCESS ROAD AND VEHICLE PARKING</u>			
	<u>EARTHWORKS</u>			
	<u>Excavations</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc for paving and bulk site clearance	m2	977	
2	Rip and scarify ground level to a depth of 150mm and consolidate to 90% mod. AASHTO density (minimum CBR 3)	m2	977	
3	Excavate in pickable earth to reduce ground level below paving and set aside for later use	m3	586	
	Carried Forward			R
	Section No. 9 EXTERNAL WORKS Bill No. 2 Paving and Carports CLUSTER G			

Brought Forward			R
4	Ditto, but cart away excavated material to a dumping place to be found by the contractor (cut to spoil)	m3	439
5	Extra over excavation for excavation in soft rock	m3	98
6	Ditto, but in hard rock	m3	49
<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
7	Under floors, steps, paving, etc	m3	147
<u>Earth filling supplied by the contractor under pavings etc</u>			
The following to be natural selected gravel layers evenly spread and consolidated in layers and dimensions as specified and on the drawings. All thicknesses to be consolidated thicknesses.			
Where described as "imported" the gravel to be supplied and carted on by the contractor from an approved borrow pit			
8	Over site of G7 material in accordance with SABS 1200 DM compacted to 95% Mod AASHTO density	m3	147
9	150mm Imported G6 material compacted to 95% mod. AASHTO density	m3	147
10	150mm Imported C4 material with and including 3% 32,50 BV cement and consolidated to 97% mod. AASHTO density	m3	147
<u>Compaction of surfaces</u>			
11	Compaction of ground surface under parking areas etc by wetting and compacting	m2	977
Carried Forward			R
Section No. 9 EXTERNAL WORKS Bill No. 2 Paving and Carports CLUSTER G			

Brought Forward				R
<u>Prescribed density tests on filling</u>				
12	In-situ dry density (sand replacement) test in accordance with method A10 (a) of TMH 1	No	10	
13	25mm Thick layer clean,dry, riversand layer treated with an approved weed killer at the rate of 50 grams per square metre,spread and levelled to receive paving blocks (elsewhere measured)	m2	977	
14	Tests to determine the degree of comapction, etc of ground filling	No	10	
<u>PAVING</u>				
<u>Interlocking Pavings</u>				
15	80mm Thick double interlocking (DZZ) precast grey coloured concrete paving blocks laid in a herringbone pattern on and including 20mm sand founding layer with and covered with sand layer sweep into joints	m2	977	
16	Circular cutting to paving	m	35	
<u>Kerbs, etc</u>				
17	Precast concrete figure 7 mountable kerb (SABS 927), levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs	m	391	
18	Precast concrete figure 7 kerb (SABS 927), circular on plan n.e 4m area levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs	m	342	
Carried Forward				R
Section No. 9 EXTERNAL WORKS Bill No. 2 Paving and Carports CLUSTER G				

		Brought Forward		R
	<u>Sundries</u>			
19	Mass concrete (25MPa) in 300 x 150mm edge filler strip finished smooth on top with a wood float, including all excavation, formwork, etc	m	8	
	<u>PAINTWORK</u>			
	<u>Prepare and paint one coat reflective road marking paint on concrete paving block surfaces</u>			
20	Lines 100mm wide	m	70	
21	Disable persons pictorial 1000mm high	No	1	
	<u>Sign Faces with Painted or Galvanised (as stated) Background, with Painted Symbols, Characters, Legend and Borders, and with Signboardings Constructed from:</u>			
	<u>Sign Supports supplied and installed including excavations, backfilling, concrete, disposal, etc</u>			
22	Steel tubing 76mm diameter x 2,5mm thick CHS sections 3m long, with two coats bitumen tar below ground and zinc phosphate primer and two coats metal paint above ground	No	1	
	<u>ASSEMBLY AREA AND WALKWAYS</u>			
	<u>EARTHWORKS</u>			
	<u>Excavations</u>			
	<u>Site clearance</u>			
23	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc for paving and bulk site clearance	m2	1,730	
24	Rip and scarify ground level to a depth of 150mm and consolidate to 90% mod. AASHTO density (minimum CBR 3)	m2	1,730	
	Carried Forward			R
	Section No. 9 EXTERNAL WORKS Bill No. 2 Paving and Carports CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Brought Forward			R
25	Excavate in pickable earth to reduce ground level below paving and set aside for later use	m3	519
26	Ditto, but cart away excavated material to a dumping place to be found by the contractor (cut to spoil)	m3	260
27	Extra over excavation for excavation in soft rock	m3	52
28	Ditto, but in hard rock	m3	26
<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
29	Under floors, steps, paving, etc	m3	259
<u>Earth filling supplied by the contractor under pavings etc</u>			
The following to be natural selected gravel layers evenly spread and consolidated in layers and dimensions as specified and on the drawings. All thicknesses to be consolidated thicknesses.			
Where described as "imported" the gravel to be supplied and carted on by the contractor from an approved borrow pit			
30	150mm Imported G6 material compacted to 95% mod. AASHTO density	m3	259
<u>Compaction of surfaces</u>			
31	Compaction of ground surface under parking areas etc by wetting and compacting	m2	1,730
<u>Prescribed density tests on filling</u>			
32	In-situ dry density (sand replacement) test in accordance with method A10 (a) of TMH 1	No	10
Carried Forward			R
Section No. 9 EXTERNAL WORKS Bill No. 2 Paving and Carports CLUSTER G			

		Brought Forward		R
33	25mm Thick layer clean,dry, riversand layer treated with an approved weed killer at the rate of 50 grams per square metre,spread and levelled to receive paving blocks (elsewhere measured)	m2	1,730	
34	Tests to determine the degree of comapction, etc of ground filling	No	10	
		<u>PAVING</u>		
		<u>Interlocking Pavings</u>		
35	60mm Thick double interlocking (DZZ) precast grey coloured concrete paving blocks laid in a herringbone pattern on and including 20mm sand founding layer with and covered with sand layer sweep into joints	m2	1,730	
		<u>Kerbs, etc</u>		
36	Precast concrete figure 7 mountable kerb (SABS 927), levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs	m	346	
37	Precast concrete figure 7 kerb (SABS 927), circular on plan n.e 4m area levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs	m	260	
		<u>Sundries</u>		
38	Mass concrete (25MPa) in 300 x 150mm edge filler strip finished smooth on top with a wood float, including all excavation, formwork, etc	m	15	
		Carried Forward		R
Section No. 9 EXTERNAL WORKS Bill No. 2 Paving and Carports CLUSTER G				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward		R
	<u>CARPORTS</u>		
39	Provide the amount of R250 000,00 (Two Hundred Fifty Thousand Rand) for the supply and installation of Carports by Specialists	Item	250,000.00
40	Allow for profit on above if required	Item	
41	Allow for giving every facility to Specialists as described	Item	
	Carried Forward to Summary of Section No. 9		R
	Section No. 9 EXTERNAL WORKS Bill No. 2 Paving and Carports CLUSTER G		

Item No		Quantity	Rate	Amount
	<u>SECTION NO.9</u>			
	<u>EXTERNAL WORKS</u>			
	<u>BILL NO. 3</u>			
	<u>STORMWATER DRAINAGE</u>			
	Materials and workmanship must be in accordance to the following SABS 1200 specifications:			
	C - Site clearance			
	D - Earthworks			
	DM - Earthworks (Roads, subgrade)			
	M - Roads (General)			
	ME - Sub-base			
	MF - Base			
	MK - Kerb and Channeling			
	MM - Ancillary Roadworks			
	<u>ACCESS ROAD AND VEHICLE PARKING</u>			
	<u>EARTHWORKS</u>			
	<u>Excavations</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc for paving and bulk site clearance	m2	326	
2	Rip and scarify ground level to a depth of 150mm and consolidate to 90% mod. AASHTO density (minimum CBR 3)	m2	326	
3	Excavate in pickable earth to reduce ground level below paving and set aside for later use	m3	49	
	Carried Forward			R
	Section No. 9 EXTERNAL WORKS Bill No. 3 Stormwater Drainage CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
4	Ditto, but cart away excavated material to a dumping place to be found by the contractor (cut to spoil)	m3	49	
5	Extra over excavation for excavation in soft rock	m3	5	
6	Ditto, but in hard rock	m3	3	
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
7	Under floors, steps, paving, etc	m3	49	
	<u>Compaction of surfaces</u>			
8	Compaction of ground surface under parking areas etc by wetting and compacting	m2	326	
	<u>Prescribed density tests on filling</u>			
9	In-situ dry density (sand replacement) test in accordance with method A10 (a) of TMH 1	No	10	
	<u>REINFORCED CONCRETE</u>			
	<u>30MPa/19mm concrete</u>			
10	Stormwater channels cast in panels	m3	33	
	<u>CONCRETE SUNDRIES</u>			
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
11	Surface beds, slabs, etc	m2	326	
	<u>FORMWORK</u>			
	<u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u>			
	Carried Forward			R
	Section No. 9 EXTERNAL WORKS Bill No. 3 Stormwater Drainage CLUSTER G			

	Brought Forward				R
	<u>Rough formwork to sides</u>				
12	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	326		
	<u>TEST CUBES</u>				
13	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	5.0		
	<u>MOVEMENT JOINTS ETC</u>				
	<u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u>				
14	Saw cut joints in top of concrete	m	326		
	<u>REINFORCEMENT</u>				
	<u>REINFORCEMENT (PROVISIONAL)</u>				
	<u>Fabric reinforcement</u>				
15	Type 311 fabric reinforcement in concrete slabs etc	m2	326		
	Carried Forward to Summary of Section No. 9				R
	Section No. 9				
	EXTERNAL WORKS				
	Bill No. 3				
	Stormwater Drainage				
	CLUSTER G				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Item No		Quantity	Rate	Amount
	<u>SECTION NO.9</u>			
	<u>EXTERNAL WORKS</u>			
	<u>BILL NO 4</u>			
	<u>WATER SUPPLIES</u>			
	<u>Materials and workmanship must be in accordance to the following SABS 1200 specifications:</u>			
	C - Site clearance			
	D - Earthworks			
	DM - Earthworks (Roads, subgrade)			
	M - Roads (General)			
	ME - Sub-base			
	MF - Base			
	MK - Kerb and Channeling			
	MM - Ancillary Roadworks			
	<u>Class 6 black uPVC pipes including "Plasson" compression fittings</u>			
1	75mm Pipes laid in and including trenches not exceeding 1m deep	m	754	
2	32mm Pipes laid in and including trenches not exceeding 1m deep	m	25	
	<u>Extra over class 6 uPVC pressure pipes for fittings with solvent welded joints</u>			
3	32mm Junction	No	4	
4	32mm Bend	No	8	
5	32 x 15mm Reducer	No	12	
6	32 x 15 x 32mm Tee	No	12	
7	32 x 22mm Reducer	No	4	
	Carried Forward			R
	Section No. 9 EXTERNAL WORKS Bill No. 4 Water Supply CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

		Brought Forward		R
8	32mm Tee	No	5	
9	75mm Elbow	No	4	
10	75mm Junction	No	8	
11	75 x 32mm reducer	No	8	
12	75 x 32 x 63mm Tee	No	4	
Carried Forward to Summary of Section No. 9				
Section No. 9				
EXTERNAL WORKS				
Bill No. 4				
Water Supply				
CLUSTER G				

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO.9</u></p> <p><u>BILL NO. 5</u></p> <p><u>SOIL DRAINAGE</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>"Polylink" polypropylene pipes:</u></p> <p>Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints</p> <p>Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured</p> <p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p> <p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p>			
	Carried Forward		R	
	<p>Section No. 9 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G</p>			

Brought Forward			R
<p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p> <p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>Vitrified clay pipes:</u></p> <p>Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid</p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints</p>			
Carried Forward			R
<p>Section No. 9 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G</p>			

Brought Forward		R
<p><u>Copper pipes:</u></p> <p>Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground</p> <p><u>Fixing of pipes</u></p> <p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p> <p><u>Lead pipes and fittings</u></p> <p>All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel</p> <p><u>Reducing fittings</u></p> <p>Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained</p> <p><u>Septic tanks</u></p> <p>Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions</p>		
<p>Carried Forward</p> <p>Section No. 9 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G</p>		R

<p style="text-align: center;">Brought Forward</p> <p><u>Exposed concrete surfaces</u></p> <p>Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gully tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steelbasins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p>		R	
<p style="text-align: center;">Carried Forward</p> <p>Section No. 9 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G</p>		R	

Brought Forward			R
<u>Waste unions</u>			
Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings			
<u>Steel sectional water tanks</u>			
Tanks shall comply with SABS CKS 114			
<u>"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u>			
Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described			
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc			
<u>SOIL DRAINAGE</u>			
<u>uPVC pipes</u>			
1	160mm Pipes laid in and including trenches	m	280
<u>Extra over "Corflo" double walled radial ribbed uPVC pipes with integral moulded cuff joints and rubber seal rings for uPVC fittings</u>			
2	160mm Bend	No	4
3	160mm Junction	No	4
4	160mm End cap	No	1
<u>SUNDRIES</u>			
Carried Forward			R
Section No. 9 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G			

	Brought Forward			R
	<u>Precast concrete circular inspection chambers, with and including manhole cover and frame all as per Engineer's drawings no.?????</u>			
5	Inspection chamber 1000mm diameter and not exceeding 750mm deep internally	No	4	
6	Inspection chamber 1000mm diameter and exceeding 750mm and not exceeding 1000mm deep internally	No	4	
7	Inspection chamber 1000mm diameter and exceeding 1000mm and not exceeding 2000mm deep internally	No	4	
	<u>Covers etc</u>			
8	Lifting key for manhole cover	No	12	
	<u>SEPTIC TANKS, ETC.</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<u>SITE CLEARANCE ETC</u>			
	<u>Site clearance</u>			
9	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	76	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
10	Holes	m3	66	
	Carried Forward			R
	Section No. 9 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Brought Forward			R
	<u>Excavation in earth exceeding 2m and not exceeding 4m deep</u>		
11	Holes	m3	8
	<u>Extra over all excavations for carting away</u>		
12	Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor	m3	34
	<u>Risk of collapse of excavations</u>		
13	Sides of trench and hole excavations not exceeding 1,5m deep	m2	54
14	Sides of trench and hole excavations exceeding 1,5m deep and not exceeding not exceeding 3m deep	m2	26
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>		
15	Backfilling to trenches, holes, etc	m3	40
	<u>Keeping excavations free of water</u>		
16	Keeping excavations free of all water other than subterranean water		Item
	<u>REINFORCED CONCRETE</u>		
	<u>20MPa/19mm concrete</u>		
17	Surface beds cast in panels	m3	2
18	Slab over septic tank	m3	2
19	Concrete haunch formed below pipes	m3	0.08
	<u>CONCRETE SUNDRIES</u>		
	Carried Forward		R
	Section No. 9 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G		

Brought Forward			R
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>		
20	Surface beds, slabs, etc to falls	m2	36
	<u>Grooves, channels, mortice , sinkings, etc in concrete</u>		
	Form 25 x 25mm chamfer to edges of concrete	m	26
	<u>Permanent formwork to soffits</u>		
21	Slab over septic tank	m2	12
	<u>Smooth formwork to form</u>		
22	Opening not exceeding 1m girth through 150mm slab	No	4
	<u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u>		
	<u>Smooth formwork to sides</u>		
23	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	28
	<u>REINFORCEMENT</u>		
	<u>Mild steel reinforcement to structural concrete work</u>		
24	10mm Diameter bars	t	0.08
	<u>Fabric reinforcement</u>		
25	Steeledale Mesh standard square fabric mesh, nominal mass 3,95 kg/m ² with nominal 8mm thick wires and 200 x 200mm pitch (code 395), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.(septic tank bottoms)	m2	18
	<u>MASONRY</u>		
	Carried Forward		R
	Section No. 9 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G		

Brought Forward			R
	<u>Brickwork of NFP bricks in class II mortar</u>		
26	One brick walls	m2	46
	<u>Brickwork reinforcement</u>		
27	150mm Wide reinforcement built in horizontally	m	144
	<u>BRICKWORK SUNDRIES</u>		
28	Leave of form 450 x 150mm high opening through a one brick wall	No	2
29	Leave or form opening through one brickwall for pipe exceeding 100mm and n.e 200mm diameter	No	4
	<u>PLASTERING</u>		
	<u>Watertight cement plaster on brickwork</u>		
30	On walls	m2	46
	<u>PLUMBING AND DRAINAGE</u>		
	<u>uPVC pipes</u>		
31	110mm Pipes	m	2
	<u>Extra over uPVC pipes for fittings</u>		
32	110mm Tee	No	4
	<u>Cover, etc</u>		
33	600 x 600mm Type 2A cast iron single seal manhole cover and frame	No	4
34	Lifting key for manhole cover	No	4
	<u>FRENCH DRAINS</u>		
	<u>SITE CLEARANCE ETC</u>		
	Carried Forward		R
	Section No. 9 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G		

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	<u>Site clearance</u>			
35	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	90	
	<u>EXCAVATION, FILLING, ETC</u>			
	<u>Excavation in earth not exceeding 2m deep</u>			
36	Holes	m3	38	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
37	Soft rock	m3	2	
38	Hard rock	m3	4	
	<u>Extra over all excavations for carting away</u>			
39	Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor	m3	32	
	<u>Risk of collapse of excavations</u>			
40	Sides of trench and hole excavations not exceeding 1,5m deep	m2	70	
	<u>Keeping excavations free of water</u>			
41	Keeping excavations free of all water other than subterranean water			
			Item	
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site (not compacted)</u>			
42	On top of french drain as soil cover	m3	6	
	<u>FILTER FABRIC</u>			
	Carried Forward			R
	Section No. 9 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

	Brought Forward			R
	<u>"Kaytech Engineered Fabric" or similar approved laid in strict accordance to the manufacturer's instructions</u>			
43	"Kaymat U14" around stone filling in sub-soil drain trenches	m2	76	
	<u>20mm Graded stone filling or similar approved</u>			
44	In holes	m3	10	
	<u>200 - 300mm Diameter clean washed stone filling or similar approved by engineer</u>			
45	In holes	m3	22	
	<u>WATERPROOFING</u>			
	<u>One layer of 250 micron "Tarkon USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
46	On top of pipes as protection of joints	m2	18	
	<u>uPVC pipes</u>			
47	110mm Inspection pipes	m	16	
	<u>Extra over uPVC pipes for fittings</u>			
48	110mm End cap	No	2	
	Carried Forward to Summary of Section No. 9			R
	Section No. 9			
	EXTERNAL WORKS			
	Bill No. 5			
	Sewer Drainage			
	CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 9</u>			
	<u>BILL NO.6</u>			
	<u>FENCING</u>			
	<u>SITE CLEARANCE, ETC.</u>			
	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	366	
	<u>Steel palisade fencing</u>			
2	Steel palisade fence 2100mm high above ground level over flat or sloping terrain including all posts, excavation, backfilling, concrete bases, etc	m	610	
3	Single gate gate 1200 x 2100m high including heavy duty hasp and staple, padlock and two barrel bolts with two keeps in and including concrete anchor blocks with Spot primer defects in pre-primed surfaces with zinc chromate primer UC 53, one universal undercoat and two coats approved enamel paint	No	1	
4	Single gate gate 2982 x 2100m high including heavy duty hasp and staple, padlock and two barrel bolts with two keeps in and including concrete anchor blocks with Spot primer defects in pre-primed surfaces with zinc chromate primer UC 53, one universal undercoat and two coats approved enamel paint	No	1	
	Carried Forward to Summary of Section No. 9			R
	Section No. 9			
	EXTERNAL WORKS			
	Bill No. 6			
	Fencing			
	CLUSTER G			

		Page No	Amount
	Section No. 9		
	EXTERNAL WORKS		
	<u>SECTION SUMMARY - EXTERNAL WORKS</u>		
Bill No			
1	Bulk Earthworks	329	
2	Paving and Carports	336	
3	Stormwater Drainage	339	
4	Water Supply	341	
5	Sewer Drainage	352	
6	Fencing	353	
	Carried to Final Summary		R
	Section No. 9 EXTERNAL WORKS CLUSTER G		

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Item No		Quantity	Rate	Amount
	<p><u>SECTION NO. 10</u></p> <p><u>BILL NO.1</u></p> <p><u>PROVISIONAL SUMS</u></p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>NOTE: Tenderers are referred to the definition of general attendance on nominated sub-contractors given in Clause 9 of the Preliminaries</p> <p>NOTE: Under no circumstances may any Prime Cost - Provisional Amount, etc be extended at an amount lower than the amount given in the Bill</p>			
	Carried Forward		R	
	<p>Section No. 10 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS CLUSTER G</p>			

Brought Forward		R
<p>THE FOLLOWING PROVISIONAL SUMS ARE FOR WORK TO BE EXECUTED BY SELECTED SUBCONTRACTORS</p> <p>The following Provisional Sums are for specialists work to be executed by a selected Sub-contractor who upon appointment in terms of the Conditions of Contract shall be deemed to be a Domestic Sub-Contractor to the Contractor</p> <p>A Selected Sub-Contractor shall be a Sub-contractor executing work for which a sum of money is provided for in the Bills of Quantities or a Sub-contractor executing additional specialist work which arises as a result of an instruction by the Principal Agent/Engineer</p> <p>Tender documents for such work shall be prepared by the Principal Agent/Engineer in consultation with and to the approval of the Contractor and such tender document shall be issued by the Principal Agent/Engineer to a list of tenderers agreed upon between the Principal Agent/Engineer and Contractor. Tenders shall be submitted to the Principal Agent/Engineer</p> <p>The Selected Sub-contractor shall be chosen by the Principal Agent/Engineer and the Contractor, and the Contractor shall satisfy himself that such selected sub-contractor can meet the requirements of the Sub-Contract agreement and the Contractor shall inform the Principal Agent/Engineer accordingly</p> <p>The procedure relating to the method of selection, obtaining of tenders, adjudication thereof and the appointment of the Selected Sub-contractor shall not create any contractual relationship between the Client and the Selected Sub-contractor</p> <p><u>Community Liaison Officer</u></p>		
1	Provide the sum of R173 636.36 (One Hundred Seventy Three Thousand Six Hundred Thirty Six Rand Thirty Six Cents) for community liaison officer	Item 190,000.00
2	Allow for giving every facility to Specialists as described	Item
Carried Forward		R
<p>Section No. 10 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS CLUSTER G</p>		

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
BILLS OF QUANTITIES
VALLAMBROSA PRIMARY SCHOOL
LDPW-B/20309

			R
	Brought Forward		
3	Allow for profit on above if required	Item	
	<u>Project Steering Committee</u>		
4	Provide a sum of R50 000,00 (Fifty Thousand Rand) for the provision of a Project Steering Committee	Item	50,000.00
5	Allow for profit on above if required	Item	
6	Allow for giving every to specialist as described	Item	
	<u>Borehole, Bulk Water Storage and Water pipe line</u>		
7	Provide the amount of R850 000.00 (Eight Hundred Fifty Thousand Rand) for equipping of borehole , elevated water storage and Water pipe reticulation by Specialists approved by the civil engineer	Item	850,000.00
8	Allow for profit on above if required	Item	
9	Allow for giving every facility to Specialists as described	Item	
	<u>Mobile Classroom Relocation</u>		
10	Provide the sum of R 150,000-00(One Hundred Fifty Thousand Rand) for mobile relocations	Item	150,000.00
11	Allow for profit.	Item	
12	Allow for attendance on sub-contractor	Item	
	<u>CONTRACT PARTICIPATION GOALS</u>		
13	Provide the sum of R 50 000.00 (Fifty Thousand Rand) for contract participation goals for targeted enterprises in accordance to CIDB Competence Standard for Contractors Gazette No. 41237, 10 November 2017.	Item	50,000.00
14	Allow for profit.	Item	
	Carried Forward		
	Section No. 10 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS CLUSTER G		R

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

			R
	Brought Forward		
15	Allow for attendance on sub-contractor	Item	
	<u>ELECTRICAL, ELECTRONICAL AND MECHANICAL INSTALLATION</u>		
	<u>Electrical Installation, etc</u>		
16	Provide the amount of R1,800,000.00 (One Million Eight Hundred Thousand Rand) for electrical installation to the buildings and site by Specialists	Item	1,800,000.00
17	Allow for giving every facility to Specialists as described	Item	
18	Allow for profit on above if required	Item	
	<u>WORK EXECUCED BY SEPARATE DIRECT CONTRACTORS</u>		
	The following work will be executed by contractors under direct appointment of the employer or the employer's agent. The contractor is to accommodate these direct contractors and allow them to execute their work unhindered and allow them the use of water and toilet facilities. Damage caused by these contractors to work completed by the principal contractor is to be recorded in detail to enable the employer to counter-charge the direct contractors the cost of making good such damages		
	<u>Occupation Health and Safety</u>		
19	Provide the sum of R500,000.00 Five Hundred Thousand Rand) for Health and Safety Consultant to be appointed as nominated sub contractor from the client	Item	500,000.00
20	Allow for profit on above if required	Item	
21	Allow for giving every to specialist as described	Item	
	Carried to Final Summary		
	Section No. 10 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS CLUSTER G		R

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
 BILLS OF QUANTITIES
 VALLAMBROSA PRIMARY SCHOOL
 LDPW-B/20309

Section No	<u>FINAL SUMMARY</u>	Page No	Amount
1	PRELIMINARIES	71	
2	DEMOLITIONS OF ADMIN BLOCKS, 14 CLASSROOMS AND TANK HOUSE	73	
3	RENOVATIONS TO 28 ENVIROLOO TOILETS	94	
4	CONSTRUCTION OF MEDIUM ADMIN BLOCK	151	
5	CONSTRUCTION OF 3 GRADE R CLASSROOMS	199	
6	CONSTRUCTION OF 3 x 3 CLASSROOM BLOCKS	241	
7	CONSTRUCTION OF 2 X 4 CLASSROOM BLOCKS	281	
8	CONSTRUCTION OF 6 WATERBORNE TOILET SEATS	326	
9	EXTERNAL WORKS	354	
10	PROVISIONAL SUMS	358	
	Sub Total		R
	<u>CONTINGENCIES</u>		
	<u>Contingencies:</u>		
	Provide the sum of R1 000 000.00 (One Million Rand) for contingencies to be used by the architect in terms of clause 17 of the principal Building Agreement.	Item	1,000,000.00
	<u>SPECIAL CONDITIONS</u>		
	Provide the sum of R 1 000 000.00 (One Million Rand) for fluctuations in cost	Item	1,000,000.00
	Sub Total		R
	<u>Add:</u> Value Added Tax at 15%		R
	Carried to Form of Tender		R
	CLUSTER G		

PART C3 SCOPE OF WORKS



PART C3.1: SPECIAL NOTES TO BIDDERS

The following special conditions are for compliance and attention to bidders:

- 1.1. LDPWR&I reserve the right to call interviews with short-listed bidders before final selection.
- 1.2. LDPWR&I reserve the right to conduct supplier due diligence prior to final award or at any time during the contract period. This may include surprise site visits.
- 1.3. LDPWR&I reserve the right to appoint the bidder that proves to be fully capable and qualified to handle and execute the job.
- 1.4. The proposals submitted must be in line with the detailed specification.
- 1.5. LDPWR&I reserve the right to cancel or withdraw this bid if:
 - i. Due to changed circumstances, there is no longer a need for this services; or
 - ii. Funds are no longer available to cover the total envisaged expenditure; or
 - iii. No acceptable bids are received; or
 - iv. There is a material irregularity in the Bid process.
- 1.6. In the case of sub-contracting or joint venture agreement, LDPWR&I will enter into a single contract with the principal bidder.
- 1.7. Bidders who are not registered on Central Supplier Database (CSD) must register before submission of bids.
- 1.8. Any completion of the bid document in pencil or erasable ink will not be acceptable and will automatically disqualify the submitted bid.
- 1.9. Successful bidder will be required to sign and enter into a formal contract upon the award.
- 1.10. Notwithstanding shortcomings and/or inconsistencies, if any, in this specification, which is only a minimum specification, a bidder shall make provision for a complete solution that will deliver the required service efficiently and cost-effectively.
- 1.11. Bid documents must be submitted physically to the closing address as reflected on the Request for Quotations/Tender.
- 1.12. Quotations received after the closing date and time will not be accepted for consideration.
- 1.13. This request for bid document contains confidential information about LDPWR&I, which has been provided to supply potential bidders with the data necessary to provide a holistic response.
- 1.14. No part of the contents may be used, copied, disclosed or conveyed in whole or in part to any party, in any manner whatsoever without the prior written permission of LDPWR&I.
- 1.15. Any reproduction or transmission of information contained in this document except for the sole purpose of responding to this bid is strictly prohibited.
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PART C3.2: OHS SPECIFICATIONS



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
**PUBLIC WORKS, ROADS
AND INFRASTRUCTURE**

PART C4 SITE INFORMATION



C4.1 DRAWINGS

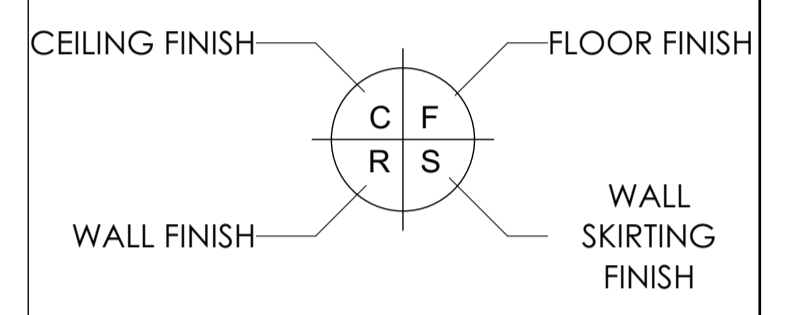
ISSUED FOR TENDER



- LEGEND**
- NEW WALLS
 - EXISTING WALL TO BE RETAINED
 - EXISTING WALL TO BE DEMOLISHED
 - NEW FIXTURES & FITTING TO BE INSTALLED
 - ITEMS IN RED AND (OR) DASHED LINES ARE TO BE REPAIRED AND (OR) REPLACED

NOTES
 ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED
 DIMENSIONS TO BE READ, NOT TO SCALED FROM THIS DRAWING
 CONTRACTORS TO CONFIRM ALL DIMENSIONS ON SITE BEFORE CONSTRUCTION COMMENCES & ANY DISCREPANCY TO BE REPORTED TO THE PROJECT ARCHITECT

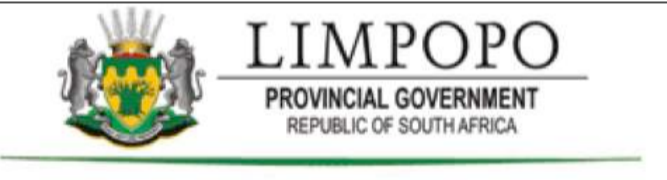
FINISHES LEGEND



SIGNATURE TABLE

DISCIPLINE	SIGN	DATE
CLIENT		
PLAN EXAMINER		
FIRE CONTROL		
ENVIRONMENTAL		
ROADS STORMWATER		
WATER & SANITATION		

REV. NO.	DATE	DESCRIPTION
0	JUL 21	FIRST ISSUE FOR TENDER



DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE
 INSTITUTION
VALLAMBROSA PRIMARY - 918 511 500

RESTORATIVES, REPAIRS & ADDITIONS
 CONTRACT - SECTION
DOCUMENTATION & PROCUREMENT
 DISCIPLINE: ARCHITECTURAL 4
 WORK DESCRIPTION - SUB DIVISION: MEDIUM ADMINISTRATION BLOCK
 DRAWING DESCRIPTION: SECTIONS A, B & C

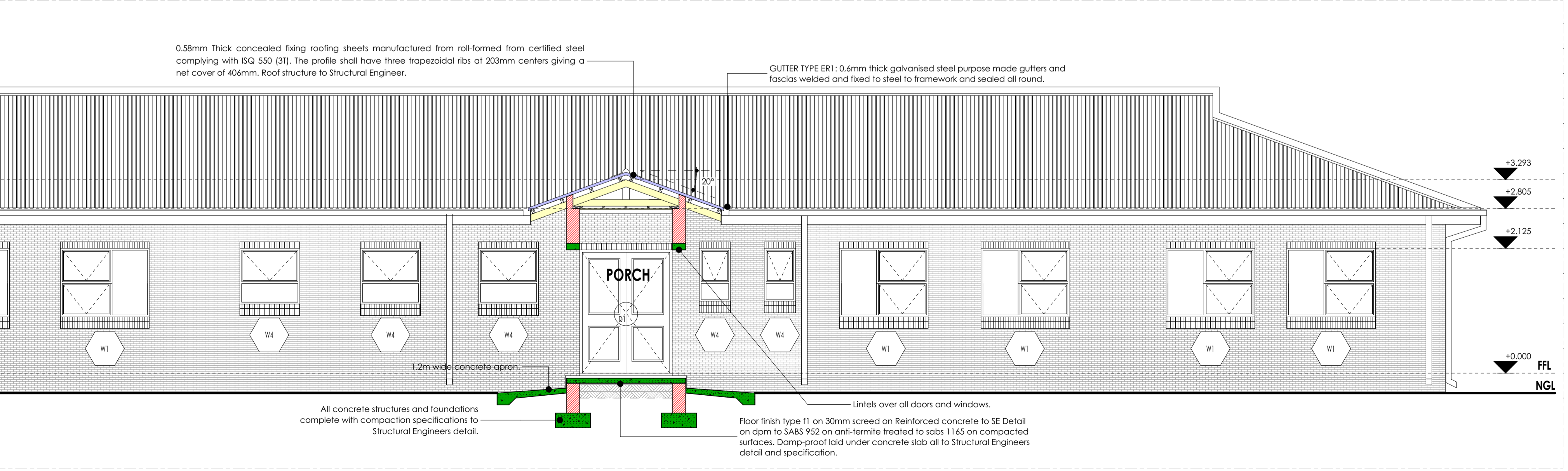
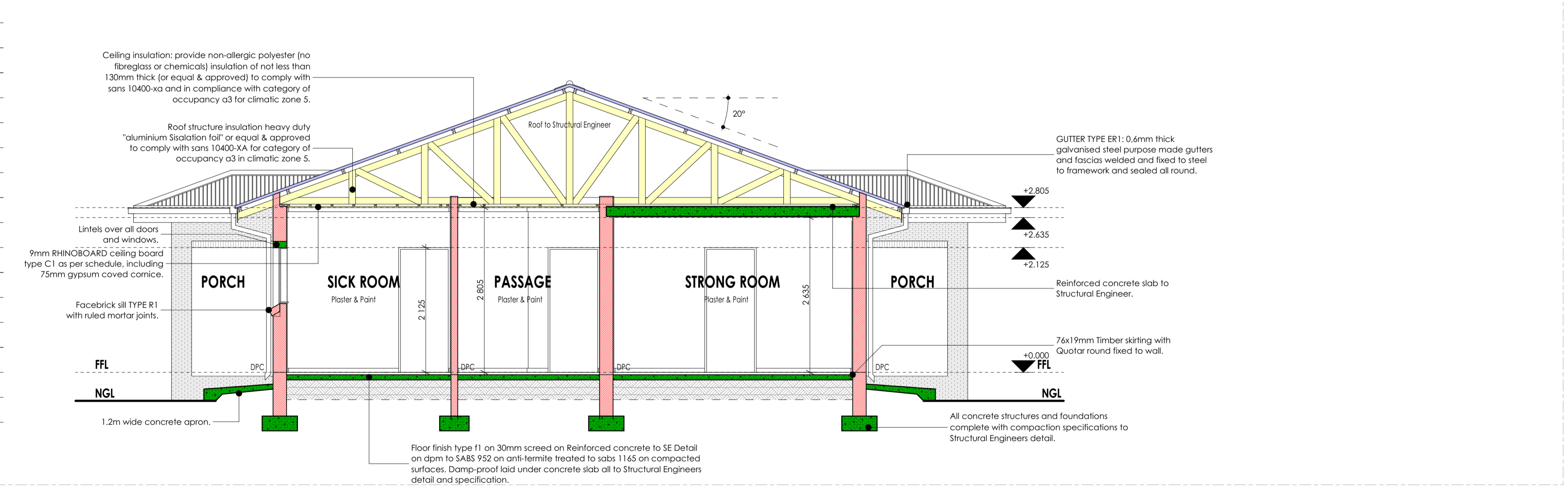
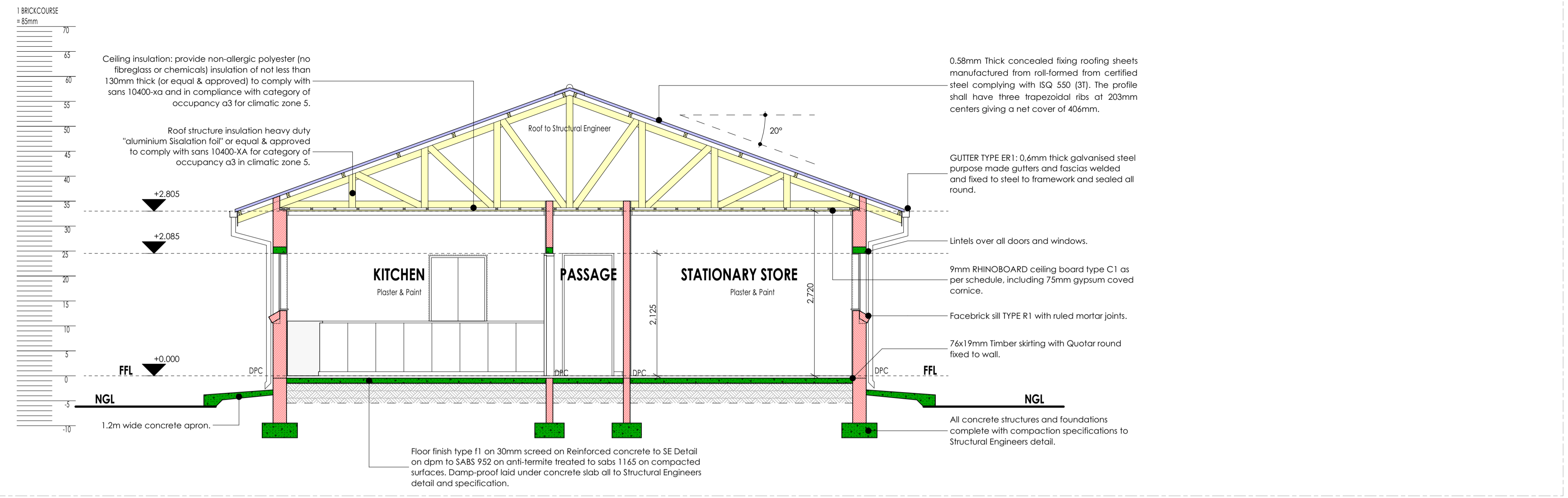
DRG No.	101-03	03/10	ITEM No.
DESIGN	NA	KSN	DRAWN
SCALE	AS SHOWN	ES	CHECK
DATE	NOV 2019	RESPONSIBLE PROFESSIONAL NAME: A. SINKALA	PR. NUMBER: P/Arch 24750409

CONSULTANT
TECTURA PROJECTS

CAUTION: INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE.
 PROJECT DATE: 10/11/2019
 PROJECT NO: 101-03
 PROJECT NAME: VALLAMBROSA PRIMARY
 PROJECT LOCATION: VALLAMBROSA, VALLAMBROSA LOCAL MUNICIPALITY, LIMPOPO PROVINCE, SOUTH AFRICA
 PROJECT ARCHITECT: ARCHITECT A. SINKALA
 PROJECT ENGINEER: ARCHITECT A. SINKALA
 PROJECT DRAWN: ARCHITECT A. SINKALA
 PROJECT CHECKED: ARCHITECT A. SINKALA
 PROJECT DATE: 10/11/2019
 PROJECT NO: 101-03
 PROJECT NAME: VALLAMBROSA PRIMARY
 PROJECT LOCATION: VALLAMBROSA, VALLAMBROSA LOCAL MUNICIPALITY, LIMPOPO PROVINCE, SOUTH AFRICA
 PROJECT ARCHITECT: ARCHITECT A. SINKALA
 PROJECT ENGINEER: ARCHITECT A. SINKALA
 PROJECT DRAWN: ARCHITECT A. SINKALA
 PROJECT CHECKED: ARCHITECT A. SINKALA

CONTRACTOR

CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REV
A1	LDPW - PROF/16002/G10	0



FINISHES LEGEND

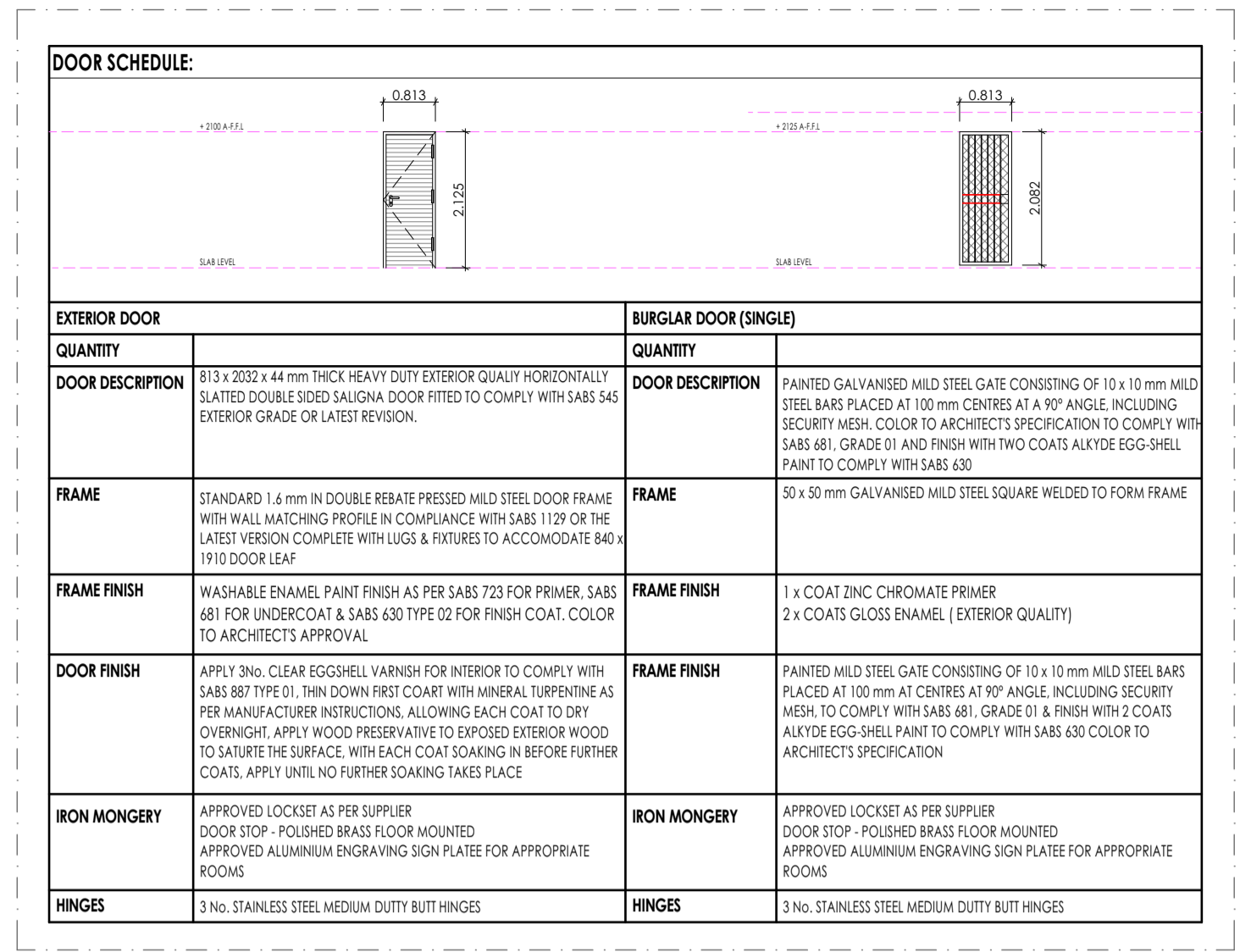
- FLOORS:**
- F1: PORCELAIN TILES - MATI (Conservative Resistant & Anti-Slippery)**
450x450 15mm litmarino floor tile or similar approved by architects, fixed with adhesive, painted with finished waterproof jointing compound. Grouting to be grey. Tiles should have expansion joint and aluminium edging strip.
- F2: PORCELAIN TILES - MATI**
450 x 450 15mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds. With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fillings to include, ribbed angle lines where there is change of level. Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.
- F3: CARPETILES**
500mm x 500mm, 1.005 PFK staple fibre carpet tiles to Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 'Wear Class 4 Heavy Duty', laid with approved adhesive, on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN S424 on wear test and 500000000 test at 25% RH on static electricity. Colour and pattern to architects approval.
- F4: CEMENT SAND SCREED**
30mm thick polished cement sand screed with 13mm Stone Nominal aggregate for Topping to comply with SABS 1083 or latest revision for concrete.
- F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVES**
65mm thick multi-coloured concrete pavers laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approval and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or Latest Revision.
- F6: GRANULITIC FINISH**
22 mm thick unsealed Granulitic finish composed of one part cement, one part fine sand, two parts coarse sand and one part granite that would pass through a 5mm mesh sieve laid by specialist in panels not exceeding 100m², divided with approved brass dividing strips. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour, pattern and aggregate size to architects approval.
- F7: INTERLOCKING PAVES (RIGID PAVING/VEHICULAR WAYS)**
20mm x 150mm x 50 mm thick concrete interlocking paves, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a herringbone pattern to the Architect's approval.
- F8: SEMI FLEXIBLE VINYL SHEETING (CORROSION RESISTANT/ANTI-SLIPPERY)**
2.5mm Thick Heavy Traffic Use, Conservative Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 584. With Static Dissipative Properties Throughout Thickness, Engineered for ISO or ISO (Anti-static) Protection Vinyl Sheet, Laid on Self-Levelled Smooth Screed gird with conductive adhesive to SABS 070 or Latest Revision in Accordance to Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042, Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity, Contractor to provide Certificate of Static Current Conductivity, Conservative resistant & Anti-Slippery.

- F9: GRAVEL FINISH ON SAND LAYER**
32mm Gravel On Compacted Sand Layer Base as Per P&E Details installed in All Duct Chambers Accommodating Sanitary Services.
- SKIRTING:**
- S1: HARDWOOD OR EQUAL AND APPROVED**
18 x 75mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with spliced heading joints and mitred corners with screws and plugs at centres not exceeding 600mm, and fixed with a 18mm x 18mm quadrant beading. The skirting to be varnished with 3No. coats of egg shell clear varnish to comply with SABS/SANS 381 type 1.
- S2: CERAMIC TILE SKIRTING**
600mm wide x 100mm high x 7mm thick matt porcelain tile to comply with SABS 1449 laid with approved adhesives and grout on 22mm thick screed in strict compliance to manufacturers instructions and SABS specification, with one base and thigh top. Complete with corner and top trims. Fillings to include, ribbed angle files where there is change of level. Colour and pattern to architects approval.
- S3: CEMENT SAND SCREED**
75 mm high x 20 mm thick hardened cement sand screed skirting covered at 20 mm dia. to form a continuous joint with the adjoining screed floor finish to FA's approval. All to be manufactured and installed in strict compliance with SABS 1083 or latest revision.

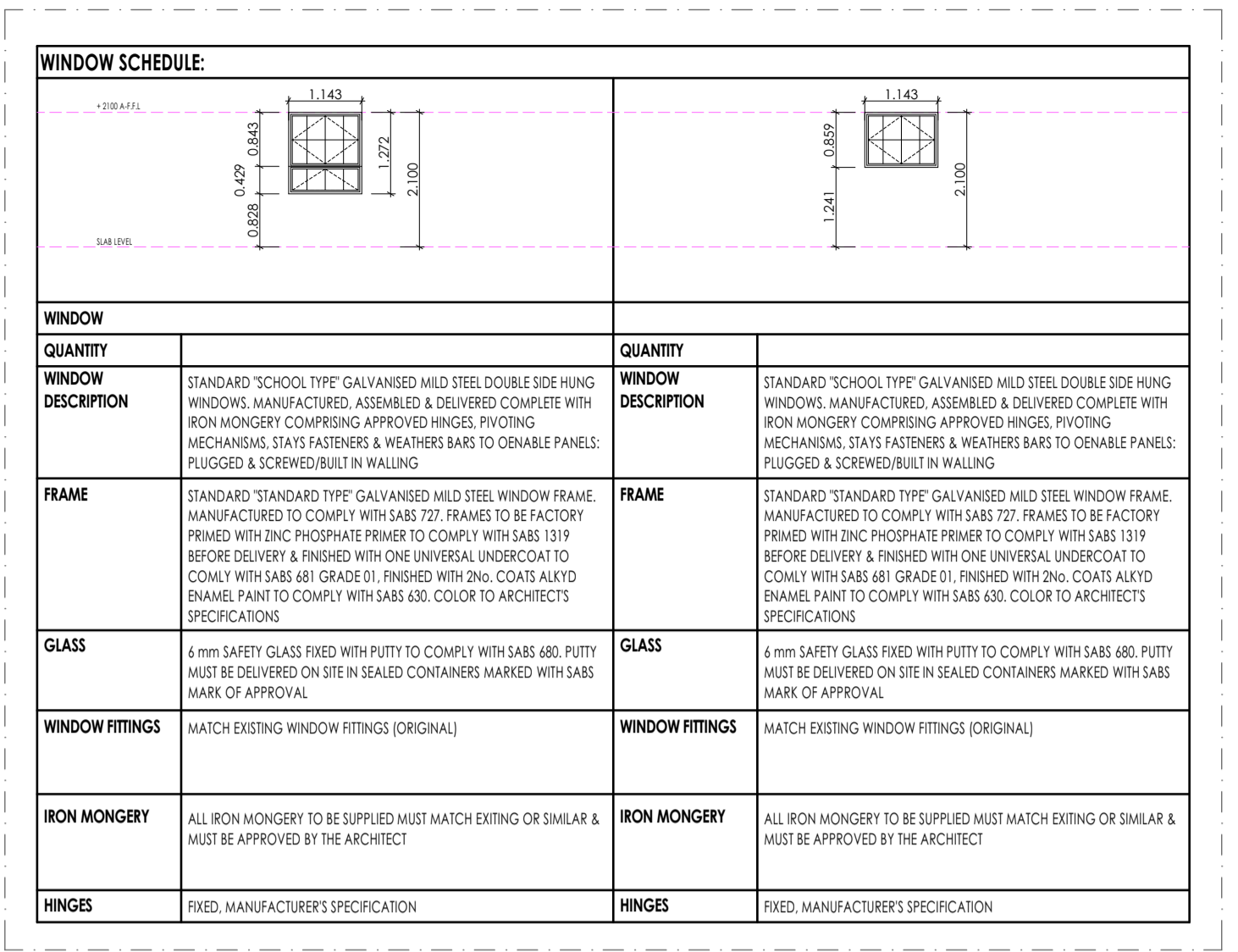
- WALL FINISHES:**
- R1: FACE BRICK**
FKX face brick in common running bond to comply with SABS 227 and forming part of the structural work.
- R2: EMULSION (PVA) PAINT - FULL HEIGHT**
2 No. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade), in accordance to manufacturer's instructions.
- R3: ENAMEL PAINT**
2 No. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade), in accordance to manufacturer's instructions.
- R4: GLAZED CERAMIC WALL TILES - ENAMEL PAINT COMBO**
Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tile to Specification "R5", laid on 15 mm thick plaster prepared to receive wall files fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R2" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.
- R5: CERAMIC WALL TILES - FULL HEIGHT**
600mm x 300mm x 7mm thick high glazed ceramic tiles to Comply with SABS 22 or latest revision, laid on 15 mm thick plaster prepared to receive wall files fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.

- CEILING AND CORNICE:**
- C1: 7mm GYPSUM BOARDS FLUSH FLASTERED CEILINGS OR EQUAL AND APPROVED**
GypCel Classic gypsum plasterboard ceiling or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, SO 9001 & 1400) certification, recycled paper content. Eccospecifier listing fixed to timber branding installed at maximum 300mm centres using Gyproc RhinoBoard Snap Point Grabber Screws 32mm at maximum 150mm centres. Apply, Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.
- C2: FIBRE CEMENT BOARDS (H-JOINTED)**
6.4mm thick GypCel Prestige 5 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, SO 9001 & 1400) certification, recycled paper content. Eccospecifier listing, non-combustible to SANS 10177:5 fixed to Ek 38mm x 50mm timber branding installed at maximum 400mm centres using Gyproc RhinoBoard Snap Point Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 No. coats of super PVA external quality paint colour to PA's approval. Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.
- C3: PAINT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED**
1200mm x 600mm x 15mm Gyproc Celotex Fin Prefinished or Fire Rated OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle 146 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees @ 4mm thickness, 2150 gwg, coating, locally manufactured, recycled content, SO 9001 & 1400) certification), at 1200 centres & Donn T38V (1200) long Cross Tees at 600 centres. Supports main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.
- C4: EMULSION (PVA) PAINT OR EQUAL AND APPROVED**
Emulsion (PVA) Paint on Skimmed Plastered Stud 3No. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffits.

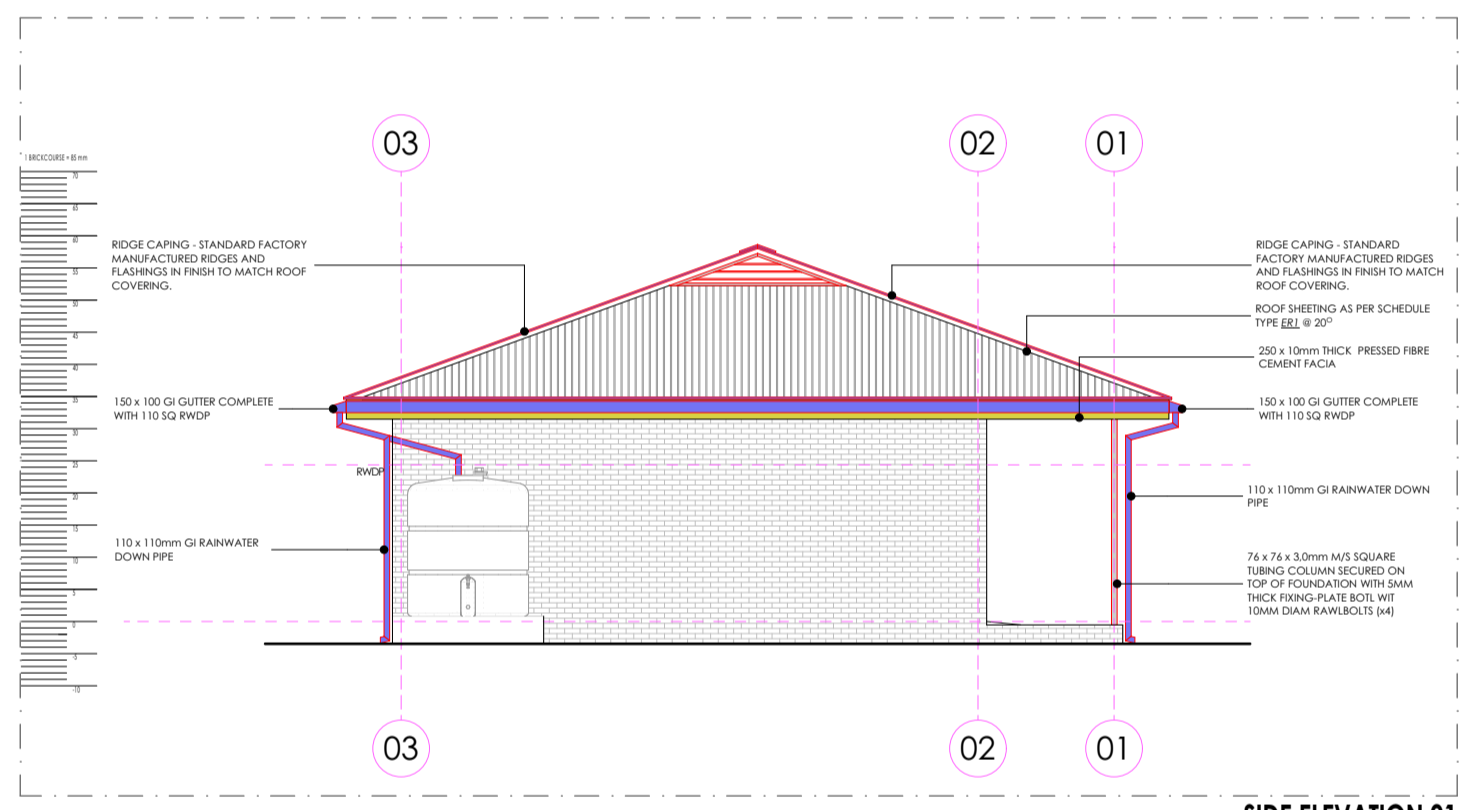
- ROOF COVERING AND INSULATION:**
- R1: EMBOSSED ROOFING SHEET (TWO SIDES)**
Roofing Sheets: 1.50mm thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with SABS 021. The profile shall have three trapezoidal ribs at 200mm centering giving a net cover of 456mm. The rib height shall be 41mm and provide caulking breaks. The male to shall have gaps of 28mm centres to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofbeams to be coated on both sides with 'Global Coat' or 'Chromadex Colour' and laid on structural timber/steel structure incorporating all necessary accessories such as fixings and dove clips in strict compliance to manufacturer's instructions.
- Insulation:** SHALL EITHER BE: 1, where there are acoustic ceiling suspended above, a heavy duty 'Aluminium stonafon foil' shall be installed AND 2, where the steel work is exposed, a 50mm 'FactoryBoard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m³ and finished with white meltable foil.
- Galvanized Steel (GI) Gutter:** 150mm Wide x 100mm Deep x 0.6mm Eaves Gutter of Commercial Grade Steel With Class Z275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.
- Downpipe:** 110 x 110 x 0.8mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing To Comply With SABS 934 or Latest Revision to be built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation instructions.
- Facia board:** 150 x 110 mm Fibre Cement Facia/Barge Board. Screw Fixed to Tuss Ends & Corner Butters With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



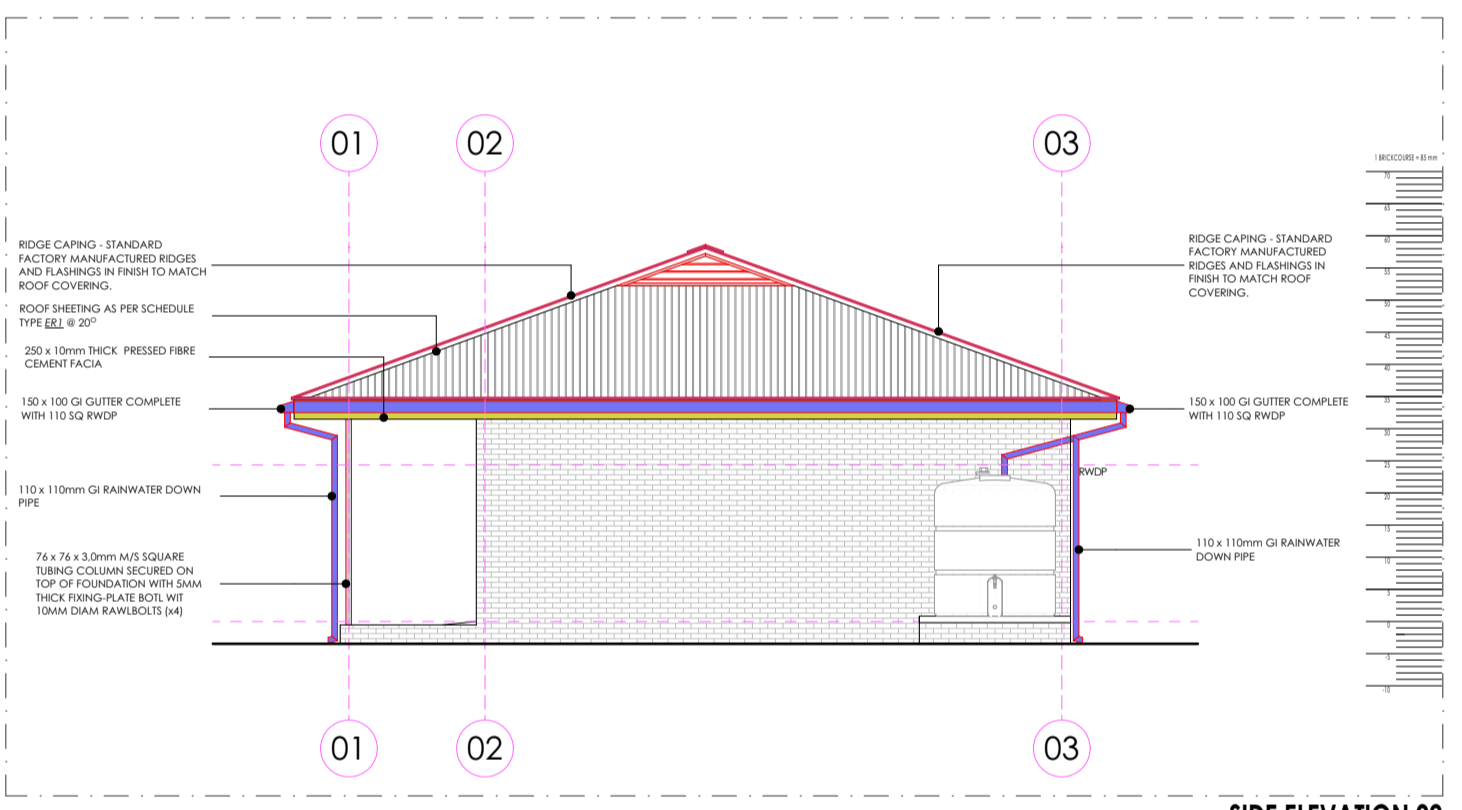
DOOR SCHEDULE
SCALE 1:100



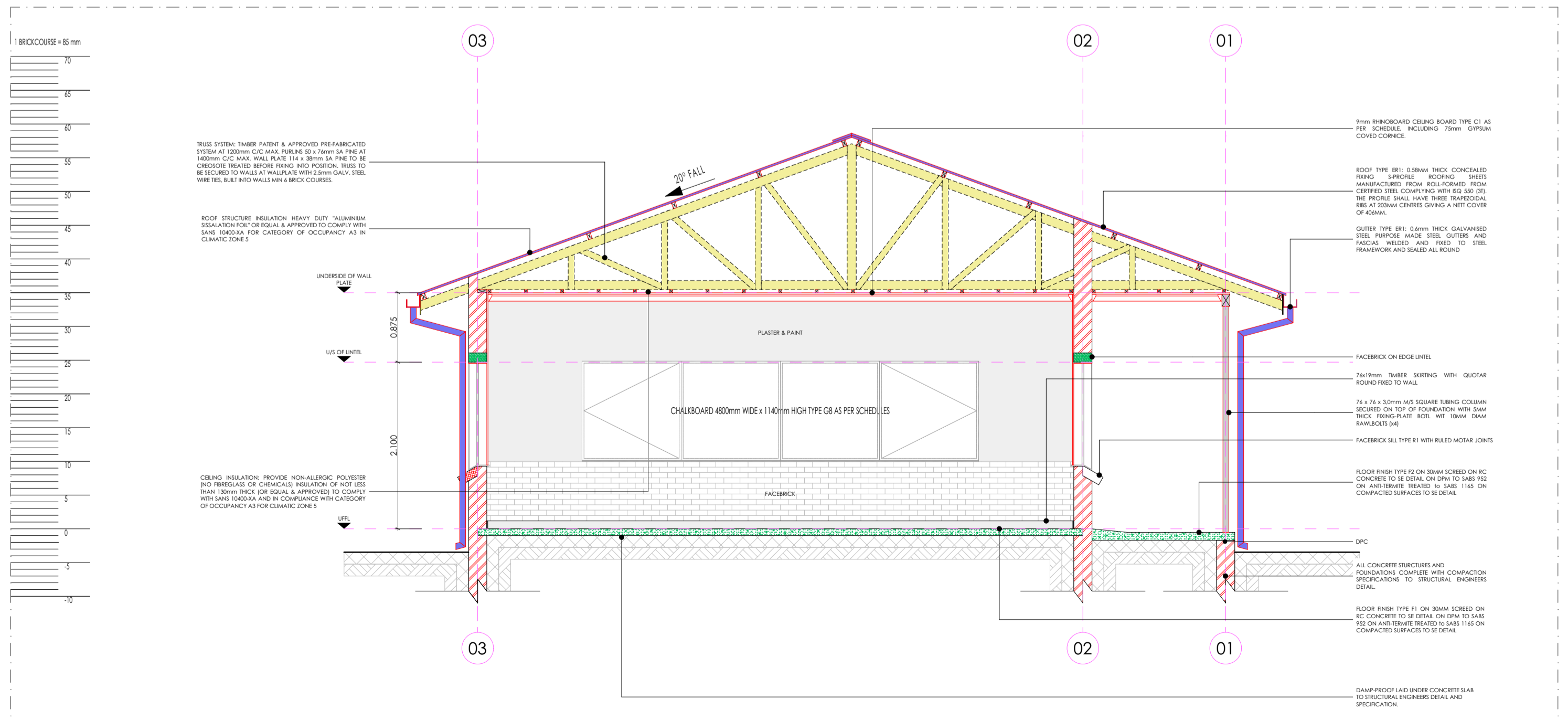
WINDOW SCHEDULE
SCALE 1:100



SIDE ELEVATION 01
SCALE 1:100



SIDE ELEVATION 02
SCALE 1:100



SECTION A-A
SCALE 1:50

SANITARY SCHEDULE

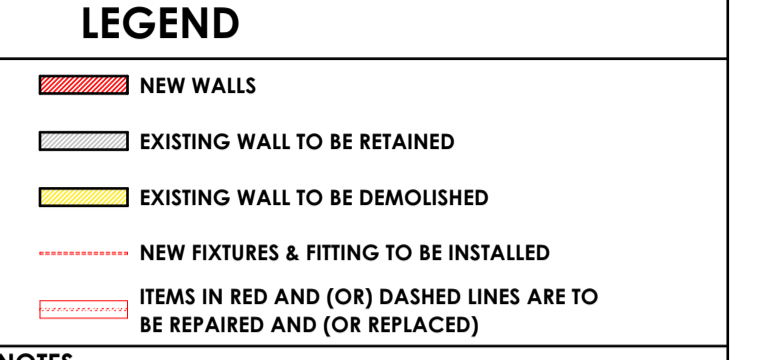
- WC'S URINALS & SHOWER**
- W1: CERAMIC STANDARD WC (C/C) - CONCEALED CISTERN**
Vitreous china 90° outlet WC or equal and approved. Top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 497 & Fitted with 'Jazz ThermoSeal Plastic Seal'. Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with blank flush plate.
- W2: CERAMIC PARALEGIC WC**
Vitreous china 90° outlet WC or equal and approved. Top inlet closed rim back-to-wall pan to comply with SABS 497. Fitted with Cistern installed complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever.
- W3: CERAMIC PARALEGIC WC (C/C) - CONCEALED CISTERN**
Vitreous china 90° outlet WC or equal and approved. Top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 497 & Fitted with 'Jazz ThermoSeal Plastic Seal'. Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever. Blank flush plate & offset push button for passage access.
- W4: CERAMIC STANDARD WC (BACK INLET)**
Vitreous china 90° outlet back inlet pan to comply with SABS 497. Fitted complete with back inlet exposed flush valve complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. Flush valve to be fitted with suitable extension lever.
- W5: CERAMIC STANDARD WC (C/C)**
Vitreous china 90° outlet WC or equal and approved. Top inlet closed rim back-to-wall pan to comply with SABS 497. Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermoseal seal and complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards.
- W6: CERAMIC WALL HUNG URINAL**
Vitreous china 90° outlet wall hung urinal to comply with SABS 497. Supplied with suitable 38mm CP domical grating, CP tap inlet spreader and two hanger brackets and fitted with exposed flush valve, and suitable bottle trap chrome finish as per manufacturer's specifications and applicable SABS standards.
- S01: SHOWER**
2mm thick Enamelled steel shower tray 900x900x160 mm manufactured with anti-slip pattern, with rounded internal corners, and 38 mm BSP graded waste fitting in corner position fitted with Shower set and complying with SABS 226 compliance of approval.
• Glazed Shower Cubicle with access door as per standard supply with manufacturer and fixed to fit space configuration
• Overhead shower arm with wall flange.
• Chrome Plated Shower Head with adjustable connector
• Chrome Plated Softly Shower diverter mixer tap with sliding wall flanges and concealed connectors adjustable from 178mm to 203 mm centres. Shower tray to be recessed 50 mm into a 100mm high concrete plinth with exposed plinth face.
- WASH-HAND BASIN**
- R1: WTB & MIXER TAP**
Vitreous china size 560 x 415mm rounded 'Tuscan', OR EQUAL AND APPROVE basin to comply with SABS 497 with single tap hole configuration supplied with integrated overflow and chairstay hole through the centre semi-purchased supplied with a 'Tuscan' pedestal and fitted with 'No. 2000 Model' 15mm chrome plated ball tap with flanged backnut (code KAL102) mixing tap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connectors. All brackets and fixing accessories in strict accordance to the manufacturer's specifications.
- R2: DISABLED BASIN**
400mm semi rounded lavatory basin to comply with SABS 497. In two tap hole configuration fitted with 2 No chrome plated Elbow outlet pillar-top, with 1/4" turn ceramic disc head and blue & Red indicators water applications and flanged backnut. chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connectors. Fitted with concealed wall bracket in accordance to the manufacturer's specifications.
- R3: WHITE GLAZED PORCELAIN WTB (VANITY)**
Ceramic freecast size 450x350mm oval self-terminating vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with 1No. chrome plated tap with flanged backnut (code KAL102) mixing tap, mounting kit and angle valves. 400mm long flexible inlets and chrome plated bottle trap supplied with all necessary pipe connectors. Basin mounted on cabinet or vanity unit with silicon sealed between counter tops in strict accordance to manufacturer's specifications.
- R4: SMALL BASIN & 2 TAPSTRAY & SHOWER SET (FOR WORKSHOPS)**
Vitreous china size 450x300mm wash basin to comply with SABS 497 in 2 tap hole configuration supplied with integrated overflow and chairstay hole with 2No. pillar-top, chrome plated anti-rattle plug with splade plug, slotted basin waste, chrome plated bottle trap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connectors. All brackets and fixing accessories in strict accordance to the manufacturer's specifications.
- R5: URINALY BASIN & No. TAP (FOR LABS)**
400mm x 350mm deep washbasin with heavy duty basin in one tap hole configuration to comply with SABS 497 and R16 hole plugged and fitted with No. pillar-top. Chrome Plated anti-rattle plug with splade plug, slotted basin waste, chrome plated bottle trap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connectors. Fitted to wall using 2No. Semi-concealed cast iron brackets in accordance to the manufacturer's specifications.
- R6: MEDIC BASIN & FITTINGS (SICK BAY)**
Vitreous china 510 x 400mm semi rounded lavatory basin to comply with SABS 497. In two tap hole configuration fitted with: 2 No. chrome plated Elbow outlet pillar-top, with 1/4" turn ceramic disc head and blue & Red indicators water applications and flanged backnut. chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connectors. Fitted with concealed wall bracket in accordance to the manufacturer's specifications.
Combination of sanitaryware, accessories and general fittings comprising of:
• Mixer type K2. • Paper towel dispenser K8 and bin type K3. • Soap dispenser type K9.
• Tapback comprising 2No. rows of wall fix type K5 as per finishes schedule and grout in compliance to manufacturer's specifications and government standard specifications. Installation heights as indicated in the drawings.

- SINKS:**
- X1: STAINLESS STEEL SINK**
Stainless steel 1000 x 457mm inset single end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsewhere measured). Grade 304 (18/10) Stainless Steel sink to comply with SABS 956 fitted with: Approved Sink mixer-wall tap, chrome plated swivel Outlet, adjustable and supplied with suitable accessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL.
- X2: STAINLESS STEEL SINK**
Stainless steel 1500 x 457mm inset double end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsewhere measured). Grade 304 (18/10) Stainless Steel sink to comply with SABS 956 fitted with: Approved Sink mixer-wall tap, with chrome plated overarm swivel Outlet, adjustable wall flanges and supplied with suitable accessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL.
- X3: CERAMIC SINK**
Ceramic freecast 455 x 355 x 180 mm rectangular laboratory sink without overflow, with a centre end outlet, fitted to wall on two semi-concealed brackets supplied with all necessary accessories (all to be acid resistant)
- X4: SINGLE WASH TROUGH (Inlet & 2 No. TAPS)**
600mm x 350mm deep washbasin with heavy duty standard from grade 18/10 SS. stainless steel with radius internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2No. CP bibcoaps - plain extended chrome plated, complete with sliding wall flange. Un-slotted sink waste with back nut, plug with stirrup, chain and stay, CP, 'T' trap, with deep seal and cleaning eye. Rough brass Sink installation height = 900mm AFFL. Cut out size 555 x 425mm.
- X5: DOUBLE WASH TROUGH (Inlet & 2 No. TAPS)**
1200 x 555 x 200mm Double drain washbasin manufactured from grade 304 (18/10) SS. stainless steel with radius internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2No. wall type bibcoaps, with Swivel Outlet, adjustable wall flanges and spaced adjustable connectors. CP. Un-slotted sink waste with back nut and plug with stirrup, CP. Double drain back rubber deep seal 'T' trap. Sink mounted on 2No. 25mm square S5 gallow brackets, front leg and adjustable foot piece or height of 915mm AFFL.

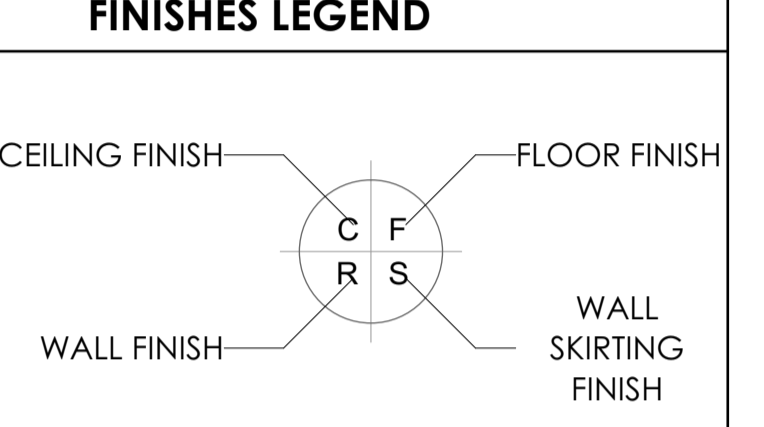
- SANITARY ACCESSORIES**
- K1: SS TOILET ROLL HOLDER - 2 ROLL**
Standard stainless steel toilet roll holder (2 roll) 150mm width x 270mm high 275mm depth Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Satin finish, including screws and dowels and all other necessary accessories in accordance to manufacturer's specifications.
- K2: GLASS MIRROR**
6mm thick clear float glass silver-backed mirror, size 450x900mm height with polished beveled edges 4 times folded for and fixed, with chromium plated dome-headed mirror screws
- K3: WASTE BIN**
280W x 525H x 200D Waste bin manufactured from 18/10 Stainless Steel, Surface Satin Finish, Material Thickness 1.5mm, including Screws, dowels and all necessary accessories in accordance to manufacturer's specifications.
- K4: SANITARY BIN (PLASTIC)**
180mm x 200mm x 600mm Plastic Sanitary Pedal Bin with capacity of 100 Litres per pack Complete with all necessary accessories and installed in accordance to manufacturer's specifications.
- K5: SOAP HOLDER**
Single semi-recessed ceramic soap dish. Complete with all necessary accessories and installed in accordance to manufacturer's specifications.
- K6: WALL GRAB RAILS-PARALEGIC**
Stainless steel 914 x 90 x 32mm diameter wall grab rail, in satin polished finish complete with SS fixing screws and plastic wall plugs. Installed as per manufacturer's instructions.
- K7: GRAB RAILS (RIGHT-HAND) PARALEGIC**
Stainless steel 914 x 90 x 32mm diameter wall grab rail and side toilet grab rail with 450mm high centre flange. To satin polished finish complete with SS fixing screws and plastic wall plugs. Installed as per manufacturer's instructions.
- K8: PAPER TOWEL DISPENSER**
330mmWx350mmX230mmD Tear and dry paper hand towel dispenser in stainless steel. Complete with screws, locking key, and all necessary accessories and installed in accordance to manufacturer's specifications.
- K9: SOAP DISPENSER (ISH - WALL MOUNTED)**
115mm x 200H x 110D Stainless Steel Hand Soap dispenser. Complete with screws, locking key, and all necessary accessories and installed in accordance to manufacturer's specifications.
- K10: ALUMINIUM COAT HOOKS (MULTITRACK)**
800mm Wide x 220mm High x 90mm High Aluminium Multitrack Hat and Coat Hook in multi-track two hooks Configuration With Anodised Silver Finish. Complete with Screws.
- K11: HAND DRYER (Hands free)**
As per Electroc Engineers specification
- K12: TOWEL RAIL**
55mm dia. Polished 900mm long towel rail complete with all necessary accessories in accordance to manufacturer's specifications. Installation height as per architect's drawing.
- K13: SHOWER CURTAIN RAIL (slight)**
20mm dia. standard chromium plated shower curtain rail 1300mm long with flanged ends and screws CP fixing height as per PA's drawing.

- GENERAL FIXTURES**
- G1: DOOR PROTECTOR**
200mm wide PVC Door Protector manufactured in high impact resistant rigid PVC (Colour Grey) and cut to suit door width from 3m length, installed strictly in accordance to manufacturer's specifications. Installation height 900mm above FFL, or as specified.
- G2: PROTECTOR SCREENS**
Full cover PVC Screen (Screen size 2340 x 1850mm) with wall-mounted code S0400 Keystone Brackets Adjustable Set of 2, size 300mm. To be supplied complete with all accessories, and fitted in strict accordance with manufactures instructions.
- G3: FINBOARD 1500W X 1000H**
Finboard size 1500mm H x 1500mm W comprising of laminated self board core priming material beaded all round with anodised aluminium channel surround mitred at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level.
- G4: FINBOARD 300W X 1200H**
Finboard size 1200mm H x 300mm W comprising of laminated self board core priming material beaded all round with anodised aluminium channel surround mitred at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level
- G5: WINDOW NORMAL BUNDS (vertical blinds)**
127 mm vertical deco blinds with anodised aluminium headrail fitted with colour coordinated insert. All runners to be wheeled and fitted with individual clutch mechanism. All runners to be connected by stainless steel links. The mechanism to be operated by a nylon ball chain with a reduction gear inside a fully enclosed cap. Blinds to be face fixed (fixed over the window opening) by means of concealed type fixing brackets.
- G6: FLOOR DRAIN**
Cast iron flat type full-flow outlets size 110 mm diameter with centre ball, including connectors to downpipes.
- G7: 36 FLOOR EXPANSION JOINT COVER**
Concealed heavy-duty fibrous steel movement joint strip, with polyurethane infill (colour grey). To be installed within the tile surface over the 20mm expansion joints, in accordance to the manufacturer's specifications.
- G8: CHALKBOARDS - GREEN SURFACE COLOUR**
Vitex system 1000 standard WHITEBOARD or EQUAL & APPROVED vitreous enameled steel utility school chalkboards wall-mounted size 480mm x 1140mm high manufactured in accordance with SABS Standard CES 362004 Edition 4 and suitable for Class 1 Heavy Duty applications, as defined therein. Enamel Steel Utility chalk board surfaces to be matt and freely structured, olive green in colour. Vitex Chalk Reference - Chalk Board Green LM197/2. Supply complete with integral anodised aluminium chalk rail (ACR), fixing components and secured in position to brickwork. The Chalk boards are to be fixed in position strictly in accordance with the manufacturer's instructions.

ISSUED FOR TENDER



NOTES
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED
DIMENSIONS TO BE READ, NOT TO SCALED FROM THIS DRAWING
CONTRATORS TO CONFIRM ALL DIMENSIONS ON SITE BEFORE CONSTRUCTION COMMENCES & ANY DISCREPANCY TO BE REPORTED TO THE PROJECT ARCHITECT



SIGNATURE TABLE

DISCIPLINE	SIGN	DATE
CLIENT		
FLY EXAMINER		
FIRE CONTROL		
ENVIRONMENTAL		
ROADS / STORMWATER		
WATER & SANITATION		

REVISIONS

REV. NO.	DATE	DESCRIPTION
0	JUL 21	FIRST ISSUE FOR TENDER



PUBLIC WORKS, ROADS & INFRASTRUCTURE
INSTITUTION

VALLAMBROSA PRIMARY - 918 511 500

RESTORATIVES, REPAIRS & ADDITIONS

DOCUMENTATION & PROCUREMENT

ARCHITECTURAL 4

BLOCK PJ 01 - 04 CLASSROOM

SECTION | SIDE ELEVATION | SCHEDULES

DRG. NO.	102-03	03/03	ITEM No.
DESIGN	NA	SMIN	DRAWN
DATE	AS SHOWN	T.M	CHECK
NOV 2019	A. SINKALA		PrArch 24750409

CONSULTANT

TECTURA PROJECTS

ALSO IN NAMPOLI, KENTA AND GARBONE, BOTSWANA

CONTRACTOR

CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REVISION
A1	LDPW - PROF/16002/G10	0

FINISHES LEGEND

FLOORS:

F1: PORCELAIN TILES - MATI (Corrosive Resistant & Anti-Slippery)

420x420 11.5mm kiln-fired floor tiles or similar approved by architects, fixed with adhesive, painted with fired waterproof jointing compound. Grouting to be grey. Tiles should have expansion joint and aluminium edging strip.

F2: PORCELAIN TILES - MATI

420 x 420 x 10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds. With Thickness/Specification in strict compliance to manufacturer's instructions and SABS specification. Fittings to include, ribbed angle files where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPETILES

500mm x 500mm . 1005 PFX staple fibre carpet tiles to Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54824 on wika test and 50 body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.

F4: CEMENT SAND SCREED

30mm thick polished cement sand screed with 13mm Stone Nominal aggregate for Topping to comply with SABS 1083 or latest revision for concrete.

F5: EXTERIOR MULTI-COLOURED CONCRETE INTERLOCKING PAVERS

65mm thick multi-coloured concrete pavers laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approval and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or Latest Revision.

F6: GRANULITIC FINISH

22mm thick unsealed Granulitic finish composed of one part cement, one part fine sand, two parts coarse sand and one part granite that would pass through a 5mm mesh sieve laid by specialist in panels not exceeding 10m², divided with approved brass dividing strips. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour, pattern and aggregate size to architects approval.

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 50 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI-FLEXIBLE VINYL SHEETING (CORROSION RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 584, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or ID (anti-static) Protection Vinyl Sheet, Laid on Self-Levelled Smooth Screed glued with conductive adhesive to SABS 070 or Latest Revision in Accordance to Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor in Compliance With SABS 1042, Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity, Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

32mm Gravel On Compacted Sand Layer Base as Per PFE Details installed in All Duct Chambers Accommodating Sanitary Services.

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

18 x 15mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and milled corners with screws and plugs at centres not exceeding 400mm, and fixed with a 19mm x 19mm quadrant bedding. The skirting to be varnished with 3No. coats of egg shell clear varnish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

600mm wide x 102mm high x 7mm thick matt porcelain tile to comply with SABS 1449 laid with approved adhesives and grout on 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with one base and thigh top. Complete with corner and top trims. Fittings to include, ribbed angle files where there is change of level. Colour and pattern to architects approval.

S3: CEMENT SAND SCREED

75 mm high x 20 mm thick hardened cement sand screed skirting covered at 20 mm dia. to form a continuous joint with the adjoining screed floor finish to FA's approval. All to be manufactured and installed in strict compliance With SABS 1083 or latest revision.

WALL FINISHES:

W1: FACE BRICK

F8X face brick in common running bond to comply with SABS 227 and forming part of the structural work.

W2: EMULSION (PVA) PAINT - FULL HEIGHT

2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade, in accordance to manufacturer's instructions.

W3: ENAMEL PAINT

2 no. coats matt (egg shell) finish alkyl (jeromel) paint to SABS 430, type 2 applied on plastered surfaces with 1 no. coat alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade, in accordance to manufacturer's instructions.

W4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R2" To Comply with SABS 430 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

W5: CERAMIC WALL TILES - FULL HEIGHT

600mm x 300mm x 7mm thick high glazed ceramic tiles to Comply with SABS 22 or Latest revision, laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.

CEILING AND CORNICE:

C1: 7mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

'GypCel Classic' gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centres. Apply, Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.

C2: FIBRE CEMENT BOARDS (H-JOINTED)

6.4mm thick GypCel Prestige 5' fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9 mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing, non-combustible to SANS 10177-5) fixed to Ek 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 No. coats of super PVA external quality paint colour to PA's approval. Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

1200mm x 600mm x 15mm Gyproc Calotex 7H Prefinished or Fire Rated OR EQUAL & APPROVED laid into Dorn ceiling grid and secured into place using Dorn Hold Down Clips @ 200mm c/c. Dorn Wall Angle M6 fixed to the perimeter wall using fixings of 300mm centres. Dorn 138 FR Main Tees @ 4mm thickness, 2150 g/m² coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Dorn TSBV (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Dorn Hanger Strap 19mm suitably fixed to the building structural members. Dorn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Dorn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4: EMULSION (PVA) PAINT OR EQUAL AND APPROVED

'Emulsion (PVA) Paint on Skimmed Plastered Stud' 3No. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

ROOF COVERING AND INSULATION:

R1: EMBOSSED ROOFING SHEET (TWO SIDES)

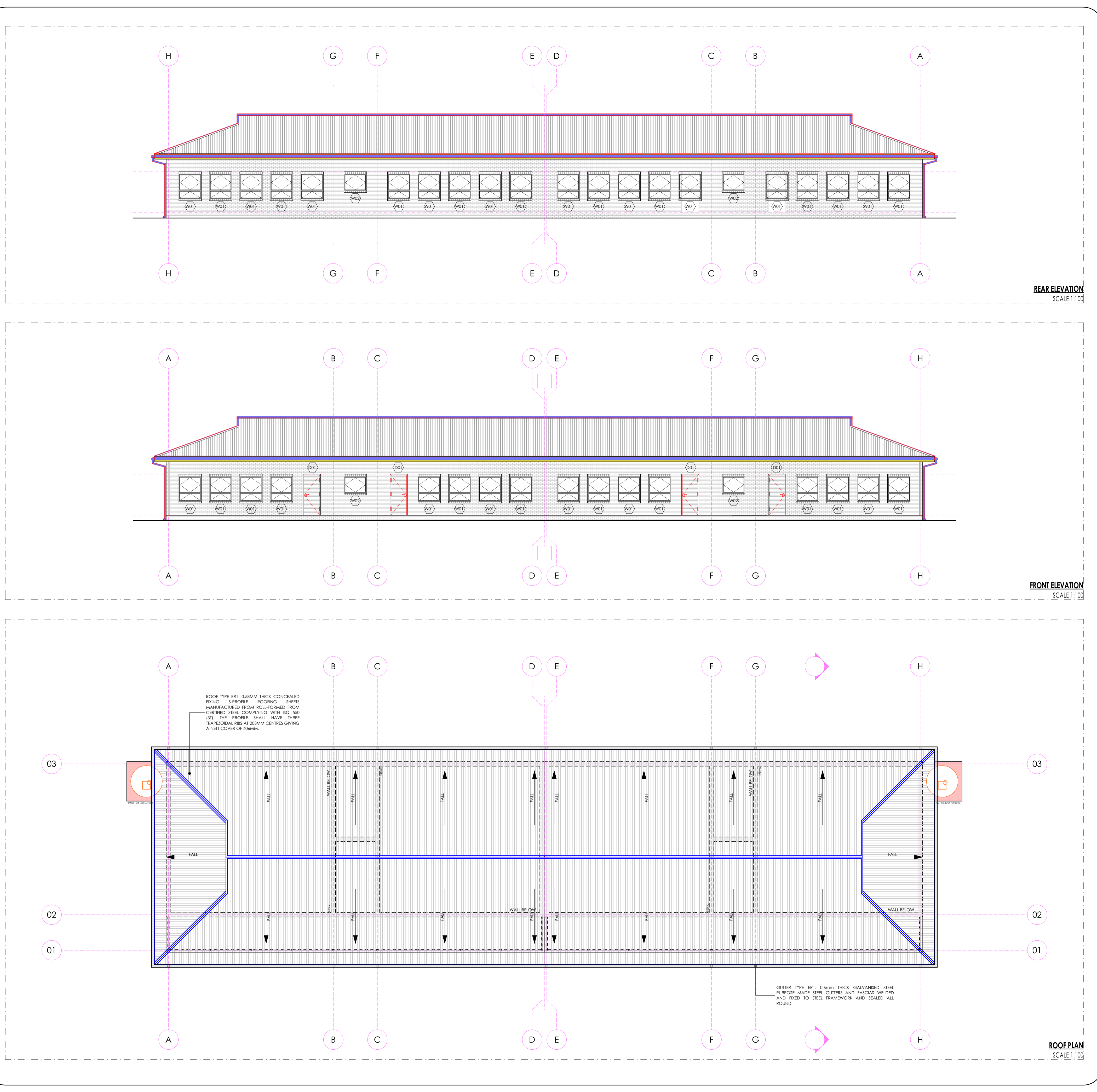
Roofing Sheets: 0.38mm thick concealed fixing roofing sheets manufactured from roll-formed from certified steel, with a rib height of 45mm. The rib height shall be 41mm and provide cavity breaks. The male ribs shall have an 89mm centres to ensure a positive double interlocking action of side-laps. Each span shall incorporate two stiffener ribs. Profiled roof sheets to be coated on both sides with 'Global Coat' or 'Chromadek Colour' and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closes in strict compliance to manufacturer's instructions.

Insulation: SHALL EITHER BE: 1, where there are acoustic ceilings suspended board, a heavy duty 'Aluminium station foil' shall be installed AND 2, where the steel work is exposed, a 50mm 'FactoryBoard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m³ and finished with white metalized foil.

Galvanized Steel (GI) Gutter: 150mm Wide x 100mm Deep x 0.6mm Eave Gutter of Commercial Grade Steel With Class Z275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

Downpipes: 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-lapping screws to Manufacturer Installation Instructions.

Facia board: 250 x 10 mm Fibre Cement Facia/Barge Board. Screw Fixed To Tuss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



ISSUED FOR TENDER

LEGEND

- NEW WALLS
- EXISTING WALL TO BE RETAINED
- EXISTING WALL TO BE DEMOLISHED
- NEW FIXTURES & FITTING TO BE INSTALLED
- ITEMS IN RED AND (OR) DASHED LINES ARE TO BE REPAIRED AND (OR) REPLACED

NOTES
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DIMENSIONS TO BE READ, NOT TO SCALED FROM THIS DRAWING
CONTRACTORS TO CONFIRM ALL DIMENSIONS ON SITE BEFORE CONSTRUCTION COMMENCES & ANY DISCREPANCY TO BE REPORTED TO THE PROJECT ARCHITECT

FINISHES LEGEND

CEILING FINISH: C, F, R, S
FLOOR FINISH: F
WALL FINISH: W
WALL SKIRTING FINISH: S

SIGNATURE TABLE

DISCIPLINE	SIGN	DATE
CLIENT		
PLAN EXAMINER		
FIRE CONTROL		
ENVIRONMENTAL		
ROADS STORMWATER		
WATER & SANITATION		

REVISIONS

REV. NO.	DATE	DESCRIPTION
0	JUL 21	FIRST ISSUE FOR TENDER

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
PUBLIC WORKS, ROADS & INFRASTRUCTURE
(INSTITUTION)

VALLAMBROSA PRIMARY - 918 511 500

RESTORATIVES, REPAIRS & ADDITIONS

CONTRACT - SECTION

DOCUMENTATION & PROCUREMENT

DISCIPLINE: **ARCHITECTURAL** | 4

WORK DESCRIPTION - SUB DIVISION: **BLOCK PJ 01 - 04 CLASSROOM**

DRAWING DESCRIPTION: **ROOF PLAN | FRONT & REAR ELEVATION**

DRG. NO. 102-02 | **02/03** | **ITEM No.**

DESIGN: NA | **SMIN** | **DRAWN**

SCALE: AS SHOWN | **T.M** | **CHECK**

DATE: NOV 2019 | NAME: A. SINKALA | SIGN: [Signature] | PR. NUMBER: P/Arch 24750409

DRAWING CO-ORDINATED

CONSULTANT

TECTURA PROJECTS

CAUTION: INFORMATION CONTAINED HEREIN IS UNCLASSIFIED AND IS NOT TO BE RELEASED TO THE PUBLIC WITHOUT THE WRITTEN AUTHORIZATION OF TECTURA PROJECTS

CONTACT: 011 234 1234 | 011 234 1234 | 011 234 1234

CONTRACTOR

CAD SYSTEM	FILE NAME
AUTOCAD	
SIZE	REV
A1	0

PROJECT NUMBER: LDPW - PROF/16002/G10

FINISHES LEGEND

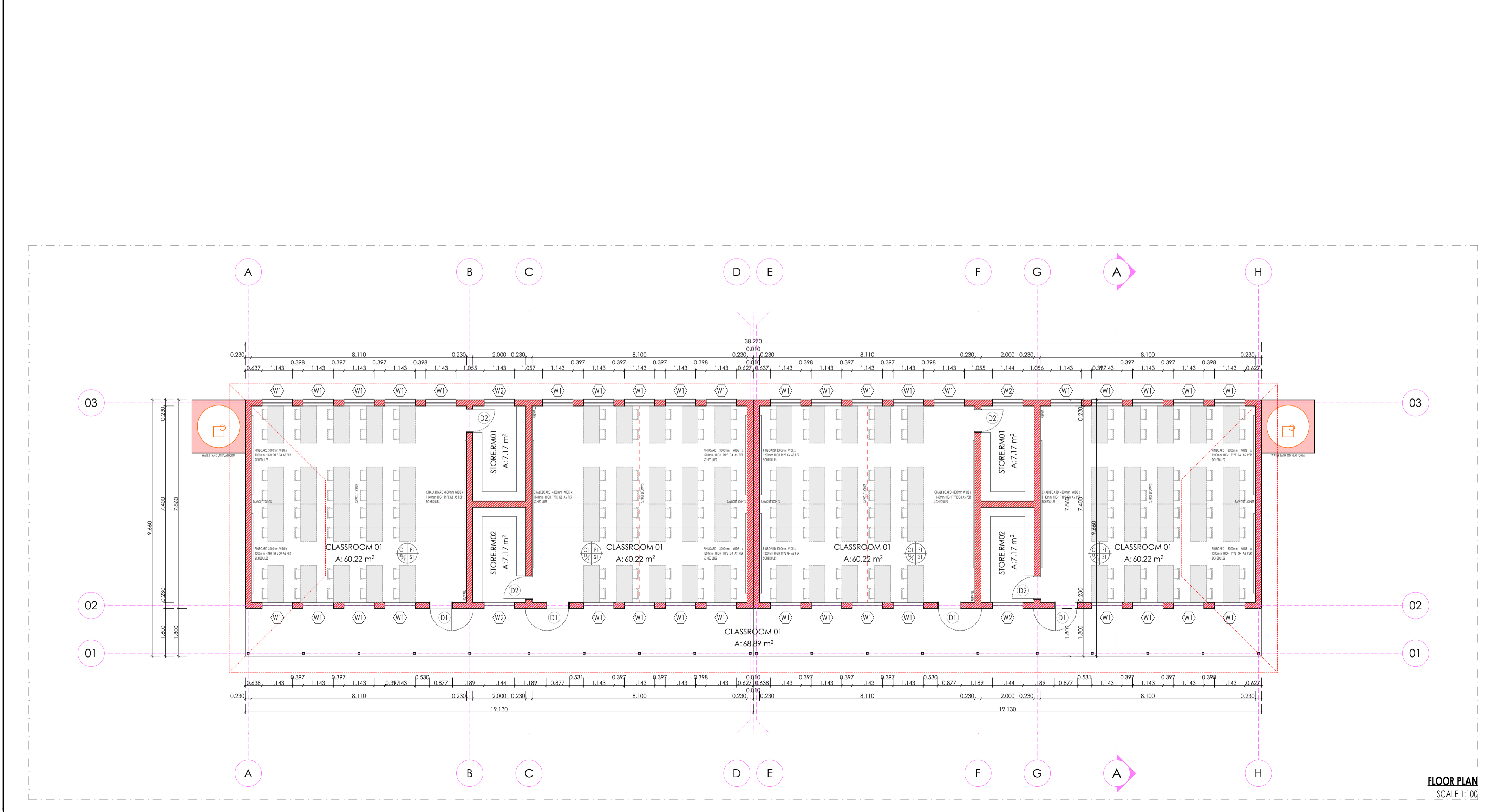
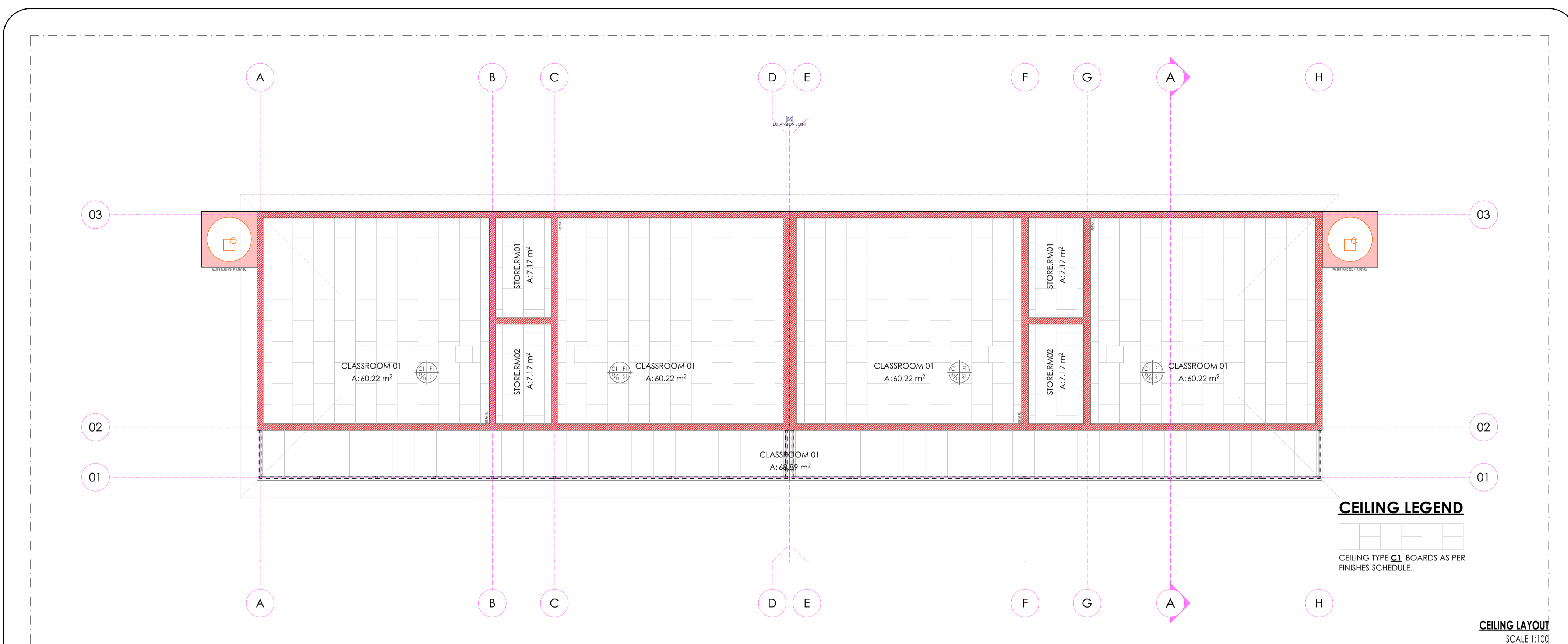
- FLOORS:**
- F1: PORCELAIN TILES - MATI (CONTOUR RESISTANT & ANTI-SLIPPER)**
420 x 420 11.5mm kiln-fired floor tiles or similar approved by architects, fixed with adhesive, painted with finished waterproof jointing compound. Grouting to be grey. Tiles should have expansion joint and aluminium edging strip.
- F2: PORCELAIN TILES - MATI**
600 x 600 x 10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds. With Thickness/Specification in strict compliance to manufacturer's instructions and SABS specification. Fittings to include, ribbed angle files where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.
- F3: CARPETILES**
500mm x 500mm x 1005 PFX staple fibre carpet tiles to Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54824 on wira test and ISO body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.
- F4: CEMENT SAND SCREED**
30mm thick polished cement sand screed with 13mm Stone Nominal aggregate for Topping to comply with SABS 1083 or latest revision for concrete.
- F5: EXTERIOR MULTI-COLOURED CONCRETE INTERLOCKING PAVERS**
65mm thick multi-coloured concrete pavers laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approval and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or Latest Revision.
- F6: GRANOLITHIC FINISH**
22mm thick finished Granolithic finish composed of one part cement, one part fine sand, two parts coarse sand and one part granite that would pass through a 5mm mesh sieve laid by specialist in panels not exceeding 10m², divided with approved brass dividing strips. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour, pattern and aggregate size to architects approval.
- F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)**
220mm x 197mm x 50 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.
- F8: SEMI-FLEXIBLE VINYL SHEETING (CORROSION RESISTANT/ANTI-SLIPPERY)**
2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible to Comply With SABS 584. With Static Dissipative Properties Throughout Thickness, Engineered for ISO x ISO (anti-static) Protection Vinyl Sheet. Laid on Self-Levelled Smooth Screed glued with conductive adhesive To SABS 070 or Latest Revision in Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor in Compliance With SABS 1042, Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity, Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.
- F9: GRAVEL FINISH ON SAND LAYER**
32mm Gravel On Compacted Sand Layer Base as Per PEE Details installed in All Duct Chambers Accommodating Sanitary Services.

- SKIRTING:**
- S1: HARDWOOD OR EQUAL AND APPROVED**
18 x 25mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred corners with screws and plugs at centres not exceeding 400mm, and fixed with a 19mm x 19mm quadrant bedding. The skirting to be varnished with 3No. coats of egg shell clear varnish to comply with SABS/SANS 381 type 1.
- S2: CERAMIC TILE SKIRTING**
600mm wide x 102mm high x 7mm thick matt porcelain tile to comply with SABS 1449 laid with approved adhesives and grout on 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with one base and height top. Complete with corner and top trims. Fittings to include, ribbed angle files where there is change of level. Colour and pattern to architects approval.
- S3: CEMENT SAND SCREED**
75 mm high x 20 mm thick hardened cement sand screed skirting covered at 50 mm dia. to form a continuous joint with the adjoining screed floor finish to FA's approval. All to be manufactured and installed in strict compliance With SABS 1083 or latest revision.

- WALL FINISHES:**
- R1: FACEBRICK**
FXX face brick in common running bond to comply with SABS 227 and forming part of the structural work.
- R2: EMULSION (PVA) PAINT - FULL HEIGHT**
2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade), in accordance to manufacturer's instructions.
- R3: ENAMEL (ENAMEL) PAINT**
2 no. coats matt (egg shell) finish alkyl (jeromel) paint to SABS 430, type 2 applied on plastered surfaces with 1 no. coat alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade), in accordance to manufacturer's instructions.
- R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO**
Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 430 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.
- R5: CERAMIC WALL TILES - FULL HEIGHT**
600mm x 300mm x 7mm thick high glazed ceramic tiles to Comply with SABS 22 or Latest revision, laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.

- CEILING AND CORNICE:**
- C1: 12mm GYPSUM BOARDS FINISH PLASTERED CEILINGS OR EQUAL AND APPROVED**
"GypCel Classic" gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing) laid to timber branding installed at maximum 300mm centres using Gyproc RhinoBoard Snap Point Grabber Screws 32mm at maximum 150mm centres. Apply, Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.
- C2: FIBRE CEMENT BOARDS (H-JOINTED)**
6.4mm thick GypCel Prestige S' fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing, non-combustible to SANS 10177.5) fixed to Ek 38mm x 50mm timber branding installed at maximum 400mm centres using Gyproc RhinoBoard Snap Point Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 No. coats of super PVA external quality paint colour to PA's approval. Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.
- C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED**
1200mm x 600mm x 15mm Gyproc Calotex (Pre-Plastered or Fire Rated OR EQUAL & APPROVED) laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle 146 fixed to the perimeter wall using fixings of 300mm centres. Donn T38 FR Main Tees @ 14mm thickness, 2150 g/m² coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.
- C4: EMULSION (PVA) PAINT OR EQUAL AND APPROVED**
Emulsion (PVA) Paint on Skimmed Plastered Scaff 3No. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soff.

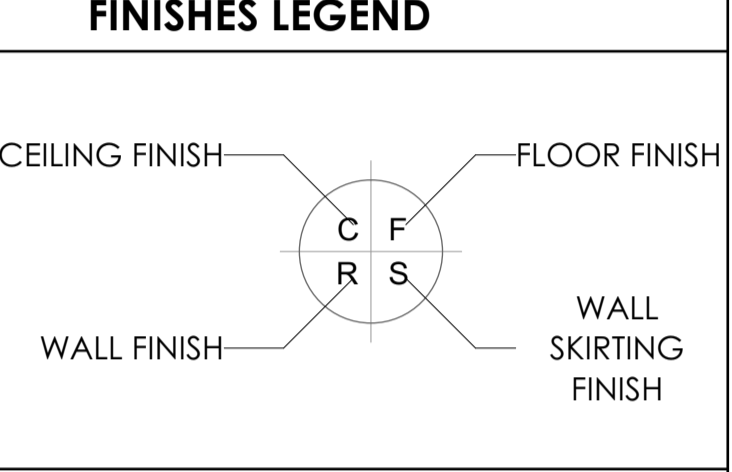
- ROOF COVERING AND INSULATION:**
- R01: EMBOSSED ROOFING SHEET (TWO SIDES)**
Roofing Sheet: 1.5mm thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 9001. The profile shall have three trapezoidal ribs of 20mm centres giving a roof angle of 45mm. The rib height shall be 41mm and provide cavity breaks. The male rib shall have gaps of 28mm centres to ensure a positive double interlocking action of side-laps. Each pan shall incorporate two stiffener ribs. Profiled roof sheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closes in strict compliance to manufacturer's instructions.
- Insulation:** SHALL EITHER BE: 1. where there are acoustic ceilings suspended board, a heavy duty "Aluminex" insulation foil shall be installed AND 2. where the steel work is exposed, a 50mm "FactoryBoard" manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m³ and finished with white meltable foil.
- Galvanized Steel (GI) Gutter:** 150mm Wide x 100mm Deep x 0.6mm Eave Gutter of Commercial Grade Steel With Class 2275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.
- Downpipe:** 110 x 110 x 0.8mm Thick Commercial Grade Galvanized Steel Sheet With Class 2275 Galvanizing To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-tapping screws To Manufacturer Installation Instructions.
- Facia board:** 250 x 10 mm Fibre Cement Facia/Barge Board. Screw Fixed To Tuss Dais & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



ISSUED FOR TENDER

- LEGEND**
- NEW WALLS
 - EXISTING WALL TO BE RETAINED
 - EXISTING WALL TO BE DEMOLISHED
 - NEW FIXTURES & FITTING TO BE INSTALLED
 - ITEMS IN RED AND (OR) DASHED LINES ARE TO BE REPAIRED AND (OR) REPLACED

NOTES
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SIGNATURE TABLE

DISCIPLINE	SIGN	DATE
CLIENT		
PLAN EXAMINER		
FIRE CONTROL		
ENVIRONMENTAL		
ROADS STORMWATER		
WATER & SANITATION		

REVISIONS

REV. NO.	DATE	DESCRIPTION
0	JUL 21	FIRST ISSUE FOR TENDER

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
PUBLIC WORKS, ROADS & INFRASTRUCTURE
(INSTITUTION)

VALLAMBROSA PRIMARY - 918 511 500

RESTORATIVES, REPAIRS & ADDITIONS

CONTRACT - SECTION

DOCUMENTATION & PROCUREMENT

DISCIPLINE	NO.
ARCHITECTURAL	4

WORK DESCRIPTION - SUB DIVISION
BLOCK PJ 01 - 04 CLASSROOM

DRAWING DESCRIPTION
FLOOR PLAN & CEILING PLAN

DRG No.	DATE	DESIGN	AS SHOWN	01/03	SMIN	T.M	ITEM No.	DRAWN	CHECK
NOV 2019	A. SINKALA						PR. NUMBER		
							PR. NUMBER		

DRAWING CO-ORDINATED

CONSULTANT

TECTURA PROJECTS

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ALSO IN NAIROBI, KENYA AND GABORONE, BOTSWANA

CONTRACTOR

CAD SYSTEM	FILE NAME
AUTOCAD	
SIZE	REV
A1	0

PROJECT NUMBER
LDPW - PROF/16002/G10

FINISHES LEGEND

FLOORS:
F1: PORCELAIN TILES - MATI (Conservative Resistant & Anti-Slippery)
450 x 150mm litmarino floor tile or similar approved by architects, fixed with adhesive, painted with finished waterproof jointing compound. Grouting to be grey. Tiles should have expansion joint and aluminium edging strip.

F2: PORCELAIN TILES - MATI
450 x 150mm litmarino matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 1107 and approved adhesives and grout on screeds. With Thickness/Specification in strict compliance to manufacturer's instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level and Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPETILES
500mm x 500mm x 100S PFK staple fibre carpet tiles to Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 'Wear Class 4 Heavy Duty', laid with approved adhesive on 20mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN S4234 on wear test and 500 body test at 25% RH on static electricity. Colour and pattern to architects approval.

F4: CEMENT SAND SCREED
30mm thick polished cement sand screed with 13mm Stone Nominal aggregate for Topping to comply with SABS 1083 at latest revision for concrete.

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVES
65mm thick multi-coloured concrete pavers laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approval and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 at latest Revision.

F6: GRANULITIC FINISH
22mm thick unsealed Granulitic finish composed of one part cement, one part fine sand, two parts coarse sand and one part granite that would pass through a 5mm mesh sieve laid by specialist in panels not exceeding 100m², divided with approved brass dividing strips. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour, pattern and aggregate size to architects approval.

F7: INTERLOCKING PAVES (RIGID PAVING/VEHICULAR WAYS)
220mm x 175mm x 50mm thick concrete interlocking paves, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a herringbone pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINYL SHEETING (CORROSION RESISTANT/ANTI-SLIPPERY)
2.5mm Thick Heavy Traffic Use, Conservative Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 584. With Static Dissipative Properties Throughout Thickness, Engineered for ISO 9001 (Anti-static) Protection Vinyl Sheet. Laid on Self-Levelled Smooth Screed grout with conductive adhesive to SABS 070 at latest Revision in Accordance to Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor in Compliance With SABS 1042, Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Conservative resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER
32mm Gravel On Compacted Sand Layer Base as Per FIE Details installed in All Duct Chambers Accommodating Sanitary Services.

SKIRTING:
S1: HARDWOOD OR EQUAL AND APPROVED
18 x 25mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with splined heading joints and mitred corners with screws and plugs at centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant bedding. The skirting to be varnished with 3No. coats of egg shell clear varnish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING
600mm wide x 100mm high x 7mm thick matt porcelain tile to comply with SABS 1449 laid with approved adhesives and grout on 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with one base and thigh top. Complete with corner and top trims. Fittings to include, ribbed angle tiles where there is change of level. Colour and pattern to architects approval.

S3: CEMENT SAND SCREED
75mm high x 20mm thick hardened cement sand screed skirting covered at 20mm dia. to form a continuous joint with the adjoining screed finish in line to FA's approval. All to be manufactured and installed in strict compliance with SABS 1083 or latest revision.

WALL FINISHES:
R1: FACE BRICK
FKX face brick in common running bond to comply with SABS 227 and forming part of the structural work.

R2: EMULSION (PVA) PAINT - FULL HEIGHT
2 No. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade), in accordance to manufacturer's instructions.

R3: ENAMEL PAINT
2 No. coats matt (egg shell) finish alkyl (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkyl resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade), in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES - ENAMEL PAINT COMBO
Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tile to Specification "R5", laid on 15mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R2" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5: CERAMIC WALL TILES - FULL HEIGHT
600mm x 300mm x 7mm thick high glazed ceramic tiles to Comply with SABS 22 or latest revision, laid on 15mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.

CEILING AND CORNICE:
C1: 7mm GYPSUM BOARDS FLUSH FLASTERED CEILINGS OR EQUAL AND APPROVED
GypCel Classic gypsum plasterboard ceiling or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber branding installed at maximum 300mm centres using Gyproc RhinoBoard Snap Point Grabber Screws 20mm at maximum 150mm centres. Apply, Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.

C2: FIBRE CEMENT BOARDS (H-JOINTED)
6.4mm thick GypCel Prestige 5 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing, non-combustible to SANS 10177:5) fixed to EK 38mm x 50mm timber branding installed at maximum 400mm centres using Gyproc RhinoBoard Snap Point Grabber Screws 20mm at maximum 150mm centres with all necessary accessories, finished with 3 No. coats of super PVA external quality paint colour to PA's approval. Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.

C3: PAINT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED
1200mm x 600mm x 15mm Gyproc Calceus Pin Fixed and/or Fire Fixed OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle 146 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees @ 4mm thickness, 2150 gwg, coating locally manufactured, recycled content, ISO 9001 & 14001 certification), at 1200 centres & Donn T38V (1200) Long Tees at 600 centres. Supports main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4: EMULSION (PVA) PAINT OR EQUAL AND APPROVED
Emulsion (PVA) Paint on Skimmed Plastered Stud 3No. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffits.

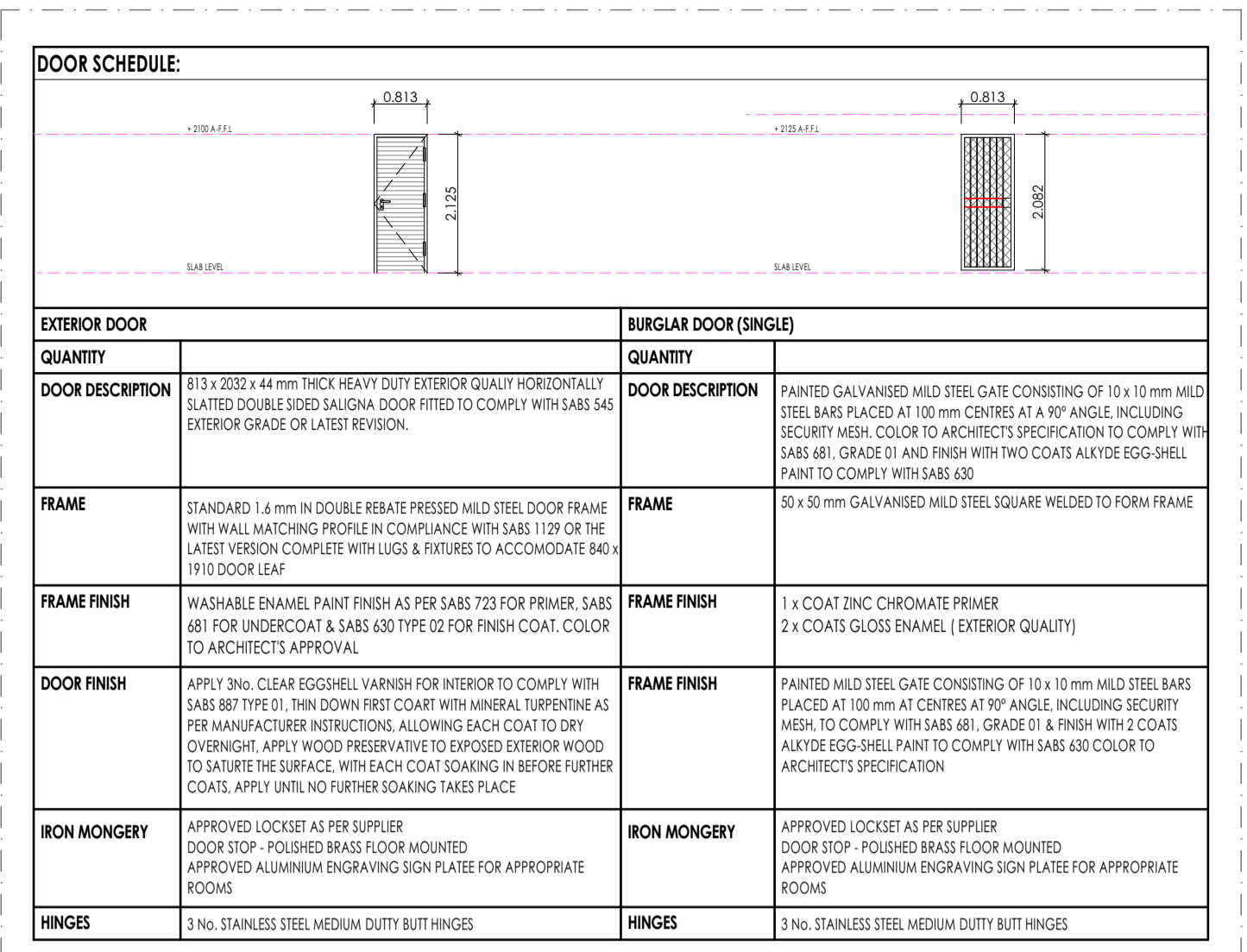
ROOF COVERING AND INSULATION:
R6:1: EMBOSSED ROOFING SHEET (TWO SIDES)
Roofing Sheets: 1.50mm thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 9001. The profile shall have three trapezoidal ribs at 200mm centering giving a net cover of 456mm. The rib height shall be 41mm and provide caulking breaks. The male to shall have gaps of 280mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofbeams to be coated on both sides with 'Global Coat' or 'Chromosold' Colour and laid on structural timber/steel structure incorporating all necessary accessories such as fixings and eave closes in strict compliance to manufacturer's instructions.

Insulation: SHALL EITHER BE: 1. where there are acoustic ceiling suspended above, a heavy duty 'Aluminium stonafon foil' shall be installed AND 2. where the steel work is exposed, a 50mm 'Flocorboard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m³ and finished with metalized foil.

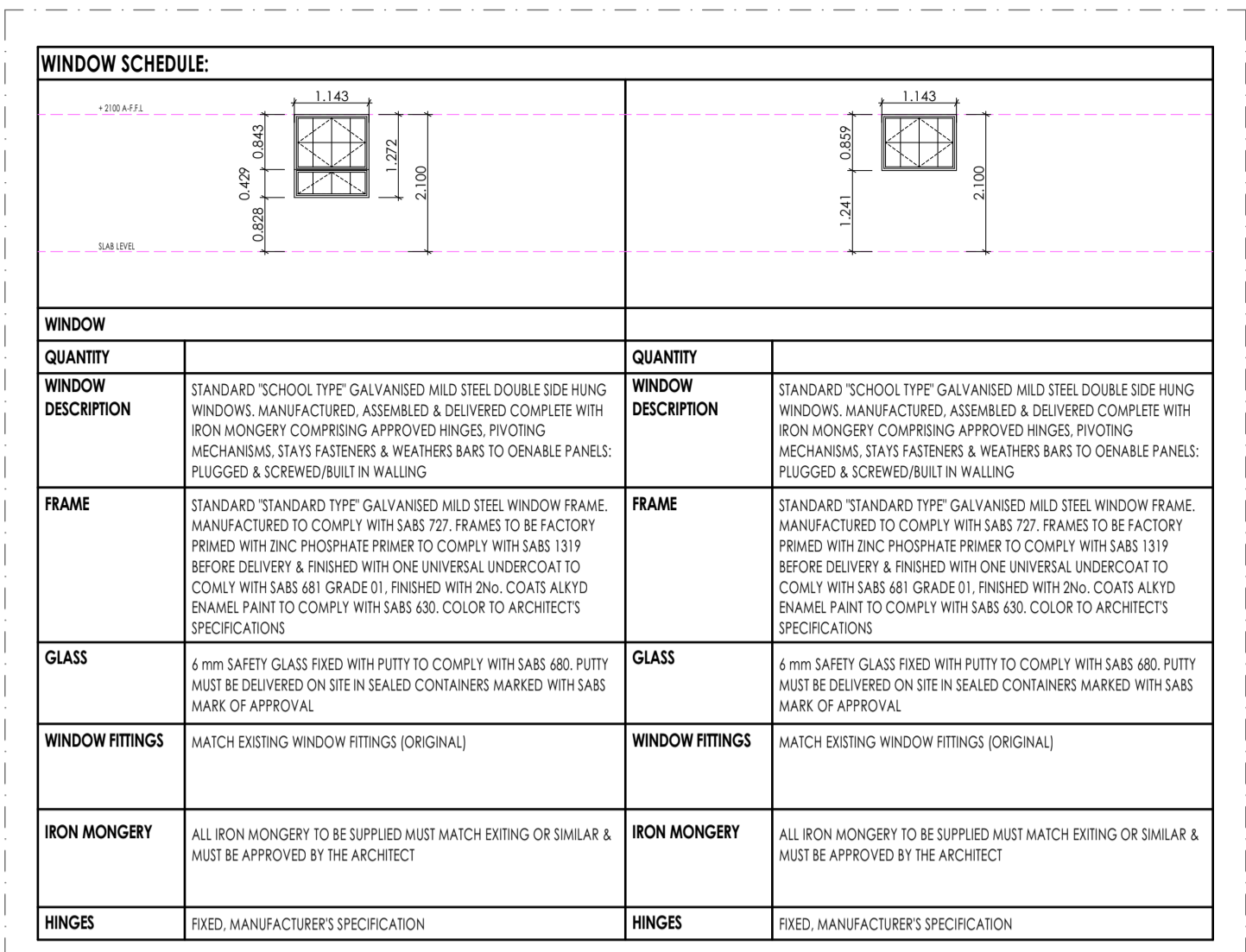
Galvanized Steel (GI) Gutter: 150mm Wide x 100mm Deep x 0.6mm Eaves Gutter of Commercial Grade Steel With Class Z275 Galvanizing to Comply With SABS 934 or latest Revision Faced to Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

Downpipe: 110 x 110 x 0.8mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing to Comply With SABS 934 or Latest Revision to be built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation Instructions.

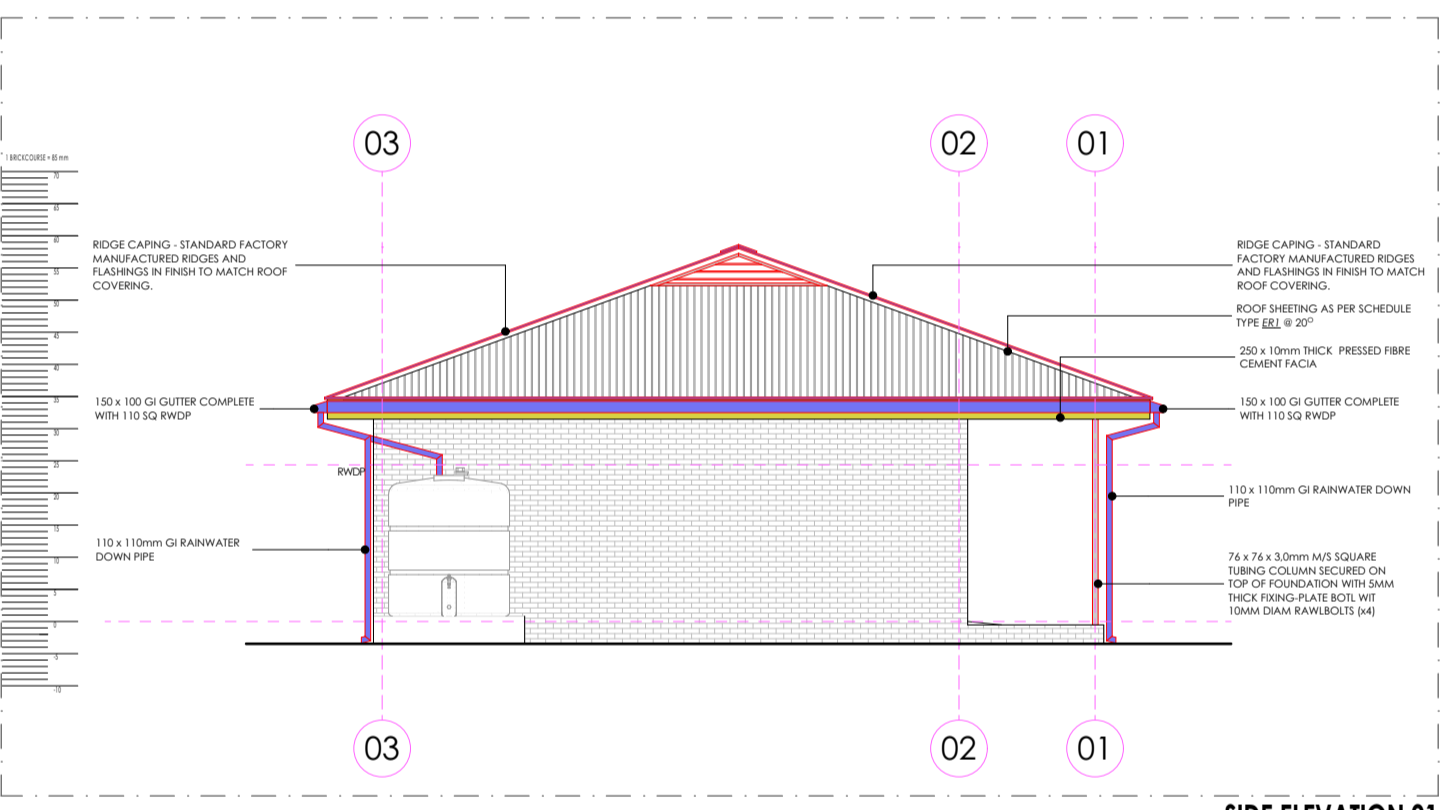
Facia board: 250 x 110 mm Fibre Cement Facia/Barge Board. Screw Fixed to Tuss Ends & Corner Butters With Counter sunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



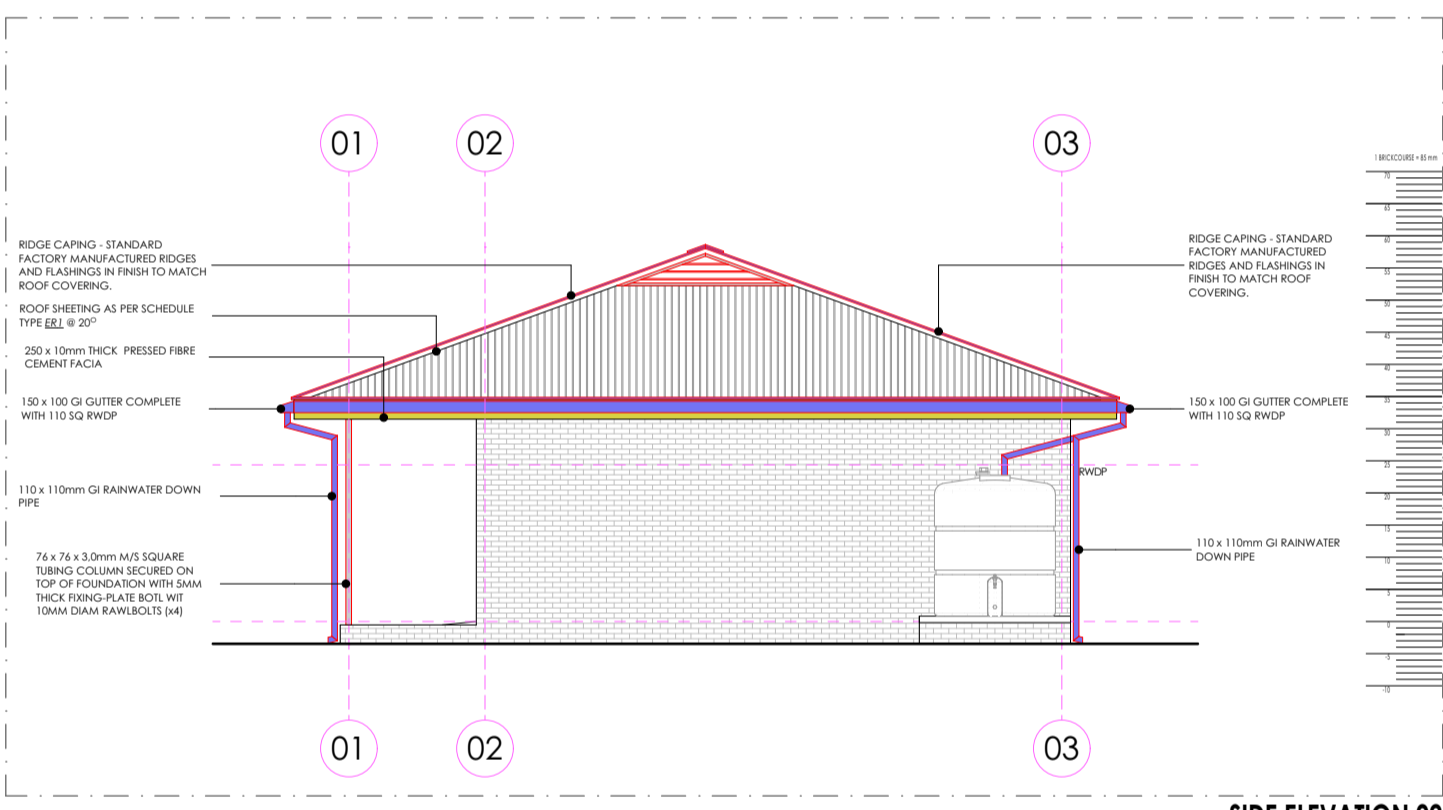
DOOR SCHEDULE
SCALE 1:100



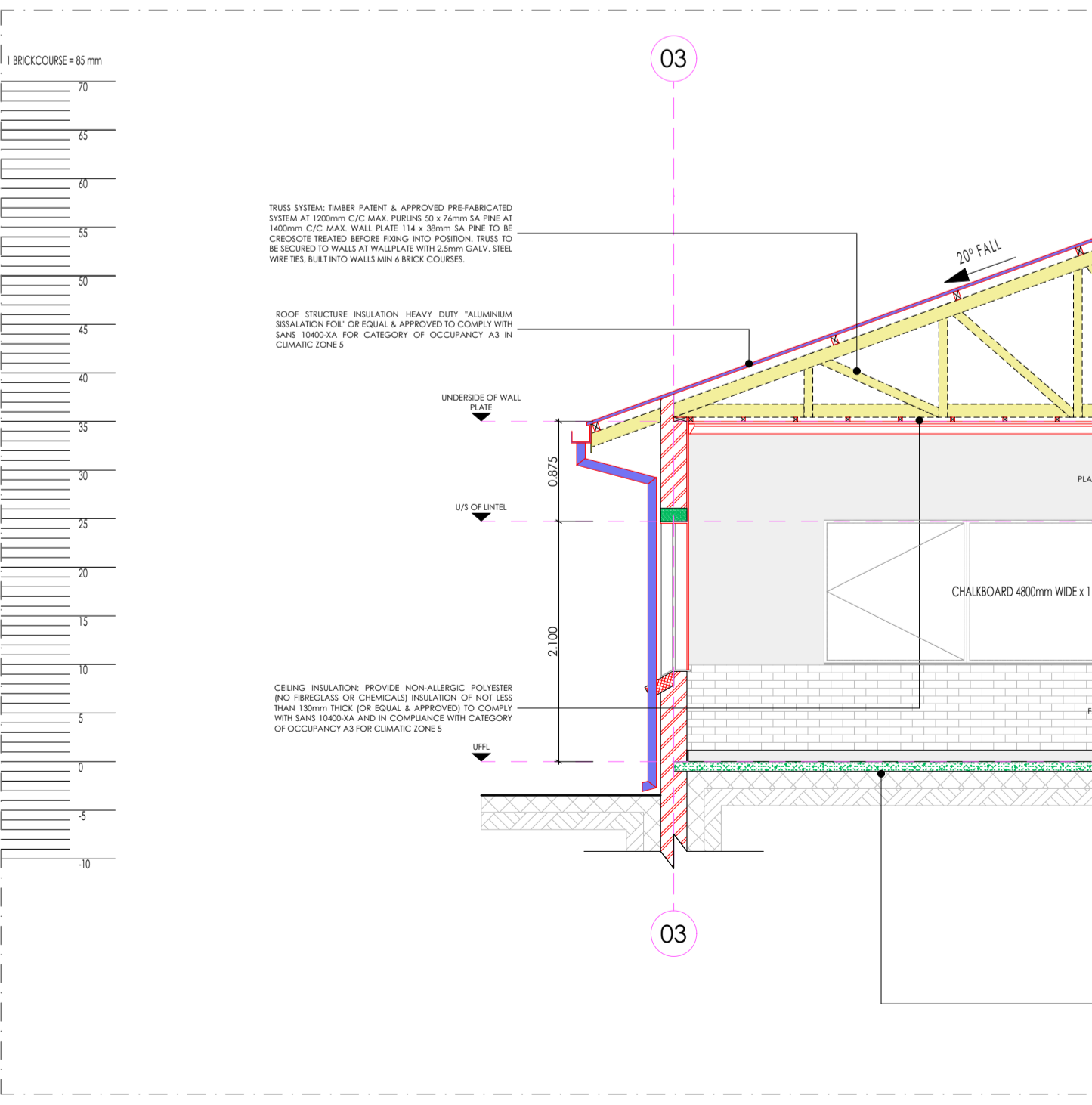
WINDOW SCHEDULE
SCALE 1:100



SIDE ELEVATION 01
SCALE 1:100



SIDE ELEVATION 02
SCALE 1:100



SECTION A-A
SCALE 1:50

SANITARY SCHEDULE

WC'S URINALS & SHOWER
W1: CERAMIC STANDARD WC (C/C) - CONCEALED CISTERN
Vitreous china 90° outlet WC or equal and approved, top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 497 & Fitted with 'Jazz ThermoSeal Plastic Seal'. Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with blank flush plate.

W2: CERAMIC PARALEGIC WC
Vitreous china 90° outlet WC or equal and approved, top inlet closed rim back-to-wall pan to comply with SABS 497. Fitted with Cistern installed complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever.

W3: CERAMIC PARALEGIC WC (C/C) - CONCEALED CISTERN
Vitreous china 90° outlet WC or equal and approved, top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 497 & Fitted with 'Jazz ThermoSeal Plastic Seal'. Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever. Blank flush plate & offset push button for passage access.

W4: CERAMIC STANDARD WC (BACK INLET)
Vitreous china 90° outlet back inlet pan to comply with SABS 497. Fitted complete with back inlet exposed flush-valve complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. Flush valve to be fitted with suitable extension lever.

W5: CERAMIC STANDARD WC (C/C)
Vitreous china 90° outlet, back inlet pan to comply with SABS 497 Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermoseal seal and complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards.

W6: CERAMIC WALL HUNG URINAL
Vitreous china wall hung bowl urinal to comply with SABS 497. Supplied with suitable 38mm CP domical grating, CP tap inlet spreader and two hanger brackets and fitted with exposed flush-valve, and suitable bottle trap chrome finish as per manufacturer's specifications and applicable SABS standards.

W7: SHOWER
20mm thick Enamelled steel shower tray 900x900x160 mm manufactured with anti slip pattern, with rounded internal corners, and 38 mm BSP grated waste fitted in corner position filled with Shower seal and complying with SABS 226 compliance of approval.
• Glazed Shower Cubicle with access door as per standard supply with manufacturer and fixed to fit space configuration
• Overhead shower arm with wall flange.
• Chrome Plated Shower Head with adjustable connector
• Chrome Plated Shower diverter mixer tap with sliding wall flanges and concealed connectors adjustable from 178mm to 203 mm centres. Shower tray to be recessed 50 mm into a 100mm high concrete plinth with exposed plinth face.

W8: HAND BATH BASIN
R1: WTB & MIXER TAP
Vitreous china size 560 x 415mm rounded 'Tuscany', OR EQUAL AND APPROVE basin to comply with SABS 497 with single tap hole configuration supplied with integrated overflow and chromatey hole through the centre semi-purchased supplied with a 'Tuscany' pedestal and fitted with 'Inca Coated Metalhead' 15mm chrome plated tap with flanged backnut (code KAL1102) mixing tap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. All brackets and fixing accessories in strict accordance to the manufacturer's specifications.

R2: DISABLED BASIN
400mm semi rounded lavatory basin to comply with SABS 497. In two top hole configuration fitted with 2 No chrome plated Elbow action pillar-top, with 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged backnut, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Fitted with concealed wall bracket in accordance to the manufacturer's specifications.

R3: WHITE GLAZED PORCELAIN WTB (VANITY)
Ceramic freecast size 450x350mm oval self-terminating vanity basin to comply with SABS 497 in one top hole configuration supplied without overflow and fitted with 1No. chrome plated tap with flanged backnut (code KAL1102) mixing tap, mounting kit and angle valves with 400mm long flexible inlets and chrome plated bottle trap supplied with all necessary pipe connections. Basin mounted on cabinet or vanity unit with silicon sealed against cabinet tops in strict accordance to manufacturer's specifications.

R4: SMALL BASIN & 2 TAPSTRAY & SHOWER SET (FOR WORKSHOPS)
Vitreous china size 450x300mm wash basin to comply with SABS 497 in 2-top hole configuration supplied with integrated overflow and chromatey hole with 2No. pillar-top, chrome plated anti-rattle plug with splined plug, slotted basin waste, chrome plated bottle trap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. All brackets and fixing accessories in strict accordance to the manufacturer's specifications.

R5: URINALY BASIN & NO. TAP (FOR LABS)
400mm x 300mm high rectangular heavy duty basin in one tap hole configuration to comply with SABS 497 and R16 hole plugged and fitted with 1No. pillar-top. Chrome Plated anti-rattle plug with splined plug, slotted basin waste, chrome plated bottle trap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Fitted to wall using 2No. Semi-concealed cast iron brackets in accordance to the manufacturer's specifications.

R6: MEDIC BASIN & FITTINGS (SICK BAY)
Vitreous china 510 x 400mm semi rounded lavatory basin to comply with SABS 497. In two top hole configuration fitted with: 2 No. chrome plated Elbow action pillar-top, with 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged backnut, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Fitted with concealed wall bracket in accordance to the manufacturer's specifications.

Combination of sanitaryware, accessories and general fittings comprising of:
• Mixer type K2. • Paper towel dispenser K8 and bin type K3. • Soap dispenser type K9.
• Tapstock comprising 2No. rows of wall fix type K5 as per finishes schedule and grout in compliance to manufacturer's specifications and government standard specifications. Installation heights as indicated in the drawings.

SINKS:
X1: STAINLESS STEEL SINK
Stainless steel 1000 x 457mm inset single end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsewhere measured). Grade 304 (18/10) Stainless Steel sink to comply with SABS 956 fitted with: Approved Sink mixer-wall tap, chrome plated swivel Outlet, adjustable and supplied with suitable accessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL.

X2: STAINLESS STEEL SINK
Stainless steel 1500 x 457mm inset double end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsewhere measured). Grade 304 (18/10) Stainless Steel sink to comply with SABS 956 fitted with: Approved Sink mixer-wall tap, with chrome plated overarm swivel Outlet, adjustable wall flange and supplied with suitable accessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL.

X3: CERAMIC SINK
Ceramic freecast 455 x 335 x 180 mm rectangular laboratory sink without overflow, with a centre end outlet, fitted to wall on two semi-concealed brackets supplied with all necessary accessories (all to be acid resistant)
X4: SINGLE WASH TROUGH (Inset & 2 No. TAPS)
600mm x 300mm high rectangular stainless steel sink with grade 18/10 SS, stainless steel with radius internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2No. CP bibcoaps - plain extended chrome plated, complete with sliding wall flange. Un-slotted sink waste with back nut, plug with slimp, chain and stay, CP, TP, trap, with deep seal and cleaning eye. Rough brass Sink installation height = 900mm AFFL. Cut out size 555 x 425mm.

X5: DOUBLE WASH TROUGH (Inset & 2 No. TAPS)
1200 x 555 x 200mm Double drain wash trough manufactured from grade 304 (18/10) SS, stainless steel with radius internal corners and provision for a 40mm dia. outlet, fitted with Approved 2No. wall type bibcoaps, with Swivel Outlet, adjustable wall flange and exposed adjustable connectors. CP, Un-slotted sink waste with back nut and plug with slimp, CP, Double drain back rubber deep seal TP-trap. Sink mounted on 2No. 25mm square S5 gallow brackets, front leg and adjustable foot piece of height of 915mm AFFL.

SANITARY ACCESSORIES
K1: SS TOILET ROLL HOLDER - 2 ROLL
Standard stainless steel toilet roll holder (2 roll) 150mm width x 270mm high 275mm depth Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Satin finish, including screws and dowels and all other necessary accessories in accordance to manufacturer's specifications.

K2: GLASS MIRROR
6mm thick clear float glass silver-backed mirror, size 450x900mm height with polished beveled edges 4 times folded for and fixed, with chromium plated dome-headed mirror screws.
K3: WASTE BIN
280W x 525H x 200D Waste bin manufactured from 18/10 Stainless Steel, Surface Satin Finish, Material Thickness 1.5mm, including Screws, dowels and all necessary accessories in accordance to manufacturer's specifications.

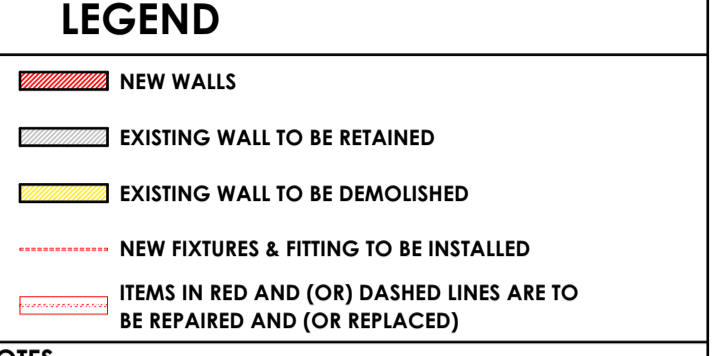
K4: SANITARY BIN (PLASTIC)
190mm x 200mm x 600mm Plastic Sanitary Pedal Bin with capacity of 100 Litres per pack Complete with all necessary accessories and installed in accordance to manufacturer's specifications.
K5: SOAP HOLDER
Single semi-recessed ceramic soap dish Complete with all necessary accessories and installed in accordance to manufacturer's specifications.

K6: WALL GRAB BARS-PARALEGIC
Stainless steel 914 x 90 x 20mm diameter wall grab rail, in satin polished finish complete with SS fixing screws and plastic wall plugs, installed as per manufacturer's instructions.
K7: GRAB BARS (RIGHT-HAND) PARALEGIC
Stainless steel 914 x 90 x 20mm diameter wall grab rail, with side toilet grab rail with 450mm high centre flange, to satin polished finish complete with SS fixing screws and plastic wall plugs, installed as per manufacturer's instructions.

K8: PAPER TOWEL DISPENSER
330mmWx350mmX230mmD Tear and dry paper hand towel dispenser in stainless steel. Complete with screws, locking key, and all necessary accessories and installed in accordance to manufacturer's specifications.
K9: SOAP DISPENSER (ISH- WALL MOUNTED)
115W x 220H x 110D Stainless steel hand soap dispenser. Complete with screws, locking key, and all necessary accessories and installed in accordance to manufacturer's specifications.
K10: ALUMINIUM COAT HOOKS (MULTITRACK)
800mm Wide x 220mm High x 90mm High Aluminium Multitrack Hat and Coat Hook in multi-track two hooks Configuration With Anodised Silver Finish Complete with Screws.
K11: HAND DRYER (Hands free)
As per Electroc Engineers specification
K12: TOWEL RAIL
55mm dia. Polished 900mm long towel rail complete with all necessary accessories in accordance to manufacturer's specifications. Installation height as per architect's drawing.
K13: SHOWER CURTAIN RAIL (slight)
20mm dia. Standard chromium plated shower curtain rail 1300mm long with flanged ends and screws CP fixing height as per PA's drawing.

GENERAL FIXTURES
G1: DOOR PROTECTOR
200mm wide PVC Door Protector manufactured in high impact resistant rigid PVC (Colour Grey) and cut to suit door width from 3m length, installed strictly in accordance to manufacturer's specifications. Installation height 900mm above FFL, or as specified.
G2: PROTECTOR SCREENS
Full cover PVC Screen (Screen size 2340 x 1850mm) with wall-mounted code S0400 Keystone Brackets Adjustable Set of 2, size 300mm. To be supplied complete with all accessories, and fitted in strict accordance with manufacturer's instructions.
G3: FINBOARD 1500W X 1000H
Finboard size 1500mm W x 1000mm W comprising of laminated self board core priming material beaded all round with anodised aluminium channel around mitred at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level.
G4: FINBOARD 300W X 1200H
Finboard size 300mm W x 1200mm W comprising of laminated self board core priming material beaded all round with anodised aluminium channel around mitred at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level.
G5: WINDOW NORMAL BUNDS (vertical blinds)
127 mm vertical deco blinds with anodised aluminium headrail fitted with colour coordinated insert. All runners to be wheeled and fitted with individual clutch mechanism. All runners to be connected by stainless steel links. The mechanism to be operated by a nylon ball chain with a reduction gear inside a fully enclosed cap. Blinds to be face fixed (faced over the window opening) by means of concealed type fixing brackets.
G6: FLOOR DRAIN
Cast iron flat type full-flow outlets size 110 mm diameter with centre ball, including connectors to downpipes.
G7: SL FLOOR EXPANSION JOINT COVER
Concealed heavy-duty stainless steel movement joint, with polyurethane infill (colour grey). To be installed within the tile surface over the 20mm expansion joints, in accordance to the manufacturer's specifications.
G8: CHALKBOARDS - GREEN SURFACE COLOUR
Vitex system 1000 standard WHITEBOARD or EQUAL & APPROVED vitreous enamel steel utility school chalkboards wall-mounted size 480mm x 1140mm high manufactured in accordance with SABS Standard CE 36/2004 Edition 4 and suitable for Class 1 Heavy Duty applications, as defined therein. Enamel steel Utility chalk board surfaces to be matt and freely structured, olive green in colour. Vitex Colour Reference - Chalk Board Green LM197/2. Supply complete with integral anodised aluminium chalk rail (ACR), fixing components and secured in position to brickwork or steel in strict accordance with the manufacturer's instructions.

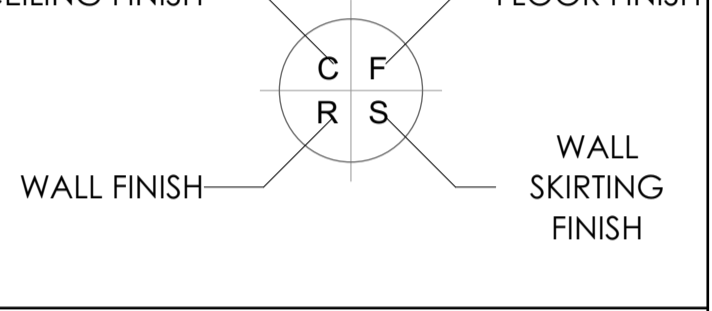
ISSUED FOR TENDER



NOTES
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED

DIMENSIONS TO BE READ, NOT TO SCALED FROM THIS DRAWING

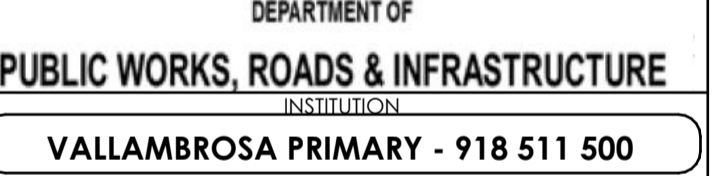
CONTRATORS TO CONFIRM ALL DIMENSIONS ON SITE BEFORE CONSTRUCTION COMMENCES & ANY DISCREPANCY TO BE REPORTED TO THE PROJECT ARCHITECT



SIGNATURE TABLE with columns for DISCIPLINE, SIGN, and DATE.

CLIENT INFORMATION table with columns for CLIENT, FIRE EXAMINER, ENVIRONMENTAL, ROADS & STORMWATER, WATER & SANITATION.

REVISIONS table with columns for REV. NO., DATE, DESCRIPTION.



PUBLIC WORKS, ROADS & INFRASTRUCTURE

VALLAMBROSA PRIMARY - 918 511 500

RESTORATIVES, REPAIRS & ADDITIONS

DOCUMENTATION & PROCUREMENT

ARCHITECTURAL 4

BLOCK PH 01 - 03 CLASSROOM

SECTION | SIDE ELEVATION | SCHEDULES table with columns for DRG. NO., DESIGN, DATE, AS SHOWN, RESPONSIBLE PROFESSIONAL, PR. NUMBER, ITEM No., DRAWN, CHECK.

CONSULTANT
TECTURA PROJECTS

CONTRACTOR table with columns for CAD SYSTEM, AUTOCAD, FILE NAME, SIZE, PROJECT NUMBER, REV, DATE.

FINISHES LEGEND

FLOORS:

F1- PORCELAIN TILES - MATI (CONTOUR RESISTANT & ANTI-SLIPPER)

450 x 450 11.5mm kilnjarjo floor tiles or similar approved by architects, fixed with adhesive, painted with finished waterproof jointing compound. Grouting to be grey. Tiles should have expansion joint and aluminium edging strip.

F2- PORCELAIN TILES - MATI

450 x 450 x 10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds with thickness/specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3- CARPETILES

500mm x 500mm, 1005 PFK staple fibre carpet tiles to comply with SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54824 on wira test and ISO body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.

F4- CEMENT SAND SCREED

30mm thick polished cement sand screed with 13mm Stone Nominal aggregate for Topping to comply with SABS 1083 or latest revision for concrete.

F5- EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVES

65mm thick multi-coloured concrete paves laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approval and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or Latest Revision.

F6- GRANULITIC FINISH

22mm thick unadorned Granulitic finish composed of one part cement, one part fine sand, two parts coarse sand and one part granite that would pass through a 5mm mesh sieve laid by specialist in panels not exceeding 10m², divided with approved brass dividing strips. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour, pattern and aggregate size to architects approval.

F7- INTERLOCKING PAVES (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 50 mm thick concrete interlocking paves, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8- SEMI FLEXIBLE VINYL SHEETING (CORROSION RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 584. With Static Dissipative Properties Throughout Thickness, Engineered for ISO 9001 (anti-static) Protection Vinyl Sheet, Laid on Self-Levelled Smooth Screed glued with conductive adhesive to SABS 070 or Latest Revision in Accordance to Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor in Compliance With SABS 1042, Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity, Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9- GRAVEL FINISH ON SAND LAYER

32mm Gravel On Compacted Sand Layer Base as Per PFE Details installed in All Duct Chambers Accommodating Sanitary Services.

SKIRTING:

S1- HARDWOOD OR EQUAL AND APPROVED

18 x 15mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred corners with screws and plugs at centres not exceeding 400mm, and fixed with a 19mm x 19mm quadrant beading. The skirting to be varnished with 3No. coats of egg shell clear varnish to comply with SABS/SANS 381 type 1.

S2- CERAMIC TILE SKIRTING

600mm wide x 100mm high x 7mm thick matt porcelain tile to comply with SABS 1449 laid with approved adhesives and grout on 22mm thick screeds in strict compliance to manufacturers instructions and SABS specification, with cove base and straight top. Complete with corner and top trims. Fittings to include, ribbed angle tiles where there is change of level. Colour and pattern to architects approval.

S3- CEMENT SAND SCREED

75 mm high x 20 mm thick hardened cement sand screed skirting covered at 50 mm dia. to form a continuous joint with the adjoining screed floor finish to FA's approval. All to be manufactured and installed in strict compliance With SABS 1083 or latest revision.

WALL FINISHES:

R1- FACE BRICK

FBX face brick in common running bond to comply with SABS 227 and forming part of the structural work.

R2- EMULSION (PVA) PAINT - FULL HEIGHT

2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade), in accordance to manufacturer's instructions.

R3- ALKYD (ENAMEL) PAINT

2 no. coats matt (egg shell) finish alkylid (enamel) paint to SABS 430, type 2 applied on plastered surfaces with 1 no coat alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade), in accordance to manufacturer's instructions.

R4- GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R2" To Comply with SABS 430 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5- CERAMIC WALL TILES - FULL HEIGHT

600mm x 300mm x 7mm thick high glazed ceramic tiles to comply with SABS 22 or Latest revision, laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.

CEILING AND CORNICE:

C1- 7mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

GypCel Classic gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centres. Apply, Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.

C2- FIBRE CEMENT BOARDS (H-JOINTED)

6.4mm thick GypCel Prestige 5 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9 mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing, non-combustible to SANS 10177:5) fixed to Ek 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 No. coats of super PVA external quality paint colour to PA's approval. Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.

C3- PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

1200mm x 600mm x 15mm Gyproc Calotex (Pre-finished or Fire Rated OR EQUAL & APPROVED) laid into Dorn ceiling grid and secured into place using Dorn Hold Down Clips @ 200mm c/c. Dorn Wall Angle 146 fixed to the perimeter wall using fixings of 300mm centres. Dorn 138 FR Main Tees @ 4mm thickness, 2150 g/m² coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Dorn TSBV (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Dorn Hanger Strap 19mm suitably fixed to the building structural members. Dorn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Dorn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

Emulsion (PVA) Paint on Skimmed Plastered Sto 3No. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffits.

ROOF COVERING AND INSULATION:

R1- EMBOSSED ROOFING SHEET (TWO SIDES)

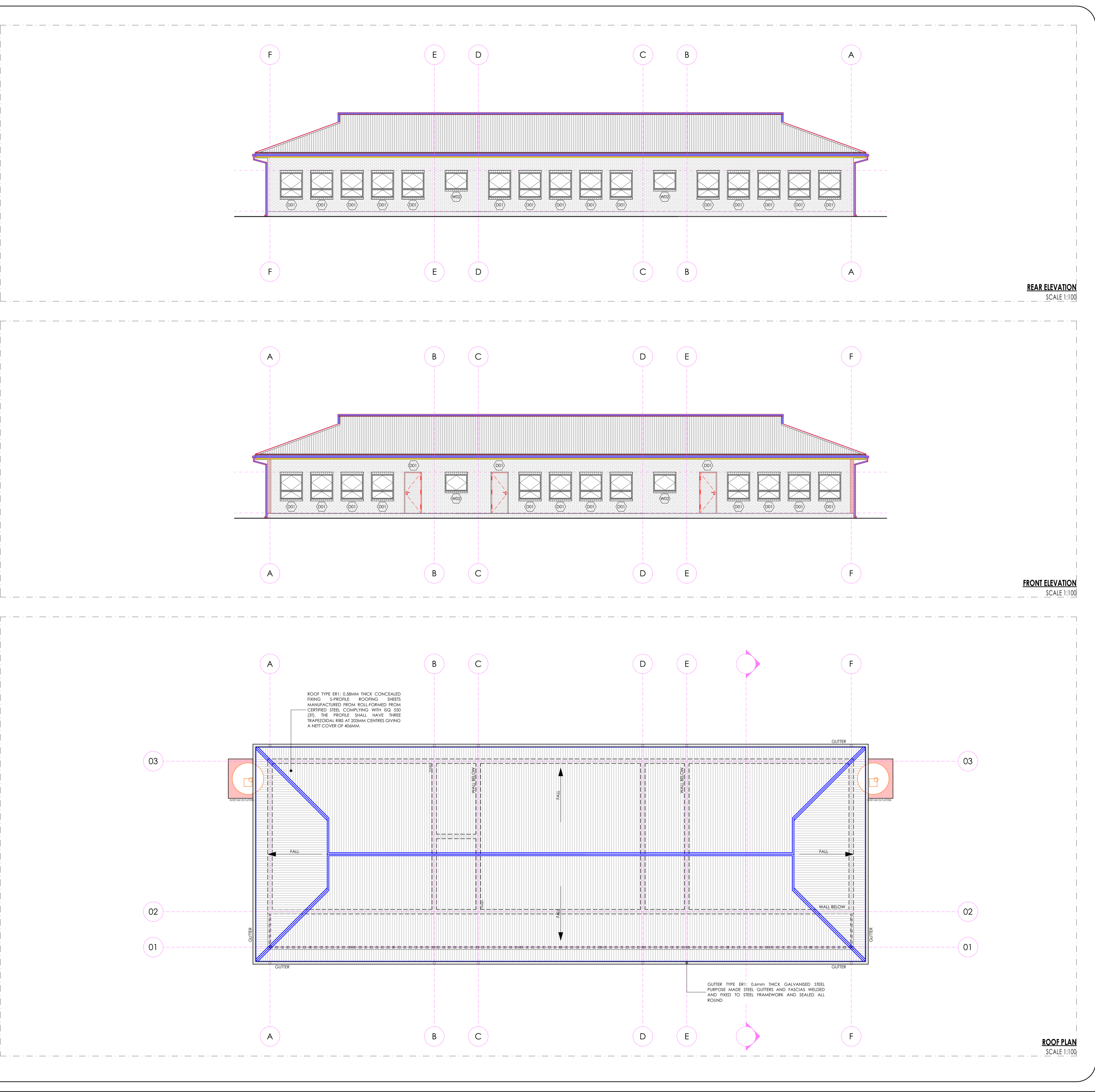
Roofing Sheets: 1.58mm thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 9001 (TS). The profile shall have three trapezoidal ribs at 200mm centres giving a total cover of 456mm. The rib height shall be 41mm and provide cavity breaks. The male rib shall have gaps of 28mm centres to ensure a positive double interlocking action of side-laps. Each pan shall incorporate two stiffener ribs. Profiled roof sheets to be coated on both sides with 'Global Coat' or 'Chromastak Colour' and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closes in strict compliance to manufacturer's instructions.

Insulation: SHALL EITHER BE: 1. where there are acoustic ceilings suspended board, a heavy duty 'Aluminium stonafon' foil be installed AND 2. where the steel work is exposed, a 50mm 'Factoryboard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m³ and finished with white metalized foil.

Galvanized Steel (GI) Gutter: 150mm wide x 100mm Deep x 0.6mm Eave Gutter of Commercial Grade Steel With Class Z275 Galvanizing to Comply With SABS 934 or latest Revision Fixed to Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

Downpipes: 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing to Comply With SABS 934 or Latest Revision to be built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-lapping screws to Manufacturer Installation instructions.

Facia board: 250 x 10 mm Fibre Cement Facia/Barge Board. Screw Fixed to Tuss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



ISSUED FOR TENDER

LEGEND

- NEW WALLS
- EXISTING WALL TO BE RETAINED
- EXISTING WALL TO BE DEMOLISHED
- NEW FIXTURES & FITTING TO BE INSTALLED
- ITEMS IN RED AND (OR) DASHED LINES ARE TO BE REPAIRED AND (OR) REPLACED

NOTES
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED

DIMENSIONS TO BE READ, NOT TO SCALED FROM THIS DRAWING

CONTRACTORS TO CONFIRM ALL DIMENSIONS ON SITE BEFORE CONSTRUCTION COMMENCES & ANY DISCREPANCY TO BE REPORTED TO THE PROJECT ARCHITECT

FINISHES LEGEND

CEILING FINISH	C	FLOOR FINISH	F
WALL FINISH	R	WALL SKIRTING FINISH	S

SIGNATURE TABLE

DISCIPLINE	SIGN	DATE
CLIENT		
PLAN EXAMINER		
FIRE CONTROL		
ENVIRONMENTAL		
ROADS STORMWATER		
WATER & SANITATION		

REV. NO.	DATE	DESCRIPTION
0	JUL 21	FIRST ISSUE FOR TENDER

REVISIONS

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
PUBLIC WORKS, ROADS & INFRASTRUCTURE
INSTITUTION

VALLAMBROSA PRIMARY - 918 511 500

RESTORATIVES, REPAIRS & ADDITIONS

CONTRACT - SECTION

DOCUMENTATION & PROCUREMENT

DISCIPLINE	NO.
ARCHITECTURAL	4

WORK DESCRIPTION - SUB DIVISION

BLOCK PH 01 - 03 CLASSROOM

DRAWING DESCRIPTION

ROOF PLAN | FRONT & REAR ELEVATION

DRG. NO.	104-02	RESPONSIBLE PROFESSIONAL	PR. NUMBER	ITEM No.
DESIGN	AS SHOWN	T.M	SMIN	DRAWN
DATE	NOV 2019	A. SINKALA	PR/Arch	24750409

DRAWING CO-ORDINATED

CONSULTANT

TECTURA PROJECTS

<p>GATED HOUSE HARBORVIEW DRIVE CANTONMENT 2017 DURBAN PHONE: 031 455 1000 FAX: 031 455 1001 WWW.TECTURA.CO.ZA</p>	<p>NORTHWEST HARBORVIEW DRIVE NO. 9 CANTONMENT 2017 DURBAN PHONE: 031 455 1000 FAX: 031 455 1001 WWW.TECTURA.CO.ZA</p>	<p>NORTHERN CAPE 201 HARBOUR HOUSE 201 HARBOUR ROAD DURBAN PHONE: 031 455 1000 FAX: 031 455 1001 WWW.TECTURA.CO.ZA</p>
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ALSO IN NAIROBI, KENYA AND GABORONE, BOTSWANA

CONTRACTOR

CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REV
A1	LDPW - PROF/16002/G10	0

FINISHES LEGEND

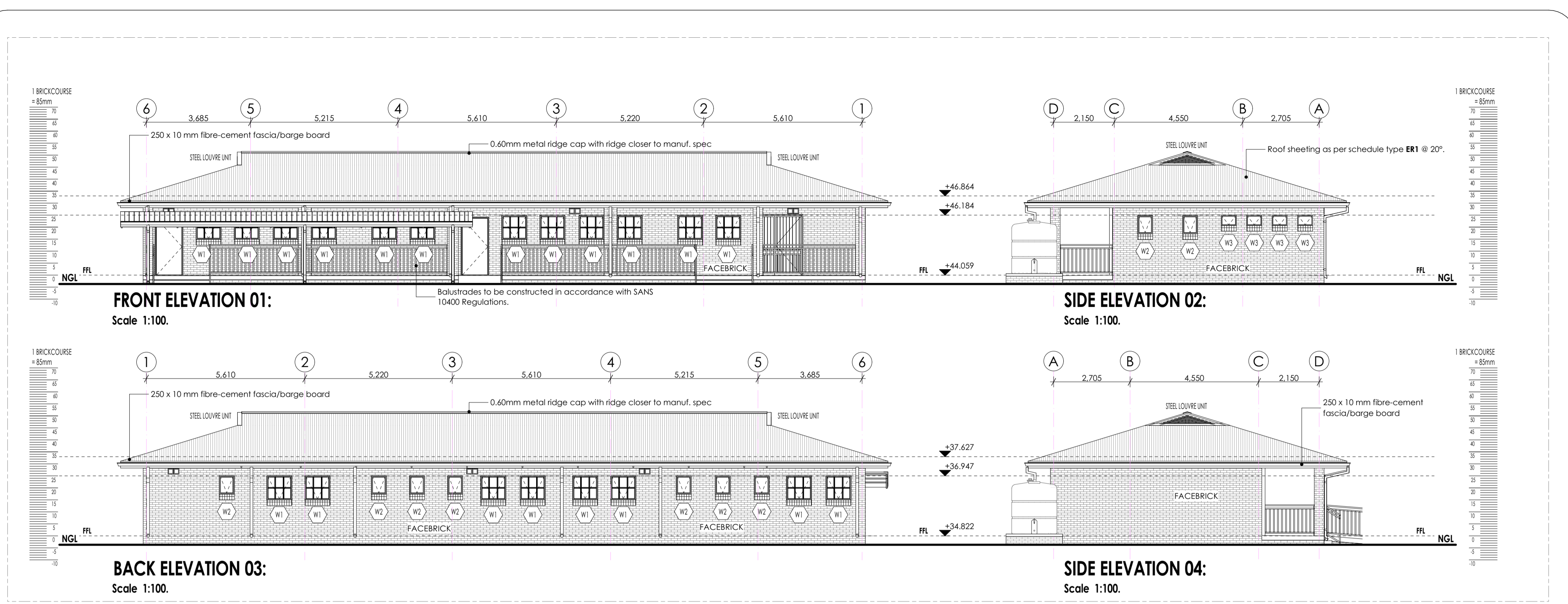
- FLOORS:**
F1: PORCELAIN TILES - MATI (Conservative Resistant & Anti-Slippery)
 400 x 400 11.5mm kiln-dried floor tiles or similar approved by architects, fixed with adhesive, painted with finished waterproof jointing compound. Grouting to be grey. Tiles should have expansion joint and aluminium edging strip.
F2: PORCELAIN TILES - MATI
 400 x 400 10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds. With Thickness/Specification in strict compliance to manufacturer's instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.
F3: CARPET TILES
 500mm x 500mm x 100S PFX staple fibre carpet tiles to Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54824 on wira test and ISO body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.
F4: CEMENT SAND SCREED
 30mm thick polished cement sand screed with 13mm Stone Nominal aggregate for Topping to comply with SABS 1083 or latest revision for concrete.
F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVES
 65mm thick multi-coloured concrete paves laid on sand bedding to civil/architectural engineer's specification in approved pattern and compacted to approval and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or Latest Revision.
F6: GRANULITIC FINISH
 22mm thick unsealed Granulitic finish composed of one part cement, one part fine sand, two parts coarse sand and one part granite that would pass through a 5mm mesh sieve laid by specialist in panels not exceeding 10m², divided with approved brass dividing strips. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour, pattern and aggregate size to architects approval.
F7: INTERLOCKING PAVES (INDIC PAVING/VEHICULAR WAYS)
 220mm x 197mm x 50 mm thick concrete interlocking paves, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/architectural engineer's specification to a 'herringbone' pattern to the Architect's approval.
F8: SEMI FLEXIBLE VINYL SHEETING (CORROSION RESISTANT/ANTI-SLIPPERY)
 2.5mm Thick Heavy Traffic Use, Conservative Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 584. With Static Dissipative Properties Throughout Thickness, Engineered for ISO or ISO (Anti-static) Protection Vinyl Sheet, Laid on Self-Levelled Smooth Screed glued with conductive adhesive to SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polished Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity, Contractor to provide Certificate of Static Current Conductivity, Conservative resistant & Anti-Slippery.
F9: GRAVEL FINISH ON SAND LAYER
 32mm Gravel On Compacted Sand Layer Base as Per PSE Details installed in All Duct Chambers Accommodating Sanitary Services.

- SKIRTING:**
S1: HARDWOOD OR EQUAL AND APPROVED
 18 x 15mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred corners with screws and plugs at centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant beading. The skirting to be varnished with 3No. coats of egg shell clear varnish to comply with SABS/SANS 381 type 1.
S2: CERAMIC TILE SKIRTING
 600mm wide x 100mm high x 7mm thick matt porcelain tile to comply with SABS 1449 laid with approved adhesives and grout on 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with cove base and height tops. Complete with corner and top trims. Fittings to include, ribbed angle tiles where there is change of level. Colour and pattern to architects approval.
S3: CEMENT SAND SCREED
 75 mm high x 20 mm thick hardened cement sand screed skirting covered at 50 mm dia. to form a continuous joint with the adjoining screed floor finish to FA's approval. All to be manufactured and installed in strict compliance With SABS 1083 or latest revision.

- WALL FINISHES:**
W1: FACE BRICK
 FBX face brick in common running bond to comply with SABS 227 and forming part of the structural work.
W2: EMULSION (PVA) PAINT - FULL HEIGHT
 2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade 1, in accordance to manufacturer's instructions.
W3: ENAMEL (ENAMEL) PAINT
 2 no. coats matt (egg shell) finish alkyl (jeromel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade 1, in accordance to manufacturer's instructions.
W4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO
 Combination of: 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "RS", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R2" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.
W5: CERAMIC WALL TILES - FULL HEIGHT
 600mm x 300mm x 7mm thick high glazed ceramic tiles to Comply with SABS 22 or Latest revision, laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.

- CEILING AND CORNICE:**
C1: 7mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED
 Gyproc Classic gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing) fixed to timber branding installed at maximum 300mm centres using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centres. Apply, Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.
C2: FIBRE CEMENT BOARDS (H-JOINTED)
 6.4mm thick GyprocPrestige 5' fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9 mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing, non-combustible to SANS 10177:5) fixed to Ek 38mm x 50mm timber branding installed at maximum 400mm centres using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 No. coats of super PVA external quality paint colour to PA's approval. Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.
C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED
 1200mm x 600mm x 15mm Gyproc Calceus Pli Prefinished or Fire Finished OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle 146 fixed to the perimeter wall using fixings @ 300mm centres. Donn 138 FR Main Tees @ 4mm thickness, 2150 g/m² coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn TSBV (1200) Long Tees @ 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanised Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.
C4: EMULSION (PVA) PAINT OR EQUAL AND APPROVED
 Emulsion (PVA) Paint on Skimmed Plastered Stud 3No. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffits.

- ROOF COVERING AND INSULATION:**
R1: EMBOSSED ROOFING SHEET (TWO SIDES)
Roofing Sheets: 1.50mm thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 530 (E). The profile shall have three trapezoidal ribs @ 200mm centres giving a net cover of 450mm. The rib height shall be 41mm and provide cavity breaks. The male rib shall have gaps of 285mm centres to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofnuts to be coated on both sides with 'Global Coat' or 'Chromoskink Colour' and laid on structural timber/steel structure incorporating all necessary accessories such as fixings and eave closes in strict compliance to manufacturer's instructions.
Insulation: SHALL EITHER BE: 1. where there are acoustic ceiling suspended above, a heavy duty 'Aluminium insulation foil' shall be installed AND 2. where the steel work is exposed, a 50mm 'FactoryBoard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m³ and finished with white meltable foil.
Galvanised Steel (GI) Gutter: 150mm Wide x 100mm Deep x 0.5mm Eave Gutter of Commercial Grade Steel With Class Z275 Galvanising To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Fascia Board Together with standard accessories discharging into Rainwater Downpipes.
Downpipe: 110 x 110 x 0.8mm Thick Commercial Grade Galvanised Steel Sheet With Class Z275 Galvanising To Comply With SABS 934 or Latest Revision to be built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-lapping screws To Manufacturer Installation Instructions.
Fascia board: 250 x 10 mm Fibre Cement Fascia/Barge Board, Screw Fixed To Tuss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



WINDOW SCHEDULE:

Window Type	No. of Windows	Notes
W1	20	
W2	09	BURGLAR BAR
W3	04	BURGLAR BAR
W4	12	AB01

WINDOW DESCRIPTION	FRAME	GLASS	FITTINGS	BURGLAR BARS	IRONMONGERY
Standard "school type" galvanised mild steel top hung window. Manufactured, assembled and delivered to site complete with ironmongery comprising approved hinges, pivoting mechanisms, stays, fasteners and weathers bars to operable panels; plugged and screwed/ built into walling.	Standard "school type" galvanised mild steel window frame. Manufactured to comply with SABS 727. Frames to be factory primed with zinc phosphate primer to comply with SABS 1319 before delivery, and finished with one universal undercoat to comply with SABS 681 grade 1, finished with two coats alkyl enamel paint to comply with SABS 630. To manufacturer's specifications. Colour to Architect's approval.	4mm CLEAR float glazing fixed with putty to comply with SABS 680. The putty shall be delivered on site in sealed containers marked with the SABS mark.	FACTORY FITTED	STANDARD GALVANISED WELDED STEEL FITTINGS (INTERNAL) 12mm solid square bars fixed on frame with upright members and cross members fixed with temper proof fasteners on all four sides. To be painted to match existing window frame colour external and internal burglar bars according to SABS 1461. Architects to approve sample.	All ironmongery to be supplied by the manufacturer. Articles shall be fixed with screws of similar metal and shall be eased, oiled, adjusted and left in perfect order on completion.
Standard "school type" galvanised mild steel top hung window. Manufactured, assembled and delivered to site complete with ironmongery comprising approved hinges, pivoting mechanisms, stays, fasteners and weathers bars to operable panels; plugged and screwed/ built into walling.	Standard "school type" galvanised mild steel window frame. Manufactured to comply with SABS 727. Frames to be factory primed with zinc phosphate primer to comply with SABS 1319 before delivery, and finished with one universal undercoat to comply with SABS 681 grade 1, finished with two coats alkyl enamel paint to comply with SABS 630. To manufacturer's specifications. Colour to Architect's approval.	4mm OBSCURED float glazing fixed with putty to comply with SABS 680. The putty shall be delivered on site in sealed containers marked with the SABS mark.	FACTORY FITTED	STANDARD GALVANISED WELDED STEEL FITTINGS (INTERNAL) 12mm solid square bars fixed on frame with upright members and cross members fixed with temper proof fasteners on all four sides. To be painted to match existing window frame colour external and internal burglar bars according to SABS 1461. Architects to approve sample.	All ironmongery to be supplied by the manufacturer. Articles shall be fixed with screws of similar metal and shall be eased, oiled, adjusted and left in perfect order on completion.
Terracotta Airbricks	N/A	To Manufacturer	N/A	N/A	N/A

ISSUED FOR TENDER

LEGEND

- NEW WALLS
- EXISTING WALL TO BE RETAINED
- EXISTING WALL TO BE DEMOLISHED
- NEW FIXTURES & FITTING TO BE INSTALLED
- ITEMS IN RED AND (OR) DASHED LINES ARE TO BE REPAIRED AND (OR) REPLACED

NOTES
 ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED
 DIMENSIONS TO BE READ, NOT TO SCALED FROM THIS DRAWING
 CONTRATORS TO CONFIRM ALL DIMENSIONS ON SITE BEFORE CONSTRUCTION COMMENCES & ANY DISCREPANCY TO BE REPORTED TO THE PROJECT ARCHITECT

FINISHES LEGEND

CEILING FINISH (C) FLOOR FINISH (F)
 WALL FINISH (W) WALL SKIRTING FINISH (S)

SIGNATURE TABLE

DISCIPLINE	SIGN	DATE
CLIENT		
PLAN EXAMINER		
FIRE CONTROL		
ENVIRONMENTAL		
ROADS STORMWATER		
WATER & SANITATION		

0 JUL 21 FIRST ISSUE FOR TENDER
 REV. NO. | DATE | DESCRIPTION

REVISIONS

LIMPOPO
 PROVINCIAL GOVERNMENT
 REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE
 INSTITUTION
VALLAMBROSA PRIMARY - 918 511 500

RESTORATIONS, REPAIRS & ADDITIONS
 CONTRACT - SECTION
DOCUMENTATION & PROCUREMENT

DISCIPLINE: **ARCHITECTURAL** 4
 WORK DESCRIPTION - SUB DIVISION: **GRADE R 2 CLASSROOM BLOCK G2**
 DRAWING DESCRIPTION: **ELEVATIONS & WINDOW SCHEDULE**

DRG. NO.	107-04	04/08	ITEM No.
DESIGN	NA	KSN	DRAWN
SCALE	AS SHOWN	ES	CHECK
DATE	NOV 2019	A. SINKALA	PR. NUMBER: 24750409

DRAWING CO-ORDINATED

CONSULTANT
TECTURA PROJECTS

CAUTION: INFORMATION IS UNCLASSIFIED AND NOT FOR DISSEMINATION TO THE PUBLIC. THIS INFORMATION IS UNCLASSIFIED AND NOT FOR DISSEMINATION TO THE PUBLIC. THIS INFORMATION IS UNCLASSIFIED AND NOT FOR DISSEMINATION TO THE PUBLIC.

CONTRACTOR

CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REV
A1	LDPW - PROF/16002/G10	0

FINISHES LEGEND

FLOORS:

F1. PORCELAIN TILES - MATI (CORROSION RESISTANT & ANTI-SLIPPERY)

450x450 11.5mm kiln-dried floor tiles or similar approved by architects, fixed with adhesive, painted with finished waterproof jointing compound. Grouting to be grey, tiles should have expansion joint and aluminium edging strip.

F2. PORCELAIN TILES - MATI

600 x 600 x 10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds. With thickness/specification in strict compliance to manufacturer's instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3. CARPETILES

500mm x 500mm . 1005 PFK staple fibre carpet tiles to Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54824 on wira test and ISO body test at less than 20v at 25% RH on static electricity. Colour and pattern to architects approval.

F4. CEMENT SAND SCREED

30mm thick polished cement sand screed with 13mm Stone Nominal aggregate for Topping to comply with SABS 1083 or latest revision for concrete.

F5. EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVES

65mm thick multi-coloured concrete paves laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approval and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or Latest Revision.

F6. GRANITIC FINISH

22mm thick finished Granolithic finish composed of one part cement, one part fine sand, two parts coarse sand and one part granite that would pass through a 5mm mesh sieve laid by specialist in panels not exceeding 10m², divided with approved brass dividing strips. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour, pattern and aggregate size to architects approval.

F7. INTERLOCKING PAVES (GRID PAVING/VEHICULAR WAVS)

220mm x 193mm x 60 mm thick concrete interlocking paves, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8. SEMI FLEXIBLE VINYL SHEETING (CORROSION RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 581. With Static Dissipative Properties Throughout Thickness, Engineered for ISO or ISO (Anti-Static) Protection Vinyl Sheet, Laid on Self-Levelled Smooth Screed glued with conductive adhesive to SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polished Floor In Compliance With SABS 1042, Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity, Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9. GRAVEL FINISH ON SAND LAYER

30mm Gravel On Compacted Sand Layer Base as Per PFE Details installed in All Duct Chambers Accommodating Sanitary Services.

SKIRTING:

S1. HARDWOOD OR EQUAL AND APPROVED

18 x 75mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred corners with screws and plugs at centres not exceeding 400mm, and fixed with a 19mm x 19mm quadrant bedding, the skirting to be varnished with 3No. coats of egg shell clear varnish to comply with SABS/SANS 381 type 1.

S2. CERAMIC TILE SKIRTING

60mm wide x 100mm high x 7mm thick matt porcelain tile to comply with SABS 1449 laid with approved adhesives and grout on 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with cone base and height top. Complete with corner and top trims. Fittings to include, ribbed angle tiles where there is change of level. Colour and pattern to architects approval.

S3. CEMENT SAND SCREED

75 mm high x 20 mm thick hardened cement sand screed skirting covered at 50 mm dia. to form a continuous joint with the adjoining screed floor finish to FA's approval. All to be manufactured and installed in strict compliance With SABS 1083 or latest revision.

WALL FINISHES:

R1. FACE BRICK

FKX face brick in common running bond to comply with SABS 227 and forming part of the structural wall.

R2. EMULSION (PVA) PAINT - FULL HEIGHT

2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade 1, in accordance to manufacturer's instructions.

R3. ENAMEL PAINT

2 no. coats matt (egg shell) finish alkyl (jeromel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade 1, in accordance to manufacturer's instructions.

R4. GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of: 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification 'R5', laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification 'R2' To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5. CERAMIC WALL TILES - FULL HEIGHT

600mm x 300mm x 7mm thick high glazed ceramic tiles To Comply with SABS 22 or Latest revision, laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.

CEILING AND CORNICE:

C1: 7mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

7mm Gyproc Classic plasterboard ceiling OR EQUAL & APPROVED consisting of 1 layer Gyproc Rhino-board 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Ecopecifier listing) fixed to timber branding installed at maximum 300mm centres using Gyproc Rhino-board Sharp Point Grabber Screws 32mm at maximum 150mm centres. Apply, Gyproc Rhino-tape to all joints and skim the ceiling using Gyproc Rhino-tape.

C2: FIBRE CEMENT BOARDS (H-JOINTED)

6.4mm thick Gyproc Prestige 5 fibre cement ceiling boards OR EQUAL & APPROVED consisting of 1 layer Gyproc Rhino-board 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Ecopecifier listing, non-combustible to SANS 10177:5) fixed to Ek 38mm x 50mm timber branding installed at maximum 400mm centres using Gyproc Rhino-board Sharp Point Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 No. coats of super PVA external quality paint colour to PA's approval. Gyproc Rhino-tape to all joints and skim the ceiling using Gyproc Rhino-tape.

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

1200mm x 600mm x 15mm Gyproc Calceus Pte Prefinished or Fire Rated OR EQUAL & APPROVED laid into Dorn ceiling grid and secured into place using Dorn Hold Down Clips @ 200mm c/c; Dorn Wall Angle M6 fixed to the perimeter wall using fixings of 300mm centres. Dorn 138 Fr Main Tees @ 4mm thickness, 1150 g/m² coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Dorn TSBV (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Dorn Hanger Strap 19mm suitably fixed to the building structure members. Dorn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Dorn Hanger Strap 19mm suitably fixed to the building structure members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

Emulsion (PVA) Paint on Skimmed Plastered 250 No. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffits.

ROOF COVERING AND INSULATION:

R11: EMBOSSED ROOFING SHEET (TWO SIDES)

Roofing Sheets: 108mm thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with IS 595:07. The profile shall have three trapezoidal ribs at 200mm centres giving a roll cover of 456mm. The rib height shall be 41mm and provide cavity breaks. The male rib shall have an angle of 28mm centres to ensure a positive double interlocking action at side-laps. Each span shall incorporate two stiffener ribs. Profiled roofheets to be coated on both sides with "Global Coat" or "Chromalok Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as fixings and eave closes in strict compliance to manufacturer's instructions.

Insulation: SHALL EITHER BE: 1, where there are acoustic ceilings suspended board, a heavy duty Aluminium stator foil shall be installed AND 2, where the steel work is exposed, a 50mm 'Factoryboard' manufactured from noncombustible glass fibre and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m³ and finished with white metalized foil.

Galvanized Steel (GI) Gutter:

150mm Wide x 100mm Deep x 0.6mm Eave Gutter of Commercial Grade Steel With Class 2275 Galvanizing To Comply With SABS 934 or latest Revision Fixed to Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

Downpipes: 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class 2275 Galvanizing To Comply With SABS 934 or Latest Revision to be built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-lapping screws to Manufacturer Installation Instructions.

Facia board: 150 x 10 mm Fibre Cement Facia/Barge Board. Screw Fixed To Tuss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

CEILING PLAN: Scale 1:100.

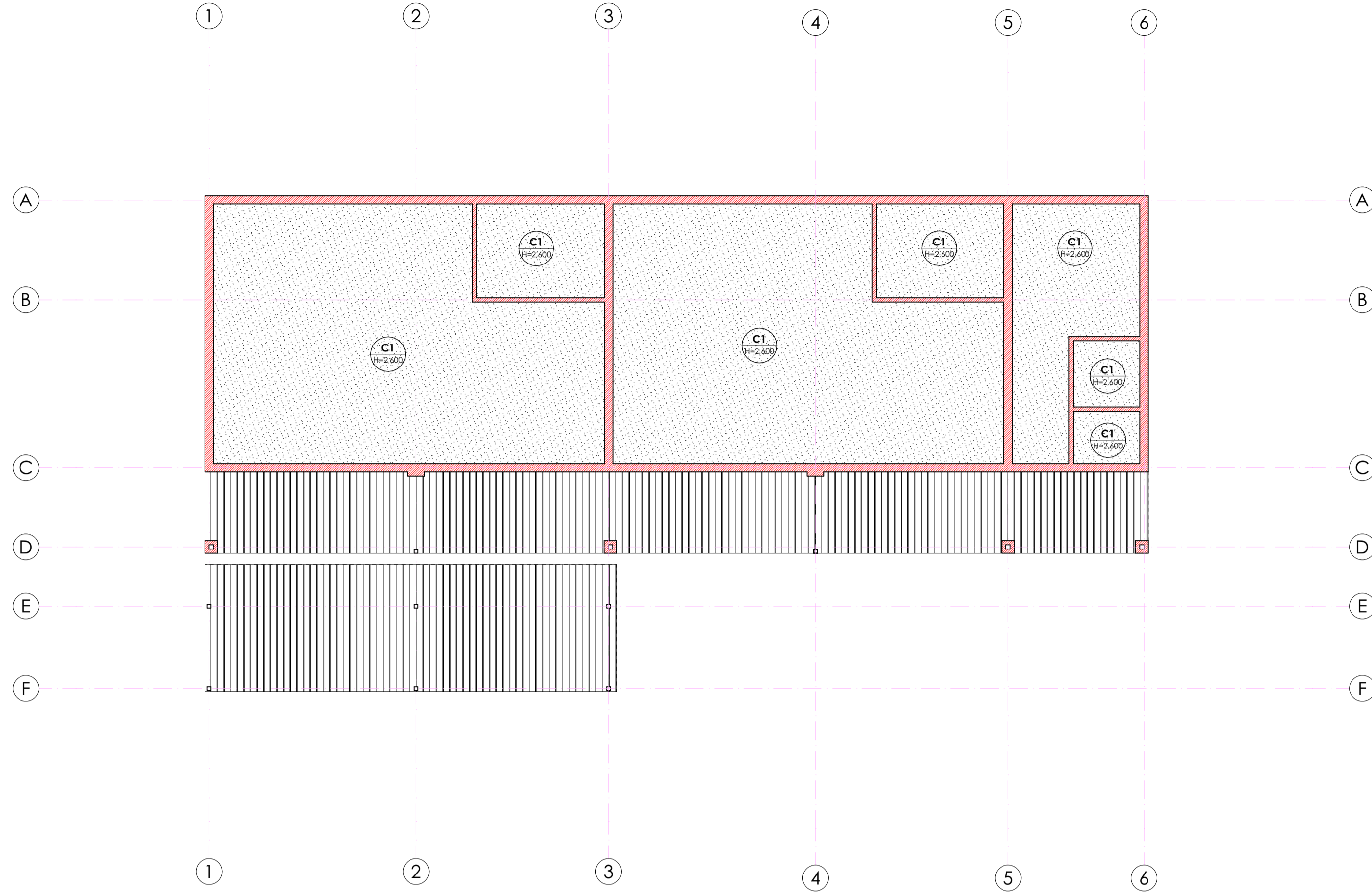


Table with 2 columns: Symbol and Description. Row 1: Dotted pattern for CEILING TYPE C1 GYPSUM BOARDS AS PER FINISHES SCHEDULE. Row 2: Horizontal lines for CEILING TYPE C2 FIBRE CEMENT BOARDS AS PER FINISHES SCHEDULE. Row 3: Dashed lines for CEILING TYPE C3 PATENT ACOUSTIC TILES PER FINISHES SCHEDULE. Row 4: Stippled pattern for CEILING TYPE C4 EMULSION PAINT ON SKIMMED SOFFIT AS PER FINISHES SCHEDULE. Row 5: Vertical lines for EXPOSED ROOFING SHEETS AS PER FINISHES SCHEDULE.

LEGEND

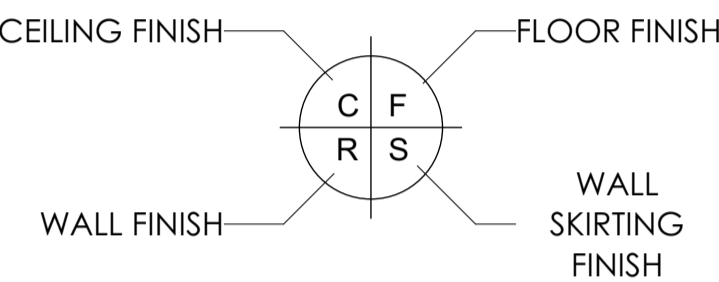
- NEW WALLS (Red line)
EXISTING WALL TO BE RETAINED (Grey line)
EXISTING WALL TO BE DEMOLISHED (Yellow line)
NEW FIXTURES & FITTING TO BE INSTALLED (Dashed line)
ITEMS IN RED AND (OR) DASHED LINES ARE TO BE REPAIRED AND (OR) REPLACED (Red and dashed lines)

NOTES: ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED

DIMENSIONS TO BE READ, NOT TO SCALED FROM THIS DRAWING

CONTRACTORS TO CONFIRM ALL DIMENSIONS ON SITE BEFORE CONSTRUCTION COMMENCES & ANY DISCREPANCY IS TO BE REPORTED TO THE PROJECT ARCHITECT

FINISHES LEGEND



SIGNATURE TABLE

Table with 3 columns: DISCIPLINE, SIGN, DATE. Rows for CLIENT, PLAN EXAMINER, FIRE CONTROL, ENVIRONMENTAL, ROADS | STORMWATER, WATER & SANITATION.

Table with 3 columns: REV. NO., DATE, DESCRIPTION. Includes a row for 'FIRST ISSUE FOR TENDER' dated JUL 21.



DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE

VALLAMBROSA PRIMARY - 918 511 500

RESTORATIONS, REPAIRS & ADDITIONS DOCUMENTATION & PROCUREMENT

ARCHITECTURAL 4

GRADE R 2 CLASSROOM BLOCK G2

FLOOR PLAN & CEILING LAYOUT

Table with 4 columns: DRG No., DESIGN, DATE, RESPONSIBLE PROFESSIONAL. Includes details for 107-01, NA, 01/08, and KSN.

Table with 4 columns: DATE, NAME, SIGN, PR. NUMBER. Includes details for NOV 2019, A. SINKALA, and PR. NUMBER 24750409.

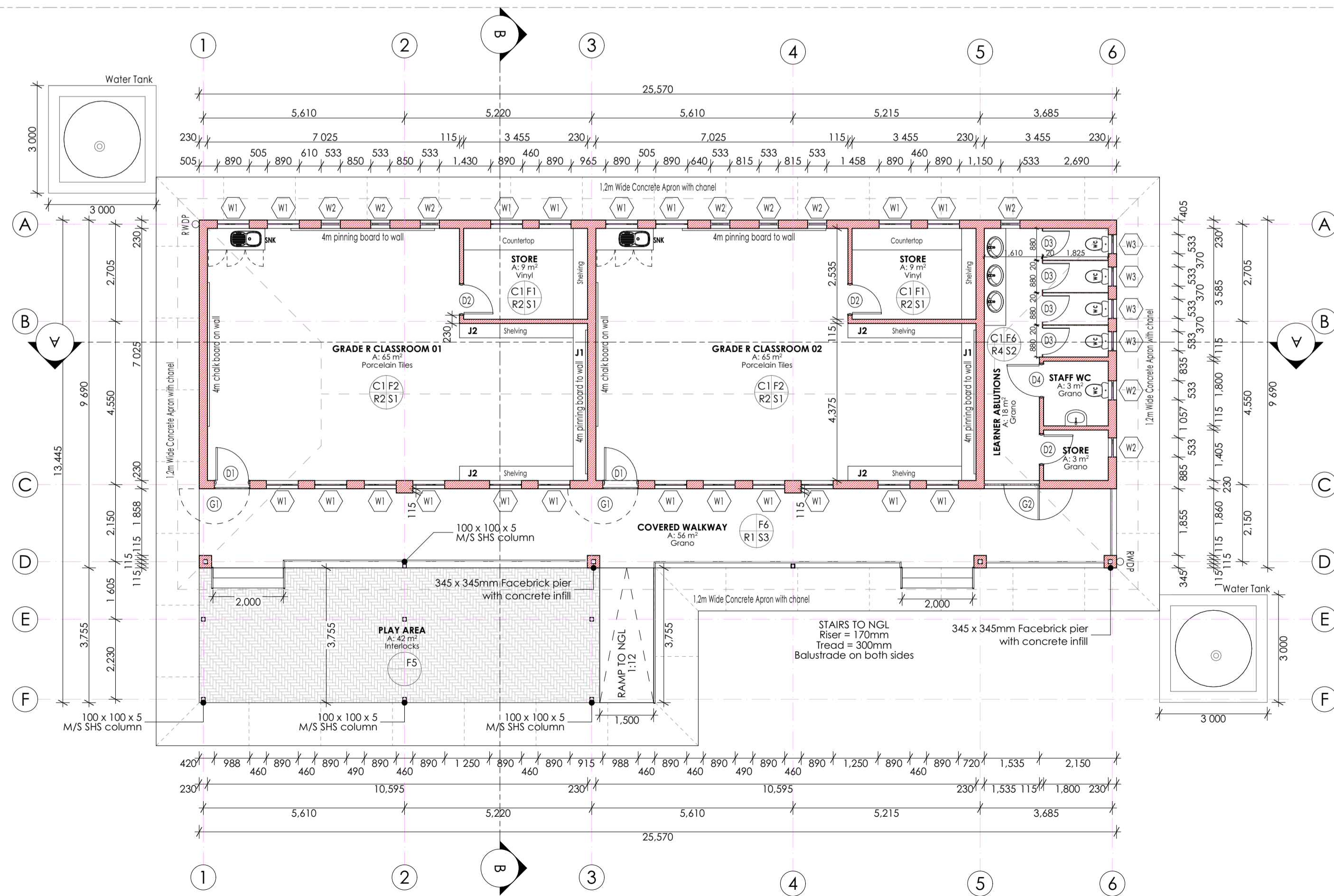
DRAWING CO-ORDINATED

Consultant information for TECTURA PROJECTS, including contact details for Gauteng, Northwest, and Northern Cape provinces.

CONTRACTOR

Table with 3 columns: CAD SYSTEM, SIZE, FILE NAME. Includes details for AUTOCAD, LDPW - PROF/16002/G10, and REV 0.

FLOOR PLAN: Scale 1:100.



FINISHES LEGEND

FLOOR FINISHES:
F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slip)
 300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles to SABS Specification 581: 1992 (or later revision), and laid to SABS 070 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Filings to include, ribbed angle files where there is a change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Slits Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.
F2: PORCELAIN TILES - MAT
 600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds with Thickness/Specification in strict compliance to manufacturers instructions and SABS Specification. Filings to include, ribbed angle files where there is a change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Slits Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.
F3: CARPET Tiles
 300mm x 300mm, 100% PEX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with BS 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and BS 5424 on wire test and 50 body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.

F4: CEMENT SAND SCREED
 30mm thick precast cement sand screed with 13mm Stone Nominal aggregate for topping to comply with SABS 1083 or latest revision for concrete.
F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS
 60mm thick multi-coloured concrete pavers laid on sand bedding to civil/structural engineer's specification in approved pattern and approved to approval and graded in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or Latest Revision.
F6: GRANULITIC FINISH
 22mm thick unsealed Granulitic finish composed of one part cement, one part fine sand, two parts coarse sand and one part granite that would pass through a 5mm mesh sieve laid by specialist in panels not exceeding 10m2, divided with approved brass dividing strips. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour, pattern and aggregate size to architects approval.

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)
 220mm x 191mm x 80 mm thick concrete interlocking pavers, 23 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a herringbone pattern to the Architect's approval.
F8: SEMI FLEXIBLE VINYL SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)
 2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586. With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (Anti-static) Protection Vinyl Sheet, Laid on Self-Levelled Smooth Screed glued with conductive adhesive to SABS 070 or Latest Revision in Accordance to Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap, Clean & Polish Floor in Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER
 30mm Gravel On Compacted Sand Layer Base as Per PE Details Installed in All Duct Chambers Accommodating Sanitary Services.
SKIRTING:
S1: HARDWOOD OR EQUAL AND APPROVED
 18x 75mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and milled corners with screws and plugs of centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant beading. The skirting to be varnished with 3no. coats of egg shell clear varnish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING
 600mm wide x 100mm high x 7mm thick matt porcelain tile to comply with SABS 1449 laid with approved adhesives and grout on 20mm thick screeds in strict compliance to manufacturers instructions and SABS specification, with Cove base and straight tops. Complete with corner and top trims. Filings to include, ribbed angle files where there is a change of level. Colour and pattern to architects approval.
S3: CEMENT SAND SCREED
 75mm high 20mm thick hardened cement sand screed skirting covered at 50 mm dia. to form a continuous joint with the adjoining screed floor finish to PA's approval. All to be manufactured and installed in strict compliance with SABS 1083 or latest revision.

WALL FINISHES:
W1: FACE BRICK
 F8 Face brick in common running bond to comply with SABS 227 and forming part of the structural wall.
W2: EMULSION (PAVA) PAINT - FULL HEIGHT
 2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 881 grade (I), in accordance to manufacturer's instructions.
W3: ACRYLIC EMULSION PAINT
 2 no. coats matt (egg shell) finish acrylic (enamel) paint to SABS 650, type 2 applied on plastered surfaces with 1 no coat alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 881 grade (I), in accordance to manufacturer's instructions.
W4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COLOUR
 Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'K5', laid on 15 mm thick plaster prepared to receive wall tile finish with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL, paint to specification 'K5' to comply with SABS 530 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

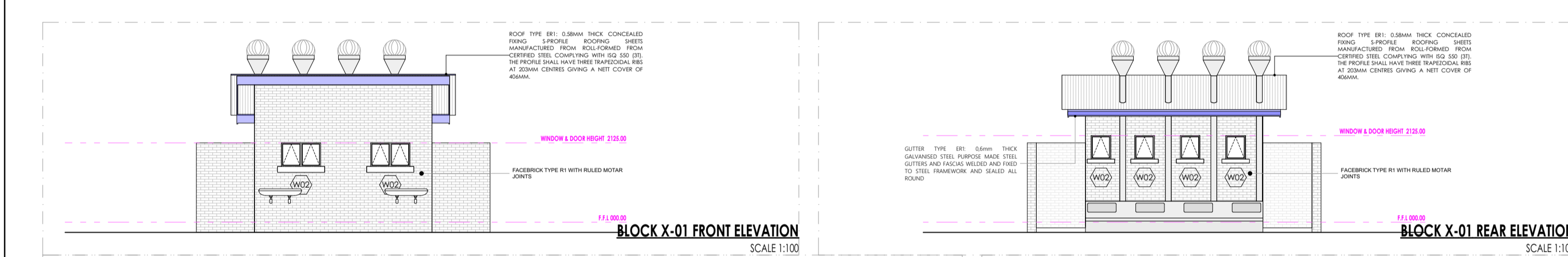
W5: CERAMIC WALL TILES - FULL HEIGHT
 600mm x 300mm x 7mm thick high glazed ceramic tiles to comply with SABS 22 or Latest revision, laid on 15 mm thick plaster prepared to receive wall tile finish with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.
CEILING AND CORNICE:
C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED
 GyroCell Classic gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Escapeflex listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc RhinoBoard Snap Nail Grabber Screws 32mm at 150mm centres. Apply Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoTape.
C2: FIBRE CEMENT BOARDS (IN JOINTS)
 6mm thick GyroCell Prestige 1 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Escapeflex listing, non-combustible to SANS 10171:5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc RhinoBoard Snap Nail Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 no. coats of super PVA external quality paint colour to PA's approval. Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoTape.
C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED
 1200mm x 600mm X 15mm Gyproc Calotex Pin Perforated or Fire Rated OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips 8 x 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn 138 FR Main Tees (8mm thickness, 2150 galvan. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn 138V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strip 19mm suitably fixed to the building structural members, Donn Galvanized Hanger Strip 19mm at maximum 150mm on both sides of the file notch. All file notches to be in file. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strip 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.
C4: EMULSION (PAVA) PAINT OR EQUAL AND APPROVED
 Emulsion (PVA) Paint on skimmed Plastered S&S 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab.

ROOF COVERING AND INSULATION:
R1: EMBOSSED ROOFING SHEET (TWO SIDES)
Roofing Sheet: 0.58mm Thick concealed fixing sheets manufactured from roll-formed from certified steel complying with ISO 530 (30). The profile shall have three trapezoidal ribs at 203mm centres giving a net cover of 406mm. The rib height shall be 41mm and provide copillary drains. The mole rib shall have gussets of 283mm centres to ensure a positive double interlocking action at side-laps. Each span shall incorporate two stiffener ribs. Profiled roofbolts to be coated on both sides with "Global Coat" or Chromadek COAT and laid on structural members structure incorporating all necessary accessories such as fixings and eave covers in strict compliance to manufacturer's instructions.
Insulation: SHALL (TYPE B): Where there are acoustic ceilings suspended board, a heavy duty Aluminium insulation foil shall be installed AND 2: where the steel work is exposed, a 50mm 'Tactoboard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m³ and finished with white melisole foil.
Galvanized Steel (GI) Gutter: 150mm wide x 110mm Deep x 4.6mm Envek Gutter of Commercial Grade Steel With Class Z275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.
Damp Proof: 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing To Comply With SABS 934 or Latest Revision to be built into walls or cast in concrete columns laid to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation Instructions.
Facia board: 250 x 110 mm Fibre Cement Facia/Barge Board, Screw Fixed To Truss Ends & Counter Balten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

DOOR SCHEDULE:

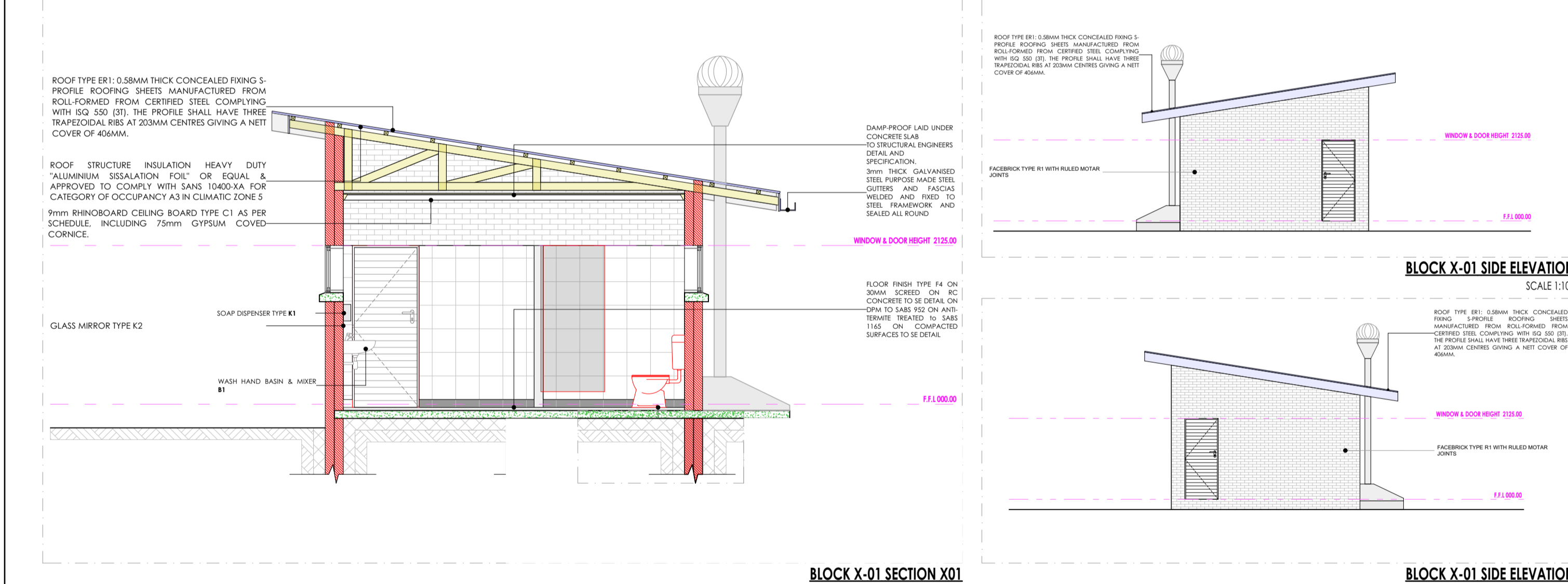
EXTERIOR DOOR		BURGULAR DOOR (SINGLE)	INTERIOR DOOR		
QUANTITY	01	QUANTITY	02	QUANTITY	02
DOOR DESCRIPTION	813 x 2032 x 44mm THICK HEAVY DUTY EXTERIOR QUALITY HORIZONTAL SLATED DOUBLE SIDED SALIGNA DOOR FITTED TO COMPLY WITH SABS 545 EXTERIOR GRADE OR LATEST REVISION.	DOOR DESCRIPTION	PAINTED GALVANIZED MILD STEEL GATE CONSISTING OF 10 x 10mm MILD STEEL BARS PLACED AT 100mm CENTRES AT A 90° ANGLE. INCLUDING SECURITY MESH. COLOR TO ARCHITECTS SPECIFICATION TO COMPLY WITH SABS 681. GRADE 01 AND FINISH WITH TWO COATS ALTYDE EGG-SHELL PAINT TO COMPLY WITH SABS 430.	DOOR DESCRIPTION	813 x 2032 x 44mm THICK INTERIOR GRADE FLUSH HOLLOW CORE SINGLE TIMBER DOOR WITH 3mm PLY ON BOTH SIDES WITH 2 CONSOLIDATED EDGES FITTED TO COMPLY WITH SABS 545 IN PRESSED STEEL FRAME. ALL PAINTED TO ARCHITECTS COLOR SCHEDULE
FRAME	STANDARD 1.6mm IN DOUBLE REBATE PRESSED MILD STEEL DOOR FRAME WITH WALL MATCHING PROFILE IN COMPLIANCE WITH SABS 1129 OR THE LATEST VERSION COMPLETE WITH LUGS & FIXTURES TO ACCOMMODATE 840 x 1910 DOOR LEAF	FRAME	50 x 50mm GALVANIZED MILD STEEL SQUARE WELDED TO FORM FRAME	FRAME	STANDARD 1.6mm IN DOUBLE REBATE PRESSED MILD STEEL DOOR FRAME WITH WALL MATCHING PROFILE IN COMPLIANCE WITH SABS 1129 OR THE LATEST VERSION COMPLETE WITH LUGS & FIXTURES TO ACCOMMODATE 840 x 1910 DOOR LEAF
FRAME FINISH	WASHABLE ENAMEL PAINT FINISH AS PER SABS 723 FOR PRIMER, SABS 681 FOR UNDERCOAT & SABS 630 TYPE 02 FOR FINISH COAT. COLOR TO ARCHITECTS APPROVAL	FRAME FINISH	1 x COAT ZINC CHROMATE PRIMER 2 x COATS GLOSS ENAMEL (EXTERIOR QUALITY)	FRAME FINISH	WASHABLE ENAMEL PAINT FINISH AS PER SABS 723 FOR PRIMER, SABS 681 FOR UNDERCOAT & SABS 630 TYPE 02 FOR FINISH COAT. COLOR TO ARCHITECTS APPROVAL
DOOR FINISH	APPLY 3no. CLEAR EGG-SHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, 1TH DOWN FIRST COAT WITH MINERAL TURPENTINE AS PER MANUFACTURER INSTRUCTIONS, ALLOWING EACH COAT TO DRY OVERNIGHT. APPLY WOOD PRESERVATIVE TO EXPOSED EXTERIOR WOOD TO SATURATE THE SURFACE, WITH EACH COAT SOAKING IN BEFORE DRYING COATS. APPLY UNTIL NO FURTHER SOAKING TAKES PLACE	FRAME FINISH	PAINTED MILD STEEL GATE CONSISTING OF 10 x 10mm MILD STEEL BARS PLACED AT 100 mm AT CENTRES AT A 90° ANGLE. INCLUDING SECURITY MESH TO COMPLY WITH SABS 681. GRADE 01 & FINISH WITH 2 COATS ALTYDE EGG-SHELL PAINT TO COMPLY WITH SABS 430. COLOR TO ARCHITECTS SPECIFICATION	DOOR FINISH	APPLY 3no. CLEAR EGG-SHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, 1TH DOWN FIRST COAT WITH MINERAL TURPENTINE AS PER MANUFACTURER INSTRUCTIONS, ALLOWING EACH COAT TO DRY OVERNIGHT. APPLY WOOD PRESERVATIVE TO EXPOSED EXTERIOR WOOD TO SATURATE THE SURFACE, WITH EACH COAT SOAKING IN BEFORE DRYING COATS. APPLY UNTIL NO FURTHER SOAKING TAKES PLACE
IRON MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS	IRON MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS	IRON MONGERY	DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS
HINGES	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES	HINGES	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES	HINGES	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES

BLOCK X-01 DOOR SCHEDULE
SCALE: 1:100



BLOCK X-01 FRONT ELEVATION
SCALE: 1:100

BLOCK X-01 REAR ELEVATION
SCALE: 1:100



BLOCK X-01 SECTION X-01
SCALE: 1:50

BLOCK X-01 SIDE ELEVATION
SCALE: 1:100

W1: FACE BRICK
 F8 Face brick in common running bond to comply with SABS 227 and forming part of the structural wall.
W2: EMULSION (PAVA) PAINT - FULL HEIGHT
 2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 881 grade (I), in accordance to manufacturer's instructions.
W3: ACRYLIC EMULSION PAINT
 2 no. coats matt (egg shell) finish acrylic (enamel) paint to SABS 650, type 2 applied on plastered surfaces with 1 no coat alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 881 grade (I), in accordance to manufacturer's instructions.
W4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COLOUR
 Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'K5', laid on 15 mm thick plaster prepared to receive wall tile finish with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL, paint to specification 'K5' to comply with SABS 530 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

W5: CERAMIC WALL TILES - FULL HEIGHT
 600mm x 300mm x 7mm thick high glazed ceramic tiles to comply with SABS 22 or Latest revision, laid on 15 mm thick plaster prepared to receive wall tile finish with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.
CEILING AND CORNICE:
C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED
 GyroCell Classic gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Escapeflex listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc RhinoBoard Snap Nail Grabber Screws 32mm at 150mm centres. Apply Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoTape.
C2: FIBRE CEMENT BOARDS (IN JOINTS)
 6mm thick GyroCell Prestige 1 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Escapeflex listing, non-combustible to SANS 10171:5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc RhinoBoard Snap Nail Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 no. coats of super PVA external quality paint colour to PA's approval. Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoTape.
C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED
 1200mm x 600mm X 15mm Gyproc Calotex Pin Perforated or Fire Rated OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips 8 x 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn 138 FR Main Tees (8mm thickness, 2150 galvan. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn 138V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strip 19mm suitably fixed to the building structural members, Donn Galvanized Hanger Strip 19mm at maximum 150mm on both sides of the file notch. All file notches to be in file. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strip 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.
C4: EMULSION (PAVA) PAINT OR EQUAL AND APPROVED
 Emulsion (PVA) Paint on skimmed Plastered S&S 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab.

ROOF COVERING AND INSULATION:
R1: EMBOSSED ROOFING SHEET (TWO SIDES)
Roofing Sheet: 0.58mm Thick concealed fixing sheets manufactured from roll-formed from certified steel complying with ISO 530 (30). The profile shall have three trapezoidal ribs at 203mm centres giving a net cover of 406mm. The rib height shall be 41mm and provide copillary drains. The mole rib shall have gussets of 283mm centres to ensure a positive double interlocking action at side-laps. Each span shall incorporate two stiffener ribs. Profiled roofbolts to be coated on both sides with "Global Coat" or Chromadek COAT and laid on structural members structure incorporating all necessary accessories such as fixings and eave covers in strict compliance to manufacturer's instructions.
Insulation: SHALL (TYPE B): Where there are acoustic ceilings suspended board, a heavy duty Aluminium insulation foil shall be installed AND 2: where the steel work is exposed, a 50mm 'Tactoboard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m³ and finished with white melisole foil.
Galvanized Steel (GI) Gutter: 150mm wide x 110mm Deep x 4.6mm Envek Gutter of Commercial Grade Steel With Class Z275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.
Damp Proof: 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing To Comply With SABS 934 or Latest Revision to be built into walls or cast in concrete columns laid to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation Instructions.
Facia board: 250 x 110 mm Fibre Cement Facia/Barge Board, Screw Fixed To Truss Ends & Counter Balten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

W1: FACE BRICK
 F8 Face brick in common running bond to comply with SABS 227 and forming part of the structural wall.
W2: EMULSION (PAVA) PAINT - FULL HEIGHT
 2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 881 grade (I), in accordance to manufacturer's instructions.
W3: ACRYLIC EMULSION PAINT
 2 no. coats matt (egg shell) finish acrylic (enamel) paint to SABS 650, type 2 applied on plastered surfaces with 1 no coat alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 881 grade (I), in accordance to manufacturer's instructions.
W4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COLOUR
 Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'K5', laid on 15 mm thick plaster prepared to receive wall tile finish with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL, paint to specification 'K5' to comply with SABS 530 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

W5: CERAMIC WALL TILES - FULL HEIGHT
 600mm x 300mm x 7mm thick high glazed ceramic tiles to comply with SABS 22 or Latest revision, laid on 15 mm thick plaster prepared to receive wall tile finish with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.
CEILING AND CORNICE:
C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED
 GyroCell Classic gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Escapeflex listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc RhinoBoard Snap Nail Grabber Screws 32mm at 150mm centres. Apply Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoTape.
C2: FIBRE CEMENT BOARDS (IN JOINTS)
 6mm thick GyroCell Prestige 1 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Escapeflex listing, non-combustible to SANS 10171:5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc RhinoBoard Snap Nail Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 no. coats of super PVA external quality paint colour to PA's approval. Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoTape.
C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED
 1200mm x 600mm X 15mm Gyproc Calotex Pin Perforated or Fire Rated OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips 8 x 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn 138 FR Main Tees (8mm thickness, 2150 galvan. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn 138V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strip 19mm suitably fixed to the building structural members, Donn Galvanized Hanger Strip 19mm at maximum 150mm on both sides of the file notch. All file notches to be in file. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strip 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.
C4: EMULSION (PAVA) PAINT OR EQUAL AND APPROVED
 Emulsion (PVA) Paint on skimmed Plastered S&S 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab.

ROOF COVERING AND INSULATION:
R1: EMBOSSED ROOFING SHEET (TWO SIDES)
Roofing Sheet: 0.58mm Thick concealed fixing sheets manufactured from roll-formed from certified steel complying with ISO 530 (30). The profile shall have three trapezoidal ribs at 203mm centres giving a net cover of 406mm. The rib height shall be 41mm and provide copillary drains. The mole rib shall have gussets of 283mm centres to ensure a positive double interlocking action at side-laps. Each span shall incorporate two stiffener ribs. Profiled roofbolts to be coated on both sides with "Global Coat" or Chromadek COAT and laid on structural members structure incorporating all necessary accessories such as fixings and eave covers in strict compliance to manufacturer's instructions.
Insulation: SHALL (TYPE B): Where there are acoustic ceilings suspended board, a heavy duty Aluminium insulation foil shall be installed AND 2: where the steel work is exposed, a 50mm 'Tactoboard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m³ and finished with white melisole foil.
Galvanized Steel (GI) Gutter: 150mm wide x 110mm Deep x 4.6mm Envek Gutter of Commercial Grade Steel With Class Z275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.
Damp Proof: 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing To Comply With SABS 934 or Latest Revision to be built into walls or cast in concrete columns laid to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation Instructions.
Facia board: 250 x 110 mm Fibre Cement Facia/Barge Board, Screw Fixed To Truss Ends & Counter Balten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

W1: FACE BRICK
 F8 Face brick in common running bond to comply with SABS 227 and forming part of the structural wall.
W2: EMULSION (PAVA) PAINT - FULL HEIGHT
 2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 881 grade (I), in accordance to manufacturer's instructions.
W3: ACRYLIC EMULSION PAINT
 2 no. coats matt (egg shell) finish acrylic (enamel) paint to SABS 650, type 2 applied on plastered surfaces with 1 no coat alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 881 grade (I), in accordance to manufacturer's instructions.
W4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COLOUR
 Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'K5', laid on 15 mm thick plaster prepared to receive wall tile finish with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL, paint to specification 'K5' to comply with SABS 530 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

W5: CERAMIC WALL TILES - FULL HEIGHT
 600mm x 300mm x 7mm thick high glazed ceramic tiles to comply with SABS 22 or Latest revision, laid on 15 mm thick plaster prepared to receive wall tile finish with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.
CEILING AND CORNICE:
C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED
 GyroCell Classic gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Escapeflex listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc RhinoBoard Snap Nail Grabber Screws 32mm at 150mm centres. Apply Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoTape.
C2: FIBRE CEMENT BOARDS (IN JOINTS)
 6mm thick GyroCell Prestige 1 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Escapeflex listing, non-combustible to SANS 10171:5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc RhinoBoard Snap Nail Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 no. coats of super PVA external quality paint colour to PA's approval. Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoTape.
C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED
 1200mm x 600mm X 15mm Gyproc Calotex Pin Perforated or Fire Rated OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips 8 x 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn 138 FR Main Tees (8mm thickness, 2150 galvan. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn 138V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strip 19mm suitably fixed to the building structural members, Donn Galvanized Hanger Strip 19mm at maximum 150mm on both sides of the file notch. All file notches to be in file. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strip 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.
C4: EMULSION (PAVA) PAINT OR EQUAL AND APPROVED
 Emulsion (PVA) Paint on skimmed Plastered S&S 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab.

ROOF COVERING AND INSULATION:
R1: EMBOSSED ROOFING SHEET (TWO SIDES)
Roofing Sheet: 0.58mm Thick concealed fixing sheets manufactured from roll-formed from certified steel complying with ISO 530 (30). The profile shall have three trapezoidal ribs at 203mm centres giving a net cover of 406mm. The rib height shall be 41mm and provide copillary drains. The mole rib shall have gussets of 283mm centres to ensure a positive double interlocking action at side-laps. Each span shall incorporate two stiffener ribs. Profiled roofbolts to be coated on both sides with "Global Coat" or Chromadek COAT and laid on structural members structure incorporating all necessary accessories such as fixings and eave covers in strict compliance to manufacturer's instructions.
Insulation: SHALL (TYPE B): Where there are acoustic ceilings suspended board, a heavy duty Aluminium insulation foil shall be installed AND 2: where the steel work is exposed, a 50mm 'Tactoboard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m³ and finished with white melisole foil.
Galvanized Steel (GI) Gutter: 150mm wide x 110mm Deep x 4.6mm Envek Gutter of Commercial Grade Steel With Class Z275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.
Damp Proof: 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing To Comply With SABS 934 or Latest Revision to be built into walls or cast in concrete columns laid to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation Instructions.
Facia board: 250 x 110 mm Fibre Cement Facia/Barge Board, Screw Fixed To Truss Ends & Counter Balten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

W1: FACE BRICK
 F8 Face brick in common running bond to comply with SABS 227 and forming part of the structural wall.
W2: EMULSION (PAVA) PAINT - FULL HEIGHT
 2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 881 grade (I), in accordance to manufacturer's instructions.
W3: ACRYLIC EMULSION PAINT
 2 no. coats matt (egg shell) finish acrylic (enamel) paint to SABS 650, type 2 applied on plastered surfaces with 1 no coat alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 881 grade (I), in accordance to manufacturer's instructions.
W4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COLOUR
 Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'K5', laid on 15 mm thick plaster prepared to receive wall tile finish with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL, paint to specification 'K5' to comply with SABS 530 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

W5: CERAMIC WALL TILES - FULL HEIGHT
 600mm x 300mm x 7mm thick high glazed ceramic tiles to comply with SABS 22 or Latest revision, laid on 15 mm thick plaster prepared to receive wall tile finish with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.
CEILING AND CORNICE:
C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED
 GyroCell Classic gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Escapeflex listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc RhinoBoard Snap Nail Grabber Screws 32mm at 150mm centres. Apply Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoTape.
C2: FIBRE CEMENT BOARDS (IN JOINTS)
 6mm thick GyroCell Prestige 1 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Escapeflex listing, non-combustible to SANS 10171:5) fixed to EX 38mm x 50mm timber bracing

FINISHES LEGEND

FLOORS:

F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slip) 300 x 300 x 2.0mm thick (colour type to architect's approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles to SABS Specification S81: 1992 (or later revision), and laid to SABS 070 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Fillings to include, ribbed angle files where there is a change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F2: PORCELAIN TILES - MAT 600 x 600 x 10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds. With Thickness/Specification in strict compliance to manufacturer's specifications and SABS Specification. Fillings to include, ribbed angle files where there is a change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals. As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CERAMIC TILES - GLOSS 300mm x 300mm, 100% PXX stajple fibre caplet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof jute backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and BS 5426 on wire test and SO body test at less than 2kv at 25Hz RF on static electricity. Colour and pattern to architect's approval.

F4: CEMENT SAND SCREED 30mm thick potted cement sand screed with 13mm Stone Nominal aggregate for topping to comply with SABS 1083 or latest revision for concrete.

F5: EXTERIOR MULTI-COLOURED CONCRETE INTERLOCKING PAVING 65mm thick multi-coloured concrete pavers laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approved and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or latest revision.

F6: GRANULITE FINISH 22mm thick unsealed Granulite finish composed of one part cement, one part fine sand, two parts coarse sand and one part granite that would pass through a 5mm mesh sieve laid by specialist in panels not exceeding 10m2, divided with approved brass dividing strips. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour, pattern and aggregate size to architect's approval.

F7: INTERLOCKING PAVING (RIGID PAVING/VEHICULARWAYS) 220mm x 197mm x 80mm thick concrete interlocking paving, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI-FLEXIBLE VINYL SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY) 2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS S86. With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self-Leveled Smooth Screed glued with conductive adhesive to SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation, Contractor to provide Certificate of Static Current Conductivity, Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER 30mm Gravel On Compacted Sand Layer Base as Per PE Details Installed In All Duct Chambers Accommodating Sanitary Services.

SKIRTING:
S1: HARDWOOD OR EQUAL AND APPROVED 18 x 75mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with spigoted heading joints and mitred corners with screws and plugs of centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant beading. The skirting to be varnished with 3no. coats of egg shell clear varnish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING 600mm wide x 1000mm high x 7mm thick matt porcelain tile to comply with SABS 1449 laid with approved adhesives and grout on 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with Cove base and straight tops. Complete with corner and top trim. Fillings to include, ribbed angle files where there is a change of level. Colour and pattern to architect's approval.

S3: CEMENT SAND SCREED 75mm high x 20mm thick hardened cement sand screed skirting covered at 50mm dia. to form a continuous joint with the adjoining screed floor finish to PA's approval. All to be manufactured and installed in strict compliance With SABS 1083, or latest revision.

WALL FINISHES:

F1: FACE BRICK F18 face brick in common bonding to comply with SABS 227 and forming part of the structural work.

F2: EMULSION (PVA) PAINT - FULL HEIGHT 2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade 1, in accordance to manufacturer's instructions.

F3: ALKID ENAMEL PAINT 2 no. coats matt (egg shell / finish alkyd / enamel) paint to SABS 650, type 2 applied on plastered surfaces with 1 no coat alkid resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade 1, in accordance to manufacturer's instructions.

F4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'R5', laid on 15mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification 'R2' To Comply with SABS 650 or latest revision applied from 2100mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

F5: CERAMIC WALL TILES - FULL HEIGHT 600mm x 300mm x 7mm thick high glazed ceramic tiles to comply with SABS 222 or latest revision, laid on 15mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 222 standard. All to be manufactured and installed in strict compliance SABS 222 Standard.

CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED Gyproc Classic gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc Rhinobond 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc Rhinobond Snap Pliers 30mm at maximum 150mm centres. Apply Gyproc Rhinobond to all joints and skim the ceiling using Gyproc Rhinobond.

C2: FIBRE CEMENT BOARDS (R-JOINTS) 6mm thick Gyproc Cast Finish fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc Rhinobond 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing, non-combustible to SANS 10171/5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc Rhinobond Snap Pliers Grabbers Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 no. coats of super PVA external quality paint colour to PA's approval. Gyproc Rhinobond to all joints and skim the ceiling using Gyproc Rhinobond.

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED 1200mm x 600mm X 15mm Gyproc Calotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fittings at 300mm centres. Donn T38 FR Main Tees (8.4mm thickness, 2150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the file notch. All the file notches to be in file. Suspend a full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 603 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4: EMULSION (PVA) PAINT OR EQUAL AND APPROVED Tensarj Paint (Non-Stimmed) Professional Spec 3no. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab.

ROOF COVERING AND INSULATION:

R1: EMBOSSING ROOFING SHEET (TWO SIDES) Roofing Sheet: 0.8mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 550 (3). The profile shall have three trapezoidal ribs at 200mm centres giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The mole rib shall have spurs of 28mm centres to ensure a positive double interlocking action at side-laps. Each span shall incorporate two stiffener ribs. Profiled roof sheets to be coated on both sides with 'Global Coat' or 'Chromolok' coating and laid on structural members/steel structure incorporating all necessary accessories such as fixings and eave covers in strict compliance to manufacturer's instructions.

R2: SMALL GRID RE-: 1 where there are acoustic ceilings suspended board, a heavy duty 'Aluminium isolation foil' shall be installed AND 2 where the steel work is exposed, a 300mm 'FastonBoard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m² and finished with white melisolate foil.

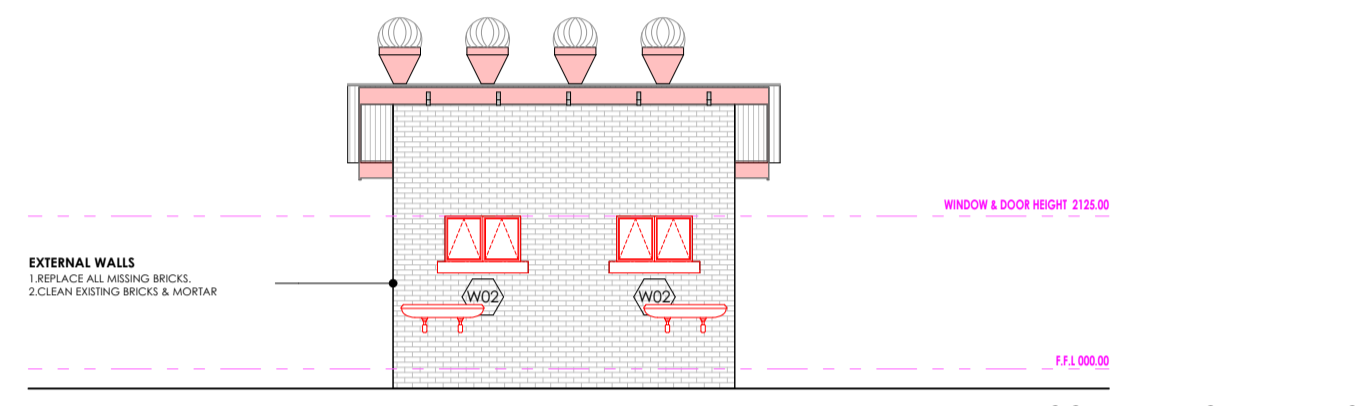
Galvanized Steel Gully Grate: 150mm Wide x 100mm Deep x 6.5mm Even Gully of Commercial Grade With Class Z275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Downpipes.

Dampstop: 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing To Comply With SABS 934 or latest Revision to be built into walls or cast in concrete columns laid to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation Instructions.

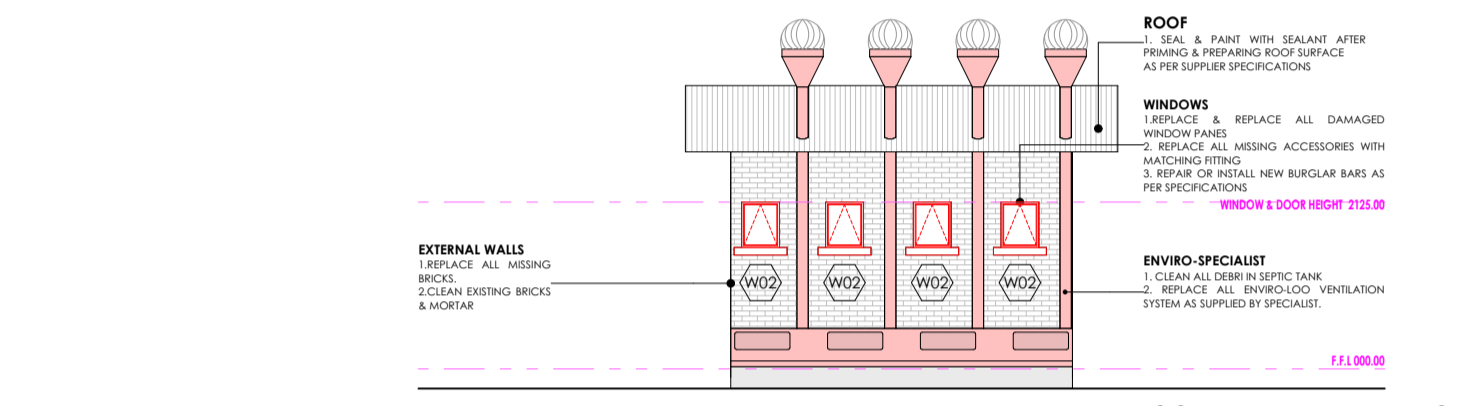
Facia board: 250 x 10 x 10mm Fibre-Cement Facia/Barge Board. Screw Fixed To Tuss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

DOOR SCHEDULE table with columns for Exterior Door, Burglar Door (Single), and Interior Door. Includes quantities, door descriptions, frames, finishes, door finishes, ironmongery, and hinges.

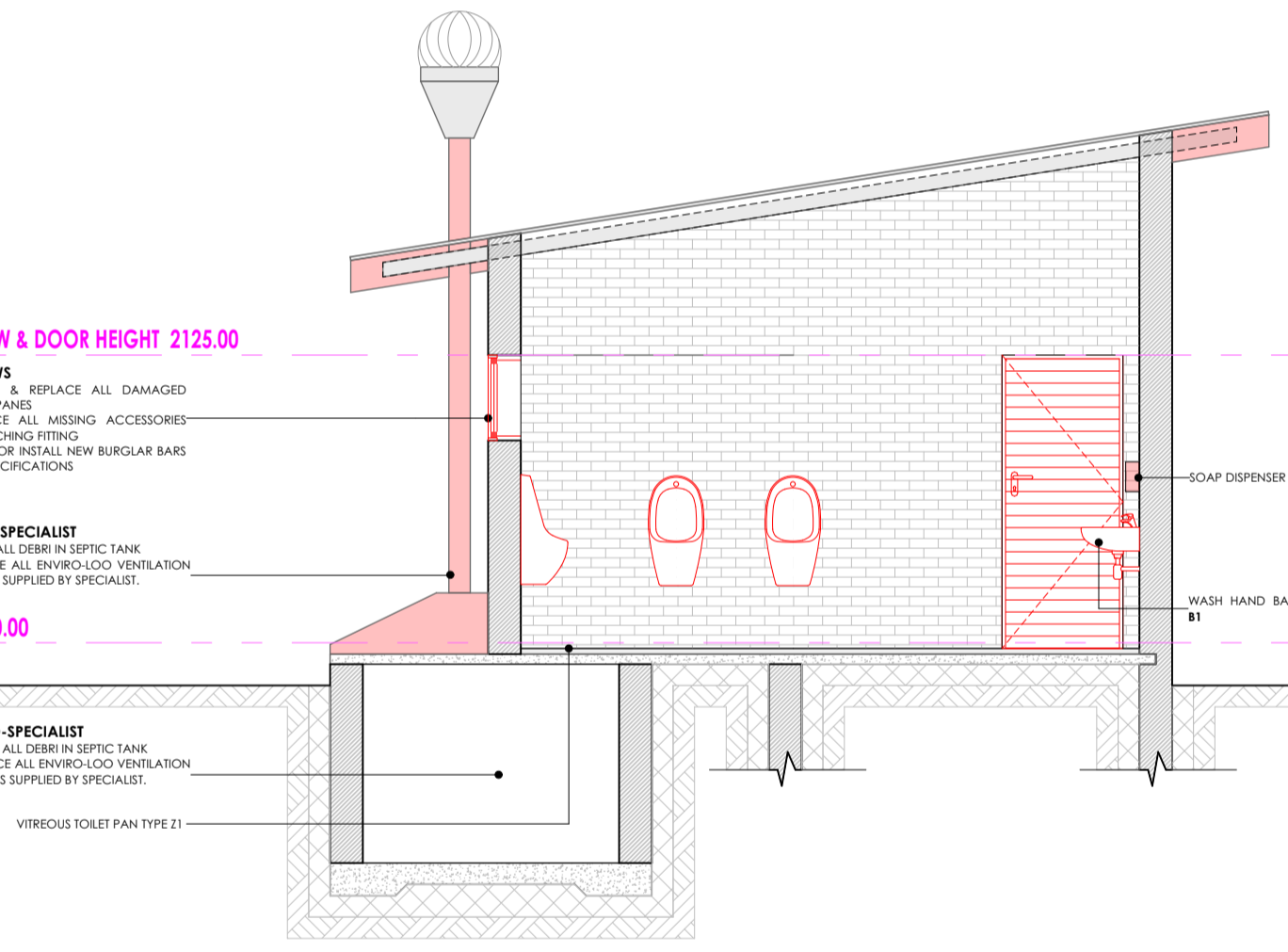
BLOCK EX-T1 DOOR SCHEDULE
SCALE 1:100



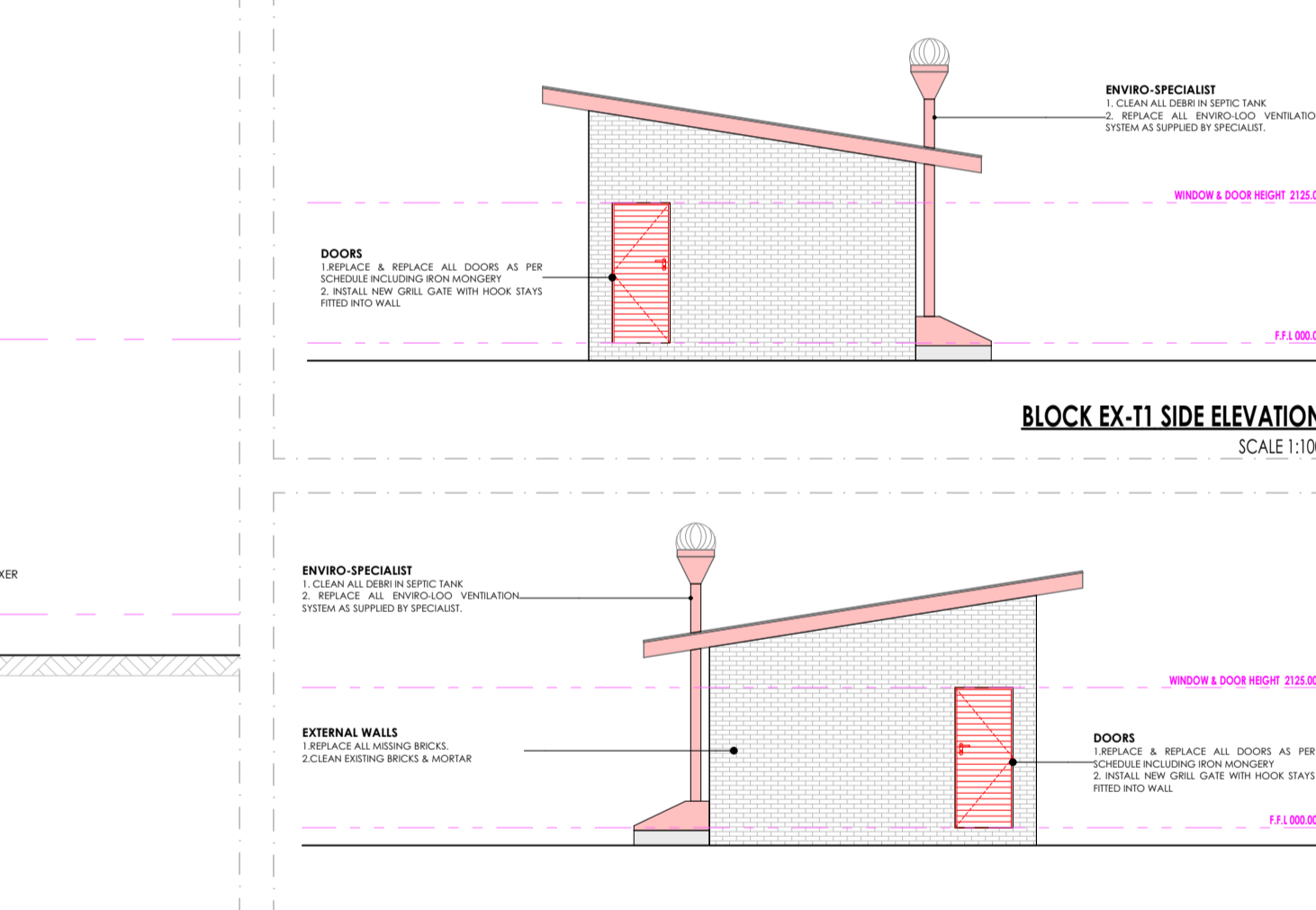
BLOCK EX-T1 FRONT ELEVATION
SCALE 1:100



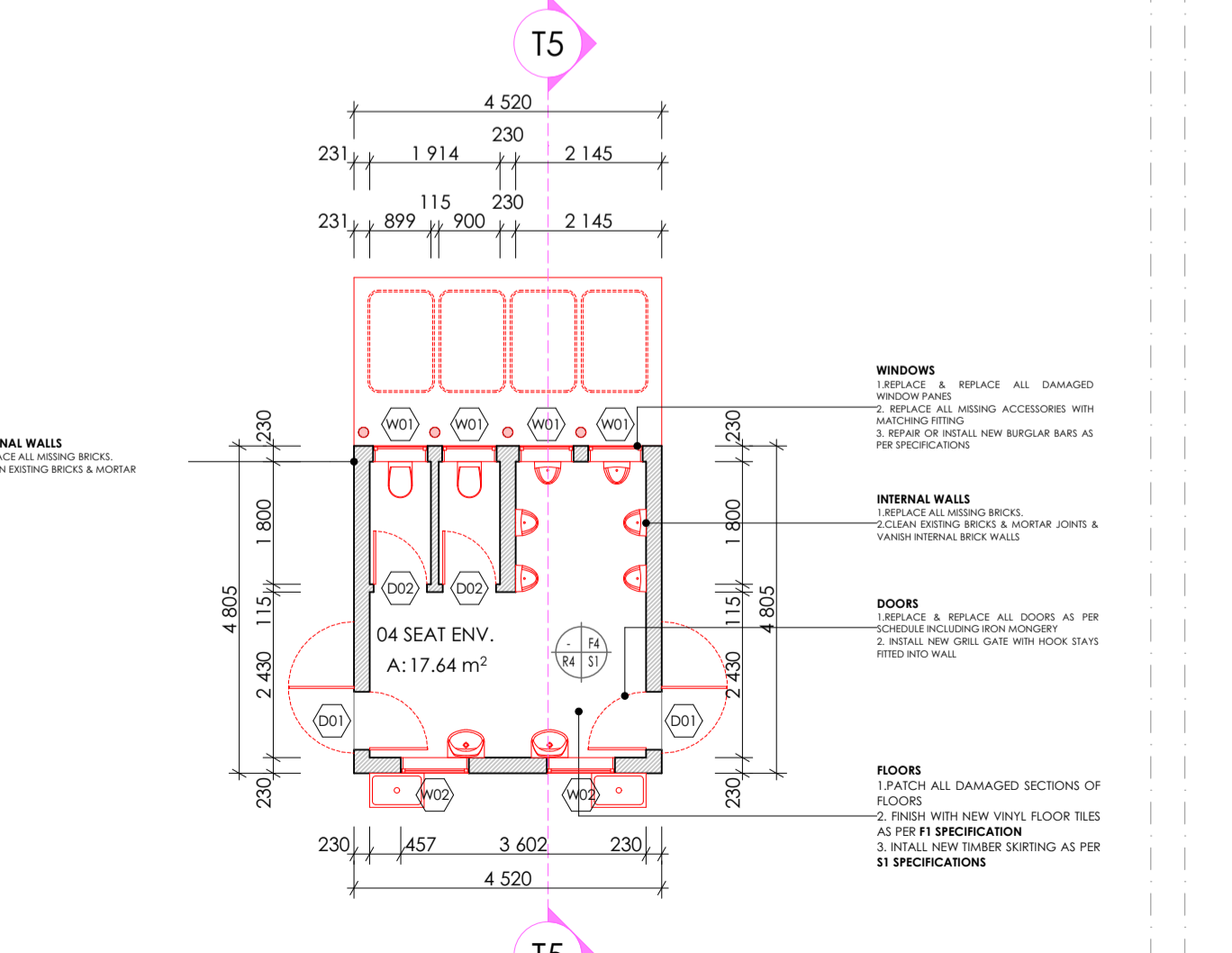
BLOCK EX-T1 REAR ELEVATION
SCALE 1:100



BLOCK EX-T1 SIDE ELEVATION T5
SCALE 1:50



BLOCK EX-T1 SIDE ELEVATION
SCALE 1:100



BLOCK EX-T1 FLOOR PLAN
SCALE 1:100

WINDOW SCHEDULE table with columns for W01, W02, W03, and W04. Includes quantities, window descriptions, frames, glasses, window fittings, ironmongery, and hinges.

BLOCK EX-T1 WINDOW SCHEDULE
SCALE 1:100

SANITARY SCHEDULE

WC'S URINALS & SHOWER
W1: CERAMIC STANDARD WC (CC) - CONCEALED CISTERN Vitreous china 90° outlet WC or equal and approved. Top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 497 & Fitted with 'Jazz Thermalsoft Plastic Seat'. Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with blank flush plate.

W2: CERAMIC PARALEGIC WC Vitreous china 90° outlet or equal and approved. Top inlet closed rim back-to-wall pan to comply with SABS 497. Fitted with Cistern installed complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable external lever.

W3: CERAMIC PARALEGIC WC (CC) - CONCEALED CISTERN Vitreous china 90° outlet WC or equal and approved. Top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 497 & Fitted with 'Jazz Thermalsoft Plastic Seat'. Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable external lever. Blank flush plate & offset push button for passage access.

W4: CERAMIC STANDARD WC (BACK INLET) Vitreous china 90° outlet back inlet pan to comply with SABS 497. Fitted complete with back inlet exposed flush valve complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. Flush valve to be fitted with suitable external lever.

W5: CERAMIC STANDARD WC (CC) Vitreous china 90° outlet WC or equal and approved. Top inlet closed rim back-to-wall pan to comply with SABS 497. Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermalsoft seat and complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards.

W6: CERAMIC WALL HUNG URINAL Vitreous china 90° outlet wall hung urinal to comply with SABS 497. Supplied with suitable 38mm CP domical gabling, CP top inlet spreader and two hanger brackets and fitted with exposed flush-valve, and suitable bottle trap chrome finish as per manufacturer's specifications and applicable SABS standards.

S01: SHOWER 22mm thick Emulsion steel shower tray 900x900x160mm manufactured with anti slip pattern, with rounded internal corners, and 38mm BSP grated waste fitting in corner position fitted with Shower set and complying with SABS 226 compliance of approval. • Gated Shower Cubicle with access door as per standard supply from manufacturer and sized to fit space configuration. • Oversized shower arm with floor flange. • Chrome Plated Shower Head with anti-jetted connector. • Chrome Plated Shower diverter mixer-wal type with sliding wall flanges and concealed connectors adjustable from 178mm to 203mm centres. Shower tray to be handed SS into a 100mm high concrete plinth with exposed plinth face.

WASH-HAND BASIN
W7: WTB & MIRROR TAP Vaso Sanitaryware vitreous china 560 x 415mm rounded 'Tuscany' OR EQUAL AND APPROVE basin to comply with SABS 497 with single tap hole configuration supplied with integrated overflow and chinatory hole with a 'Tuscany' pedestal and fitted with 'No. Cota WaterJet' 15mm chrome pushbutton operating tap with flanged bracket (code KM120) meeting tap, 300-32 CP anti-trip plug with angle valves. 300

W8: DISABLED BASIN 400mm semi rounded lavatory basin to comply with SABS 497. In two tap hole configuration fitted with 2 No chrome plated Elbow action pillar-tap, with 1/2 turn ceramic disc head and blue & Red indicators water applications and flanged bracket, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connectors. Fixed with concealed wall bracket in accordance to the manufacturer's specifications.

W9: WHITE GLAZED PORCELAIN WTB (VANITY) Ceramic freecoy size 455x325mm oval self-erecting vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with 'No. chrome plated tap with flanged bracket (code KM120) meeting tap, mounting kit and angle valves. 400mm long flexible inlets and chrome plated bottle trap supplied with all necessary pipe connectors. Basins mounted on cabinet or vanity top with silicon bead between contact areas in strict accordance to manufacturer's specifications.

W10: WIDUITY BASIN & 2 TAP (FOR LABS) Vitreous china size 455x325mm oval laboratory basin to comply with SABS 497. In two tap hole configuration fitted with 2 No chrome plated Elbow action pillar-tap, with 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged bracket, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connectors. Fixed with concealed wall bracket in accordance to the manufacturer's specifications.

W11: MEDIC BASIN & FITTINGS (SICK BAY) Vitreous china size 400mm semi rounded lavatory basin to comply with SABS 497. In two tap hole configuration fitted with 2 No chrome plated Elbow action pillar-tap, with 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged bracket, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connectors. Fixed with concealed wall bracket in accordance to the manufacturer's specifications. • Combination of sanitaryware, accessories and general fittings comprising of: • Mirror type C1 • Paper towel dispenser K8 and bin type K3. • Soap dispenser type K5. • Spoutback comprising 2no. rows of wall tie finish type R5 as per finishes schedule and grout in compliance to manufacturer's specifications and government standard specifications. Installation heights as indicated in the drawings.

SINKS:
X1: STAINLESS STEEL SINK Stainless steel 1000 x 457mm inset single end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsewhere measured). Grade 304 (18/10) Stainless Steel sink to comply with SABS 905 fitted with Approved Sink mixer-wal type, chrome plated swivel Outlet, adjustable and supplied with suitable accessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL.

X2: STAINLESS STEEL SINK Stainless steel 1500 x 457mm inset double end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsewhere measured). Grade 304 (18/10) Stainless Steel sink to comply with SABS 905 fitted with Approved Sink mixer-wal type, chrome plated swivel overflow swivel Outlet, adjustable wall flanges and supplied with suitable accessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL.

X3: CERAMIC SINK Ceramic freecoy 425 x 335 x 180mm rectangular laboratory sink without overflow, with a centre end waste outlet, fitted to wall on two semi-concealed brackets with all necessary accessories (all to be acid resistant)

X4: SINGLE WASH THROUGH (WET) & 2no. TAPS 600mm x 500mm inset washthrough floor-cast from grade 18/10 stainless steel with radiused internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2no. CP bibbits - plain extended chrome plates, complete with sliding wall flanges. Un-slotted sink waste with back nut, plug with stirrup, chain and stay. CP 'F' trap, with deep seal and cleaning eye. Rough Brass Sink installation height = 900mm AFFL. Cut out size 555 x 425mm.

X5: DOUBLE WASH THROUGH (WET) & 2no. TAPS 720 x 552 x 200mm Double bowl wall hung washthrough floor-cast from grade 18/10 stainless steel, radiused internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2no. wall tie bibbits, with Swivel Outlet, adjustable wall flanges and exposed adjustable connectors. CP. Un-slotted sink waste with back nut and plug with stirrup, CP. Double drain black rubber deep seal 'F'-trap. Sink mounted on 2no. 25mm square S5 gallow brackets, front leg and adjustable foot piece of height of 915mm AFFL.

SANITARY ACCESSORIES

K1: SS TOILET ROLL HOLDER - 2 ROLL Standard stainless steel toilet roll holder (2 roll) 150mm width x 270mm high 275mm depth Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Soft finish, including screws and dowels and all other necessary accessories in accordance to manufacturer's specifications.

K2: SS MIRROR 6mm thick clear float glass silver-backed mirror, size 450x900mm height with polished beveled edges 4 times beveled for and fixed, with chromium plated dome-headed mirror screws

K3: SS WASTE BIN 280W x 628H x 200D Waste bin manufactured from 18/10 Stainless Steel, surface Soft Finish, Material Thickness 1.5mm, including Screws, dowels and all necessary accessories in accordance to manufacturer's specifications.

K4: SANITARY BIN (PLASTIC) 190mm x 200mm x 600mm Plastic Sanitary Pedal Bin with capacity of 100 Liters per pack Complete with all necessary accessories and installed in accordance to manufacturer's specifications.

K5: SOAP HOLDER Single semi-recessed ceramic soap dish Complete with all necessary accessories and installed in accordance to manufacturer's specifications.

K6: WALL GRAB BARS - PARALEGIC Stainless steel 914 x 90 x 20mm diameter wall grab rail, in satin polished finish complete with SS fixing screws and plastic wall plugs, installed as per manufacturer's instructions.

K7: GRAB BARS (RIGHT-LEFT HAND) - PARALEGIC Stainless steel 914 x 90 x 20mm diameter wall grab rail, with side toilet grab rail with 450mm high centre flange, in satin polished finish complete with SS fixing screws and plastic wall plugs, installed as per manufacturer's instructions.

K8: PAPER TOWEL DISPENSER 330mmxWx35mmxD28mmD tear and dry paper hand towel dispenser in stainless steel. Complete with screws, locking key, and all necessary accessories and installed in accordance to manufacturer's specifications.

K9: SOAP DISPENSER - WASH-WALL MOUNTED 115W x 200H x 110D Stainless Steel hand-free soap dispenser. Complete with screws, locking key, and all necessary accessories and installed in accordance to manufacturer's specifications.

K10: ALUMINIUM COAT HOOKS (MULTI-TRACK) 80mm Wide x 220mm High x 90mm High Aluminium Multitrack Hat and Coat Hook in multi-track two hooks Configuration With Anodized Silver Finish Complete with Screws

K11: HAND DRYER (Hands Free) As per Electrical Engineer specification

K12: TOWEL RAIL 55mm dia. Polished 900mm long towel rail complete with all necessary accessories in accordance to manufacturer's specifications. Installation height as per architect's specifications.

GENERAL FIXTURES

G1: DOOR PROTECTOR 200mm wide UPVC Door Protector manufactured in high impact resistant rigid UPVC (Colour Grey) and cut to full door width from 3m length, installed strictly in accordance to manufacturer's specifications. Installation height 900mm above FFL, or as specified.

ISSUED FOR TENDER

LEGEND

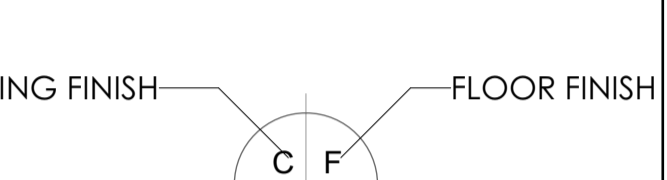
- NEW WALLS
- EXISTING WALL TO BE RETAINED
- EXISTING WALL TO BE DEMOLISHED
- NEW FIXTURES & FITTING TO BE INSTALLED
- ITEMS IN RED AND (OR) DASHED LINES ARE TO BE REPAIRED AND (OR) REPLACED

NOTES
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED

DIMENSIONS TO BE READ, NOT TO SCALED FROM THIS DRAWING

CONTRATORS TO CONFIRM ALL DIMENSIONS ON SITE BEFORE CONSTRUCTION COMMENCES & ANY DISCREPANCY TO BE REPORTED TO THE PROJECT ARCHITECT

FINISHES LEGEND



DISCIPLINE
CLIENT
PLANNING EXAMINER
FIRE CONTROL
ENVIRONMENTAL
ROADS & STORMWATER
WATER & SANITATION

SIGNATURE TABLE

Table with columns for Discipline, Client, Planning Examiner, Fire Control, Environmental, Roads & Stormwater, and Water & Sanitation. Includes signature lines for REV. NO., DATE, and DESCRIPTION.

REVISIONS

Revision table with columns for REV. NO., DATE, DESCRIPTION, and SIGNATURE. Includes a signature box for the author.

LIMPOPO PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

PUBLIC WORKS, ROADS & INFRASTRUCTURE INSTITUTION

VALLAMBROSA PRIMARY - 918 511 500

RESTORATIVES, REPAIRS & ADDITIONS

DOCUMENTATION & PROCUREMENT

ARCHITECTURAL
STAGE 04 ARCHITECTURAL
DRAWING DESCRIPTION
BLOCK EX-TO1

Table with columns for DRG No., DESIGN, DATE, and STATUS. Includes a signature box for the professional.

Table with columns for DATE, NAME, SIGN, and PR. NUMBER. Includes a signature box for the professional.

CONSULTANT

TECTURA PROJECTS logo and contact information. Includes address, phone, and website details for the consultant.

CONTRACTOR

Table with columns for CAD SYSTEM, SIZE, AUTOCAD PROJECT NUMBER, and FILE NAME/REV. Includes a signature box for the contractor.