



**LIMPOPO**

PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

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

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

**BID NUMBER: LDPWRI-B20109**

**PROVISIONAL  
BILL OF QUANTITIES**

For the

**UPGRADES AND ADDITIONS AT ST PAUL HIGH SCHOOL**

For the

**DEPARTMENT OF EDUCATION,  
LIMPOPO PROVINCE**

**CIDB CLASS GRADING: 7GB OR HIGHER**



**CIDB CLASS GRADING xxGB OR HIGHER**

**BID NUMBER: LDPWRI-B/20109**

**UPGRADE AND ADDITIONS AT ST PAUL HIGH SCHOOL**

**PROCUREMENT DOCUMENT**

Name of Tenderer: .....

CIDB CRS Number: .....

CSD Registration Number: .....

Tax Pin: .....

Tender Amount including Vat: .....

CLOSING DATE AND TIME: .....

**ISSUED BY:**

**DEPARTMENT OF PUBLIC WOKS, ROADS AND INFRASTRUCTURE  
PRIVATE BAG X9491  
POLOKWANE  
0700  
TEL: 015 284 7000/1**

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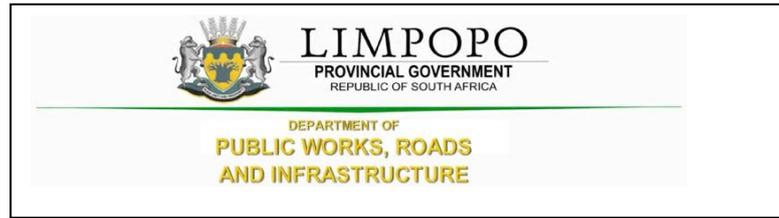
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**PART A: SPECIAL NOTES TO BIDDERS**



**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

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

**NOTES TO BIDDERS**

**1. NAME OF PARTIES**

**EMPLOYER**

Limpopo Province Department of Roads & Infrastructure: Works Towers

43 Church Street

Tel: (015) 284 7000/1

Private BAG X9490

POLOKWANE

0700

**Contact:**

Makape P. @ 082 460 6271

**Principal Agent:**

**Tectura International**

Suite 04

76 Hans Van Rensburg

Polokwane

Tel: 015 291 4611 Fax: 086 667 5534

**Contact:**

Name: Timothy Nkandu

Email: [Timothy@tecturai.com](mailto:Timothy@tecturai.com)

**Quantity Surveyor:**

**Proserve Consulting (Pty) Ltd**

Address

Irene Corporate Corner`

37 Via Salara Crescent

Cnr Nellmaphius & Van Reyneveld Rd

Irene,

**SPECIAL NOTES TO TENDERERS**

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Pretoria

Tel: 012 661 3435 Fax: N/A

**Contact:**

Name: Duduzile Ruwuya

Email: [Druwuya@proservegroup.co.za](mailto:Druwuya@proservegroup.co.za)

**Civil Engineers:**

**Lowflow Construction and Engineering**

26 Peace St, Arbor Park,

Block 5, Ground Floor

Tzaneen, 0850

Tel: 015 004 0811 Fax: N/A

**Contact:**

Name: Tashinga Muronda

Email: [tashy1902@live.com](mailto:tashy1902@live.com)

**Mechanical Engineers:**

**Takusa Consulting and Services**

Fourways Office Park

Block 5, Ground Floor

Roos St &, Fourways Blvd, Sandton

Tel: 010 110 8724 Fax: 086 667 5534

**Contact:**

Name: Kamogelo Sechoaro

Email: [kamogelo@takusaconsulting.co.za](mailto:kamogelo@takusaconsulting.co.za)

**Electrical Engineers:**

**Takusa Consulting and Services**

Fourways Office Park

Block 5, Ground Floor

Roos St &, Fourways Blvd, Sandton

Tel: 010 110 8724 Fax: 086 667 5534

**Contact:**

Name: Kamogelo Sechoaro

Email: [kamogelo@takusaconsulting.co.za](mailto:kamogelo@takusaconsulting.co.za)

## **2. SPECIAL CONTRACT DOCUMENTS**

### **Note:**

The clauses in these Special Contract Conditions form part of the contract requirements and shall have preference over any contradicting clauses in these Bills of Quantities, the preliminaries, and the Conditions of Contract.

### **2.1 CONTRACT DOCUMENTS**

The Contract Document will consist of:

- I. The agreement shall be the JBCC Series 2000 Principal Building Agreement, prepared by the Joint Building Contracts Committee, Edition 4.1, and March 2005 amended as hereinafter described.
- II. Documents to be provided by the Contractor in terms of the requirements of these Provisional Bills of Quantities. Where reference is made to the "subcontract agreement" this is deemed to mean the "JBCC Series 2000 Nominated /Selected Sub-Contract Agreement" (March 2005 Edition)
- III. The JBCC Series 2000 Preliminaries prepared by the Joint Building Contracts Committee (May 2005 edition) amended as hereinafter described, shall be deemed to be incorporated herein.
- IV. Tenderers are referred to the above -mentioned documents for the full intent and meaning of each clause thereof. These clauses are hereinafter referred to by clause numbers and headings only, for which, such allowance must be made as may be considered necessary.
- V. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given as far as possible under each relevant clause. Where modifications or amendments as described are made, such modifications and/or amendments shall supersede any conflicting provision in the relevant clauses of the JBCC Series 2000 Preliminaries or the JBCC Series 2000 Principal Building Agreement and the tenderer shall make due allowance for whatever costs and charges he may consider necessary for the carrying out and observance of the provisions of the clauses as modified and/or amended.
- VI. Where any clause is not relevant to this specific contract such clause is marked N/A (signifying "not applicable").
- VII. "The Model Preambles for Trades" as recommended and published by the Association of South Africa Quantity Surveyors -1999 edition, shall be deemed to form part of this contract documentation. Any amendments and/or additional information is listed under the supplementary preambles at the start of each trade in the bills of quantities.
- VIII. **Pricing of preliminaries - The relevant clause numbers of sections A and B of the preliminaries are listed at the end of the contract preliminaries section for pricing purposes.** if Alternative as

**SPECIAL NOTES TO TENDERERS**

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set out in clause 10 of the preliminaries 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.

- IX. The **tenderer** shall allow opposite each of the items for whatever costs and charges he may consider necessary for the carrying out, complying with and due observance of the provisions, conditions, and requirements set out therein.
- X. Only priced items will be considered in respect of any adjustments to this section. Any items left unpriced will be understood to be provided for in the rates given for other items and no claim for extras arising out of the tenderer's omission to price any item will be entertained.
- XI. Notwithstanding the period stated in the JBCC form of tenders, tenderers shall hold good for a period of one hundred and eighty (180) calendars days from the date of closing of the tenderers and shall not be altered, amended, or withdrawn during that period.

**2.2 QUERIES FROM BIDDERS**

The pages of these bills of quantities are numbered consecutively as indexed on the first page.

The Bidder shall check the numbers of the pages and should any be missing or duplicated, or the reproduction be indistinct, or if any doubt exists as to the full intent or meaning of any description or these bills of quantities contain any obvious errors, the Bidder shall notify the Accounting Officer/ Quantity surveyor at once who shall promptly give a written directive. No liability whatsoever will be admitted in respect of errors in any BID due to the abovementioned causes.

On no account should these documents be used for placing orders for materials. Bidders do so at their own risk and shall not be reimbursed for additional costs so incurred.

**2.3 ACQUAINTANCE WITH BID DOCUMENTS**

By submission of a BID, the Bidder will be deemed to have acquainted himself/herself fully with the BID documents, local authority requirements and by-laws and all aspects of the work envisaged in the documents before pricing and submission of his/ her BID. The employer may appoint a principal Agent to act on his/ her behalf with full authority and obligations.

**2.4 FORMS TO BE COMPLETED**

The form of BID together with its appendices must be submitted with the BID.

**2.5 SCOPE OF THE WORKS**

The project comprises of the construction of medium administration block, 24 classrooms, 8 seat waterborne and 36 enviro-loo toilets **as** well as related external works in accordance with the drawings and specifications that will be provided to the contractor.

The Contractor shall provide sufficient qualified technical staff, field staff, and safety personnel to ensure the Works under this contract be satisfactorily carried out safely and meeting the performance targets and

**SPECIAL NOTES TO TENDERERS**

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programs. The Contractor shall also provide competent attendant(s) to monitor any works concerning the scope of works.

**2.6 PROGRAMMING WITH DIRECT CONTRACTORS**

Tenderers must take note that some work may be performed by independent/ direct contractors that will not form part of this contract. Tenderers, however, must make provision for these installations in their program and must provide all the necessary assistance to The **Limpopo Department of Public Works, Roads and Infrastructure in completion of the said contracts.**

- Any installations by specialists e.g., Security installation, loose furniture

**2.7 SITE**

St Paul High School  
Lukaumission, Groblersdal  
Limpopo

**2.8 CONTRACT DOCUMENTS**

The contract/agreement will be based on the JBCC Series 2000 Principal Building Agreement, prepared by the Joint Building Contracts Committee, Edition 4.1, and March 2005.

Wherever reference is made to the terms "Client, Employer or Principal Agent) in the documents, it shall be deemed to mean. The Limpopo Department of Public Works, Roads, and Infrastructure or any person acting in such capacity as well as any officer to whom any power vested in terms of these conditions of the contract have been delegated to.

**2.9 CONFIDENTIALITY OF BID DOCUMENTS**

All the recipients of BID documents shall be whether they submit a bid or not, treat the details of these documents as confidential and their general content shall not be disclosed or discussed with third parties without the prior approval of the **Limpopo Department of Public Works, Roads, and Infrastructure.**

**2.10 BID ALL INCLUSIVE**

The Bidder must allow in his/ her BID for all labour, material, transport, handling, construction plant, temporary works, or method of construction where the method of payment allows for various methods of construction, value-added tax and everything else necessary for the execution and completion of the works in accordance with the BID documents

**2.11 BILLS OF QUANTITIES**

**This Bill of Quantities is provisional and subject to be re-measured.**

The Contractor / Bidder is warned that if he/ she use any quantities or specifications appearing in these Bills of Quantities for ordering materials, he/ she does so at his/ her own and no liability whatsoever shall be

**SPECIAL NOTES TO TENDERERS**

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admitted afterward by the **Employer / Limpopo Department of Public Works, Roads, and Infrastructure** for such correctness of such quantities or specifications.

**2.12 STAMP DUTY**

If applicable, all stamp duties in connection with the contract shall be paid by the Bidder.

**2.13 SIGNING OF BIDDERS**

The BID must be signed by a representative of the Bidder being duly authorized to do so and Bidders are to attach a company resolution.

**2.14 LODGING AND SCRUTINY OF PRICED BILLS OF QUANTITIES**

The Bidder's / Contactor's attention is specifically directed to the provision that, before the contract is signed, he/ she is to submit his/ her priced Bills of Quantities with conditions of contract and cast neatly in black ink for checking. The Accounting Officer / Quantity Surveyor will duly check the priced Bills of Quantities and shall make such adjustment of individual prices and rectify discrepancies as he may consider necessary. No artificial prices shall be acceptable.

**2.15 ADDITIONAL INFORMATION REQUIRED**

The **Employer / Limpopo Department of Public Works, Roads and Infrastructure** may ask any Bidder for a clarification/s of his / her BID. Nevertheless, no Bidder will be permitted to alter his / her BID sum after the BIDs have been opened and read to other bidders, although clarification which does not change the BID may be accepted.

The Employer reserves the right to appoint a firm of public accountants to report on the financial capacity of any Bidder. The Bidder shall provide all reasonable help and information in such an investigation. All written information submitted by the Bidder together with and in support of his / her BID shall be considered to form the basis on which the BID has been prepared and submitted.

**2.16 ARITHMETICAL ERRORS**

The Accounting Officer / Quantity Surveyor reserves the right to correct arithmetical or other errors in the bid document for reasons which the Accounting Officer / Quantity Surveyor will indicate, the Bidder will, in terms of Rule 14, be requested to make corrections.

**2.17 IMBALANCE IN BIDDED/TENDERED RATES**

In the event of there being any rate or rates which are declared to be unacceptable by the Accounting officer/Quantity Surveyor for reasons which the Accounting Officer / Quantity Surveyor will indicate, the Bidder will, in terms of Rule 14, be requested to:

- a) Either justify and specify rate or rates, i.e. to give a financial breakdown on how such rate or rates were obtained or calculated, or

**SPECIAL NOTES TO TENDERERS**

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- b) Consider amending and adjusting such rate while retaining the BID sum derived under Sub-rule 15.a unchanged and fixed

If the Accounting Officer / Quantity Surveyor requests the Bidder to adjust any unacceptable rate or rates, the Accounting Officer / Quantity Surveyor may at his / her discretion limit any such adjustment to rates in specific sections of the bills of quantities. On no account will the Accounting Officer / Quantity Surveyor permit the Bidder to use such an opportunity to re-price extensive sections of the bills of quantities, even though the BID sum remains unchanged.

**2.18 ALTERATIONS TO BID DOCUMENTS**

No unauthorized alteration or addition shall be made to the form of BID, to the bills of quantities or any other portion of the BID documents. If any such alteration or additions is made and if the bills of quantities of not properly completed, the BID may be rejected, and the Employer will not be bound to by such alterations.

**2.19 BID QUALIFICATIONS**

BIDs must be submitted strictly in accordance with the BID documents, i.e. without qualifications. Qualifications like statements of interpretation of contract documents must be avoided and any point of doubt or difficulty should be cleared with the Accounting Officer / Quantity Surveyor as early as possible during the BID period. Should any query be found to be of any influence on the BID, all other Bidders shall immediately be informed of the particulars by the Accounting Officer / Quantity Surveyor.

**2.20 COSTS INCURRED BY BIDDER**

The Employer shall not be responsible to pay for the expenses or losses, which may be incurred by any Bidder in the preparation of the BID or in visiting the site in connection herewith.

**20.21 BID ACCEPTANCE**

The Employer will not be bound to accept the lowest or any BID. No reason for the acceptance or rejection of any BID will be given.

**20.22 WITHDRAWAL OF BID AFTER CLOSING DATE**

The Bidder may not withdraw his BID after the time set for opening BIDs without any BID having been accepted.

Should a Bidder amend or withdraw his/her BID after the specified date and hour, but prior to his being notified of the acceptance thereof, or should a Bidder after having been notified that his/her BID has been accepted.

- (a) Give notice of his/her inability to execute the contract in terms of his BID; or
- (b) Fail to sign a contract or furnish the security within the period fixed in the BID Conditions reflected on the form of BID or any extended period fixed by the Employer; or
- (c) Fail to execute the contract;

**SPECIAL NOTES TO TENDERERS**

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He shall pay all additional expended, damages and/or losses which the Employer may incur in calling for fresh BIDs or by paying the difference between his/her BID and a less favourable BID accepted in terms of the provisions of the last paragraph of this term: Provided that the Employer may at its discretion exempt a Bidder from the provisions of this sub-rule if he believes that the circumstances justify the exemption.

When in circumstances mentioned in the second paragraph of this item, the Employer deems it not desirable to invite fresh BID; then the Employer may accept another BID from those already received. The provisions of **Rule 2.21 above, shall again apply.**

**2.23 METHOD OF MEASUREMENT**

The Bills of Quantities have been measured in accordance with the 6<sup>th</sup> Edition of the standard system of Measuring Builders Work.

**2.24 AVAILABILITY AND SUBSTITUTION OF MATERIALS**

Bidders are urged to make themselves, during BID stage, thoroughly acquainted with the availability of all materials for this project as no claim for non-availability or late delivery of materials will afterward be recognized/considered.

If materials specified are not available or it seems that there will be a delay of materials, then the Bidder must notify the **Employer** at once in writing who will, at his/her discretion, attend to the matter. Once the BIDs are handed in it will be taken that all materials specified in these Bills of Quantities are available and will be delivered on-site for completion of the project within the prescribed contract period.

The Substitution will be strictly subject to the **Employer's** approval.

The **Contractor** must, as far as possible, purchase materials available in the Limpopo Province provided the quality is acceptable. Materials of inferior quality shall under no circumstances be accepted. If the **Contractor** cannot comply with these conditions, he/she must substantiate this in writing with documentary proof from suppliers.

**2.25 PROPRIETARY TYPES AND TRADE NAMES**

Where reference is made in these Bills of Quantities to proprietary types or names, the products, or materials, etc. referred to are to be exactly as described, the prior approval of the **Employer** must be obtained for any substitution and may be the subject to a variation order.

**2.26 SABS SPECIFICATIONS**

All references in these Bills of Quantities to Specifications of the Bureau of Standards shall be deemed to be a reference to the latest issues of such specifications, and any subsequent amendments thereto. All articles, materials or items described as to conform to the SABS Specification must bear the SABS mark where possible.

**2.27 PERFORMANCE GUARANTEE**

Where the project is over R 2 000 000.00 the Bidder must submit with this BID proof (using a letter of intent or otherwise) from his/her guarantor that his/her guarantor will issue the guarantee if the BID is accepted.

**2.28 BID**

While the Employer reserves the right to accept or not accept any BID, the intention is that a BID will be accepted. The successful Bidder will be appointed as the Main Contractor in terms of the JBCC Series 2000 Principal Building Agreement, prepared by the Joint Building Contracts Committee, Edition 4.1, and March 2005. Any condition submitted by the Bidders which is a variance with the provisions of the main contract will not be accepted and may render the BID liable to disqualification.

The BID shall be sealed in an envelope and endorsed as per BID form and be deposited in the BID box as per BID advert.

**On no account will BIDS received after the time and date for submission of BIDs be considered and Bidders are advised that postal delays will not constitute a claim for recognition of such BIDS.**

Telegraphs or telefaxed BIDS will **NOT** be considered under any circumstances.

**2.29 INSPECTION OF SITE**

**A Compulsory site inspection will be as per tender advert.** Tenderers are, however, urged to thoroughly inspect the site, acquaint themselves with the nature and extent of the works, the site conditions about power and water supply, transport facilities, conditions of adjacent existing buildings and also access to the site, availability of working space, etc.; before submitting their BIDs **as no extra cost arising out of their failure to price for the above mentioned shall be considered.**

**2.30 SITE OFFICE**

The Contractor shall erect, maintain, and takedown on completion of the work a building for site meetings with a concrete floor, suitable roof, suitable walls, door, and four windows, with tables and chairs (not benches), all suitable to accommodate 12 persons.

It is further a condition that all work or movement of vehicles in the vicinity of this office that creates noise or nuisance during site meetings must be suspended for the duration of the site meetings.

**2.31 LOCAL LABOUR**

As soon as the site is handed to the Contractor, he/she will be expected to form a joint committee with the local community. This committee will ensure that all unskilled and available semi-skilled labour are employed from the community.

All labour shall apply through the committee for employment on the project and the selection of these labourers shall be made by the Contractor from a list of applicants compiled by the community members on the

**SPECIAL NOTES TO TENDERERS**

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committee. On all labour-intensive projects, at least 10% of the labourers must be employed from the local community where the project will be executed.

Labourers should be paid in accordance with the provision of the Labour Relations Act, Act 23 of 1956 and the amended Basic Conditions of Employment of 1983, or any latest available Acts.

In accordance with Government Gazette No.16095 of 19 November 1994 wages differ for different areas.

**2.32 PROCEDURE OF THE WORK**

The Employer reserves the right to direct the order in which the various parts of the contract will be executed should circumstances warrant such action.

**2.33 VARIATIONS**

Where prices are submitted by the Contractor or Nominated Sub-Contractor during the progress of the works in respect of variations or regarding a claim under the terms of the contract and even though such prices may be used in an interim certificate, it is hereby agreed that there is to be no presumption of acceptance. Should the Employer wish to accept any such prices before the issue of the final certificate, he will do so in writing.

**2.34 PROVISIONAL WORK**

Any increase or decrease of work measured provisionally will not be sufficient grounds for any adjustments in the tendered rates.

**2.35 MONEY/BUDGET OR PROVISIONS**

Whatever an amount for work is allowed in these Bills of Quantities under the term "Money/budgetary Provision" it shall be taken that such amount is for work to be carried out by Specialists, who will be ordinary domestic Sub-Contractors to the Main Contractor.

**2.36 BORROW PITS**

It is the responsibility of the Contractor to find the necessary borrow pits for imported filling and also to ascertain the suitability and acceptability of such filling, as no claims in this regard will be entertained afterward.

**2.37 TESTS**

It is the responsibility of the Contractor to carry out his/her tests during the execution of the contract to check the strength of concrete, mortar, the density of filling, etc., and only those tests as requested by the Employer will be paid for by the Client.

**2.38 THE CONTRACT PERIOD**

The contract period shall be 24 months (exclusive of builder's holiday) from the date of site handover.

**SPECIAL NOTES TO TENDERERS**

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**2.39 COMPLETION OF BID DOCUMENTS**

Bidders shall ensure that all documents requiring completion are duly completed in ink (black), signed, and witnessed in the spaces provided.

**2.40 OCCUPATIONAL HEALTH AND SAFETY**

**2.40.1 General**

In terms of the Occupational Health and Safety Regulations promulgated on 18 July 2003, Bidders are advised that they are required to comply fully with such regulations about this project as no claims in this regard will be entertained.

**2.40.2 Covid-19 Related Requirements**

- Contactor must have risk assessments and plans in place.
- Procedure on how to conduct worker education on Covid-19.
- Identification and protection of Vulnerable Employees (e.g. workers above 60 years)
- Safe transport of employees.
- Screening of employees on entering workplace.
- Prevention of viral spread in the workplace.
- Provision of hand sanitisers and face masks.
- Cleaning of surfaces and shared Equipment's.
- Shift arrangements.
- Managing sick employees.
- Monitoring systems must be in place to ensure compliance with safety protocols.
- Contactors provide a Bi-Weekly confirmation of the status of each employee on site.

**2.41 VALUE ADDED TAX**

Value-added tax must be added to the contract amount in the Final Summary and all amounts, rates, etc. in the Bills of Quantities will, therefore, be exclusive of value-added tax.

**2.42 PRICES ALL INCLUSIVE**

The Bidder must allow in his/her BID for all labour, material, transport, handling, construction plant, temporary works, or method of constructions where the method of payment allows for various methods of construction, value-added tax and everything else necessary for the execution and completion of the works in accordance with the BID documents.

**2.43 PROOF OF PAYMENT OF VALUE ADDED TAX OR ANY APPLICABLE IMPORT DUTY**

The Bidder is to provide proof that he/she and all his Sub-Contractors are registered at the Receiver of Revenue for VAT or any applicable import duty purposes and will submit all names of Sub-Contractors to the Employer. The Employer may submit all this information to the Receiver of Revenue.

**SPECIAL NOTES TO TENDERERS**

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**2.44 WORKMEN'S COMPENSATION**

The Contractor must provide valid proof of active registration with the workmen's compensation fund (COIDA).

**2.45 CONTRACT PRICE ADJUSTMENT**

The BID will be subject to Escalation and the base month will be based on the date of tender closing.

**2.46 GENERAL NOTES**

Should the tender be awarded to the successful tenderer, the following is to be noted:

- No works shall commence until the Health and Safety Plan has been issued by the successful tenderer and has been approved by the Department of Public Works, Roads and Infrastructure representative.
- No work shall commence on site until all CAR and PL insurances are in place
- No payment shall be made until all guarantees are in place.
- Workers employed by the Contractor will not be allowed to be seen lingering around existing facilities or disturbing classes.
- The Contractor must not render any construction activities that will affect the Client operation before informing the Employer for approval thereof.
- The Contractor's workers should be noticeable by wearing proper clothing with the company logo.

**2.47 PAYMENT PROCEDURE**

Payment procedure in terms of this contract shall be as follows:

- The Contractor to submit valuation by the 20<sup>th</sup> of the Month.
- The payment shall be issued to the Department of Education by the 7<sup>th</sup> of the following month, with payment being made by the 30<sup>th</sup> of that month.
- Every effort will be made to achieve payments earlier, but this cannot be guaranteed.
- Interest on late payments shall be charged at the prime rate.
- Payment for unfixed materials (Material on site) on-site shall be allowed.
- Payment for materials off-site shall only be allowed subject to written approval by the Employer, which will only be conditional upon the necessary cessions being in place and any other documentation which the Employer requests.

**2.48 INFORMATION RELEVANT TO INSURANCES**

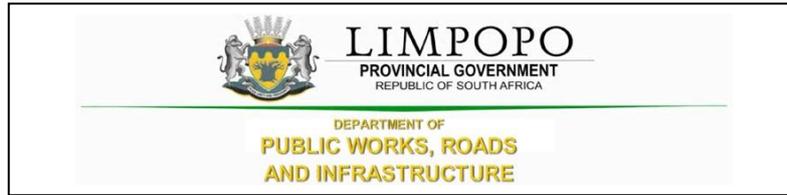
The Contractor will be expected to take the following insurance with a deductible to be determined by the Contractor. In addition to the above-mentioned, the Contractor should take any other insurances relevant to the proper execution of the works.

**2.49.1 CONTRACT WORKS**

– Estimated Contract Amount plus 20%

**2.49.2 PUBLIC LIABILITY**

– R 10 000 000.00



## PART T1: TENDERING PROCEDURE

### T1.1 TENDER NOTICE AND INVITATION TO TENDER

The Limpopo Department of Public Works, Roads and Infrastructure invites tenders for the Construction of medium administration block, 24 classrooms, 8 seat waterborne and 36 enviro-loo toilets including related external works in accordance with the drawings and specifications that will be provided to the contractor at St Paul's High School, Lukaumission, Groblersdaal, Limpopo.

It is estimated that tenderers should have a CIDB class grading of 7GB or higher.

Only tenderers who meet the minimum requirements stated in the tender data are eligible to submit tenders.

A non-refundable tender deposit of **as per Tender Advert** payable in cash is required on collection of the tender documents.

Administrative queries relating to the issue of these documents may be addressed in writing to **Ms Moloto V**, Tel. No. **015 284 7142**; email: [molotomv@dpw.limpopo.gov.za](mailto:molotomv@dpw.limpopo.gov.za).

Technical queries relating to the issue of these documents may be addressed in writing to **Mr P. Makape**, Tel. No. **082 460 6271**; email: [makapep@dpw.limpopo.gov.za](mailto:makapep@dpw.limpopo.gov.za).

A compulsory briefing meeting with representatives of the Employer will not take place due to the Covid-19 Lockdown restrictions. However, tenderers are welcomed to make arrangements to visit the site on a non-compulsory basis at the St Paul High School, Lukaumission, Groblersdaal, Limpopo.

The closing date and time for receipt of tenders are **as per Tender Advert**.

**Telegraphic, telephonic, scanned documents, facsimile, e-mail, and late tenders will not be accepted.**

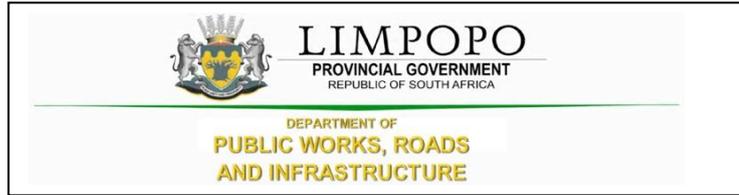
Tenders must only be submitted on the tender documentation that is issued including priced bills of quantities.

Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tenders Data.

**It remains the responsibility of the bidders that the bid document reaches the tender box by the stipulated closing date and time as advertised on the tender bulletin.**

**T1.2 TENDER DATA**

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**T1.2 TENDER DATA**

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement (July 2015) as published in Government Gazette No 38960, Board Notice 136 of 10 July 2015. (See [www.cidb.org.za](http://www.cidb.org.za)).

The Standard Conditions of Tender make several preferences 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.

<b>Clause number</b>	<b>Tender Data</b>
F.1.1	The Employer is the Limpopo Department of Public Works, Roads and Infrastructure

T1.2 TENDER DATA

<p>F.1.2</p>	<p>For this contract, the following documents will be adopted: The <b>single-volume</b> procurement document issued by the employer comprises of the following:</p> <p><b>Part A1: Special Notes to Bidders</b></p> <p><b>The Tender</b> <b>Part T1: Tendering procedures</b> T1.1 Tender notice and invitation to tender T1.2 Tender data</p> <p><b>Part T2: Returnable documents</b> T2.1 List of returnable documents T2.2 Returnable schedules</p> <p><b>The Contract Part C1: Agreements and contract data</b> C1.1 Form of offer and acceptance C1.2 Contract data</p> <p><b>The Contract Part C3: Pricing data</b> C3.1 Pricing instructions</p> <p><b>The Contract Part C4: Provisional Bills of Quantities</b> C4.1 Preliminaries C4.2 Building Works C4.3 Electrical Installation C4.4 Mechanical Installation C4.5 Civil Works C4.6 External Works C4.7 COVID-19 Health and Safety Compliance C4.8 Provisional Sums</p> <p><b>Part 5: Scope of work</b> C5.1 Scope of work</p> <p><b>Part 6: EPWP Infrastructure Guideline 2015</b> C6.1 Data Collection Tool</p> <p><b>Part 7: Site information and drawings</b> C7.1 Site information C7.2 Drawings</p>
<p>F.1.3</p>	<p>The employer's representative is:</p> <p>Name : Makape P. Address : Department of Public Works, Roads and Infrastructure. Works Towers, 43 Church Street. Tel : 082 460 6271 Email : <a href="mailto:makapep@dpw.limpopo.gov.za">makapep@dpw.limpopo.gov.za</a></p>
<p>F.1.4</p>	<p>The language for communications is English</p>
<p>F.2.1</p>	<p>Only those Bidders who satisfy the following eligibility criteria are eligible to submit tenders:</p> <ol style="list-style-type: none"> <li>1. The Bidder is a Firm.</li> <li>2. Bidders that satisfy the criteria stated in the tender data and the tenderer or any of his principles is not under any restriction to do business with the employer.</li> </ol>

**T1.2 TENDER DATA**

F.2.2	<p>Compulsory site briefing</p> <p>A compulsory site briefing meeting with representatives of the Employer will not take place due to the Covid-19 Lockdown restrictions. However, tenderers are welcomed to make arrangements to visit the site on a non-compulsory basis at St Paul High School, Lukaumission, Grobblersdal, Limpopo</p>
F.2.3	<p>Tenderers may request clarification of the tender documents by notifying the employer at least five (5) working days before the closing time and date stated in the <b>Tender Advert</b>.</p>
F.2.4	<p>No alternative tender offers will be considered.</p>
F.2.5	<p>The list of Returnable Documents identifies which of the documents a tenderer must complete when submitting a tender offer. The tenderer must submit his tender offer by completing the Returnable Documents, signing the “Offer” section in the “Form of Offer and Acceptance” and delivering the Returnable Documents back to the Department.</p>
F.2.6	<p>Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as consortiums shall state which of the signatories the lead is partner whom; the employer shall hold liable for the tender offer.</p>
F.2.7	<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>
F.2.8	<p><b>Location of the tender box: Department of Public Works, Roads and Infrastructure,</b></p> <p><b>Physical Address: Corner River and Blaauwberg streets, Ladanna, 0699.</b></p> <p><b>Identification details:</b> Tender reference number, Title of Tender and the closing date and time of the tender.</p>
F.2.9	<p>Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.</p>
F.2.10	<p>Tenderers are alerted that tender offers which do not provide all the data or information requested completely and, in the form, required, may be regarded by the employer as non-responsive.</p>
F.2.11	<p>The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.</p>
F.2.12	<p>The tender offer validity period is <b>180 Days</b>.</p>
F.3.1	<p>Tenders will not be opened immediately after the closing time for tenders.</p>
F.3.2	<p>The tenderers will be evaluated in <b>four</b> stages</p> <ul style="list-style-type: none"> <li>(i) Compliance documents – refer to the list of returnable documents (Part T2)</li> <li>(ii) Local Content (SBD 6.2) and its Annexures</li> <li>(iii) Functionality</li> <li>(iv) Price and Preference (BBBEE)</li> </ul>

T1.2 TENDER DATA

F.3.3	<p><b>Scoring Financial Offer:</b></p> <p>Tender offers will be scored using the following formula: <math>NFO = \left( \frac{Pm}{P} \right) \times 100</math></p> <p>Where</p> <p>NFO = number of tender evaluation points awarded for the financial offer.</p> <p>W1 = the percentage score given for financial offer as stated in the Notice and Invitation to Tender T1.1</p> <p>Pm = the comparative offer of the most favourable tender offer. P = the comparative offer of the tender offer under consideration.</p> <p>where</p> <p>W1 = the number of tender evaluation points for the financial offer and equals:</p> <ol style="list-style-type: none"><li>1) 90 where the financial value inclusive of VAT of all responsive tenders received has a value above R 50 000 000; or</li><li>2) 80 where the financial value inclusive of VAT of one or more responsive tender offers equals or is less than R 50 000 000.</li></ol> <p>Scoring Preferences:</p> <p>Up to 20 points will be awarded to the tenderer who completes the referencing schedule and who is found to be eligible for the preference claimed</p>
	<p><b><i>The Department is not obliged to award the tender to the bidder with the highest number of tender points.</i></b></p>

## TENDER EVALUATION CRITERIA AND WEIGHTINGS

### NOTES TO BIDDERS

#### 1.1 CRITERIA USED FOR THE EVALUATION/ ADJUCATION OF INFRASTRUCTURE RELATED BIDS

1.1.1 The points are allocated as follows:

1.1.2 For projects above R500 000, the distribution of points is used as follows:

##### A. BID EVALUATION STAGE 2- LOCAL CONTENT (SBD 6.2)

1.1 A bid may be disqualified if –

- (a) this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation; and
- (b) the bidder fails to declare that the Local Content Declaration Templates (Annex C, D and E) have been audited and certified as correct.

1.2 This tender is subject to Regulation 8 “Local Production and Content” of the Preferential Procurement Policy Framework Act, 2017: Preferential Procurement Regulations, 2017 submitting of SBD 6.2 and its declarations is compulsory. Please note a minimum threshold of for local content and production in relation to this bid (refer to the list of Designated Items for Local Production and Content)

1.2.1 Evaluation in terms of the stipulated minimum threshold for local production and content. LDPWRI-B/20109 will be evaluated in terms of minimum thresholds for local content stipulated in the LDPWRI-B/20109 document. The declaration made by the BIDDER in the Declaration Certificate for Local Content and Annex C (Local Content Declaration: Summary Schedule) will be used for this purpose.

1.2.2 All responses that will not meet the required minimum threshold “Annexure 1 (SBD 6.2)” for local content as stipulated in the specifications will be disqualified and not evaluated further. Only Bidders that achieved the minimum threshold for local content and production will be evaluated further in terms of functionality and preference point system prescribed in the Preferential Procurement Regulations, 2017.

1.2.3 All Declarations for Local Content and Production must be fully completed and signed.

**N.B** Bidders will need to meet a minimum threshold percentage for local production and content as stipulated in the Bid Document (refer to the list of Designated Items for Local Production and Content) to be further evaluated in terms of the 80/20 preference point system prescribed in the Preferential Procurement Policy Framework Act, 5/2000 and preferential procurement regulations of 2017.

**TENDER EVALUATION CRITERIA AND WEIGHTINGS**

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1.2.4 The exchange rate to be used for the calculation of Local Production and Content must be the exchange rate published by the South African Reserve Bank (SARB) during the advertisement period of this **LDPWRI-B/20109**.

1.2.5 Only the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 will be used to calculate local content.

2.6 The Local Content (LC) expressed, as a percentage of the bid price will be calculated in accordance with the following formula:

$$LC = (1 - x/y) * 100$$

Where

X is the imported content in Rand

Y is the quotation price in Rand excluding value added tax (VAT)

1. The exchange rate to be used for the calculation of local production and content must be the exchange rate published by the South African Reserve Bank (SARB) at 11:00 on Friday, 21 February 2020.

2. Only the South African Bureau of Standards (SANS) approved technical specification number SATS 1286:2011 must be used to calculate local content.

TENDER EVALUATION CRITERIA AND WEIGHTINGS

**A. BID EVALUATION STAGE 3 - FUNCTIONALITY**

**NOTE: Functionality -A bidder must obtain a minimum of 70% under functionality to qualify for final evaluation.**

Responsive bids will be evaluated using a point system which awards on the basis set out in the table below:

Functionality	Weighting
<p><b>Current Workload of Bidder</b></p> <ul style="list-style-type: none"> <li>• Current value is equal or greater than twice the maximum value of the required CIDB grade = 0</li> <li>• Current value is greater than the maximum value of the required CIDB grade but less than twice the maximum value of the required CIDB grade = 5</li> <li>• Current value is within the required CIDB threshold = 10</li> <li>• Current value is less than the minimum value of the required CIDB grade = 15</li> </ul> <p>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 Table 1.</p> <p><b>NB: Completion of this table is mandatory for points to be allocated. Do not refer to any attachment. If no projects at the moment the tender must indicate on this table. Appointment letters must be attached for current projects.</b></p> <p><b>Misrepresentation of facts will render your bid non-responsive.</b></p>	<p>15</p>



**TENDER EVALUATION CRITERIA AND WEIGHTINGS**

<p><b>Profile of key staff</b> (the key staff must be linked to project-specific organogram). CVs and certified copies of qualifications must be attached for points to be allocated. NB: List the details of key staff in Table 2. Completion of this table is mandatory for points to be allocated.</p>	<p><b>Weighting</b></p>
<p><b>Project Supervisor/Site Agent</b></p> <p>Qualification</p> <ul style="list-style-type: none"> <li>• Registration as professional engineer, technologist, architect, construction manager or quantity surveyor = 5</li> <li>• Degree in built environment = 3</li> <li>• National Diploma in Built environment = 1</li> </ul> <p>Experience</p> <ul style="list-style-type: none"> <li>• 5 years' experience or more = 5</li> <li>• Between 2 and 5 years' experience = 3</li> <li>• Less than 2 years = 1</li> </ul> <p><b>Construction Manager</b></p> <p>Qualification</p> <ul style="list-style-type: none"> <li>• Registration as professional engineer, technologist, architect, construction manager or quantity surveyor = 5</li> <li>• Degree in built environment = 3</li> <li>• National Diploma in Built environment = 1</li> </ul> <p>Experience</p> <ul style="list-style-type: none"> <li>• 5 years' experience or more = 5</li> <li>• Between 2 and 5 years' experience = 3</li> <li>• Less than 2 years = 1</li> </ul> <p><b>Site Safety Officer</b></p> <ul style="list-style-type: none"> <li>• Registration with professional council in built environment = 5</li> <li>• Degree in built environment = 3</li> <li>• National Diploma in Built environment=1</li> </ul> <p>Experience</p> <ul style="list-style-type: none"> <li>• 5 years' experience or more = 5</li> <li>• Between 2 and 5 years' experience = 3</li> <li>• Less than 2 years = 1</li> <li>•</li> </ul>	<p style="text-align: center;">30</p>

**TENDER EVALUATION CRITERIA AND WEIGHTINGS**

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**Table 2 Details of key staff.**

<b>Name</b>	<b>Position</b>	<b>Qualifications</b>	<b>Professional Registration (if any)</b>	<b>Experience: Number of year (s)</b>	<b>Indicate whether full time or part-time on this project</b>

**TENDER EVALUATION CRITERIA AND WEIGHTINGS**

Experience in similar projects in the last 10 years	Weighting
<p>Number of projects completed within CIDB grade 7 or higher. The grading applies at the time of award of the project.</p> <p>Completed Projects must be classified as General Building (GB) works in terms of CIDB for points to be allocated.</p> <ul style="list-style-type: none"> <li>• Completed 5 or more projects = 25</li> <li>• Completed 4 projects = 20</li> <li>• Completed 3 projects = 15</li> <li>• Completed 2 projects = 10</li> <li>• Completed 1 project = 5</li> <li>• Bidder submitted no project in 7= 0</li> </ul> <p><b>NB: The details of completed projects must be entered in Table 3. Completion of this table is mandatory for points to be allocated. Appointment letters and completion certificates must be attached for points to be allocated. All attachments to be on appropriate letterhead and signed off by the client.</b></p>	<p>25</p>



TENDER EVALUATION CRITERIA AND WEIGHTINGS

Proposal and methodology	Weighting
<ul style="list-style-type: none"> <li> <p><b>Project Proposal/Method Statement</b></p> <p>Bidder has submitted no information or inadequate information to determine scoring level = 0</p> <p>The bidder has misunderstood certain aspects of the scope of work and does not deal with the critical aspects of the project, such as demolishing, refurbishment and risk associated with the works =5</p> <p>The bidder addresses the scope of work provides a methodology to deal with the critical aspects of the project, such as demolishing, refurbishment and risk associated with the works =10</p> </li> <li> <p><b>Project Schedule/programme (acceptable scheduling software)</b></p> <p>Programme not submitted or unrealistic=0</p> <p>Programme realistic but not aligned to Bill of Quantities = 2</p> <p>Programme is realistic and aligned to the Bill of Quantities =5</p> </li> <li> <p><b>Cashflow projections</b></p> <p>Cashflow not submitted or unrealistic=0</p> <p>The cash flow projections not aligned to the programme=2</p> <p>The cash flow projections and programme are aligned=5</p> </li> </ul>	<p>20</p>

TENDER EVALUATION CRITERIA AND WEIGHTINGS

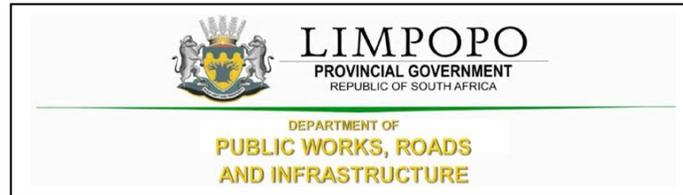
Safety, Health and Environmental Plan (SHEQ)	Weighting
<p>Bidder has submitted no information or inadequate information to determine scoring level=0</p> <p>The bidder has misunderstood certain aspects of the scope of work and does not address safety and health issues related to the works – i.e. there is no cognisance to the safety of the learners, teachers and workers and the impact of their work on the environment=5</p> <p>The safety, health and environment approach provided deal with the critical aspects of the project, such as demolishing, refurbishment and risk associated with the works. Cognisance is taken dealing with safety of the workers, learners and teachers when conducting their works such as barricading of the area, conducting safety talk with the affected parties=10</p>	10
<b>Total</b>	<b>100</b>
<p><b>NB: To qualify for final evaluation the bidder must obtain a minimum score of 70% on functionality</b></p>	

## NB: ADDITIONAL EVALUATION CRITERIA

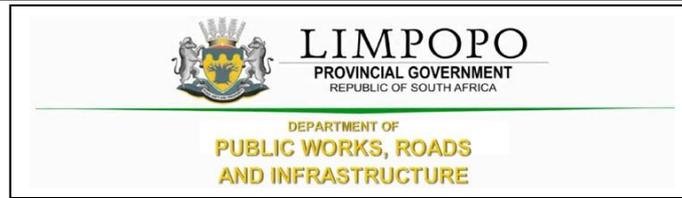
1. This project forms part of the Twenty-Five (25) schools programme (See table below)
2. Should one bidder score high points on more than three (3) projects, Bidders will be required to meet the minimum requirements as listed below to qualify for additional appointment:
  - 2.1 Bidder should have a minimum functionality score of 90 points.
  - 2.2 Bidder should have one CIDB grading level above the highest appointed level required grading.
3. The department reserves the right to negotiate prices in accordance with regulation **6 (80/20 preference point system for acquisition of goods or services for Rand value equal to or above R30 000 and up to R50 million)** and/or **7 (90/10 preference point system for acquisition of goods or services with Rand value above R50 million)** of the Preferential Procurement Regulations of 2017.
4. Furthermore, the Department “LDPWR&I” is not obliged to award the tender to the bidder with the highest number of tender points.

Item No	Name of school	LDPW Contract Number
1	Diphuti Primary	LDPWRI-20091
2	Kgarahara Secondary	LDPWRI-20096
3	Masikhwa Primary	LDPWRI-20092
4	Napsadi Secondary	LDPWRI-20093
5	Ngwana Makhutswe Secondary	LDPWRI-20094
6	Rasema Secondary	LDPWRI-20115
7	Seale Secondary	LDPWRI-20095
8	Mmaphuti Manamela Secondary (New Site)	LDPWRI-B/20100
9	David Scara Kutumela Primary (Modimolle RDP Settlement)	LDPWRI-B/20102
10	Matsobane Primary	LDPWRI-B/20103
11	Rakgoatha Primary	LDPWRI-B/20099
12	Dikoloi Secondary	LDPWRI-B/20097
13	Matsibe Secondary	LDPWRI-B/20101
14	Sekete Secondary	LDPWRI-B/20104
15	Suswe Primary	LDPWRI-B/2098
16	Matsuokwane Secondary	LDPWRI-B/20106

17	Rebone Secondary	LDPWRI-B/20105
18	Dikgalaopeng Secondary	LDPWRI-B/20107
19	Seboeng Primary (New Site)	LDPWRI-B/20108
20	St. Paul Secondary	LDPWRI-B/20109
21	Chameti Secondary	LDPWRI-B/20110
22	Mphakani Primary	LDPWRI-B/20112
23	Ramatimana Primary School	LDPWRI-B/20111
24	Sehonwe Primary	LDPWRI-B/20114
25	Vutivi Primary (New Site)	LDPWRI-B/20113



## PART T2: RETURNABLE DOCUMENTS



## T2.1: LIST OF RETURNABLE DOCUMENTS

### BID EVALUATION STAGE 1- MANDATORY REQUIREMENTS

1. The following returnable documents are compulsory, failure to comply will be considered non-responsive, and the bid will not be evaluated any further. All returnable documents are incorporated into the bid documents.
  - SBD1: Invitation to Bid (fully completed and signed)
  - Submit a power of attorney/Certificate of Authority (fully completed and signed)
  - Record of Addenda (where applicable)
  - SBD 4: Declaration of Interest
  - SBD 6.1: Reference Points claim form in terms of the Preferential Procurement Regulations 2017 or amended.
  - SBD 6.2 Declaration Certificate for Local Production and Content
  - SBD 8: Declaration of the bidder's past SCM practices
  - SBD 9: Certificate of Bid determination
  - Declaration of Subcontracting Arrangements
  - C1.1: Form of the offer (PART C1)
  - Joint venture certificate (where applicable)
  - Bidding entity must not have any of their directors/shareholders listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;
  - Bidding entity must not appear on the National Treasury's list of blacklisted entities
  - Completion of the Bid Document must be done with a non-erasable black pen
  - Submission of fully completed original tender document
  
2. The following returnable documents are **required for tender evaluation purposes**.
  - Curriculum Vitae of all key staff allocated to this project, indicating their experience and qualifications and professional registration with various councils.
  - Certified copies (not older than 6 months from the date of certifying) of all qualifications, professional registrations, and training.
  - Letters of completion for previous or current work on appropriate letterhead and signed off by the client must be attached. The letters must detail the scope of work undertaken, project value is undertaken, date of award and completion, and the location where work was carried out.
  - Proof of ownership of the plant or confirmation of rental agreement thereof.
  - Methodology documentation, detailing the bidder's approach to executing the scope of works, risk, and environmental impact.
  - Proof of Contractor Registration issued by the Construction Industry Development Board - Compulsory.
  - Signed Preferencing Schedule, including submitting the supporting documents
    - B-BBEE Verification Certificates issued by a verification agency accredited by the South African National Accreditation System "SANAS" (In the case of a consortium and Joint venture, a Joint BBBEE certificate is required, but where sub-contracting only the BBBEE of the bidding entity is required). Or in the case of an Exempted Micro Enterprise or a Qualifying Small Enterprise, if permitted in terms of the relevant code,
    - A duly completed and valid affidavit on the relevant form obtained from the DTI website ([https://www.thedti.gov.za/economic\\_empowerment/bee\\_codes.jsp](https://www.thedti.gov.za/economic_empowerment/bee_codes.jsp)). Failure to submit these documents will result in no points allocated.

**PART T2: RETURNABLE DOCUMENTS**

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- Copy of COIDA (Compensation for Occupational Injuries and Diseases) registration certificate, e.g. Letter of Good Standing
- A valid Tax Clearance, unique security Personal Identification Number(PIN) issued by the South African Revenue Services (where Consortium / Joint Venture / Sub- contractors / Sub-consultants are involved, each party to the association must submit a separate Valid Tax Clearance unique security personal Identification number)
- Certified copy of directors' identity documents not older than six months. No copy of a certified copy will be accepted.
- Joint Venture or Consortium submissions are eligible, Joint Venture Agreement must be notarized by the commissioner of oath.
- Submission of fully Completed and Priced Bill of Quantities

***KINDLY NOTE THAT FAILURE TO SUBMIT AND OR COMPLETE THE REQUIRED DOCUMENTATION (AS PER MANDATORY REQUIREMENTS INCLUDING COMPLETION OF SBD 1, 4, 6.1, 6.2, 8 and 9) WITH THE TENDER WILL RESULT IN YOUR TENDER BEING REJECTED WITHOUT FURTHER CONSIDERATION.***

PART T2: RETURNABLE DOCUMENTS

**T2.2: RETURNABLE SCHEDULE**

Bidders shall indicate whether the list of returnables has been submitted together with the following completed documents or attachments (by indicating Yes or No)		Complaint	
1.	SBD 1: Invitation to Bid	Yes	No
2.	Certificate of Authority	Yes	No
3.	Record of Addenda to the tender	Yes	No
4.	Compulsory Declaration	Yes	No
5.	Preferencing schedule: Broad-based Black Economic Empowerment status	Yes	No
6.	Proposed amendments and qualifications (if applicable)	Yes	No
7.	SBD 4: Declaration of Interest	Yes	No
8.	SBD 6.1: Reference Points claim form in terms of the Preferential Procurement Regulations 2017 or amended	Yes	No
9.	SBD 6.2 Declaration Certificate for Local Production and Content	Yes	No
10.	SBD 8: Declaration of the bidder's past SCM practices	Yes	No
11.	SBD 9: Certificate of Bid determination	Yes	No
12.	Declaration of Subcontracting Arrangements	Yes	No
13.	Form of offer	Yes	No
14.	CSD (Summary)	Yes	No
15.	COIDA	Yes	No
16.	Valid tax clearance or tax pin	Yes	No
17.	Certified copy of Contractor Registration for Incorporation or of Company Registration Document	Yes	No
18.	Joint venture certificate (where applicable)	Yes	No
19.	B-BBEE Verification Certificates issued by a verification agency accredited by the South African National Accreditation System (SANAS)	Yes	No
20.	Certified copies of Qualifications, Professional registration, and Training for Key persons	Yes	No
21.	Methodology/Method statement	Yes	No
22.	Certificates or letters of completed or current similar projects, with Contactable references and on the Client's letterhead	Yes	No
23.	Certified copy of directors' identity documents	Yes	No
24.	Minimum CIDB class grading: 7GB or higher (CIDB Certificate)	Yes	No
25.	Preliminary Programme/schedule and cash flow	Yes	No
26.	Safety, Health and Environmental Plan (SHEQ)	Yes	No

**BID NUMBER: LDPWRI-B/20109**

**PART T2: RETURNABLE DOCUMENTS**

**SBD1: INVITATION TO BID**

**PART A**

<b>YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)</b>					
BID NUMBER:		CLOSING DATE:		CLOSING TIME:	
DESCRIPTION					
<b>THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).</b>					
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
<b>SUPPLIER INFORMATION</b>					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
	TCS PIN:		<b>OR</b>	CSD No:	
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE [TICK APPLICABLE BOX]	<input type="checkbox"/> Yes		B-BBEE STATUS LEVEL SWORN AFFIDAVIT	<input type="checkbox"/> Yes	
	<input type="checkbox"/> No			<input type="checkbox"/> No	
IF YES, WHO WAS THE CERTIFICATE ISSUED BY?					
AN ACCOUNTING OFFICER AS CONTEMPLATED IN THE CLOSE CORPORATION ACT (CCA) AND NAME THE APPLICABLE IN THE TICK BOX	<input type="checkbox"/>	AN ACCOUNTING OFFICER AS CONTEMPLATED IN THE CLOSE CORPORATION ACT (CCA)			
	<input type="checkbox"/>	A VERIFICATION AGENCY ACCREDITED BY THE SOUTH AFRICAN ACCREDITATION SYSTEM (SANAS)			
	<input type="checkbox"/>	A REGISTERED AUDITOR			
		NAME:			
<b>[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/SWORN AFFIDAVIT (FOR EMEs&amp; QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]</b>					

**PART T2: RETURNABLE DOCUMENTS**

<p>ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?</p>	<p><input type="checkbox"/>Yes                      <input type="checkbox"/>No</p> <p>[IF YES ENCLOSE PROOF]</p>	<p>ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?</p>	<p><input type="checkbox"/>Yes                      <input type="checkbox"/>No</p> <p>[IF YES ANSWER PART B:3 BELOW ]</p>
<p><b>SIGNATURE OF BIDDER</b> .....</p>	<p><b>DATE</b></p>		
<p><b>CAPACITY UNDER WHICH THIS BID IS SIGNED (Attach proof of authority to sign this bid; e.g. resolution of directors, etc.)</b></p>			
<p><b>TOTAL NUMBER OF ITEMS OFFERED</b></p>		<p><b>TOTAL BID PRICE (ALL INCLUSIVE)</b></p>	
<p><b>BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:</b></p>		<p><b>TECHNICAL INFORMATION MAY BE DIRECTED TO:</b></p>	
<p>DEPARTMENT/ PUBLIC ENTITY</p>	<p>LDPWR&amp;I</p>	<p>CONTACT PERSON</p>	<p>Mr. P. Makape</p>
<p>CONTACT PERSON</p>	<p>Ms Moloto V.</p>	<p>TELEPHONE NUMBER</p>	<p>082 460 6271</p>
<p>TELEPHONE NUMBER</p>	<p>015 284 7142</p>	<p>FACSIMILE NUMBER</p>	
<p>FACSIMILE NUMBER</p>		<p>E-MAIL ADDRESS</p>	<p>makapep@dpw.limpopo.gov.za</p>
<p>E-MAIL ADDRESS</p>	<p>molotomv@dpw.limpopo.gov.za</p>		

**PART T2: RETURNABLE DOCUMENTS**

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**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 ONLINE
- 1.3. BIDDERS MUST REGISTER ON THE CENTRAL SUPPLIER DATABASE (CSD) TO UPLOAD MANDATORY INFORMATION NAMELY: (BUSINESS REGISTRATION/ DIRECTORSHIP/ MEMBERSHIP/IDENTITY NUMBERS; TAX COMPLIANCE STATUS; AND BANKING INFORMATION FOR VERIFICATION PURPOSES). B-BBEE CERTIFICATE OR SWORN AFFIDAVIT FOR B-BBEE MUST BE SUBMITTED TO BIDDING INSTITUTION.
- 1.4. WHERE A BIDDER IS NOT REGISTERED ON THE CSD, MANDATORY INFORMATION NAMELY: (BUSINESS REGISTRATION/ DIRECTORSHIP/ MEMBERSHIP/IDENTITY NUMBERS; TAX COMPLIANCE STATUS MAY NOT BE SUBMITTED WITH THE BID DOCUMENTATION. B-BBEE CERTIFICATE OR SWORN AFFIDAVIT FOR B-BBEE MUST BE SUBMITTED TO BIDDING INSTITUTION.
- 1.5. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER LEGISLATION OR SPECIAL CONDITIONS OF CONTRACT.

**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 VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE PROOF OF TCS / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.

**3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS**

- 3.1. IS THE BIDDER A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?  YES  NO
- 3.2. DOES THE BIDDER HAVE A BRANCH IN THE RSA?  YES  NO
- 3.3. DOES THE BIDDER HAVE A PERMANENT ESTABLISHMENT IN THE RSA?  YES  NO
- 3.4. DOES THE BIDDER HAVE ANY SOURCE OF INCOME IN THE RSA?  YES  NO

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

**NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.**

**CERTIFICATE OF AUTHORITY**

Indicate the status of the tenderer by ticking the appropriate box hereunder. The tenderer must complete the certificate set out below for the relevant category.

A Company	B Partnership	C Joint Venture	D Sole Proprietor	E Close Corporation

**A. CERTIFICATE FOR COMPANY**

I,....., chairperson of the board of directors of ..... hereby confirm that by resolution of the board (copy attached) taken on .....20...., Mr/Mrs.....acting in the capacity of....., was authorized to sign all documents in connection with this tender and any contract resulting from it on behalf of the company.

As witness

1.....  
 . Chairperson  
 2.....  
 Date

**B. CERTIFICATE OF PARTNERSHIP**

We, the undersigned, being the key partners in the business trading as ..... hereby authorize Mr/Mrs....., acting in the capacity of.....to sign all documents in connection with the tender for Contract.....and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

NOTE: This certificate is to be completed and signed by all the key partners upon whom rests the direction of the affairs of the Partnership as a whole.

**C. CERTIFICATE FOR JOINT VENTURE**

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorize Mr/Mrs....., authorized signatory of the company ....., acting in the capacity of lead partner, to sign all documents in connection with the tender offer for Contract.....and any other contract resulting from it on our behalf.

This authorization is evidenced by the attached power of attorney signed by legally authorized signatories of all the partners to the Joint Venture.

NAME OF FIRM	ADDRESS	AUTHORIZING SIGNATURE, NAME & CAPACITY

**D. CERTIFICATE FOR THE SOLE PROPRIETOR**

I, ....., hereby confirm that I am the sole owner of the business trading as.....

As Witness:

1..... Signature: Sole owner  
 2..... Date

**E. CERTIFICATE FOR CLOSE CORPORATION**

We, the undersigned, being the key members in the business trading as.....hereby authorise Mr/Mrs.....acting in the capacity of....., to sign all documents in connection with the tender for Contract.....and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

**PART T2: RETURNABLE DOCUMENTS**

NOTE: This certificate is to be completed and signed by all the key members upon whom rests the direction of the affairs of the Close Corporation as a whole

**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:		
	<b>Date</b>	<b>Title or Details</b>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....

## Compulsory Declaration

The following particulars must be furnished. In the case of a joint venture, a separate declaration in respect of each partner must be completed and submitted.

<b>Section 1: Enterprise Details</b>		
<b>Name of enterprise:</b>		
<b>Contact person:</b>		
<b>Email:</b>		
<b>Telephone:</b>		
<b>Cell no</b>		
<b>Fax:</b>		
<b>Physical address</b>		
<b>Postal address</b>		
<b>Section 2: Particulars of companies and close corporations</b>		
<b>Company / Close Corporation registration number</b>		
<b>Section 3: SARS Information</b>		
<b>Tax reference number</b>		
<b>VAT registration number:</b>	<i>State Not Registered if not registered for VAT</i>	
<b>Section 4: CIDB registration number</b>		
<b>Section 5: National Treasury Central Supplier Database</b>		
<b>Supplier number</b>		
<b>Unique registration reference number</b>		
<b>Section 6: Particulars of principals</b>		
<p><b>principal:</b> means a natural person who is a partner in a partnership, a sole proprietor, a director of a company established in terms of the Companies Act of 2008 (Act No. 71 of 2008) or a member of a close corporation registered in terms of the Close Corporation Act, 1984, (Act No. 69 of 1984).</p>		
<b>Full name of the principal</b>	<b>Identity number</b>	<b>Personal tax reference number</b>
Attach a separate page if necessary		

**PART T2: RETURNABLE DOCUMENTS**

**Section 7: Record in the service of the state**

Indicate by marking the relevant boxes with a cross, if any principal is currently or has been within the last 12 months in the service of any of the following:

- a member of any municipal council
- a member of any provincial legislature
- a member of the National Assembly or the National Council of Province
- a member of the board of directors of any municipal entity
- an official of any municipality or municipal entity
- an employee of any department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act of 1999 (Act No. 1 of 1999)
- a member of an accounting authority of any national or provincial public entity
- an employee of Parliament or a provincial legislature

If any of the above boxes are marked, disclose the following:

Name of principal	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within the last 12 months

\*insert separate page if necessary

**Section 8: Record of a family member in the service of the state**

**family member:** a person's spouse, whether in a marriage or in a customary union according to indigenous law, a domestic partner in a civil union, or child, parent, brother, sister, whether such a relationship results from birth, marriage or adoption

Indicate by marking the relevant boxes with a cross, if any family member of a principal as defined in section 5 is currently or has been within the last 12 months been in the service of any of the following:

- a member of any municipal council
- a member of any provincial legislature
- a member of the National Assembly or the National Council of Province
- a member of the board of directors of any municipal entity
- an official of any municipality or municipal entity
- an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)
- a member of an accounting authority of any national or provincial public entity
- an employee of Parliament or a provincial legislature

Name of a family member	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within the last 12 m

\*insert separate page if necessary

**PART T2: RETURNABLE DOCUMENTS**

**Section 9: Record of termination of previous contracts with an organ of state**

Was any contract between the tendering entities including any of its joint venture partners terminated during the past 5 years for reasons other than the employer no longer requiring such works or the employer fails to make payment in terms of the contract.

Yes       No (Tick appropriate box)

If yes, provide particulars (interest separate page if necessary)

**Section 10: Declaration**

The undersigned, who warrants that he/she is duly authorized to do so on behalf of the tendering entity confirms that the contents of this Declaration are within my knowledge, and save where stated otherwise in an attachment hereto, are to the best of my belief both true and correct, and:

- i) neither the name of the tendering entity or any of its principals appears on:
  - a) the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004 (Act No. 12 of 2004)
  - b) National Treasury's Database of Restricted Suppliers (see [www.treasury.gov.za](http://www.treasury.gov.za))
- ii) neither the tendering entity or any of its principals has within the last five years been convicted of fraud or corruption by a court of law (including a court outside of the Republic of South Africa);
- iii) any principal who is presently employed by the state has the necessary permission to undertake remunerative work outside such employment (attach permission to this declaration);
- iv) the tendering entity is not associated, linked or involved with any other tendering entities submitting tender offers
- v) has not engaged in any prohibited restrictive horizontal practices including consultation, communication, agreement, or arrangement with any competing or potential tendering entity regarding prices, geographical areas in which goods and services will be rendered, approaches to determining prices or pricing parameters, intentions to submit a tender or not, the content of the submission (specification, timing, conditions of the contract, etc.) or intention to not win a tender;
- vi) has no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- vii) neither the tenderer or any of its principals owes municipal rates and taxes or municipal service charges to any municipality or a municipal entity and are not in arrears for more than 3 months;
- viii) SARS may, on an on-going basis during the term of the contract, disclose the tenderer's tax compliance status to the Employer and when called upon to do so, obtain the written consent of any subcontractors who are subcontracted to execute a portion of the contract that is entered into more than the threshold prescribed by the National Treasury, for SARS to do likewise.

Signed .....

Date .....

Name .....

Position .....

*Enterprise*  
.....

**PART T2: RETURNABLE DOCUMENTS**

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- NOTE 2: Section 30(1) of the Public Service Act, 1994, prohibits an employee (person who is employed in posts on the establishment of departments) from performing or engaging remunerative work outside his or her employment in the relevant department, except with the written permission of the executive authority of the department. When in operation, Section 8(2) of the Public Administration Management Act, 2014, will prohibit an employee of the public administration (i.e. organs of state and all national departments, national government components listed in Part A of Schedule 3 to the Public Service Act, provincial departments including the office of the premier listed in Schedule 1 of the Public Service Act and provincial departments listed in schedule 2 of the Public Service Act, and provincial government components listed in Part B of Schedule 3 of the Public Service Act) or persons contracted to executive authorities in accordance with the provisions of section 12A of the Public Service Act of 1994 or persons performing similar functions in organs of state from conducting business with the State or to be a director of a public or private company conducting business with the State. The offense for doing so is a fine or imprisonment for a period not exceeding 5 years or both. It is also serious misconduct which may result in the termination of employment by the employer.
- NOTE 3: Regulation 44 of Supply Chain Management regulations issued in terms of the Municipal Finance Management Act of 2003 requires that organs of state and municipal entities not award a contract to a person who is the service of the state, a director, manager or principal shareholder in the service of the state or who has been in the service of the state in the previous twelve months.
- NOTE 4: Regulation 45 of Supply Chain Management regulations requires a municipality or municipal entity to disclose in the notes to the particulars of the annual statement of any award made to a close family member in the service of the state.
- NOTE 5: Corrupt activities which give rise to an offense in terms of the Prevention and Combating of Corrupt Activities Act of 2004) include improperly influencing in any way the procurement of any contract, the fixing of the price, consideration or other amounts of money stipulated or otherwise provided for in any contract and the manipulating by any means of the award of a tender.
- NOTE 6: Section 4 of the Competition Act of 1998 prohibits restrictive horizontal practice including agreements between parties in a horizontal relationship that have the effect of substantially preventing or lessening competition, directly or indirectly fixing prices or dividing markets or constitute collusive tendering. Section 5 also prohibits restrictive vertical practices. Any restrictive practices that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties.

**F. BROAD-BASED BLACK ECONOMIC EMPOWERMENT**

**Preferencing schedule: Broad-Based Black Economic Empowerment Status**

**Preamble**

Section 10(b) of the Broad-Based Black Economic Empowerment Act of 2003 (Act No. 53 of 2003) states that “Every organ of state and the public entity must take into account and, as far as is reasonably possible, apply any **relevant code of good practice** issued in terms of this Act in developing and implementing a preferential procurement policy.”

A number of codes of good practice have been issued in terms of Section 9(1) of the B-BBEE Act of 2003, including a generic code of good practice and various sector codes. The sector codes vary the metrics, weightings, and targets used in the generic code of good practice to establish the overall performance of an entity and its B-BBEE status. The B-BBEE status needs to be assessed in accordance with the applicable code.

**1 Conditions associated with the granting of preferences**

Tenderers who claim a preference shall provide proof of B-BBEE status level of contributor in accordance with the requirements of section 2 in respect of the applicable code as at the closing time for submissions, failing which their claims for preferences will be rejected.

**1 Proof of B-BBEE status level of contributor**

Proof of B-BBEE status level of contributor shall be by means of

- the B-BBEE status level certificate issued by an authorized body or person;
- an affidavit as prescribed by the B-BBEE Codes of Good Practice; or
- any other requirement prescribed in terms of the Broad-Based Black Economic Empowerment Act

**2 Tender preferences claimed**

The scoring shall be as follows:

B-BBEE status level of contributor	Status level of a tenderer <i>(tick relevant level)</i>	Number of preference points	
		90/10 preference points system	80/20 preference points system
Form not completed or non-complaint contributor		0	0
Level 8 contributor		1	2
Level 7 contributor		2	4
Level 6 contributor		3	6
Level 5 contributor		4	8
Level 4 contributor		5	12
Level 3 contributor		6	14
Level 2 contributor		9	18
Level 1 contributor		10	20

**4 Declaration**

The tenderer declares that

- a) the tendering entity is a level contributor as stated in the submitted proof of B-BBEE status level of a contributor as at the closing date for submissions
- b) the tendering entity has been measured in terms of the following code (tick applicable box):

- Generic code of good practice

**PART T2: RETURNABLE DOCUMENTS**

Construction Sector Code

Other – specify

.....

.....

c) the tendering entity confirms that it will only enter into a subcontract with the Employer's prior approval and is not permitted to subcontract more than 25% of the total of the prices of the contract to any other enterprise that does not have an equal or higher B-BBEE status level of contributor unless the contract is a subcontractor to an Exempted Micro Enterprises which has the capability to execute the contract.

d) the contents of the declarations made in terms of a) and b) above are within my knowledge and are to the best of my belief both true and correct

The undersigned, who warrants that he/she is duly authorized to do so on behalf of the tenderer, confirms that he/she understands the conditions under which such preferences are granted and confirms that the tenderer satisfies the conditions about the granting of tender preferences.

Signature: .....

Name: .....

Duly authorized to sign on behalf of: .....

Telephone: .....

Fax: ..... Date: .....

Name of witness: ..... Signature of witness: .....

**Note:** 1) Failure to complete the declaration will lead to the rejection of a claim for preference.  
2) Supporting documentation of the abovementioned claim for preference must be submitted with the tender submission to be eligible for a preference

### 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 cover letter to his tender and reference such a 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 4: DECLARATION OF INTEREST

**SBD 4: DECLARATION OF INTEREST**

1. Any legal person, including persons employed by the state<sup>1</sup>, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes an advertised competitive bid, a limited bid, a proposal or written price quotation). Because of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorized representative declare his/her position concerning the evaluating/adjudicating authority where-

- the bidder is employed by the state; and/or
- the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.

2. To give effect to the above, the following questionnaire must be completed and submitted with the bid.

2.1 Full Name of bidder or his or her representative: .....

2.2 Identity Number:.....

2.3 The position occupied in the Company (director, trustee, shareholder<sup>2</sup>, member):  
.....

2.4 Registration number of company, enterprise, close corporation, partnership agreement or trust:  
.....

2.5 Tax Reference Number: .....

2.6 VAT Registration Number: .....

2.6.1 The names of all directors/trustees/shareholders/members, their identity numbers, tax reference numbers and, if applicable, employee / PERSAL numbers must be indicated in paragraph 3 below.

<sup>1</sup>"State" means –

- (a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999);
- (b) any municipality or municipal entity;
- (c) provincial legislature;
- (d) national Assembly or the national Council of provinces; or
- (e) Parliament.

<sup>2</sup> "Shareholder" means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control over the enterprise.

2.7 Are you or any person connected with the bidder? YES / NO  
Presently employed by the state?

2.7.1 If so, furnish the following particulars:

Name of person / director / trustee / shareholder/ member: .....

Name of state institution at which you or the person connected to the bidder is employed: .....

SBD 4: DECLARATION OF INTEREST

The position occupied in the state institution: .....

Any other particulars:  
.....  
.....  
.....

2.7.2 If you are presently employed by the state, did you obtain the appropriate authority to undertake remunerative work outside employment in the public sector? YES / NO

2.7.2.1 If yes, did you attach proof of such authority to the bid document? YES / NO

(Note: Failure to submit proof of such authority, where applicable, may result in the disqualification of the bid.

2.7.2.2 If no, furnish reasons for non-submission of such proof:  
.....  
.....  
.....

2.8 Did you or your spouse, or any of the company's directors / trustees/shareholders/members or their spouses conduct business with the state in the previous twelve months? YES / NO

2.8.1 If so, furnish particulars:  
.....  
.....  
.....

2.9 Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid? YES / NO

2.9.1 If so, furnish particulars.  
.....  
.....  
.....

2.10 Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid? YES/NO

2.10.1 If so, furnish particulars.  
.....  
.....  
.....

**SBD 4: DECLARATION OF INTEREST**

2.11 Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies whether or not they are bidding for this contract? **YES/NO**

2.11.1 If so, furnish particulars:

.....  
 .....  
 .....

**Full details of directors / trustees / members / shareholders.**

Full Name	Identity Number	Personal Income Tax Reference Number	State Employee Number / Persal Number

**4 DECLARATION**

I, THE UNDERSIGNED (NAME).....

CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 2 and 3 ABOVE IS CORRECT. I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....  
 Signature Date

.....  
 Position Name of bidder

**SBD 6.1: REFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017**

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

**NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011.**

**1. GENERAL CONDITIONS**

1.1 The following preference point systems are applicable to all bids:

- 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

- a) The value of this bid is estimated to **exceed/not exceed** R50 000 000 (all applicable taxes included) and therefore the ..... preference point system shall be applicable; or
- b) Either the 80/20 or 90/10 preference point system will be applicable to this tender (*delete whichever is not applicable for this tender*).

1.3 Points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contributor.

1.4 The maximum points for this bid are allocated as follows:

	POINTS
<b>PRICE</b>	
<b>B-BBEE STATUS LEVEL OF CONTRIBUTOR</b>	
<b>Total points for Price and B-BBEE must not exceed</b>	<b>100</b>

1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

**2. DEFINITIONS**

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) **“B-BBEE status level of contributor”** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) **“EME”** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) **“functionality”** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) **“prices”** includes all applicable taxes less all unconditional discounts;
- (h) **“proof of B-BBEE status level of contributor”** means:
  - 1) B-BBEE Status level certificate issued by an authorized body or person;
  - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
  - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) **“QSE”** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

**3. POINTS AWARDED FOR PRICE**

**3.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS**

A maximum of 80 or 90 points is allocated for price on the following basis: **80/20 or 90/10**

$$P_s = 80 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right) \quad \text{or} \quad P_s = 90 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where

- P<sub>s</sub> = Points scored for price of bid under consideration
- P<sub>t</sub> = Price of bid under consideration
- P<sub>min</sub> = Price of lowest acceptable bid

**4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR**

4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

<b>B-BBEE Status Level of Contributor</b>	<b>Number of points (90/10 system)</b>	<b>Number of points (80/20 system)</b>
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

**5. BID DECLARATION**

5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

**6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1**

6.1 B-BBEE Status Level of Contributor: . = .....(maximum of 10 or 20 points)  
 (Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

**7. SUB-CONTRACTING**

7.1 Will any portion of the contract be sub-contracted?

*(Tick applicable box)*

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

7.1.1 If yes, indicate:

- i) What percentage of the contract will be subcontracted.....%
- ii) The name of the sub-contractor.....
- iii) The B-BBEE status level of the sub-contractor.....

iv) Whether the sub-contractor is an EME or QSE

*(Tick applicable box)*

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations,2017:

<b>Designated Group: An EME or QSE which is at last 51% owned by:</b>	<b>EME</b> √	<b>QSE</b> √
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
<b>OR</b>		
Any EME		
Any QSE		

**8. DECLARATION WITH REGARD TO COMPANY/FIRM**

8.1 Name of company/firm:.....

8.2 VAT registration number:.....

8.3 Company registration number:.....

8.4 TYPE OF COMPANY/ FIRM

- Partnership/Joint Venture / Consortium
- One person business/sole propriety
- Close corporation
- Company
- (Pty) Limited

[TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

.....  
.....  
.....

8.6 COMPANY CLASSIFICATION

- Manufacturer
  - Supplier
  - Professional service provider
  - Other service providers, e.g. transporter, etc.
- [TICK APPLICABLE BOX]

8.7 Total number of years the company/firm has been in business:.....

8.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we 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 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
  - (a) disqualify the person from the bidding 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 bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury 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.

WITNESSES

1. ....

2. ....

.....  
SIGNATURE(S) OF BIDDERS(S)

DATE: .....

ADDRESS .....

.....

.....

## SBD 6.2: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

### 1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 (Regulation 8) makes provision for the promotion of local production and content.
- 1.2. Regulation Regulation 8.(2) prescribes that in the case of designated sectors, organs of state must advertise such tenders with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for bids referred to in paragraph 1.2 above, a two-stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = \left(1 - \frac{x}{y}\right) \times 100$$

Where

x is the imported content in Rand

y is the bid price in Rand excluding value-added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by the South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated in paragraph 4.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on [http://www.dti.gov.za/industrial development/ip.jsp](http://www.dti.gov.za/industrial%20development/ip.jsp) at no cost.

1.6 A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;

2. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows: (Refer to "Treasury Designated sector"- Page 64 to 66)

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
_____	_____ %
_____	_____ %
_____	_____ %

3. Does any portion of the services, works or goods offered have any imported content?

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

3.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information are accessible on [www.reservebank.co.za](http://www.reservebank.co.za).

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

4. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the DTI must be informed accordingly in order for the dti to verify and in consultation with the AO/AA provide directives in this regard.

**(REFER TO ANNEX B OF SATS 1286:2011)**

**LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)**

**IN RESPECT OF BID NO.** .....

**ISSUED BY:** (Procurement Authority / Name of Institution):

.....

NB

- 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on <http://www.thedti.gov.za/industrialdevelopment/ip.jsp>. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, ..... (full names),  
do hereby declare, in my capacity as .....  
of .....(name of bidder entity),  
the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that
  - (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (c) The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C;

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

**If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.**

- (d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

**SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**WITNESS No. 1** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**WITNESS No. 2** \_\_\_\_\_ **DATE:** \_\_\_\_\_

## GUIDANCE DOCUMENT FOR THE CALCULATION OF LOCAL CONTENT

### 1. DEFINITIONS

Unless explicitly provided in this guideline, the definitions given in SATS 1286:2011 apply.

### 2. GENERAL

#### 2.1. Introduction

This guideline provides tenderers with a detailed description of how to calculate local content of products (goods, services and works) by components/material/services and enables them to keep an updated record for verification requirements as per the SATS 1286:2011 Annexure A and B.

The guideline consists of two parts, namely:

- a written guideline; and
- three declarations that must be completed:
  - Declaration C: “Local Content Declaration – Summary Schedule” (see Annexure C);
  - Declaration D: “Imported Content Declaration – Supporting Schedule to Annex C” (see Annexure D); and
  - Declaration E: “Local Content Declaration – Supporting Schedule to Annex C” (see Annexure E).

The guidelines and declarations should be used by tenderers when preparing a tender. A tenderer must complete Declarations D and E, and consolidate the information on Declaration C.

Annexure C must be submitted with the tender by the closing date and time as determined by the Tender Authority. The Tender Authority reserves the right to request that Declarations D and E also be submitted.

If the tender is successful, the tenderer must continuously update Declarations C, D and E with actual values for the duration of the contract.

NOTE:

Annexure A is a note to the purchaser in SATS 1286:2011; and  
Annexure B is the Local Content Declaration IN SATS 1286:2011.

## **2.2. What is local content?**

According to SATS 1286:2011, the local content of a product is the tender price less the value of imported content, expressed as a percentage. It is, therefore, necessary to first compute the imported value of a product to determine the local content of a product.

## **2.3. Categories: Imported and Local Content**

The tenderer must differentiate between imported content and local content. Imported content of a product by components/material/services is separated into two categories, namely:

- products imported directly by the tenderer; and
- products imported by a third party and supplied to the tenderer.

### **2.3.1. Imported Content**

Identify the imported content, if any, by value for products by component/material/services. In the case of components/materials/services sourced from a South African manufacturer, agent, supplier or subcontractor (i.e. third party), obtain that information and Declaration D from the third party.

Calculate the imported content of components/materials/services to be used in the manufacture of the total quantity of the products for which the tender is to be submitted.

As stated in clause 3.2.4 of SATS 1286:2011: "If information on the origin of components, parts or materials is not available, it will be deemed to be imported content."

#### **2.3.1.1. Imported directly by the tenderer:**

When the tenderer import products directly, the onus is on the tenderer to provide evidence of any components/materials/services that were procured from a non-domestic source. The evidence should be verifiable and pertain to the tender as a whole. Typical evidence will include commercial invoices, bills of entry, etc.

When the tenderer procures imported services such as project management, design, testing, marketing, etc. and makes royalty and lease payments, such payments relating to the tender must be included when calculating imported content.

#### **2.3.1.2. Imported by a third party and supplied to the tenderer:**

When the tenderer supplies components/material/services that are imported by any third party (for example, a domestic manufacturer, agent, supplier or subcontractor in the supply chain), the onus is on the tenderer to obtain verifiable evidence from the third party.

The tenderer must obtain Declaration D from all third parties for the related tender. The third party must be requested by the tenderer to continuously update Declaration D. Typical evidence of imported content will include commercial invoices, bills of entry etc.

When a third party procures imported services such as project management, design, testing, marketing etc. and makes royalty and lease payments, such payments relating to the tender must be included when calculating imported content.

#### 2.3.1.3. Exempt Imported Content:

Exemptions, if any, are granted by the Department of Trade and Industry (the dti). Evidence of the exemptions must be provided and included in Annexure D.

**2.3.2. Local Content**

Identify and calculate the local content, by value for products by components/materials/services to be used in the manufacture of the total quantity of the products.

**TREASURY DESIGNATED SECTOR**

TREASURY DESIGNATED SECTOR						
Steel Construction Material						
Section	Bill No	Item	Description	Unit	Qty	Local Content Threshold
<b>Reinforcement (Foundations)</b>						
2	2	11	Type 245 fabric reinforcement	M2	1958	100%
3	2	12	Type 245 fabric reinforcement	M2	242	100%
4	2	13	Type 245 fabric reinforcement	M2	305	100%
5	2	10	Type 245 fabric reinforcement	M2	44	100%
C3	2	30	Type 617 fabric reinforcement	m2	60	70%
C3	5	17	Type 245 fabric reinforcement	M2	152	100%
<b>Reinforcement (C, F&amp;R)</b>						
2	2	10	All diameter bars	t	13	100%
3	2	11	All diameter bars	t	4	100%
4	2	12	All diameter bars	t	2	100%
5	2	9	All diameter bars	t	1	100%
<b>Brick Reinforcement (Masonry)</b>						
2	3	9	150mm Brick Reinforcement	m	9907	100%
3	3	13	75mm Brick Reinforcement	m	295	100%
3	3	14	150mm Brick Reinforcement	m	3801	100%
4	3	13	75mm Brick Reinforcement	m	374	100%
4	3	14	150mm Brick Reinforcement	m	1857	100%
5	3	10	75mm Brick Reinforcement	m	131	100%
5	3	11	150mm Brick Reinforcement	m	715	100%
<b>Brickwork (Cement)</b>						
			Cement	t	473.94	100%
<b>Fabricated Structural Steel (Ironmongery)</b>						
2	8	2	Green Chalkboard	No	24	100%
2	8	3	Door Stopper	No	24	100%
3	8	1	Door Stopper	No	90	100%
4	8	2	Door Stopper	No	26	100%
5	8	1	Door Stopper	No	8	100%

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Item	Section	Bill No	Description	Unit	Qty	Local Content Threshold
<b>Steel Gates</b>						
2	9	1	Steel Gate to Door, size 813 x 2032mm high	No	24	100%
3	9	1	Steel Gate to Door, size 813 x 2032mm high	No	18	100%
4	9	1	Steel Gate to Door, size 1500 x 2400mm high	No	2	100%
<b>Door Frames</b>						
2	9	2	Door Frames size 813 x 2032mm high	No	24	100%
3	9	2	Door Frames size 813 x 2032mm high	No	36	100%
3	9	3	Door Frames size 813 x 2032mm high	No	18	100%
3	9	4	Door Frames size 914 x 2032mm high	No	36	100%
4	9	2	Door Frames size 813 x 2032mm high	No	10	100%
4	9	3	Door Frames size 813 x 2032mm high	No	2	100%
4	9	4	Door Frames size 914 x 2032mm high	No	10	100%
4	9	5	Door Frames size 1500 x 2400mm high	No	2	100%
5	9	1	Door Frames size 914 x 2032mm high	No	8	100%
<b>Window Frames</b>						
2	9	3	Window Frame size 1143 x 1272mm high	No	216	100%
3	9	5	Window Frame size 533 x 950mm high	No	36	100%
4	9	6	Window Frame size 1022 x 900mm high	No	3	100%
4	9	7	Window Frame size 1022 x 949mm high	No	3	100%
4	9	8	Window Frame size 2000 x 1170mm high	No	1	100%
4	9	9	Window Frame size 533 x 950mm high	No	5	100%
4	9	10	Window Frame size 1511 x 1170mm high	No	14	100%
5	9	1	Window Frame size 1022 x 949mm high	No	8	100%
<b>Roofs and Cladding</b>						
2	5	1	Roof Sheeting	m2	2899	100%
2	5	2	500mm Girth Ridge	m	211	100%
2	5	3	500mm Girth Hip	m	123	100%
3	5	1	Roof Sheeting	m2	362	100%
3	5	2	500mm Girth Ridge	m	52	100%
3	5	3	500mm Girth Hip	m	91	100%
4	5	1	Roof Sheeting	m2	362	100%
4	5	2	550mm Girth Ridge	m	52	100%
4	5	3	550mm Girth Hip	m	91	100%
4	5	4	550mm Girth Close Out and Mitred Valley Gutter	m	9	100%
5	5	1	Roof Sheeting	m2	74	100%

5	5	2	550mm Girth Ridge	m	11	100%
5	5	3	550mm Girth Hip	m	20	100%
<b>Louvres</b>						
5	5	4	Steel triangular louvre, 1600 x 600mm high	No	4	100%
<b>Tubing Column</b>						
2	9	5	76 x 76 x 3mm x 6.54 kg/m Mild steel square tubing	kg	1 681	100%
<b>Gutters, Downpipe and Lauders</b>						
2	12	1	100 x 100 Eaves gutters	m	562	70%
2	12	2	Extra over last for stopped end	No	48	70%
2	12	3	Ditto, but corner	No	248	70%
2	12	4	Ditto, but outlet	No	60	70%
2	12	5	75mmDiameter downpipe	m	208	70%
2	12	6	Extra over for offset	No	120	70%
2	12	7	Ditto, but shoe	No	60	70%
3	12	1	100 x 100 Eaves gutters	m	208	70%
3	12	2	Extra over last for stopped end	No	72	70%
3	12	3	Ditto, but corner	No	156	70%
3	12	4	Ditto, but outlet	No	36	70%
3	12	5	75mmDiameter downpipe	m	125	70%
3	12	6	Extra over for offset	No	72	70%
3	12	7	Ditto, but shoe	No	36	70%
4	12	1	100 x 100 Eaves gutters	m	94	70%
4	12	2	Extra over last for stopped end	No	22	70%
4	12	3	Ditto, but corner	No	48	70%
4	12	4	Ditto, but outlet	No	11	70%
4	12	5	75mmDiameter downpipe	m	38	70%
4	12	6	Extra over for offset	No	22	70%
4	12	7	Ditto, but shoe	No	11	70%
5	12	1	100 x 100 Eaves gutters	m	46	70%
5	12	2	Extra over last for stopped end	No	16	70%
5	12	3	Ditto, but corner	No	35	70%
5	12	4	Ditto, but outlet	No	8	70%
5	12	5	75mmDiameter downpipe	m	28	70%
5	12	6	Extra over for offset	No	16	70%
5	12	7	Ditto, but shoe	No	8	70%
<b>Steel Pipes</b>						
C3	2	34	1000mm long x 150mm diameter flanges steel pipe	No.		70%

C3	2	35	100mm flanged steel pipe	No.		70%
C3	2	36	1500 x 100mm flange steel pipe with welded flanges both ends	No.		70%
<b>uPVC Pipes</b>						
C3	2	14	75mm uPVC Class 12 pipes	m	180	70%
C3	2	15	90mm uPVC Class 12 pipes	m	530	70%
C3	3	10	110mm 400KPa Main Core uPVC pipes	m	530	70%
C3	3	11	160mm 400KPa Main Core uPVC pipes	m	0	70%
C3	3	12	110mm 90-degree plain bend	m	8	70%
C3	3	13	110mm 45-degree plain bend	m	4	70%
C3	3	14	110mm 45-degree plain junction	m	6	70%
C3	3	15	160mm 90-degree plain junction	m	3	70%
C3	3	16	160mm 45-degree plain junction	m	3	70%
C3	3	17	160mm 45-degree plain junction	m	2	70%
<b>Taps Valves, etc</b>						
3	12	13	Bib tap	No	18	70%
4	12	16	Bib tap	No	3	70%
4	12	17	Chromium plated single tap	No	1	70%
5	12	14	Bib tap	No	8	70%
C3	2	26	90mm Gate Valve	No	2	70%
C3	2	27	75mm Gate Valve	No	2	70%
<b>Electrical Cables</b>						
<b>PVC Cables, etc.</b>						
B	2	2.3	110mm diameter PVC sleeves	m	120	100%
B	2	2.7.1	50mm <sup>2</sup> 4 core	m	85	100%
B	2	2.7.2	16mm <sup>2</sup> 2 core	m	50	100%
B	2	2.7.3	10mm <sup>2</sup> 2 core	m	340	100%
B	2	2.7.4	6mm <sup>2</sup> 2 core	m	100	100%
B	2	2.7.5	4mm <sup>2</sup> 2 core	m	150	100%
B	2	2.8.1	Gland no 5 complete with shroud	No	2	100%
B	2	2.8.2	Gland no 3 complete with shroud	No	2	100%
B	2	2.8.3	Gland no 2 complete with shroud	No	12	100%
B	3	3.5.3	16mm 4 core cable	No	2	100%
B	3	3.6.1	20mm PVC Conduit	m	130	100%
B	3	3.6.2	25mm PVC Conduit	m	230	100%
B	3	3.6.3	20mm PVC Conduit	m	250	100%
B	3	3.6.4	25mm PVC Conduit	m	80	100%
B	3	3.6.7	20mm diameter 4 way (round box)	No	51	100%
B	3	3.6.8	450 x 450mm Bonding tray in roof space	No		100%
B	3	3.8.1	2.5mm <sup>2</sup> for light circuits	m	650	100%

**BID NUMBER: LDPWRI-B/20109**

B	3	3.8.2	4mm <sup>2</sup> for plug socket circuits	m	460	100%
B	3	3.8.3	1.5mm <sup>2</sup>	m	650	100%
B	3	3.8.4	2.5mm <sup>2</sup>	m	460	100%
B	4	4.5.3	10mm 2 core cable	No	2	100%
B	4	4.6.1	20mm PVC Conduit	m	60	100%
B	4	4.6.2	25mm PVC Conduit	m	60	100%
B	4	4.6.3	20mm PVC Conduit	m	400	100%
B	4	4.6.4	25mm PVC Conduit	m	300	100%
B	4	4.6.7	20mm diameter 4 way (round box)	No	30	100%
B	4	4.8.1	2.5mm <sup>2</sup> for light circuits	No	510	100%
B	4	4.8.2	4 mm <sup>2</sup> for plug sockets circuits	No	410	100%
B	5	5.1.2	4mm 2 core cable	No	2	100%
B	5	5.2.1	20mm PVC Conduit	No	5	100%
B	5	5.2.2	25mm PVC Conduit	No	5	100%
B	5	5.2.3	20mm PVC Conduit	No	50	100%
B	5	5.2.4	25mm PVC Conduit	No	10	100%
B	5	5.7.1	2.5mm <sup>2</sup> for lights circuits	m	55	100%
B	5	5.7.2	4mm <sup>2</sup> for plug socket circuits	m	15	100%
B	5	5.7.3	1.5mm <sup>2</sup>	m	55	100%
B	5	5.7.4	2.5mm <sup>2</sup>	m	15	100%
B	6	6.5.3	4mm 2 core cable	No	2	100%
B	6	6.6.2	25mm PVC Conduit	m	15	100%
B	6	6.6.3	20mm PVC Conduit	m	10	100%
B	6	6.9.1	2.5mm <sup>2</sup> for lights circuits	m	20	100%
B	6	6.9.2	4mm <sup>2</sup> for plug socket circuits	m	15	100%
B	6	6.9.3	1.5mm <sup>2</sup>	m	20	100%
B	6	6.9.4	2.5mm <sup>2</sup>	m	15	100%
B	7	7.2.1	4mm <sup>2</sup> x 2core copper cable	m	800	100%
B	7	7.2.2	2.5mm <sup>2</sup> bare copper earth wire (BCEW)	m	800	100%
<b>BCEW Cables</b>						
B	3	3.5.4	10mm BCEW	No	2	100%
B	4	4.5.4	6mm BCEW	No	2	100%
B	5	5.5.4	2mm BCEW	No	2	100%
B	6	6.5.2	16mm BCEW	No	2	100%
B	6	6.5.4	2mm BCEW	No	2	100%
B	7	7.2.2	2.5mm <sup>2</sup> bare copper earth wire (BCEW)	m	800	100%
<b>Transformers and Shunt Reactors</b>						
B	2	2.1	Class 1 transformer (200kVA 11kV/400V)	No	1	70%

<b>Pumps, Medium Voltage (MV) Motor and Associated Accessories</b>						
B	2	2.1.1	Main Kiosk	No	1	100%
C	2	40	Grundforce PM Pressure Pump	No	1	100%
Treasury Designated Sector						

**3. ANNEXURE C**

**3.1. Guidelines for completing Annexure C: Local Content Declaration – Summary Schedule**

*Note: The paragraph numbers correspond to the numbers in Annexure C.*

**C1. Tender Number**

Supply the tender number that is specified on the specific tender documentation.

**C2. Tender description**

Supply the tender description that is specified on the specific tender documentation.

**C3. Designated products**

Supply the details of the products that are designated in terms of this tender (i.e. buses).

**C4. Tender Authority**

Supply the name of the tender authority.

**C5. Tendering Entity name**

Provide the tendering entity name (for example, Unibody Bus Builders (Pty) Ltd).

**C6. Tender Exchange Rate**

Provide the exchange rate used for this tender, as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

**C7. Specified local content %**

Provide the specified minimum local content requirement for the tender (i.e. 80%), as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MDB) 6.2.

**C8. Tender item number**

Provide the tender item number(s) of the products that have a local content requirement as per the tender specification.

**C9. List of items**

Provide a list of the item(s) corresponding with the tender item number. This may be a short description or a brand name.

**Calculation of local content**

**C10. Tender price**

Provide the unit tender price of each item excluding VAT.

**C11. Exempted imported content**

Provide the ZAR value of the exempted imported content for each item, if applicable. These value(s) must correspond with the value(s) of column D16 on Annexure D.

**C12. Tender value net of exempted imported content**

Provide the net tender value of the item, if applicable, by deducting the exempted imported content (C11) from the tender price (C10).

**C13. Imported value**

Provide the ZAR value of the items' imported content.

**C14. Local value**

Provide the local value of the item by deducting the Imported value (C13) from the net tender value (C12).

**C15. Local content percentage (per item)**

Provide the local content percentage of the item(s) by dividing the local value (C14) by the net tender value (C12) as per the local content formula in SATS 1286.

**Tender Summary**

**C16. Tender quantity**

Provide the tender quantity for each item number as per the tender specification.

**C17. Total tender value**

Provide the total tender value by multiplying the tender quantity (C16) by the tender price (C10).

**C18. Total exempted imported content**

Provide the total exempted imported content by multiplying the tender quantity (C16) by the exempted imported content (C11). These values must correspond with the values of column D18 on Annexure D.

**C19. Total imported content**

Provide the total imported content of each item by multiplying the tender quantity (C16) by the imported value (C13).

**C20. Total tender value**

Total tender value is the sum of the values in column C17.

**C21. Total exempted imported content**

Total exempted imported content is the sum of the values in column C18. This value must correspond with the value of D19 on Annexure D.

**C22. Total tender value net of exempted imported content**

The total tender value net of exempt imported content is the total tender value (C20) less the total exempted imported content (C21).

**C23. Total imported content**

Total imported content is the sum of the values in column C19. This value must correspond with the value of D53 on Annexure D.

**C24. Total local content**

Total local content is the total tender value net of exempted imported content (C22) less the total imported content (C23). This value must correspond with the value of E13 on Annexure E.

**C25. Average local content percentage of tender**

The average local content percentage of tender is calculated by dividing total local content (C24) by the total tender value net of exempted imported content (C22).

#### 4. ANNEXURE D

##### 4.1. Guidelines for completing Annexure D: “Imported Content Declaration – Supporting Schedule to Annexure C”

*Note: The paragraph numbers correspond to the numbers in Annexure D.*

- D1. Tender number**  
Supply the tender number that is specified on the specific tender documentation.
- D2. Tender description**  
Supply the tender description that is specified on the specific tender documentation.
- D3. Designated products**  
Supply the details of the products that are designated in terms of this tender (i.e. buses).
- D4. Tender authority**  
Supply the name of the tender authority.
- D5. Tendering entity name**  
Provide the tendering entity name (i.e. Unibody Bus Builders (Pty) Ltd).
- D6. Tender exchange rate**  
Provide the exchange rate used for this tender, as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

##### **Table A. Exempted Imported Content**

- D7. Tender item number**  
Provide the tender item number(s) of the product(s) that have imported content.
- D8. Description of imported content**  
Provide a list of the exempted imported product(s), if any, as specified in the tender.
- D9. Local supplier**  
Provide the name of the local supplier(s) supplying the imported product(s).
- D10. Overseas supplier**  
Provide the name(s) of the overseas supplier(s) supplying the exempted imported product(s).
- D11. Imported value as per commercial invoice**  
Provide the foreign currency value of the exempted imported product(s) disclosed in the commercial invoice accepted by the South African Revenue Service (SARS).
- D12. Tender exchange rate**  
Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

**D13. Local value of imports**

Convert the value of the exempted imported content as per commercial invoice (D11) into the ZAR value by using the tender exchange rate (D12) disclosed in the tender documentation.

**D14. Freight costs to port of entry**

Provide the freight costs to the South African Port of the exempted imported item.

**D15. All locally incurred landing costs and duties**

Provide all landing costs including customs and excise duty for the exempted imported product(s) as stipulated in the SATS 1286:2011.

**D16. Total landed costs excluding VAT**

Provide the total landed costs (excluding VAT) for each item imported by adding the corresponding item values in columns D13, D14 and D15. These values must be transferred to column C11 on Annexure C.

**D17. Tender quantity**

Provide the tender quantity of the exempted imported products as per the tender specification.

**D18. Exempted imported value**

Provide the imported value for each of the exempted imported product(s) by multiplying the total landed cost (excl. VAT) (D16) by the tender quantity (D17). The values in column D18 must correspond with the values of column C18 of Annexure C.

**D19. Total exempted imported value**

The total exempted imported value is the sum of the values in column D18. This total must correspond with the value of C21 on Annexure C.

**Table B. Imported Directly By Tenderer**

**D20. Tender item numbers**

Provide the tender item number(s) of the product(s) that have imported content.

**D21. Description of imported content:**

Provide a list of the product(s) imported directly by tender as specified in the tender documentation.

**D22. Unit of measure**

Provide the unit of measure for the product(s) imported directly by the tenderer.

**D23. Overseas supplier**

Provide the name(s) of the overseas supplier(s) supplying the imported product(s).

**D24. Imported value as per commercial Invoice**

Provide the foreign currency value of the product(s) imported directly by tenderer disclosed in the commercial invoice accepted by the South African Revenue Service (SARS).

**D25. Tender rate of exchange**

Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

**D26. Local value of imports**

Convert the value of the product(s) imported directly by the tenderer as per commercial invoice (D24) into the ZAR value by using the tender exchange rate (D25) disclosed in the tender documentation.

**D27. Freight costs to port of entry**

Provide the freight costs to the South African Port of the product(s) imported directly by the tenderer.

**D28. All locally incurred landing costs and duties**

Provide all landing costs including customs and excise duty for the product(s) imported directly by the tenderer as stipulated in the SATS 1286:2011.

**D29. Total landed costs excluding VAT**

Provide the total landed costs (excluding VAT) for each item imported directly by the tenderer by adding the corresponding item values in columns D26, D27 and D28.

**D30. Tender quantity**

Provide the tender quantity of the product(s) imported directly by the tenderer as per the tender specification.

**D31. Total imported value**

Provide the total imported value for each of the product(s) imported directly by the tenderer by multiplying the total landed cost (excl. VAT) (D29) by the tender quantity (D30).

**D32. Total imported value by tenderer**

The total value of imports by the tenderer is the sum of the values in column D31.

**Table C. Imported by Third Party and Supplied to the Tenderer**

**D33. Description of imported content**

Provide a list of the product(s) imported by the third party and supplied to the tenderer as specified in the tender documentation.

**D34. Unit of measure**

Provide the unit of measure for the product(s) imported by the third party and supplied to tenderer as disclosed in the commercial invoice.

- D35. Local supplier**  
Provide the name of the local supplier(s) supplying the imported product(s).
- D36. Overseas supplier**  
Provide the name(s) of the overseas supplier(s) supplying the imported products.
- D37. Imported value as per commercial invoice**  
Provide the foreign currency value of the product(s) imported by the third party and supplied to the tenderer disclosed in the commercial invoice accepted by SARS.
- D38. Tender rate of exchange**  
Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.
- D39. Local value of imports**  
Convert the value of the product(s) imported by the third party as per commercial invoice (D37) into the ZAR value by using the tender exchange rate (D38) disclosed in the tender documentation.
- D40. Freight costs to port of entry**  
Provide the freight costs to the South African Port of the product(s) imported by third party and supplied to the tenderer.
- D41. All locally incurred landing costs and duties**  
Provide all landing costs including customs and excise duty for the product(s) imported by third party and supplied to the tenderer as stipulated in the SATS 1286:2011.
- D42. Total landed costs excluding VAT**  
Provide the total landed costs (excluding VAT) for each product imported by third party and supplied to the tenderer by adding the corresponding item values in columns D39, D40 and D41.
- D43. Quantity imported**  
Provide the quantity of each product(s) imported by third party and supplied to the tenderer for the tender.
- D44. Total imported value**  
Provide the total imported value of the product(s) imported by third party and supplied to the tenderer by multiplying the total landed cost (D42) by the quantity imported (D43).
- D45. Total imported value by third party**  
The total imported value from the third party is the sum of the values in column D44.

**Table D. Other Foreign Currency Payments**

- D46. Type of payment**  
Provide the type of foreign currency payment. (i.e. royalty payment for use of patent, annual licence fee, etc.).

**D47. Local supplier making the payment**

Provide the name of the local supplier making the payment.

**D48. Overseas beneficiary**

Provide the name of the overseas beneficiary.

**D49. Foreign currency value paid**

Provide the value of the listed payment(s) in their foreign currency.

**D50. Tender rate of exchange**

Provide the exchange rate used for this tender as per the Standard Bidding Document (SBD) and Municipal Bidding Document (MBD) 6.2.

**D51. Local value of payments**

Provide the local value of each payment by multiplying the foreign currency value paid (D49) by the tender rate of exchange (D50).

**D52. Total of foreign currency payments declared by tenderer and/or third party**

The total of foreign currency payments declared by tenderer and/or a third party is the sum of the values in column D51.

**D53. Total of imported content and foreign currency payment**

The total imported content and foreign currency payment is the sum of the values in column D32, D45 and D52. This value must correspond with the value of C23 on Annexure C.

## 5. ANNEXURE E

### 5.1. Guidelines to completing Annexure E: “Local Content Declaration-Supporting Schedule to Annexure C”

*The paragraph numbers correspond to the numbers in Annexure E*

**E1. Tender number**

Supply the tender number that is specified on the specific tender documentation.

**E2. Tender description**

Supply the tender description that is specified on the specific tender documentation.

**E3. Designated products**

Supply the details of the products that are designated in terms of this tender (for example, buses/canned vegetables).

**E4. Tender authority**

Supply the name of the tender authority.

**E5. Tendering entity name**

Provide the tendering entity name (for example, Unibody Bus Builders (Pty) Ltd) Ltd).

#### **Local Goods, Services and Works**

**E6. Description of items purchased**

Provide a description of the items purchased locally in the space provided.

**E7. Local supplier**

Provide the name of the local supplier that corresponds to the item listed in column E6.

**E8. Value**

Provide the total value of the item purchased in column E6.

**E9. Total local products (Goods, Services and Works)**

Total local products (goods, services and works) is the sum of the values in E8.

**E10. Manpower costs:**

Provide the total of all the labour costs accruing only to the tenderer (i.e. not the suppliers to tenderer).

**E11. Factory overheads:**

Provide the total of all the factory overheads including rental, depreciation and amortisation for local and imported capital goods, utility costs and consumables. (Consumables are goods used by individuals and businesses that must be replaced regularly because they wear out or are used up. Consumables can also be defined as the components of an end product that are used up or permanently altered in the process of manufacturing, such as basic chemicals.)

**E12. Administration overheads and mark-up:**

Provide the total of all the administration overheads, including marketing, insurance, financing, interest and mark-up costs.

**E13. Total local content:**

The total local content is the sum of the values of E9, E10, E11 and E12. This total must correspond with C24 of Annexure C.

SBD 6.2: DECLARATION OF LOCAL CONTENT

ANNEX C: LOCAL CONTENT DECLARATION – SUMMARY SCHEDULE

SATS 1286.2011

Annex C

- (C1) Tender No.
- (C2) Tender description:
- (C3) Designated product(s)
- (C4) Tender Authority:
- (C5) Tendering Entity name:
- (C6) Tender Exchange Rate:
- (C7) Specified local content %

**Note:** VAT to be excluded from all calculations

Pula  EU  GBP

Tender item no's	List of items	Tender price each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
2-2-11	Type 245 fabric reinforcement							1 958,00			
3-2-12	Type 245 fabric reinforcement							242,00			
4-2-13	Type 245 fabric reinforcement							305,00			
5-2-10	Type 245 fabric reinforcement							44,00			
C3-2-30	Type 617 fabric reinforcement							60,00			
C3-5-17	Type 245 fabric reinforcement							152,00			
2-2-10	All diameter bars							13,00			
3-2-11	All diameter bars							4,00			
4-2-12	All diameter bars							2,00			
5-2-9	All diameter bars							1,00			
2-3-9	150mm Brick Reinforcement							9 907,00			
3-3-13	75mm Brick Reinforcement							295,00			
3-3-14	150mm Brick Reinforcement							3 801,00			
4-3-13	75mm Brick Reinforcement							374,00			
4-3-14	150mm Brick Reinforcement							1 857,00			
5-3-10	75mm Brick Reinforcement							131,00			
5-3-11	150mm Brick Reinforcement							715,00			
	Cement							473,94			
2-8-2	Green Chalkboard							24,00			
2-8-3	Door Stopper							24,00			
3-8-1	Door Stopper							90,00			
4-8-2	Door Stopper							26,00			
5-8-1	Door Stopper							8,00			
2-9-1	Steel gate to door, size 813 x 2032mm high							24,00			
3-9-1	Steel gate to door, size 813 x 2032mm high							18,00			
4-9-1	Steel gate to door, size 1500 x 2400mm high							2,00			
2-9-2	Door Frames size 813 x 2032mm high							24,00			
3-9-2	Door Frames size 813 x 2032mm high							36,00			

Signature of tenderer from Annex B

Date: \_\_\_\_\_

(C20) Total tender value	
(C21) Total Exempt imported content	
(C22) Total Tender value net of exempt imported content	
(C23) Total imported content	
(C24) Total local content	
(C25) Average local content % of tender	

SBD 6.2: DECLARATION OF LOCAL CONTENT

Annex C

(C1) Tender No.  
 (C2) Tender description:  
 (C3) Designated product(s)  
 (C4) Tender Authority:  
 (C5) Tendering Entity name:  
 (C6) Tender Exchange Rate:  
 (C7) Specified local content %

Note: VAT to be excluded from all calculations

Pula  EU  GBP

Tender item no's	List of items	Tender price each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
3-9-3	Door Frames size 813 x 2032mm high							18,00			
3-9-4	Door Frames size 914 x 2032mm high							36,00			
4-9-2	Door Frames size 813 x 2032mm high							10,00			
4-9-3	Door Frames size 813 x 2032mm high							2,00			
4-9-4	Door Frames size 914 x 2032mm high							10,00			
4-9-5	Door Frames size 1500 x 2400mm high							2,00			
5-9-1	Door Frames size 914 x 2032mm high							8,00			
2-9-3	Window Frames size 1143 x 1272mm high							216,00			
3-9-5	Window Frames size 533 x 950mm high							36,00			
4-9-6	Window Frames size 1022 x 900mm high							3,00			
4-9-7	Window Frames size 1022 x 949mm high							3,00			
4-9-8	Window Frames size 2000 x 1170mm high							1,00			
4-9-9	Window Frames size 533 x 950mm high							5,00			
4-9-10	Window Frames size 1511 x 1170mm high							14,00			
5-9-1	Window Frames size 1022 x 949mm high							8,00			
2-5-1	Roof sheeting							2 899,00			
2-5-2	500mm girth Ridge							211,00			
2-5-3	500mm girth Hip							123,00			
3-5-1	Roof sheeting							362,00			
3-5-2	500mm girth Ridge							52,00			
3-5-3	500mm girth Hip							91,00			
4-5-1	Roof sheeting							362,00			
4-5-2	500mm girth Ridge							52,00			
4-5-3	500mm girth Hip							91,00			
4-5-4	550mm girth Close Out and Mitred Valley Gutter							9,00			
5-5-1	Roof sheeting							74,00			
5-5-2	500mm girth Ridge							11,00			
5-5-3	500mm girth Hip							20,00			
5-5-4	Steel triangular louvre, 1600 x 600mm high							4,00			
2-9-5	76 x 76 x 3mm x 6.54kg/m Mild steel square tubing column							1 681,00			

(C20) Total tender value

(C21) Total Exempt imported content

(C22) Total Tender value net of exempt imported content

(C23) Total Imported content

(C24) Total local content

(C25) Average local content % of tender

Signature of tenderer from Annex B

Date: \_\_\_\_\_

SBD 6.2: DECLARATION OF LOCAL CONTENT

Annex C

\_\_\_\_\_

(C1) Tender No.  
 (C2) Tender description:  
 (C3) Designated product(s)  
 (C4) Tender Authority:  
 (C5) Tendering Entity name:  
 (C6) Tender Exchange Rate:  
 (C7) Specified local content %

Note: VAT to be excluded from all calculations

Pula \_\_\_\_\_ EU \_\_\_\_\_ GBP \_\_\_\_\_

Tender item no's	List of items	Tender price each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
2-12-1	100 x 100 Eaves gutters							562,00			
2-12-2	Extra over eaves gutter for stopped end							48,00			
2-12-3	Extra over eaves gutter for corner							248,00			
2-12-4	Extra over eave gutter for outlet							60,00			
2-12-5	75mm Diameter downpipe							208,00			
2-12-6	Extra over downpipe for offset							120,00			
2-12-7	Extra over downpipe for Shoe							60,00			
3-12-1	100 x 100 Eaves gutters							208,00			
3-12-2	Extra over eaves gutter for stopped end							72,00			
3-12-3	Extra over eaves gutter for corner							156,00			
3-12-4	Extra over eave gutter for outlet							36,00			
3-12-5	75mm Diameter downpipe							125,00			
3-12-6	Extra over downpipe for offset							72,00			
3-12-7	Extra over downpipe for Shoe							36,00			
4-12-1	100 x 100 Eaves gutters							94,00			
4-12-2	Extra over eaves gutter for stopped end							22,00			
4-12-3	Extra over eaves gutter for corner							48,00			
4-12-4	Extra over eave gutter for outlet							11,00			
4-12-5	75mm Diameter downpipe							38,00			
4-12-6	Extra over downpipe for offset							22,00			
4-12-7	Extra over downpipe for Shoe							11,00			
5-12-1	100 x 100 Eaves gutters							46,00			
5-12-2	Extra over eaves gutter for stopped end							16,00			
5-12-3	Extra over eaves gutter for corner							35,00			
5-12-4	Extra over eave gutter for outlet							8,00			
5-12-5	75mm Diameter downpipe							28,00			
5-12-6	Extra over downpipe for offset							16,00			
5-12-7	Extra over downpipe for Shoe							8,00			
C3-2-14	75mm uPVC Class 12 pipes							180,00			
C3-2-15	90mm uPVC Class 12 pipes							530,00			
C3-3-10	110mm 400KPa Main Core uPVC pipes							530,00			
C3-3-12	110mm 90-degree plain bend							8,00			

(C20) Total tender value \_\_\_\_\_

(C21) Total Exempt imported content \_\_\_\_\_

(C22) Total Tender value net of exempt imported content \_\_\_\_\_

(C23) Total Imported content \_\_\_\_\_

(C24) Total local content \_\_\_\_\_

(C25) Average local content % of tender \_\_\_\_\_

Signature of tenderer from Annex B \_\_\_\_\_

Date: \_\_\_\_\_

SBD 6.2: DECLARATION OF LOCAL CONTENT

Annex C

- (C1) Tender No.
- (C2) Tender description:
- (C3) Designated product(s)
- (C4) Tender Authority:
- (C5) Tendering Entity name:
- (C6) Tender Exchange Rate:
- (C7) Specified local content %

**Note:** VAT to be excluded from all calculations

Pula  EU  GBP

Tender item no's	List of items	Tender price each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
C3-3-13	110mm 45-degree plain bend							4,00			
C3-3-14	110mm 45-degree plain junction							6,00			
C3-3-15	160mm 90-degree plain junction							3,00			
C3-3-16	160mm 45-degree plain junction							3,00			
C3-3-17	160mm 45-degree plain junction							2,00			
3-12-13	Bib tap							18,00			
4-12-16	Bib tap							3,00			
4-12-17	Chromium plated single tap							1,00			
5-12-14	Bib tap							8,00			
C3-2-26	90mm Gate Valve							2,00			
C3-2-27	75mm Gate Valve							2,00			
B-2-2.3	110mm diameter PVC sleeves							120,00			
B-2-2.7.1	50mm <sup>2</sup> 4 core							85,00			
B-2-2.7.2	16mm <sup>2</sup> 2 core							50,00			
B-2-2.7.3	10mm <sup>2</sup> 2 core							340,00			
B-2-2.7.4	6mm <sup>2</sup> 2 core							100,00			
B-2-2.7.5	4mm <sup>2</sup> 2 core							150,00			
B-2-2.8.1	Gland no 5 complete with shroud							2,00			
B-2-2.8.2	Gland no 3 complete with shroud							2,00			
B-2-2.8.3	Gland no 2 complete with shroud							12,00			
B-3-3.5.3	16mm 4 core cable							2,00			
B-3-3.6.1	20mm PVC Conduit							130,00			
B-3-3.6.2	25mm PVC Conduit							230,00			
B-3-3.6.3	20mm PVC Conduit							250,00			
B-3-3.6.4	25mm PVC Conduit							8,00			
B-3-3.6.7	20mm diameter 4 way (round box)							51,00			
B-3-3.8.1	2.5mm <sup>2</sup> for light circuits							650,00			
B-3-3.8.2	4mm <sup>2</sup> for plug socket circuits							460,00			
B-3-3.8.3	1.5mm <sup>2</sup>							650,00			
B-3-3.8.4	2.5mm <sup>2</sup>							460,00			
B-4-4.5.3	10mm 2 core cable							2,00			

(C20) Total tender value

(C21) Total Exempt imported content

(C22) Total Tender value net of exempt imported content

(C23) Total Imported content

(C24) Total local content

(C25) Average local content % of tender

Signature of tenderer from Annex B

Date: \_\_\_\_\_

SBD 6.2: DECLARATION OF LOCAL CONTENT

Annex C

- (C1) Tender No.
- (C2) Tender description:
- (C3) Designated product(s)
- (C4) Tender Authority:
- (C5) Tendering Entity name:
- (C6) Tender Exchange Rate:
- (C7) Specified local content %

Note: VAT to be excluded from all calculations

Pula  EU  GBP

Tender item no's	List of items	Tender price each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
B-4-4.6.1	20mm PVC Conduit							60,00			
B-4-4.6.2	25mm PVC Conduit							60,00			
B-4-4.6.3	20mm PVC Conduit							400,00			
B-4-4.6.4	25mm PVC Conduit							300,00			
B-4-4.6.7	20mm diameter 4 way (round box)							30,00			
B-4-4.8.1	2.5mm <sup>2</sup> for light circuits							510,00			
B-4-4.8.2	4 mm <sup>2</sup> for plug sockets circuits							410,00			
B-5-5.1.2	4mm 2 core cable							2,00			
B-5-5.2.1	20mm PVC Conduit							5,00			
B-5-5.2.2	25mm PVC Conduit							5,00			
B-5-5.2.3	20mm PVC Conduit							50,00			
B-5-5.2.4	25mm PVC Conduit							10,00			
B-5-5.7.1	2.5mm <sup>2</sup> for lights circuits							55,00			
B-5-5.7.2	4mm <sup>2</sup> for plug socket circuits							15,00			
B-5-5.7.3	1.5mm <sup>2</sup>							55,00			
B-5-5.7.4	2.5mm <sup>2</sup>							15,00			
B-6-6.5.3	4mm 2 core cable							2,00			
B-6-6.6.2	25mm PVC Conduit							15,00			
B-6-6.6.3	20mm PVC Conduit							10,00			
B-6-6.9.1	2.5mm <sup>2</sup> for lights circuits							20,00			
B-6-6.9.2	4mm <sup>2</sup> for plug socket circuits							15,00			
B-6-6.9.3	1.5mm <sup>2</sup>							20,00			
B-6-6.9.4	2.5mm <sup>2</sup>							15,00			
B-7-7.2.1	4mm <sup>2</sup> x 2core copper cable							800,00			
B-7-7.2.2	2.5mm <sup>2</sup> bare copper earth wire (BCEW)							800,00			
B-3-3.5.4	10mm BCEW							2,00			
B-4-4.5.4	6mm BCEW							2,00			
B-5-5.5.4	2mm BCEW							2,00			
B-6-6.5.2	16mm BCEW							2,00			
B-6-6.5.4	2mm BCEW							2,00			
B-7-7.2.2	2.5mm <sup>2</sup> bare copper earth wire (BCEW)							800,00			
B-2-2.1	Class 1 transformer (50KVA 11kV/400V)							1,00			
B-2-2.1.1	Main Kiosk							1,00			
C-2-40	Grundforce PM Pressure Pump							1,00			

(C20) Total tender value

(C21) Total Exempt imported content

(C22) Total Tender value net of exempt imported content

(C23) Total Imported content

(C24) Total local content

(C25) Average local content % of tender

Signature of tenderer from Annex B

Date: \_\_\_\_\_

**ANNEX E: LOCAL CONTENT DECLARATION – SUPPORTING SCHEDULE TO ANNEX C**



**ANNEX E: LOCAL CONTENT DECLARATION**

SATS 1286.2011

**Annex E**

**Local Content Declaration - Supporting Schedule to Annex C**

(E1)	Tender No.		<b>Note: VAT to be excluded from all calculations</b>
(E2)	Tender description:		
(E3)	Designated products:		
(E4)	Tender Authority:		
(E5)	Tendering Entity name:		

Local Products (Goods, Services and Works)	Description of items purchased	Local suppliers	Value
	(E6)	(E7)	(E8)
<b>(E9) Total local products (Goods, Services and Works)</b>			R 0

(E10)	<b>Manpower costs</b> (Tenderer's manpower cost)	R 0
(E11)	<b>Factory overheads</b> (Rental, depreciation & amortisation, utility costs, consumables etc.)	R 0
(E12)	<b>Administration overheads and mark-up</b> (Marketing, insurance, financing, interest etc.)	R 0
<b>(E13) Total local content</b>		R 0
<b>This total must correspond with Annex C - C24</b>		

Signature of tenderer from Annex B

Date:

SBD 8: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT

**SBD 8: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES**

- 1 This Standard Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3 The bid of any bidder may be disregarded if that bidder or any of its directors have-
  - a. abused the institution's supply chain management system;
  - b. committed fraud or any other improper conduct concerning such system; or
  - c. failed to perform on any previous contract.
- 4 **To give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? <b>(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied).</b>  The Database of Restricted Suppliers now resides on the National Treasury's website( <a href="http://www.treasury.gov.za">www.treasury.gov.za</a> ) and can be accessed by clicking on its link at the bottom of the home page.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? <b>The Register for Tender Defaulters can be accessed on the National Treasury's website (<a href="http://www.treasury.gov.za">www.treasury.gov.za</a>) by clicking on its link at the bottom of the home page.</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		

**CERTIFICATION**

I, THE UNDERSIGNED (FULL NAME) .....  
CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS TRUE AND CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST  
ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....  
**Signature**

.....  
**Date**

.....  
**Position**

.....  
**Name of Bidder**

**SBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION**

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**SBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION**

- 1 This Standard Bidding Document (SBD) must form part of all bids<sup>1</sup> invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).<sup>2</sup> Collusive bidding is a *per se* prohibition meaning that it cannot be justified under any grounds.
- 3 Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
  - a. disregard the bid of any bidder if that bidder or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct concerning such system.
  - b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.
- 4 This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid:

**SBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION**

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**CERTIFICATE OF INDEPENDENT BID DETERMINATION**

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I, the undersigned, in submitting the accompanying bid:

---

(Bid Number and Description)

in response to the invitation for the bid made by:

---

(Name of Institution)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf

of: \_\_\_\_\_ that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign the bid, on behalf of the bidder;
5. For this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
  - (a) has been requested to submit a bid in response to this bid invitation;
  - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
  - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium<sup>3</sup> will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
  - (a) prices;
  - (b) the geographical area where product or service will be rendered (market allocation)
  - (c) methods, factors or formulas used to calculate prices;
  - (d) the intention or decision to submit or not to submit, a bid;
  - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
  - (f) bidding with the intention not to win the bid.

**SBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION**

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- 8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, before the date and time of the official bid opening or of the awarding of the contract.
- 10. I am aware that, in addition, and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of Bidder

<sup>1</sup> Includes price quotations, advertised competitive bids, limited bids and proposals.

<sup>2</sup> Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

<sup>3</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill, and knowledge in an activity for the execution of a contract.

**DECLARATION OF SUBCONTRACTING ARRANGEMENTS**

**DECLARATION OF SUBCONTRACTING ARRANGEMENTS**

The Limpopo Department of Public Works, Roads & Infrastructure is tasked with achieving government socio-economic transformation and development initiatives through its procurement spend. The department therefore endeavours to promote such initiatives through its procurement, by means of one or a combination of the following, in terms of the Preferential Procurement Policy Framework Act (PPPFA), 2000: Preferential Procurement Regulations (PPR), 2017:

1. Application of Subcontracting as a Condition of Tender, in line with the PPPFA: PPR 2017;
  - 1.1 The basis and conditions for sub-contracting as a condition of tender, is further detailed under item 1.1 below.

The Tenderer if successful in this bid offer, will be required to provide the Signed Subcontracting Agreement(s) and Supporting Documents, in line with the information detailed in this Returnable within 60 calendar days of the site handover. Failure to adhere to this will result in the immediate cancellation of the acceptance of offer (appointment letter).

**Additional information to subcontracting requirement in terms of Regulations 4 or 9 PPR 2017:**

- i. It is the responsibility of the tenderer to select competent subcontractors that meet all the requirements of the tender. The fact that the Department/Employer may make a list of potential subcontractors available as registered on the National Treasury CSD or on a CIDB database does not result in any liability of the Department/Employer or a warranty that the listed suppliers are competent.
- ii. Subcontractors may not be allocated work which contradicts any regulations, regulatory body and/or compliance requirements relevant to the work being sub-contracted for i.e. requirements by CIDB Regulations, accreditations and registrations to professional / regulatory institutions in the case of professional services etc.
- iii. The tenderer will be responsible for all due diligence on the selected subcontractors and will be held liable for any non-performance.
- iv. With reference to **the Preferential Procurement Regulations 2017, Regulation 6(5), 7(5) and 12(3)**; *“A person awarded a contract may not subcontract more than 25% of the value of the contract to any other enterprise, that does not have an equal or higher B-BBEE status level of contributor than the person concerned.”*
  - *“Unless the contract is subcontracted to an EME that has the capability and ability to execute the subcontract.”*
  - Or the tenderer may not be awarded points for B-BBEE status level of contribution.
- v. Tenderers are to complete and submit a Schedule of Proposed Subcontracting Arrangement(s)), also stipulating the percentage and equivalent Rand value to be subcontracted.
- vi. Tenderers are to provide, on award within 60 calendar days of the site handover, formal proof of Signed Subcontracting Agreement(s) together with the following documentation for each of the relevant, as a minimum:

<b>Supporting Documents to Subcontracting Agreement/s</b>
Certified Copy of valid B-BBEE Certificate/ Affidavit.
Copy of valid/ active CIDB registration in the case of construction work.
Copy of valid/ active registration to applicable regulatory institutions (where stipulated) in the case of professional services work.
A valid and active Tax Compliance Status Pin issued by SARS.
Submission of National Treasury Central Supplier Database (CSD) Summary Report.

**Note:** It is incumbent and expected that the Tenderer will apply the same due care and diligence in selecting and managing its sub-contractors / joint venture partner as would have been the case in their own appointment.

**DECLARATION OF SUBCONTRACTING ARRANGEMENTS**

**1. SUBCONTRACTING AS A CONDITION OF TENDER**

<b>In line with the Preferential Procurement Policy Regulations 2017, Regulation 9, Subcontracting may only be to one or a combination of the following (as per National Treasury CSD and CIDB databases):</b>	
<b>NO.</b>	<b>CATEGORIES FOR SUBCONTRACTING</b>
<b>1</b>	A tenderer subcontracting a minimum of 30% of the value of the contract to one or a combination of the designated categories below:
<b>1.1</b>	An EME or QSE which is at least 51% owned by black people; or
<b>1.2</b>	an EME or QSE which is at least 51% owned by black people who are youth; or
<b>1.3</b>	an EME or QSE which is at least owned by black people who are women; or
<b>1.4</b>	an EME or QSE which is at least 51% owned by black people with disabilities; or
<b>1.5</b>	an EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships; or
<b>1.6</b>	a cooperative which is at least 51% owned by black people; or
<b>1.7</b>	an EME or QSE which is at least 51% owned by black people who are military veterans; or
<b>1.8</b>	an EME or QSE.

**Tenderers are formally required to allow for subcontracting of the allocated work as set out in the Scope of 30% of the Tender Value offered.**

**1.1 BASIS AND CONDITIONS FOR SUBCONTRACTING AS A CONDITION OF TENDER**

The basis and conditions for sub-contracting as a condition of tender is detailed as follow:

- 1.1.1 The advancement of certain designated groups in terms of Regulation 4 PPR 2017;
- 1.1.2 The advancement of suppliers or enterprises in the geographical area or Province where the project site is located;
- 1.1.3 All requirements stipulated under clauses 1 and 1.1 of this Returnable, must be read in conjunction with the information documented within this Declaration on **Item 3 – Schedule of Proposed Subcontracting Work.**

DECLARATION OF SUBCONTRACTING ARRANGEMENTS

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**2. SUBCONTRACTING AFTER AWARD OF TENDER**

In line with the Preferential Procurement Policy Regulations 2017, Regulation 12, Subcontracting after Award, the following are contractual obligations for notification:

- 2.1 A person awarded a contract may only enter into a subcontracting arrangement with the approval of the organ of state.
- 2.2 A person awarded a contract in relation to a designated sector, may not subcontract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 2.3 A person awarded a contract may not subcontract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level of contributor than the person concerned, unless the contract is subcontracted to an EME that has the capability and ability to execute the subcontract.

**DECLARATION OF SUBCONTRACTING ARRANGEMENTS**

**3. SCHEDULE OF PROPOSED SUBCONTRACTING WORK**

The tenderer is required to complete the table below indicating the nature and extent of work to be subcontracted and value and percentage of work to the tender amount. The total percentage of the value of work to be subcontracted must be to a minimum of 30% or more of the tender amount. Failure to comply with the 30% minimum value of the work to be subcontracted will lead to the disqualification of the tender.

	NATURE AND EXTENT OF WORK	SUB-CONTRACTORS CONTRACT VALUE	SUB-CONTRACTORS PERCENTAGE (%) OF CONTRACT VALUE
1.			
2.			
3.			
4.			
5.			
<b>TOTAL SUBCONTRACT VALUE &amp; PERCENTAGE IN RELATION TO CONTRACT VALUE</b>			

I, THE UNDERSIGNED (*FULL NAME OF AUTHORISED PERSON*) .....

ON BEHALF OF (*FULL NAME OF TENDERING ENTITY*) .....

FORMALLY CONFIRM THAT THIS TENDER SUBMISSION IS FULLY COMPLIANT AND ADHERES IN FULL, TO ALL THE REQUIREMENTS STIPULATED IN THIS BID IN ITS ENTIRITY.

I ACCEPT THAT, FAILURE TO COMPLETE AND SUBMIT THIS DECLARATION ON SUBCONTRACTING ARRANGEMENTS AND SCHEDULE OF PROPOSED SUBCONTRACTING WORK WILL RESULT IN THE DISQUALIFICATION OF MY TENDER SUBMISSION.

I ACCEPT THAT, FAILURE TO SUBMIT THE SIGNED SUBCONTRACTING AGREEMENTS AND ITS SUPPORTING DOCUMENTS ON AWARD, IN ACCORDANCE WITH THE REQUIREMENTS OF THE BID, WILL LEAD TO THE CANCELLATION OF THE CONTRACT.

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

**SAFCEC JOINT VENTURE AGREEMENT**

JOINT VENTURE AGREEMENT made and entered into by and between:

.....of  
..... (hereafter referred to as .....)

of the first part;

and

.....of  
..... (hereafter referred to as .....)

of the second part;

PREAMBLE

WHEREAS the Parties have formed a Joint Venture in order to submit tenders to the

..... for the construction of  
.....  
(hereafter referred to as the "works").

SAFCEC JOINT VENTURE AGREEMENT

**NOW THEREFORE, IT IS AGREED AS FOLLOWS:**

**1. FORMATION OF JOINT VENTURE**

- 1.1 The Parties hereby associate themselves into and as a Joint Venture in accordance with the provisions of this Agreement under the style or firm name of ..... JOINT VENTURE.
- 1.2 The Parties hereto agree and undertake that they will not disclose the contents of this Agreement to persons with whom they may have any dealings directly or indirectly arising from the conclusion of this Agreement and the operation and establishment of the Works.
- 1.3 Notwithstanding that the parties may be jointly and severally bound to the ....., should the Joint Venture be awarded the contract by the ..... for the construction of the Works, nothing herein contained shall be interpreted as giving rise to a general partnership between the parties or limiting the rights or powers of either party to carry on its separate business for its sole benefit.

**2. OBJECT AND MOTIVATION**

The sole object for which this Joint Venture is established and the sole business of the Joint Venture is to negotiate for and conclude a contract for the execution of the Works and to carry out such Works to finality, all in accordance with the terms of this Agreement.

**3. PROFITS AND LOSSES**

- 3.1 The profits and losses of the Joint Venture shall be borne by ..... and ..... In the proportions .....% and .....% respectively (hereinafter referred to as "the Specified Proportions").
- 3.2 In addition to any other provisions contained in this Agreement, the functions, duties, obligations and responsibilities of ..... and ..... under this Joint Venture agreement and in the execution of the Works will be to provide all bridging finance, guarantees and resources necessary to successfully carry out the project in proportion to the specified proportions, in which proportions all profits, losses, costs, liabilities and assets and any other responsibilities, whether pecuniary or otherwise, shall be shared equally, as far as possible.

**4 DURATION**

The operation of this Agreement shall be deemed to have commenced on the ..... Day of ..... 200..., and shall terminate, except insofar as the provisions of Clauses 5 and 6 apply, upon the happening of any of the following events, whichever shall be earlier:

- 4.1 Award of the Contract by ..... for the construction of the Works to an outside party or parties, or
- 4.2 In the case of contract award, at the time the contract is terminated and all rights and obligations of the parties in connection with such contract and in connection with this Agreement have ceased, but in no case before the conclusion of any maintenance period in the contract and the cancellation and/or refund of all guarantees and bonds. The Joint Venture existence shall also be deemed to continue insofar as the Joint Venture is responsible for latent defects under the contract.

**SAFCEC JOINT VENTURE AGREEMENT**

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**5. EXCLUSIVITY**

The Parties agree and undertake in favour of each other that neither of them shall, except in accordance with the intention expressed in this agreement, be associated in any manner, either directly or indirectly, with any investigation, negotiation, tender or proposal for the performance of or incidental to the execution of the Works and including any variation by way of addition or omission from the scope of the Works or the extension to the Works, nor invest in any company, enterprise or partnership in any manner related thereto, either as previously agreed by the Management Committee in writing.

**6. PRE-CONTRACT COSTS**

- 6.1 All costs incurred by the Parties prior to the ..... day of ..... 200....., shall be for their own account.
- 6.2 Costs incurred by the Parties after the ..... day of ..... 200... and approved by the Management Committee, shall be borne by the Parties in the Specified Proportions.

**7. MANAGEMENT COMMITTEE**

- 7.1 The day-to-day affairs of the Joint Venture shall be under the control of a Management Committee which shall consist of one representative of each of the parties. Within the terms of this agreement and the contract, if awarded, each such member shall have full authority to bind the party and/or parties he represents in all matters relating to the affairs of the Joint Venture. No party to this agreement may bind the other party hereto without the prior consent of such other party, nor may the Management Committee bind the Joint Venture or any party beyond the terms of this agreement or the contract without the prior written consent of both parties. The parties hereto shall be obliged immediately upon signature of this Agreement, to appoint their representatives and the first meeting of the Management Committee will be held immediately thereafter. The parties shall be obliged at all times to maintain a representative on the Management Committee.
- 7.2 Each representative on the Management Committee shall be entitled to appoint, and from time to time remove and replace, an alternate who shall, at any meeting of the Management Committee at which the representative whom he represents is absent, be vested with all rights and powers and subject to all obligations of the representative whom he represents.
- 7.3 The Chairman at meetings of the Management Committee shall be a representative from ..... and ..... respectively on a six months rotation basis commencing with .....
- 7.4 Meetings of the Management Committee shall take place at such times and places as the Committee shall determine, provided that the Chairman shall be obliged to convene a meeting of the Management Committee not later than 10 days after being required to do so by any one of the parties to this agreement. Not less than five days' notice of any meeting of the Management Committee shall be given to the representatives thereof and their alternates.
- 7.5 Decisions of the Management Committee shall be unanimous, provided that If the representatives or the alternates fail to agree on any decision, the meeting at which that decision is sought shall be adjourned for a period of 24 hours and should the representatives then not agree on the course of action to be taken the matter shall be referred to the Executive Board for a decision. The decision of such Executive Board shall be placed before a further adjourned meeting, which shall take place no later than 72 hours after the initial adjourned meeting and shall bin the Management Committee which shall adopt such decision without variation.
- 7.6 Subject to 7.7 below, decisions on the Management Committee may be reached telephonically, telegraphically, by facsimile or in writing.
- 7.7 Decisions of the Management Committee, whether at a meeting or otherwise, shall be recorded in written minutes which shall be distributed by the Chairman, for the time being to the members of the Management Committee not later than seven days after those decisions have been taken.

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- Such minutes shall be deemed to have been affirmed unless dissented from not later than seven days after they are deemed to have been received by the dissenter.
- 7.8 The Management Committee may, as it wishes, decide to increase the number of its members for or invite other parties to attend any of its meetings. Such co-opted members or observers shall not have a vote.
  - 7.9 The Management Committee shall have the power to delegate such of its powers and duties as it may determine in the best interests of the parties.
  - 7.10 No remuneration shall be paid by the Joint Venture to the parties' representatives on the Management Committee in their capacities as such.
  - 7.11 The administrative function regarding the operation of the Management Committee shall be fulfilled by the Chairman.

**8 POWERS OF THE MANAGEMENT COMMITTEE AND DIRECTION OF THE PROJECT MANAGER**

The functions, responsibilities and powers of the Management Committee shall be:

- 8.1 To appoint the Project Manager who shall be nominated by ..... and ..... and who shall attend all meetings of the Management Committee for the implementation of its policies and act only in accordance with its directives and its established procedures. The Project Manager shall be removed in terms of 10 hereof and his successor(s) shall be nominated by ..... and ..... And approved by the Management Committee.
- 8.2 To formulate and dictate to the Project Manager overall policy regarding the following:
  - 8.2.1 The general day-to-day management of the affairs of the Joint Venture.
  - 8.2.2 Representation of the Joint Venture in dealing with the Resident Engineer/ Engineer/ Client and third parties on matters affecting the Joint Venture as a whole.
  - 8.2.3 Co-ordination of the activities of the parties.
  - 8.2.4 Preparation by agreement with the parties and supervision of the programme of the Works.
  - 8.2.5 Ensuring that the responsibility of each of the parties in regard to technical and contractual matters is preserved.
- 8.3 To make such provisions as are necessary to enable the Project Manager to perform his tasks.
- 8.4 To approve the balance sheets and accounts of the Joint Venture.
- 8.5 To approve the tender submitted by the Joint Venture and to approve or withhold approval for and amendment proposed thereto.
- 8.6 To approve the appointment of legal advisers and auditors where such appointments are necessary.
- 8.7 To determine the nature and extend of any additional duties and functions of each of the parties in relation to this Joint Venture.
- 8.8 To determine the terms and conditions of employment of personnel as well as emoluments seconded by the parties to the Joint Venture.
- 8.9 Subject to the terms and conditions of this agreement, to determine and approve:
  - 8.9.1 The amount and type of working capital requirements of the Joint Venture.
  - 8.9.2 All borrowings, guarantees and like obligations undertaken by the parties to the Joint Venture.
  - 8.9.3 The insurance to be taken out by the Joint Venture.

**SAFCEC JOINT VENTURE AGREEMENT**

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8.9.4 The nature, method and amount of all claims.

8.9.5 When and in what amount to distribute dividends to the parties hereto, save that any decision in terms of which the Joint Venture will undertake further work outside of the original scope of the contract or any variation or amendment of this agreement of the contract, shall require the unanimous agreement of the parties before becoming effective and binding the Joint Venture.

8.9.6 The approval and appointment of all sub-contractors.

**9 THE EXECUTIVE BOARD**

- 9.1 The Executive Board shall consist of one representative of each of the parties who shall be the Chief Executive Officer of each Joint Venture partner or their nominated deputy but shall not be the same representative as appointed to the Management Committee in terms of Clause 7.1 hereof. The Executive Board shall be the mediation authority of the Joint Venture which shall decide on all issues which are referred to it by the Management Committee as well as on all issues where the Management Committee is not unanimous.
- 9.2 Decisions of the Executive Board, whether original decisions or decisions taken after referral from the Management Committee shall be implemented by the Management Committee as per Clause 7.5.1.
- 9.3 Decisions of the Executive Board shall be unanimous.
- 9.4 Effect shall be given to a resolution arrived at unanimously.
- 9.5 In the event of the Executive Board not being unanimous in its decision the matter is to be referred to arbitration in terms of Clause 16 hereof.
- 9.6 Subject to 9.7 as read in conjunction with 7.7 and, provided that they are unanimous, decisions of the Executive Board may be reached telephonically, telegraphically or in writing. If reached telephonically or otherwise orally such decision must be confirmed in writing within 24 hours.
- 9.7 The Minutes of meetings of the Executive Board shall be handled mutatis mutandis in the manner per Clause 7.7.
- 9.8 The administrative functions regarding the operation of the Executive Board shall be fulfilled by the Chairman of the Management Committee, who shall not be entitled to a voice or a vote at Executive Board meetings.

**10 PERSONNEL**

- 10.1 The Project Manager shall be appointed as provided in Clause 8.1 hereof.
- 10.2 The person nominated to the office of Project Manager shall be subject to removal from such office by decision of the Management Committee.
- 10.3 All the remuneration and emoluments of employment of the Project Manager shall be an expense of and paid by the Joint Venture, provided that a party shall be entitled by notice in writing delivered to the other parties to elect that the person to be nominated by it to fill the offices of project Manager shall be seconded to the Joint Venture in which event the remuneration and emoluments which would otherwise have been paid to such persons while filling such offices shall be paid to the member responsible for their nomination or otherwise as such member shall direct and subject to such payment being duly and promptly paid to the member or its nominee, the member will hold harmless and keep indemnified the Joint Venture and the other members from all actions, proceedings, claims and demands by such persons or otherwise howsoever in respect of such remuneration and emoluments. The remuneration and emoluments to be paid and allowed by the Joint Venture to the Project Manager shall be

**SAFCEC JOINT VENTURE AGREEMENT**

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determined from time to time by the Management Committee and borne by the parties hereto in the Specified Propositions.

10.4 The members of the Management Committee and Executive Board and their proxies and alternates shall not be employees of the Joint Venture and shall not be entitled to claim any salary or remuneration from the Joint Venture by virtue of such appointments unless the Management Committee shall otherwise decide in writing.

10.5 ..... shall be appointed as Secretaries to the Joint Venture. Save for matters pertaining to the works and the contract, ..... Shall be consulted on all matters of an administrative and financial nature arising in connection with the business of the Joint Venture where their particular experience, knowledge, facilities and skills in matters of this nature shall be considered to be of benefit to the Joint Venture.

**11 FINANCING**

11.1 Working Capital

11.1.1 Banking accounts shall be opened in the name of the Joint Venture with banks and at such places as may be determined by it, and the parties shall be responsible for the payment in the Specified Properties of such sums to the credit of such banking accounts as shall from time to time be required by way of working capital for the Joint Venture.

11.1.2 Any amounts from time to time advanced by the parties to the Joint Venture in terms of this agreement shall be placed to the credit of their respective capital accounts in the Joint Venture.

11.1.3 The banking accounts referred to in sub-clause 11.1.1 hereof shall be operated, and cheques thereon shall be drawn in accordance with the instructions to the bankers in question. Withdrawals from these banking accounts shall be effected on the authority of persons nominated thereto by the Management Committee.

11.1.4 Should any party fail to make payment to the Joint Venture of any amount which it is obliged to pay in terms of sub-clause 11.1.1 hereof, after the expiry of a period of seven days from the date of notice requiring it to make such payment, the party to default shall be liable for payment of interest to the other parties on the amount so withheld at the rate of Prime Bank rate charged by Joint Venture Bankers per annum should such other parties have advanced the aforesaid sum.

11.1.5 All revenue derived by the Joint Venture from the contract shall forthwith be deposited to the credit of the banking accounts referred to in sub-Clause 1.1.1 hereof.

11.1.6 The amount for the time being standing to the credit of the Joint Venture's banking accounts shall be applied:

11.1.6.1 In discharging the obligations of the Joint Venture in accordance with their tenor; provided that the Management Committee shall be entitled to require the payment of any liability prior to its due date if such anticipated payment will result in the allowance by the creditor in question of an advantageous discount to the Joint Venture for prompt payment;

11.1.6.2 As to any surplus of funds for the time being in the said banking account, subject to the agreement of the parties as payment to the parties in the Specified Proportions or in proportion to their participation of the time being in

**SAFCEC JOINT VENTURE AGREEMENT**

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the Joint Venture, save that any such surplus shall first be utilised for the purpose of eliminating or reducing any disproportion in the ratios of the parties respective capital accounts.

11.2 Capital and Advances

11.2.1 The amount of capital required by the Joint Venture to attain its object (and which includes all loans, guarantees, indemnities, reserves) shall be determined from time to time by the Management Committee, and upon being so determined shall forthwith be contributed by the parties to the Joint Venture in the Specified Proportions.

11.2.2 If at any time any party to the Joint Venture shall, due to an emergency or with the consent in writing of the other parties advance any sum of money or to incur any liability on behalf of the Joint Venture over and above its due contribution to capital, then where money has been advanced, the same shall be a debt due from the Joint Venture to the party advancing the money, and shall be repayable on thirty days' notice and shall bear interest at Prime Bank rate as charged by Joint Venture's bankers per annum from date of advance to date of payment. Where a party has incurred a contingent liability on the above basis, the other parties shall, within thirty days of being requested to do so in writing, relieve such party of its obligations thereunder to the extent that the obligations of the parties are in the Specified Proportions.

**12. ACCOUNTS**

12.1 The Joint Venture shall cause proper books of account and complete records to be kept as are customary in the Republic of South Africa relating to all the assets and liabilities of the Joint Venture and expenses incurred or income received by the Joint Venture.

Such book and records shall not be related to the affairs of the parties individually. The said books of account and records, together with all letters, papers or writings concerning or belonging to the Joint Venture shall be kept at site and such other place from time to time as determined by the Management Committee, and each of the parties to the Joint Venture shall at all times have free access and the right to inspect and copy the same.

12.2 Within thirty days of the end of every quarter during the continuance of the Joint Venture, the Joint Venture shall furnish to the Management Committee all necessary documents such as balance sheets, profit and loss accounts, bank balances and comparisons with budget and forecasts of cash flow and profits as are necessary to keep the Management Committee informed of the financial affairs of the Joint Venture. Every such profit and loss account and balance sheet shall be agreed to and signed by the members of the Management Committee on behalf of the Joint Venture members, and when so signed, shall be binding on all the parties, except that if any manifest error therein be detected and pointed out by any party to the others at any time after such signature, such error shall forthwith be rectified.

12.3 After the completion of the contract and the release of all bonds, guarantees and obligations given for the performance of the parties in the Joint Venture, the joint Venture shall procure the preparation and auditing of a final balance sheet and profit and loss account, which shall be approved by the Management Committee, and from which the final profit and loss sustained by the Joint Venture shall be ascertained, and distributed to or contributed by the parties in proportion to their participation in the Joint Venture. This clause shall not be construed as prohibiting the interim distribution of profits or contribution towards losses in the discretion of the Management Committee.

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**13. WINDING UP**

Upon the determination of the Joint Venture in accordance with the provisions of this agreement, a full and general account shall be taken of the assets and liabilities of the Joint Venture and of the transactions and dealings thereof, and with all convenient speed, such assets shall be sold and realised and the proceeds applied in paying and discharging such liabilities and the expenses of and incidental to the winding-up of the Joint Venture affairs and thereafter in paying to each Joint Venture member its share of such proceeds in the Specified Proportions. The Joint Venture members respectively undertake to do all such things as may be necessary so as to give effect to the above.

**14. BREACH**

- 14.1 If a party ("the guilty party") shall commit a breach of any material provision of this agreement, and fail to remedy the same within a period of thirty (30) days after the receipt by it of written notice requiring it to do so, or be placed in liquidation or under judicial management, whether provisionally or finally, or propose any compromise with its creditors, the other parties ("the aggrieved parties") shall have the right, without prejudice to any of its other remedies arising from such breach, forthwith to terminate this agreement, in which event:
  
- 14.2 The guilty party's interest in the joint venture shall be taken over by the remaining parties. The aggrieved parties shall, in addition, have the right, if it so requires, to take over the capital account of the party in default.  
Such capital account shall be valued on the basis of the nett assets revealed in an audited balance sheet and profit and loss account prepared as at the end of the month in which the default or other breach occurred; provided that the profit and loss account shall take into account the Joint Venture's share in the valuation of the work in progress, as shown in the Joint Venture accounts, at the date of preparation of the balance sheet and profit and loss account, after providing for any known or contemplated future losses to be incurred on the work undertaken or to be undertaken by the Joint Venture and provided further that should upon the completion of the contract or contracts, the provision for losses made in the valuation or work in progress as aforesaid prove to be incorrect, such provisions shall be adjusted. Provided the aggrieved parties have proved that the tender rates as escalated from time to time were inadequate, the guilty party shall be liable to the extent of the participation of such party for all losses incurred on the whole of the contract, including any losses incurred subsequent to the termination of the agreement in accordance with these provisions, but such party shall not be entitled to share in any profits earned subsequent to such termination.
  
- 14.3 The aggrieved parties shall have the right to recruit in its employment personnel seconded to the Joint Venture by the guilty party and, as a stipulation in favour of such personnel, the guilty party waives any claims it might otherwise have had against such personnel arising from their summary termination of their employment with the guilty party.
  
- 14.3 All plant hired by the guilty party to the Joint Venture shall remain on hire to and under the control of the aggrieved parties until the completion of the contract, or until the aggrieved parties shall release such plant from the operation of this sub-clause. Payment shall be made thereof monthly.

**15. DISPUTES**

- 15.1 Having regard to the high degree of good faith which must exist between the parties, the parties agree to do their utmost to ensure that the disputes between them are settled equitably and amicably and where possible without resort to arbitration.

**SAFCEC JOINT VENTURE AGREEMENT**

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15.2 In the event of any differences or dispute of whatever nature arising from this agreement (which shall include any failure to agree on any matter which requires the parties' agreement for the purposes of implementation of this agreement) or any other matter related thereto which cannot be settled by direct negotiation between the parties, such differences or dispute shall be referred to arbitration in terms of Clause 16 hereof.

**16 ARBITRATION**

16.1 Save as hereinafter provided, any dispute at any time between any of the parties hereto in regard to any matter arising out of this agreement or its interpretation or rectification shall be submitted to and decided by arbitration.

16.2 The arbitration referred to in 16.1 shall be held -

16.2.1 At .....

16.2.2 In a summary manner, i.e. on the basis that it shall not be necessary to observe or carry out either -

16.2.2.1 the usual formalities or procedure (e.g. there shall not be any pleadings or discovery); or

16.2.2.2 the strict rules of evidence.

16.2.3 Immediately and with a view to its being completed within twenty-one business days after it is demanded;

16.2.4 Otherwise (but subject to © (d) and (e) under the provisions of the Arbitration Act No. 42 of 1965 or the Republic of South Africa as amended from time to time).

16.3 The Arbitrator shall be, if the question in issue is -

16.3.1 Primarily an accounting matter, an independent accountant;

16.3.2 Primarily a legal matter, a practising Senior Counsel of not than five years standing as such;

16.3.3 Any other matter, an independent person unanimously agreed upon between the parties and failing agreement appointed by the President for the time being of the South African Federation of Civil Engineering Contractors.

16.4 If agreement cannot be reached within seven business days after the arbitration has been demanded as to whether the question in issue falls under 16.3.1, 16.3.2 or 16.3.3, then a practising Senior Counsel of not less than five years' standing as such agreed upon between the parties, and failing agreement appointed by the President for the time being of the ..... Society of Chartered Accountants as soon as possible, thereafter, shall determine whether the question in issue falls under 16.3.1, 16.3.2 or 16.3.3 so that an arbitrator can be appointed, and the arbitration can be held and concluded, if possible, within the prescribed period of twenty-one days.

16.5 The arbitrator shall decide the matters submitted to him according to what he considers just and equitable in the circumstances and, therefore, the strict rules of law need not be observed or be taken into account by him in arriving at his decision.

16.6 The parties irrevocably agree that the decision in those arbitration proceedings -

**SAFCEC JOINT VENTURE AGREEMENT**

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16.6.1 shall be binding on them;

16.6.2 shall be carried into effect;

16.6.3 can be made an order of any court of competent jurisdiction.

**17. CONFIDENTIALITY**

17.1 All matters relating to this agreement, any negotiations and the contract for the construction of the Works resulting therefrom shall be regarded by the parties hereto as being highly confidential, and shall not be disclosed without prior written consent of the management Committee to any party, person or entity who or which is not a signatory to this Agreement, except where such disclosure is necessary for the fulfilment of this Agreement.

No party shall at any time hereinafter use any technical information, save that in the public domain, acquired from the other parties hereto except for the purposes of fulfilment of the contract.

17.2 No party shall have the right to advertise, or otherwise permit, the dissemination of publicity concerning its participation in the Joint Venture unless:

17.2.1 the relevant material shall make due reference to and acknowledgement of the work of the other parties;

17.2.2 the relevant material shall, for its dissemination is within the control of the party in question, have been approved by the other parties, which approval shall not be unreasonably withheld.

**18. ASSIGNMENT**

18.1 No party shall cede, assign or in any other way make over any of its rights or obligations under this agreement without the written consent of the other parties except insofar as such assignment or alienation is to any wholly-owned subsidiary company of that party.

18.2 In the event of such assignment or alienation taking place, the initial party shall jointly and severally and in solidum guarantee the obligations or the assignee towards the remaining parties.

**19 GENERAL**

19.1 No party shall have a claim against the other parties arising out of a failure to secure the contract, except insofar as the parties are liable to bear the joint venture expenses in the Specified Proportions.

19.2 Any changes and supplementary provisions concerning this agreement shall require the written approval of all the parties hereto.

**19.3 Variations not effective unless in writing**

No variation, modification or waiver of any provision of this agreement, or consent to any departure therefrom, shall in any event be of any force or effect unless unanimous and confirmed in writing and signed by the parties; then such variation, modification, waiver or consent shall be effective only in the specific instance and for the purpose and to the extent for which made or given.

**SAFCEC JOINT VENTURE AGREEMENT**

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**19.4 Additions to the Joint Venture**

No additional parties shall be admitted to the Joint Venture unless the parties to this agreement unanimously agree and subject to the Conditions of Contract for the Works. All sub-contractors must be approved by the Management Committee in accordance with procedures to be established by the said Committee.

**19.5 Company formation**

Should the parties at any time unanimously agree to form a company to take over the interest of the Joint Venture in the contract and the assets of the joint Venture, the parties undertake to enter into a Shareholders Agreement embodying insofar as it is reasonably possible and practicable the terms hereof and, in addition, including therein a provision affording each party a right of pre-emption to any shares in the company which the other may from time to time wish to dispose of. For the Works the formation of a company shall be subject to the General Conditions of Contract for the Works.

**19.6 Domicilium**

19.6.1 The parties hereto respectively choose domicilium citandi et executandi for all purposes of and in connection with this agreement as follows:

.....  
.....  
.....  
.....

19.6.2 The parties hereto shall be entitled to change their domicilium from time to time, and any such change shall only be effective upon receipt of notice in writing by the other parties of such change.

19.6.3 All payments to be made pursuant to this agreement, and all notices, demands or communications intended for any party, shall be made or given at such party's domicilium for the time being, and if forwarded by prepaid registered post, shall be deemed to have been made or given seven days after the date of posting unless proved to the contrary.

**19.7 Currency**

All amounts referred to in this agreement and all monies payable to or by the parties to the Joint Venture in connection with the Joint Venture shall be both calculated and paid in currencies from time to time and at places to be agreed by the Management Committee.

**19.8 Governing Law**

This agreement shall be construed in accordance with and governed by the laws of Republic of South Africa. The English language version of this agreement shall prevail.

19.9 All correspondence between the parties in regard to this agreement and the contract shall be in the English language.

19.10 Each party shall bear its own costs incurred in the preparation and negotiation of this agreement.

19.11 This agreement over-rides any previous agreement or arrangements concluded between the parties in regard to the works and contract. Notwithstanding the provisions of Clause 19 hereof, the parties agree that any variations to the provision of this agreement and any decisions in

**SAFCEC JOINT VENTURE AGREEMENT**

terms of which this Joint Venture will undertake further work outside the original scope of the contract referred to earlier, shall require the unanimous agreement of the parties before becoming effective and binding on the parties.

19.12 In the interpretation of this agreement, works in the singular shall include the plural and vice versa as the context may require. The headings to clauses shall not be considered part thereof nor shall the words which they contain be taken into account in the interpretation of any clause.

**THUS DONE AND SIGNED AT ..... THIS .....DAY OF  
..... 20....**

For and behalf of:

.....

**AS WITNESS:**

1. ....

2. ....

**THUS DONE AND SIGNED AT ..... THIS .....DAY OF  
..... 20...**

For and behalf of:

.....

**AS WITNESS:**

1. ....

2. ....



## THE CONTRACT

**PART C1: AGREEMENT AND CONTRACT DATA**

PART C.1: 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:

**The project comprises of the construction of medium administration block, 24 classrooms, 8 seat waterborne and 36 enviro-loo toilets as well as related external works in accordance with the drawings and specifications that will be provided to the contractor at St Paul’s High School in Lukaumission, Groblersdal, Limpopo.**

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 the 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

PART C1.1: AGREEMENT AND CONTRACT DATA

**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            Contract Data
- Part C3            Pricing Data
- Part C4            Scope of Work

Any 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 the organization**

**Signature and Name of Witness**

Signature .....

Name .....

Capacity .....

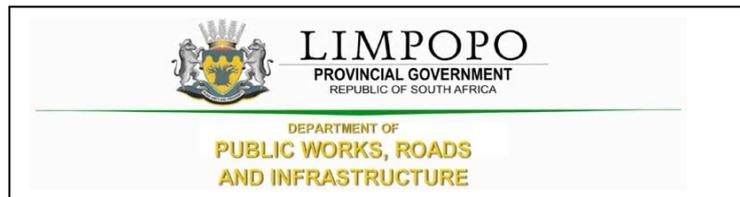
### Schedule of Deviations

- 1 Subject .....
- Details .....
- .....
- .....
- .....
  
- 2 Subject .....
- Details .....
- .....
- .....
- .....
  
- 3 Subject .....
- Details .....
- .....
- .....
- .....
  
- 4 Subject .....
- Details .....
- .....
- .....
- .....

By the duly authorized 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 CONTRACT DATA

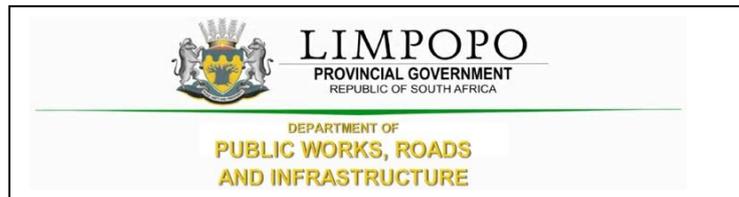
The Conditions of Contract are clauses 1 to 41 of the **JBCC Series 2000 Principal Building Agreement (Edition 4.1 of March 2005)** published by the Joint Building Contracts Committee.

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.



## PART C3: PRICING DATA



### **C3.1 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 Works 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 the assessment of payment for additional work that may have to be carried out.
- The drawings listed in the Scope of Works used for the setting up of these Bills of Quantities are kept by the Main Contractor and can be viewed at any time during office hours up until the completion of the works.
- 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.



## PART C4: PROVISIONAL BILLS OF QUANTITIES



## C4.1 PRELIMINARIES

**LIMPOPO DEPARTMENT OF EDUCATION  
UPGRADES AND ADDITIONS AT  
ST. PAUL HIGH SCHOOL**

Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 1</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>PRELIMINARIES NOTES</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>NOTES</u></b></p> <p>i) The agreement is based on the JBCC Principal Building Agreement (version 4.1). The additions, deletions and alterations to the JBCC PBA and the <b><i>Principal Building Agreement: Contract Data</i></b> and these documents have been incorporated in the Contract section of this document. The tenderer is deemed to have referred to these documents for the full and meaning of each clause. The clauses are referred to by the number and heading only. Where standard clauses or options are not applicable to the contract such notifications or corrections are necessary are given under each relevant clause. Where an item is not relevant to this specific contract such item is marked. "N/A" signifying "Not Applicable".</p> <p>ii) The Preliminaries for use with the JBCC Series 2000 Preliminaries prepared by the Joint Building Contracts Committee, edition code 2103 March 2005 and shall be deemed to be incorporated herein</p> <p>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</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			

	<b>Brought Forward</b>		R	
	<p>iv) Where standard clause or alternatives are not entirely applicable to this contract such modification, corrections or supplements as will apply are given under each relevant clause heading</p> <p>v) Where any item is not relevant to this specific contract such item is marked N/A (signifying "not applicable")</p> <p>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.</p> <p><b><u>PRICING OF PRELIMINARIES</u></b></p> <p>Items not priced in these Preliminaries shall be deemed to be included elsewhere in these Bills of Quantities.</p> <p><b><u>SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT - (Edition 4.1, March 2005)</u></b></p> <p><b><u>DEFINITIONS AND INTERPRETATION (A1)</u></b></p>			
1/1/1	<p>Clause 1.0</p> <p>F:..... V:..... T:.....</p>	Item		
	<p><b><u>OFFER, ACCEPTANCE AND PERFORMANCE OBLIGATIONS (A2)</u></b></p>			
1/1/2	<p>Clause 2.0</p> <p>F:..... V:..... T:.....</p>	Item		
	<p><b><u>DOCUMENTS (A3)</u></b></p>			
1/1/3	<p>Clause 3.0</p> <p>F:..... V:..... T:.....</p>	Item		
	<b>Carried Forward</b>		R	
	<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			

	<b>Brought Forward</b>		R	
	<b><u>DESIGN RESPOSIBILITY (A4)</u></b>			
1/1/4	Clause 4.0 F:..... V:..... T:.....	Item		
	<b><u>EMPLOYERS AGENTS (A5)</u></b>			
1/1/5	Clause 5.0 F:..... V:..... T:.....	Item		
	<b><u>SITE REPRESENTATIVE (A6)</u></b>			
1/1/6	Clause 6.0 F:..... V:..... T:.....	Item		
	<b><u>COMPLIANCE WITH LAWS AND REGULATIONS (A7)</u></b>			
1/1/7	Clause 7.0 F:..... V:..... T:.....	Item		
	<b><u>INSURANCE AND SECURITY</u></b>			
	<b><u>WORKS RISK (A8)</u></b>			
1/1/8	Clause 8.0 F:..... V:..... T:.....	Item		
	<b><u>INDEMNITIES (A9)</u></b>			
1/1/9	Clause 9.0 F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
	Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 Preliminaries and General			

	<b>Brought Forward</b>		R	
	<b><u>WORKS INSURANCES (A10)</u></b>			
1/1/10	Clause 10.0 F:..... V:..... T:.....	Item		
	<b><u>LIABILITY INSURANCES (A11)</u></b>			
1/1/11	Clause 11.0 F:..... V:..... T:.....	Item		
	<b><u>EFFECTING INSURANCES (A12)</u></b>			
1/1/12	Clause 12.0 F:..... V:..... T:.....	Item		
	<b><u>NO CLAUSE (A13)</u></b>			
1/1/13	Clause 13.0 F:..... V:..... T:.....	Item		
	<b><u>SECURITY (A14)</u></b>			
1/1/14	Clause 14.0 F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
	Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 Preliminaries and General			

	<b>Brought Forward</b>		R	
	<b><u>EXECUTION</u></b>			
	<b><u>PREPARATION FOR AND EXECUTION OF THE WORKS (A15)</u></b>			
1/1/15	Clause 15.0 F:..... V:..... T:.....	Item		
	<b><u>ACCESS TO THE WORKS (A13)</u></b>			
1/1/16	Clause 16.0 F:..... V:..... T:.....	Item		
	<b><u>CONTRACT INSTRUCTION (A17)</u></b>			
1/1/17	Clause 17.0 F:..... V:..... T:.....	Item		
	<b><u>SETTING OUT OF THE WORKS (A18)</u></b>			
1/1/18	Clause 18.0 F:..... V:..... T:.....	Item		
	<b><u>ASSIGNMENT (A19)</u></b>			
1/1/19	Clause 19.0 F:..... V:..... T:.....	Item		
	<b><u>NOMINATED SUBCONTRACTORS (A20)</u></b>			
1/1/20	Clause 20.0 F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
	Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 Preliminaries and General			

	<b>Brought Forward</b>		R	
	<b><u>SELECTED SUBCONTRACTORS (A21)</u></b>			
1/1/21	Clause 21.0  F:..... V:..... T:.....	Item		
	<b><u>EMPLOYERS DIRECT CONTRACTORS (A22)</u></b>			
1/1/22	Clause 22.0  F:..... V:..... T:.....	Item		
	<b><u>CONTRACTORS DOMESTIC SUBCONTRACTORS (A23)</u></b>			
1/1/23	Clause 23.0  F:..... V:..... T:.....	Item		
	<b><u>COMPLETION</u></b>			
	<b><u>PRACTICAL COMPLETION (A24)</u></b>			
1/1/24	Clause 24.0 Contract Period: The period commencing on actual <b>Site</b> hand over date to the <b>Contractor</b> and ending on the date of <b>Practical Completion</b> or authorised extensions thereto including all Annual Industrial Holiday Periods, Sundays and Public Holidays.  F:..... V:..... T:.....	Item		
	<b><u>WORKS COMPLETION (A25)</u></b>			
1/1/25	Clause 25.0  F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
	Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 Preliminaries and General			

	<b>Brought Forward</b>		R	
	<b><u>FINAL COMPLETION (A26)</u></b>			
1/1/26	Clause 26.0 F:..... V:..... T:.....	Item		
	<b><u>LATENT DEFECT'S LIABILITY PERIOD (A27)</u></b>			
1/1/27	Clause 27.0 F:..... V:..... T:.....	Item		
	<b><u>SECTIONAL COMPLETION (A28)</u></b>			
1/1/28	Clause 28.0 F:..... V:..... T:.....	Item		
	<b><u>REVISION OF THE DATE FOR PRACTICAL COMPLETION (A29)</u></b>			
1/1/29	Clause 29.0 F:..... V:..... T:.....	Item		
	<b><u>PENALTY FOR LATE OR NON-COMPLETION (A30)</u></b>			
1/1/30	Clause 30.0 F:..... V:..... T:.....	Item		
	<b><u>PAYMENT</u></b>			
	<b><u>INTERIM PAYMENT TO THE CONTRACTOR (A31)</u></b>			
1/1/31	Clause 31.0 F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
	Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 Preliminaries and General			

	<b>Brought Forward</b>		R
	<b><u>ADJUSTMENT OF THE CONTRACT VALUE (A32)</u></b>		
1/1/32	Clause 32.0 F:..... V:..... T:.....	Item	
	<b><u>RECOVERY OF EXPENSE AND/OR LOSS (A33)</u></b>		
1/1/33	Clause 33.0 F:..... V:..... T:.....	Item	
	<b><u>FINAL ACCOUNT AND FINAL PAYMENT (A34)</u></b>		
1/1/34	Clause 34.0 F:..... V:..... T:.....	Item	
	<b><u>PAYMENT TO OTHER PARTIES (A35)</u></b>		
1/1/35	Clause 35.0 F:..... V:..... T:.....	Item	
	<b><u>CANCELLATION</u></b>		
	<b><u>CANCELLATION BY EMPLOYER - CONTRACTOR'S DEFAULT (A36)</u></b>		
1/1/36	Clause 36.0 F:..... V:..... T:.....	Item	
	<b><u>CANCELLATION BY EMPLOYER - LOSS AND DAMAGE (A37)</u></b>		
1/1/37	Clause 37.0 F:..... V:..... T:.....	Item	
	<b>Carried Forward</b>		R
	Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 Preliminaries and General		

	<b>Brought Forward</b>		R	
	<b><u>CANCELLATION BY CONTRACTOR - EMPLOYER'S DEFAULT (A38)</u></b>			
1/1/38	Clause 38.0  F:..... V:..... T:.....	Item		
	<b><u>CANCELLATION - CESSATION OF THE WORKS (A39)</u></b>			
1/1/39	Clause 39.0  F:..... V:..... T:.....	Item		
	<b><u>CANCELLATION - CESSATION OF THE WORKS (A39)</u></b>			
1/1/40	Clause 39.0  F:..... V:..... T:.....	Item		
	<b><u>DISPUTE</u></b>			
	<b><u>SETTLEMENT OF DISAGREEMENTS AND DISPUTES (A40)</u></b>			
1/1/41	Clause 40.0  F:..... V:..... T:.....	Item		
	<b><u>SUBSTITUTE PROVISIONS</u></b>			
	<b><u>STATE CLAUSES (A41)</u></b>			
1/1/42	Clause 41.0  F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
	Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 Preliminaries and General			

	<b>Brought Forward</b>		R	
	<p><b><u>SCHEDULE OF VARIABLES (A42)</u></b></p> <p>1/1/43 Clause 42.0</p> <p>F:..... V:..... T:.....</p> <p><b><u>AGREEMENT</u></b></p> <p><b><u>AGREEMENT</u></b></p>	Item		
	<p>1/1/44 Clause</p> <p>F:..... V:..... T:.....</p> <p>Information necessary for completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder</p> <p><b><u>CONTRACT DETAILS</u></b></p> <p>Works Description:</p> <p>The construction of medium administration block, 24 classrooms, 8 seat waterborne and 36 enviro-loo toilets as well as related external works</p> <p>Site Description:</p> <p>St Paul High School Lukaumission, Grosblersdal Limpopo</p> <p>Work for installation by direct contractors: <b>TBC</b></p>	Item		
	<b>Carried Forward</b>		R	
	<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			

	<b>Brought Forward</b>		R	
	<p>This agreement is for a government contract: <b>Yes</b></p> <p>Date on which possession of the site is intended to be given: <b>TBC</b></p> <p>Period for the commencement of the works after the contractor takes possession of the site: <b>10 days</b></p> <p>Completions in sections are required: <b>No</b></p> <p>Intended date of practical completion and the penalty per calendar day for the works as a whole:</p> <p><b>24 months from site handover date</b></p> <p><b>R 5 094.00</b></p> <p>Contract duration : <b>24 months</b> including national builder's break</p> <p><b>SPECIAL COMPLETION REQUIREMENTS</b></p> <p>Beneficial occupation dates: <b>TBC</b></p> <p>Tenant Installations beneficial occupation</p> <p>F..... V..... T .....</p>			
1/1/45	<p>Arbitration rules as recommended by the Association of Arbitrators (SA)</p> <p>F ..... V ..... T .....</p>	Item		
1/1/46	<p>The law applicable to this agreement shall be that of South Africa</p> <p>F ..... V ..... T .....</p>	Item		
	<b>Carried Forward</b>		R	
	<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			

	<b>Brought Forward</b>		R	
	<p><b><u>INSURANCES</u></b></p>			
1/1/47	<p>Contract works insurance to be effected by: <b>Contractor</b></p> <p>For the amount of: The <b>Contract Sum</b> plus 20% with deductible of R20 000.00</p> <p>Notwithstanding the provisions of Clause 41.3.2, the first amount deductible will be for the <b>Contractor's</b> account</p> <p>SASRIA insurance required:</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/48	<p>Public liability insurance to be effected by <b>Contractor</b></p> <p>For the amount of: R 10 000 000.00</p> <p>With a deductible of: R 10 000.00 per claim</p> <p>F:..... V:..... T:.....</p>	Item		
	<p><b><u>DOCUMENT</u></b></p> <p>Waivers of contractors lien is required: <b>Yes</b></p> <p>Number of construction document copies to be supplied free of charge: <b>3</b></p> <p>Number of days for submission of priced documents: <b>TBA</b></p> <p>Notwithstanding the provisions of the above clause, no payments will be certified unless the priced documents are agreed with the Quantity Surveyors.</p> <p>JBCC Engineering General Conditions are to be included in the documents: <b>No</b></p> <p>Alternative if contract value is not adjusted using Contract Price Adjustment Provision: <b>N/A</b></p> <p>Tender Price is requested for Fixed Rates.</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			

<p style="text-align: center;"><b>Brought Forward</b></p> <p>Details of changes made to the provision of JBCC standard documentation:.....</p> <p>The Contractor shall issue a Tax Invoice immediately to enable the Employer to process payment.</p>			R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			R	

	<b>Brought Forward</b>		R	
	<b><u>SECTION B: PRELIMINARIES</u></b>			
	<b><u>Definition and interpretation (B1)</u></b>			
1/1/49	Definition and interpretation (B1.1 - B1.6.5)  F:..... V:..... T:.....	Item		
	<b><u>Documents (B2)</u></b>			
1/1/50	Checking of documents (B2.1)  F:..... V:..... T:.....	Item		
1/1/51	These bills of quantities contain pages and annexures as indexed on the flyleaf  The items in these bills of quantities are to be read and priced in conjunction with the descriptions regarded as amplified by the Model Preambles for Trades as recommended and published by the Association of South African Quantity Surveyors, 2008 edition, and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained.  F:..... V:..... T:.....	Item		
1/1/52	Provisional bills of quantities (B2.2)  F:..... V:..... T:.....	Item		
1/1/53	Availability of construction documentation for contracts based on provisional bills of quantities (B2.3)  F:..... V:..... T:.....	Item		
1/1/54	Interests of agents (B2.4)  F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
	Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 Preliminaries and General			

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	<b>Brought Forward</b>		R	
1/1/55	Priced documents (B2.5)  F:..... V:..... T:.....	Item		
1/1/56	Tender submission (B2.6)  F:..... V:..... T:.....	Item		
1/1/57	Notwithstanding anything contained in this clause tenders shall be valid for a period of 180 days from the closing date of tenders  F:..... V:..... T:.....	Item		
	<b><u>The site (B3)</u></b>			
1/1/58	Defined works area (B3.1)  F:..... V:..... T:.....	Item		
1/1/59	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 at the official site briefing meeting.  Site Meeting Date: <b>TBC</b> The meeting will be held at: <b>TBC</b> Tenderers are advise to arrive at least one hour earlier for the briefing meeting in order to avoid delays related to locating the venue.  F:..... V:..... T:.....	Item		
1/1/60	Inspection of the site (B3.3)  F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
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<b>Brought Forward</b>			R
1/1/61	<p>A compulsory briefing meeting with representatives of the Employer will not take place due to the Covid-19 Lockdown restrictions. However, tenderers are welcomed to make arrangements to visit the site on a non-compulsory basis at the St. Paul High School</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/62	<p>Existing premises occupied (B3.4)</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/63	<p>Previous work - dimensional accuracy (B3.5)</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/64	<p>Previous work - defects (B3.6)</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/65	<p>Services - known (B3.7)</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/66	<p>Services - unknown (B3.8)</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/67	<p>Protection of trees etc (B3.9)</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/68	<p>Articles of value (B3.10)</p> <p>F:..... V:..... T:.....</p>	Item	
<b>Carried Forward</b>			R
<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			

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<b>Brought Forward</b>			R
1/1/69	Inspection of adjoining properties etc (B3.11)  F:..... V:..... T:.....	Item	
<b><u>Management of contract (B4)</u></b>			
1/1/70	Management of the works (B4.1)  The contractor is to submit with his tender a synopsis of the proposed management team envisaged for this project.  F:..... V:..... T:.....	Item	
1/1/71	Programme for the works  The contractor is to submit with his tender a detailed program outlining the envisaged programming of the works  F:..... V:..... T:.....	Item	
1/1/72	Progress meetings (B4.3)  F:..... V:..... T:.....	Item	
1/1/73	Technical meetings (B4.4)  F:..... V:..... T:.....	Item	
<b><u>Samples and shop drawings and manufacturer's instructions (B5)</u></b>			
1/1/74	Samples of materials (B5.1)  F:..... V:..... T:.....	Item	
<b>Carried Forward</b>			R
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	<b>Brought Forward</b>		R	
1/1/75	Workmanship samples (B5.2)  F:..... V:..... T:.....	Item		
1/1/76	Shop drawings (B5.3)  F:..... V:..... T:.....	Item		
<b><u>Temporary works and plant (B6)</u></b>				
1/1/77	Deposits and fees (B6.1)  F:..... V:..... T:.....	Item		
1/1/78	Enclosure of the works (B6.2)  F:..... V:..... T:.....	Item		
1/1/79	Advertising (B6.3)  F:..... V:..... T:.....	Item		
1/1/80	Plant, equipment, sheds and offices (B6.4)  F:..... V:..... T:.....	Item		
1/1/81	Main notice board (B6.5)  Provision shall be made for 1 set of Professional boards  Lettering shall include 1 logo not exceeding 200 x 200mm per consultant and contractor all in colour and 1 Limpopo Department of Education chromadek signage board that must be 2 x 4m.  F:..... V:..... T:.....	Item		
<b>Carried Forward</b>				
Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 Preliminaries and General			R	

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	<b>Brought Forward</b>		R	
1/1/82	Subcontractors notice board (B6.6)  F:..... V:..... T:.....	Item		
	<b><u>Temporary services (B7)</u></b>			
1/1/83	Location (B7.1)  F:..... V:..... T:.....	Item		
1/1/84	Water (B7.2)  Alternative A  F:..... V:..... T:.....	Item		
1/1/85	Electricity (B7.3)  Alternative A  F:..... V:..... T:.....	Item		
1/1/86	Telecommunication equipment (B7.4)  Alternative A  F:..... V:..... T:.....	Item		
1/1/87	Ablution facilities (B7.5)  Alternative A  F:..... V:..... T:.....	Item		
	<b><u>Prime cost amounts (B8)</u></b>			
1/1/88	Responsibility for prime cost amounts (B8.1)  F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
	Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 Preliminaries and General			

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Brought Forward			R
<b><u>Attendance on N/S Subcontractors (B9)</u></b>			
1/1/89	General attendance (B9.1) F:..... V:..... T:.....	Item	
1/1/90	Special attendance (B9.2) F:..... V:..... T:.....	Item	
1/1/91	Commissioning - Fuel, water and power (B9.3) F:..... V:..... T:.....	Item	
<b><u>Financial aspects (B10)</u></b>			
1/1/92	Statutory taxes, duties and levies (B10.1) F:..... V:..... T:.....	Item	
1/1/93	Provision for Value Added Tax (VAT) is made in the Final Summary F:..... V:..... T:.....	Item	
1/1/94	Payment of preliminaries (B10.2) F:..... V:..... T:.....	Item	
1/1/95	Adjustment of preliminaries (B10.3) F:..... V:..... T:.....	Item	
1/1/96	Payment certificate cash flow (B10.4) F:..... V:..... T:.....	Item	
<b>Carried Forward</b>			R
Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 Preliminaries and General			

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	<b>Brought Forward</b>		R	
1/1/97	Contractor information supply (B10.5)  F:..... V:..... T:.....	Item		
	<b><u>General (B11)</u></b>			
1/1/98	Protection of works (B11.1)  F:..... V:..... T:.....	Item		
1/1/99	Protection/isolation of existing/sectionally occupied works (B11.2)  F:..... V:..... T:.....	Item		
1/1/100	Site security (B11.3)  F:..... V:..... T:.....	Item		
1/1/101	Notice before covering work (B11.4)  F:..... V:..... T:.....	Item		
1/1/102	Disturbance (B11.5)  F:..... V:..... T:.....	Item		
1/1/103	Works cleaning and clearing (B11.6)  F:..... V:..... T:.....	Item		
1/1/104	Vermin (B11.7)  F:..... V:..... T:.....	Item		
1/1/105	Overhand work (B11.8)  F:..... V:..... T:.....	Item		
	<b>Carried Forward</b>		R	
	Section No. 1 PRELIMINARIES & GENERAL Bill No. 1 Preliminaries and General			

<b>Brought Forward</b>		<b>R</b>
<b><u>Schedule of variables (B12)</u></b>		
1/1/106	Pre-tender information (B12.1)  F:..... V:..... T:.....  Information necessary for elections and completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder. Where no information is given it shall mean that either no details or specific requirements are available or that the clause is not relevant to this specific contract	Item
1/1/107	12.1.1 Provisional bills of quantities (B2.2) The quantities are provisional: <b>Yes</b>  F:..... V:..... T:.....	Item
1/1/108	12.1.2 Availability of construction documentation (B2.3) Construction documentation is not complete: <b>Yes</b>  F:..... V:..... T:.....	Item
1/1/109	12.1.3 Interest of agents (B2.4)  F:..... V:..... T:.....	Item
1/1/110	12.1.4 Defined works area (B3.1)  F:..... V:..... T:.....	Item
1/1/111	12.1.5 Geotechnical investigation (B3.2)  F:..... V:..... T:.....	Item
1/1/112	12.1.6 Existing premises occupied (B3.4)  F:..... V:..... T:.....	Item
<b>Carried Forward</b>		<b>R</b>
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	<b>Brought Forward</b>		R	
1/1/113	<p>12.1.7 Services - known (B3.7)</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/114	<p>12.1.8 Protection of trees (B3.9)</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/115	<p>12.1.9 Inspection of adjoining properties (B3.11)</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/116	<p>12.1.10 Enclosure of the works (B6.2)</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/117	<p>12.1.11 Offices (B6.4.3)</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/118	<p>12.1.12 Main notice board (B6.5)</p> <p>Provision shall be made for 1 set of Professional boards</p> <p>Lettering shall include 1 logo not exceeding 200 x 200mm per consultant and contractor all in colour and 1 Limpopo Department of Education chromadek signage board that must be 2 x 4m.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/119	<p>12.1.13 Subcontractors notice board (B6.6)</p> <p style="padding-left: 40px;">A notice board is required: <b>Yes</b></p> <p>F:..... V:..... T:.....</p>	Item		
	<b>Carried Forward</b>		R	
	<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			

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	<b>Brought Forward</b>		R	
1/1/120	<p>12.1.14 Water (B7.2) Alternative Selected: <b>A</b></p> <p>The contractor shall make provision for water connection requirements that will enable them to carry out works around the site. The contractor shall apply for all necessary supply connections requirements with the Local Authority. Should the local authority refuse services supply to site, the contractor shall connect to any other existing services pointed to him by the Principal Agent in the same manner that the Local authority would have supplied services to site ie in compliance with the specifications of the Local authority.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/121	<p>12.1.15 Electricity (B7.3) Alternative selected: <b>A</b></p> <p>The contractor shall make provision for electrical power connection requirements that will enable them to carry out works around the site. The contractor shall apply for all necessary supply connections requirements with the Local authority. The contractor shall connect to any other existing services pointed to him by the Principal Agent in the same manner that the Local authority would have supplied services to site ie in compliance with the specifications of the Local authority.</p> <p>F:..... V:..... T:.....</p>	Item		
	<b>Carried Forward</b>		R	
	<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			

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<b>Brought Forward</b>			R
1/1/122	<p>12.1.16 Telecommunications (B7.4) Alternative selected: <b>A</b></p> <p>The contractor shall make provision for telephone connection requirements that will enable them to carry out works around the site. The contractor shall apply for all necessary supply connections requirements with the relevant Agency. Should the Agency refuse services supply to site, the contractor shall connect to any other existing services pointed to him by the Principal Agent in the same manner that the Agency would have supplied services to site ie in compliance wit the specifications of the Agency.</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/123	<p>12.1.17 Ablution facilities (B7.5) Alternative selected: <b>A</b></p> <p>The contractor shall make provision for sewer connection requirements that will enable them to carry out works around the site. The contractor shall apply for all necessary supply connections requirements with the Local authority. The contractor shall connect to any other existing services pointed to him by the Principal Agent in the same manner that the Local authority would have supplied services to site ie in compliance wit the specifications of the Local authority.</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/124	<p>12.1.8 Special attendance (B9.2)</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/125	<p>12.1.19 Protection of the works (B11.1)</p> <p>F:..... V:..... T:.....</p>	Item	
<b>Carried Forward</b>			R
<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			

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<b>Brought Forward</b>			R
1/1/126	<p>12.1.20 Protection of existing/sectionally occupied works (B11.2) Protection is required: <b>Yes</b></p> <p><b>The contractor shall conduct an as built survey (photographic and written) prior to commencing works. All damage caused by the Contractor during the contract shall be rectified at the Contractors cost.</b></p> <p>F:..... V:..... T:.....</p>	Item	
1/1/127	<p>12.1.21 Disturbance (B11.5)</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/128	<p>Post tender information (B12.2)</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/129	<p>12.2.1 Payment of preliminaries Alternative selected: (A or B)</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/130	<p>12.2.2 Adjustment of preliminaries Alternative selected: (A or B)</p> <p>F:..... V:..... T:.....</p>	Item	
1/1/131	<p>12.2.3 Additional agreed preliminaries items</p> <p>F:..... V:..... T:.....</p>	Item	
<b>Carried Forward</b>			R
<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			

	<b>Brought Forward</b>		R	
	<b><u>SECTION C: SPECIFIC PRELIMINARIES</u></b>			
1/1/132	<p><b>GUARANTEE</b></p> <p>Where guarantees are called for, the contractor shall obtain a written guarantee, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the principal agent on the certified completion of the contract. The guarantee shall state that workmanship, materials and installation are guaranteed for a specified period from the date of certified completion of the contract, and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice from the principal agent to do so. This guarantee will not be enforced if the work is damaged by structural defects in the building in which case the responsibility for replacement shall rest entirely with the contractor unless found to be as a result of a design fault.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/133	<p><b>SHOP DRAWINGS</b></p> <p>The contractor and/or nominated/selected sub-contractor shall prepare and submit, at his own expense, three (3) copies of shop drawings of all fabricated work, working or setting out drawings shop details and schedules to the principal agent for approval prior to commencement of manufacture.</p> <p>Correction of shop drawings shall not constitute a change in scope of work unless the contractor notifies the Principal Agent in writing within seven (7) calendar days and shall not proceed with fabrication until so authorised by the principal agent</p> <p>F:..... V:..... T:.....</p>	Item		
	<b>Carried Forward</b>		R	
	<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			

	<b>Brought Forward</b>		R	
1/1/134	<p><b>SAMPLES</b></p> <p>Samples are physical examples furnished by the contractor to illustrate materials, equipment or workmanship and to establish standards by which the work will be judged. The contractor shall furnish without delay such samples and "mock ups" as may be called for by the Principal Agent, who may reject all material and workmanship not corresponding with the approved samples.</p> <p>Samples must be submitted in duplicate or as instructed and must allow a reasonable time for their consideration.</p> <p>Samples must be properly labelled with the project name and location, contractor's name, the type, finish composition of materials date of submission and the contract document reference in which the project is identified.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/135	<p><b>SITE INSTRUCTIONS</b></p> <p>Site instructions issued are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor.</p> <p>Site instructions to the various sub-contractors may be issued only by the Principal Agent and must be issued via the contractor.</p> <p>Copies of all site instructions issued are to be submitted for the principal agent and the quantity surveyors within two (2) days of issue.</p> <p>F:..... V:..... T:.....</p>	Item		
	<b>Carried Forward</b>		R	
	<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			

	<b>Brought Forward</b>		R	
1/1/136	<p><b>OVERTIME</b></p> <p>Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the Principal Agent has specifically authorised in writing, prior to the execution thereof, that costs for such overtime are to be borne by the employer.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/137	<p><b>CO-OPERATION OF CONTRACTOR FOR COST CONTROL</b></p> <p>It is specifically agreed that the contractor accepts the obligation of assisting the professional consultants in implementing proper cost control in an effort to prevent the final building cost from exceeding the budget.</p> <p>It is specifically agreed that the professionals and the contractor will endeavour to agree and sign off variations within sixty days of them arising.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/138	<p><b>SITE LEVELS</b></p> <p>Before commencement of the works, the contractor shall carry out and provide the principal agent, for approval, a survey of the existing site levels in sufficient details to enable the preparation of a final account.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/139	<p><b>PROPRIETARY BRANDED PRODUCTS</b></p> <p>The contractor shall take delivery of, handle, store, use apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instruction after consultation with the manufacturer's authorised representative</p> <p>F:..... V:..... T:.....</p>	Item		
	<b>Carried Forward</b>		R	
	<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			

	<b>Brought Forward</b>		R	
1/1/140	<p><b>AS BUILT DRAWINGS</b></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>F:..... V:..... T:.....</p>	Item		
1/1/141	<p><b>COMMUNITY LIAISON OFFICER (CLO)</b></p> <p>Provisional Allowance for a salary for the CLO for the duration of the contract.</p> <p>F:..... V:..... T:.....</p>	Item		
1/1/142	<p><b>OCCUPATIONAL HEALTH AND SAFETY ACT</b></p> <p>In terms of the Occupational Health and Safety Regulations promulgated on 18 July 2003 and any latest editions/amendments, it will be expected from the contractor to comply fully with and adhere to all such regulations pertaining to this project as no claims in this regard will be entertained.</p> <p>F: ..... V: ..... T: .....</p>	Item		
1/1/143	<p><b>COVID-19 RELATED ITEMS</b></p> <p>In terms of the latest Covid-19 regulations and requirements, it will be expected from the contractor to comply fully with and adhere to all such regulations pertaining to this project as no claims in this regard will be entertained.</p> <p>F: ..... V: ..... T: .....</p>	Item		
	<b>Carried to Final Summary</b>		R	
	<p>Section No. 1 PRELIMINARIES &amp; GENERAL Bill No. 1 Preliminaries and General</p>			



## C4.2 BUILDING WORKS

Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 2</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>NOTES</u></b></p> <p><b><u>Carting away of excavated material</u></b></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p> <p><b><u>Filling</u></b></p> <p>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</p> <p>Excavations measured in successive depths of 2m.</p> <p><b><u>SITE CLEARANCE ETC</u></b></p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 1 Earthworks</p>			

<b>Brought Forward</b>			R
<b><u>Site clearance</u></b>			
2/1/1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	2 741
<b><u>EXCAVATIONS</u></b>			
<b><u>Excavation in earth not exceeding 2m deep</u></b>			
2/1/2	Trenches	m3	626
<b><u>Extra over excavations in earth to trenches and holes for</u></b>			
2/1/3	Excavation in soft rock	m3	63
2/1/4	Excavation in hard rock	m3	31
<b><u>CARTING AWAY OF EXCAVATED MATERIAL</u></b>			
<b><u>Note:</u></b>			
Description 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.			
2/1/5	Extra over all excavation for carting away surplus material from excavation and / or stockpile on site to a dumping site to be located by the Contractor	m3	342
<b><u>RISK OF COLLAPSE OF EXCAVATIONS</u></b>			
<b><u>Risk of collapse to side of excavation in earth not exceeding 1,5m deep</u></b>			
2/1/6	Trenches and holes	m2	1 789
<b><u>FILLING, ETC.</u></b>			
<b><u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density in layers not exceeding 150mm thick</u></b>			
2/1/7	Backfilling to trenches, holes, etc	m3	315
<b>Carried Forward</b>			R
Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 1 Earthworks			

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<b>Brought Forward</b>				R
2/1/8	Under floors, steps, pavings, etc	m3	1 331	
	<b><u>Imported gravel filling (G7) stabilise with 2-3% cement compacted to 93% Mod AASHTO density in layers not exceeding 150mm thick</u></b>			
2/1/9	Backfilling to trenches, holes, etc	m3	94	
2/1/10	Under floors, steps, pavings, etc	m3	294	
	<b><u>Filling supplied by the Contractor under floors, trenches, etc.</u></b>			
2/1/11	Sub-base filling (G5) from excavations under solid floors, steps, etc. compacted to 95% modified AASHTO density in layers not exceeding 150mm thick	m3	294	
	<b><u>COMPACTION OF SURFACES</u></b>			
2/1/12	Prepare ground surface by scarifying sub-grade, rip and re-compact 150mm to 90% modified AASHTO density	m2	2 480	
	<b><u>WEED KILLERS, INSECTICIDES, TERMITES, etc.</u></b>			
	<b><u>Protection against termites, ants, etc</u></b>			
2/1/13	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	2 480	
2/1/14	To bottom and sides of excavated trenches, Holes, etc.	m2	2 415	
<b>Carried Forward to Summary of Section No.</b>				R
Section No. 2				
4 CLASSROOM BLOCK X 6				
Bill No. 1				
Earthworks				

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>Cost of tests</u></b></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7, "Tests" of SANS 1200 G, shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the principal agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the principal agent. (Test cubes are measured separately)</p> <p><b><u>Formwork</u></b></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use. 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>			
	<b>Carried Forward</b>		R	
	<p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 2 Concrete, Formwork and Reinforcement</p>			

<p style="text-align: center;"><b>Brought Forward</b></p> <p>Formwork to soffits of solid slabs, etc. shall be deemed to be to 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.</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>The Tenderer is to note that for the "off-shutter" concrete finish shall be in accordance with the architectural specification 616 CON-140: Smooth + fair finish:-</p> <ul style="list-style-type: none"> <li>· Degree of accuracy: I</li> <li>· Finish: Smooth and even</li> <li>· Form facing material to produce a smooth, hard, uniform texture on the concrete</li> <li>· Steel faced formwork. Joints grout-tight.</li> <li>· Panels shall be as large as practicable and arranged in a regular pattern as a feature of the surface</li> <li>· Formwork tie holes: to the approval of the architect</li> <li>· Repair imperfections: not allowed. Tie bolt holes shall be patched</li> <li>· Not permitted: blowholes, small fins, bulges, irregularities, voids, honeycombing, segregation and other large defects.</li> <li>· Concrete surfaces: No further treatment to form a smooth finish of uniform texture, appearance and colour</li> </ul> <p>Structural Concrete</p> <p>Tenderers are referred to the Structural Engineer's - Standard Specifications which should be read before pricing this trade in particular, but also the other trades. The use of extenders, fly-ash, etc. are clearly described on this drawing.</p>		R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 2 Concrete, Formwork and Reinforcement</p>		R	

<b>Brought Forward</b>				<b>R</b>
<b><u>GENERAL NOTES TO TENDERERS</u></b>				
General notes, described in Bill No.1, shall equally apply to this Bill.				
<b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>				
<b><u>15Mpa/19mm concrete</u></b>				
2/2/1	Blinding	m3	31	
<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACE</u></b>				
<b><u>25MPa/19mm Concrete</u></b>				
2/2/2	Strip footings	m3	157	
<b><u>REINFORCED CONCRETE CAST IN FORMWORK</u></b>				
<b><u>20Mpa/19mm concrete</u></b>				
2/2/3	Concrete Apron cast to fall etc,	m3	52	
<b><u>25MPa/19mm Concrete</u></b>				
2/2/4	Surface beds cast in panels	m3	255	
<b><u>TEST BLOCKS</u></b>				
<b><u>Notes:</u></b>				
Concrete strength test cubes, label and send to an approved laboratory for testing, pay all charges and submit report to the Regional Representative. Only successful tests will be paid for (Provisional)				
2/2/5	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	236	
<b><u>SUNDRIES TO CONCRETE</u></b>				
<b>Carried Forward</b>				<b>R</b>
Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 2 Concrete,Formwork and Reinforcement				

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<b>Brought Forward</b>			R
<b><u>Surface treatment</u></b>			
2/2/6	Power float top surface of concrete surface bed to a true and even level finish	m2	2 480
<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>			
<b><u>Rough formwork to sides</u></b>			
2/2/7	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	1 043
<b><u>MOVEMENTS JOINTS ETC,</u></b>			
<b><u>Saw cuts Joints</u></b>			
2/2/8	3 x 30mm In saw cut joints in floors	m	437
<b><u>Expansion joints</u></b>			
2/2/9	10mm soft board or similar approved between concrete and brick wall	m	521
<b><u>REINFORCEMENT (PROVISIONAL)</u></b>			
<b><u>High and mild tensile steel reinforcement to structural concrete work</u></b>			
2/2/10	All diameter bars	t	13
<b><u>Fabric reinforcement:</u></b>			
2/2/11	Type 245 fabric reinforcement in concrete surface beds, slabs, etc.	m2	1 958
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 2			
4 CLASSROOM BLOCK X 6			
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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 3</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>Sizes in descriptions</u></b></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><b><u>Hollow walls etc</u></b></p> <p>Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole. Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brickseal" bitumen emulsion waterproofing coating.</p> <p><b><u>Face bricks</u></b></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 3 Masonry</p>			

<b>Brought Forward</b>			R
<b><u>Pointing</u></b>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b><u>BRICKWORK IN FOUNDATION</u></b>			
<b><u>Brickwork in 73mm burnt clay masonry units class NFP in Class II mortar, laid in stretcher bond with 10mm flush joints</u></b>			
2/3/1	One brick wall	m2	671
<b><u>SUPERSTRUCTURE BRICKWORK</u></b>			
<b><u>Brickwork of NFP brick in class II mortar laid in stretcher bond with 10mm flush joints</u></b>			
2/3/2	One brick wall	m2	2 027
2/3/3	Half brick wall, in beamfilling	m2	84
<b><u>FACE BRICKWORK</u></b>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<b><u>"Corobrick" face bricks (Colour: TBC) with PC sum amount of R 4 500.00 per thousand bricks delivered to site (excluding VAT) manufactured in accordance with SANS 227-2007, bedded and jointed in Class II mortar and pointed with recessed 6mm joints in both directions</u></b>			
2/3/4	Extra over brickwork for face brickwork in foundations (Provisional)	m2	1 341
2/3/5	Extra over brickwork for face brickwork in superstructure	m2	1 512
2/3/6	Extra over brickwork for face brickwork in brick-on-edge header course lintel	m	266
2/3/7	Extra over brickwork for face brickwork in brick-on-edge header course sills, bedded in mortar and set slightly sloped	m	246
<b>Carried Forward</b>			R
Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 3 Masonry			

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<b>Brought Forward</b>			R
2/3/8	Extra over brickwork for face brickwork in beamfilling	m2	84
<b><u>BRICKWORK SUNDRIES</u></b>			
<b><u>Brickwork reinforcement</u></b>			
2/3/9	150mm Wide reinforcement built in horizontally.	m	9 907
<b><u>"Allied concrete" or similar approved prestressed fabricated lintels</u></b>			
2/3/10	100 x 70mm Lintels in lengths not exceeding 3m	m	311
2/3/11	175 x 70mm Lintels in lengths not exceeding 3m	m	27
<b><u>Turning pieces</u></b>			
2/3/12	110mm Wide turning piece to flat brick lintels	m	266
<b><u>Air bricks etc</u></b>			
2/3/13	Set of 2 240 x 155mm Terracota air bricks as per architects specification	No	24
<b><u>Roof ties</u></b>			
2/3/14	30 x 1.2mm galvanised steel strapping, built into wall for 5 courses and minimum 800mm to be fixed to trusses	No	468
<b><u>MOVEMENTS JOINTS ETC,</u></b>			
<b><u>Expansion joints</u></b>			
2/3/15	30mm softboard between vertical brick surfaces not exceeding 300mm wide	m2	132
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 2			
4 CLASSROOM BLOCK X 6			
Bill No. 3			
Masonry			

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No.1, shall equally apply to this Bill.			
	<b><u>DAMP PROOFING OF WALLS AND FLOORS</u></b>			
	<b><u>One layer of 375 micron "Consol Plastic Brikgrip DPC" embossed damp proof course</u></b>			
2/4/1	Under walls	m2	18	
2/4/2	Under cills, etc.	m2	54	
	<b><u>One layer of 250 micron "USB Green" or similar approved dampproof membrane sealed at laps with PVC self -adhesive tape</u></b>			
2/4/3	Under surface beds.	m2	2 480	
	<b><u>JOINTS SEALANTS, ETC.</u></b>			
	<b><u>Mastic grey polysulphide sealing compound including raking out of joints filler as necessary</u></b>			
2/4/4	3 x 30mm In saw cut joints in floors	m	437	
2/4/5	10mm Isolation Joints between surface bed concrete and brick wall	m	521	
	<b>Carried Forward to Summary of Section No.</b>			
	Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 4 Waterproofing			R

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 5</u></b>			
	<b><u>ROOF COVERINGS</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No.1, shall equally apply to this Bill.			
	<b><u>ROOF SHEETING</u></b>			
	<b><u>Similar Approved</u></b>			
	<b><u>0.6mm thick "Brownbuilt Klip-lok light Industrial" galvanised troughed roof sheeting with "Chromadek - Traffic Green" finish on one side, and 0.6mm galvanised steel accessories fixed to timber purlins or rails fixed in strict accordance to the manufacturer's instructions and fixed by an approved erector. A written and approved five (5) year guarantee of water-tightness shall be issued after approval of roofs by the manufacturer</u></b>			
2/5/1	Roof sheeting pitch not exceeding 25 degrees	m2	2 899	
2/5/2	550mm girth Ridge capping, 3 times bent and notched on site to suit roof profile	m	211	
2/5/3	550mm girth Hip capping, 3 times bent and notched on site to suit roof profile.	m	123	
	<b><u>ROOF AND WALL INSULATION</u></b>			
	<b><u>Similar Approved</u></b>			
	<b>Carried Forward</b>			R
	Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 5 Roof Coverings			

	<b>Brought Forward</b>			R	
2/5/4	<p><b><u>Sisalation "Bubble Foil" aluminium foil banded insulation</u></b></p> <p>135mm thick Insulation laid over purlins (at approximately 750mm centres), fixed concurrent with sheeting with and including galvanised steel accessories</p>	m2	2 899		
	<b>Carried Forward to Summary of Section No.</b>			R	
	<p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 5 Roof Coverings</p>				

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 6</u></b></p> <p><b><u>CARPENTRY AND JOINERY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><u>Joinery</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc.</p> <p>Descriptions of hardwood joinery shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.</p> <p><u>Fixing</u></p> <p>Items described as nailed shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>Timber</u></p> <p>All softwood to be South African Pine</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 6 Carpentry and Joinery</p>			

<p style="text-align: center;"><b>Brought Forward</b></p> <p><u>Descriptions</u></p> <p>Items described as "bolted" shall be deemed to exclude the bolts and include the holes unless otherwise described.</p> <p>Where the fixing of members is not stated it shall mean the nailing of one timber member to another.</p> <p>The term "planted on" shall mean the nailing of one timber member to another</p> <p>The term "screwed on" shall mean the countersunk screwing of one timber member to another.</p> <p>The term "screwed on and pelleted" shall mean the screwing of one timber member to another with the heads of screw sunk and pelleted.</p> <p>The term "plugged" shall mean the countersunk screwing of a timber member to and including plastic plugs in brickwork or concrete.</p> <p>The term "plugged and pelleted" shall mean the screwing of a timber member to and including plastic plugs in brickwork or concrete with heads of screw sunk and pelleted.</p> <p>Shelving, etc. described as screwed to steel must be fixed from underside and prices are to include for countersunk drilling through the steel for screw fixing.</p> <p>Descriptions of floors, ceilings, joinery, etc. shall be deemed to include for all square cutting</p> <p>Descriptions of items given in linear metre shall be deemed to include for mitres, stopped ends, fitted intersections, etc.</p> <p>Descriptions of rounded angles, rebates, grooves, chamfers, moulded edges, etc. shall be deemed to include for angles, ends, etc.</p> <p><b><u>ROOFS, ETC</u></b></p>		R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 6 Carpentry and Joinery</p>		R	

	<b>Brought Forward</b>			R
	<p><b><u>Plate nailed timber roof truss construction</u></b></p> <p>The following is applicable in respect of roof trusses:</p> <p>All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245.</p> <p>Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish.</p> <p>All joints to be close fitted butt joints.</p> <p><b>Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation.</b></p> <p><b>The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabrication commences.</b></p> <p><b>Tenderers must study the roof plan and sections as attached to the back of these bills of quantities and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained.</b></p> <p><b><u>Roof trusses</u></b></p>			
2/6/1	Design, supply, take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gang boarding, temporary and permanent bracing, etc (measured on plan)	m2	2 416	
	<p><b><u>Sawn softwood</u></b></p>			
2/6/2	38 x 114mm Wall plates	m	562	
	<p><b><u>Sundries</u></b></p>			
2/6/3	Two coats creosote on sawn timbers	m2	208	
	<p><b><u>Similar Approved</u></b></p>			
	<b>Carried Forward</b>			R
	<p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 6 Carpentry and Joinery</p>			

<b>Brought Forward</b>				R
	<b><u>"Everite FC77" Fascia and badge boards</u></b>			
2/6/4	15 x 225mm Pressed fibre cement fascia boards, fixed to supports and roof timbers with one brass screw at maximum 750mm centres, including standard aluminium half round cover strips at all joints, as per architect's specification	m	562	
	<b><u>DOORS ETC</u></b>			
	<b><u>44mm thick solid R&amp;F panel meranti timber doors with masonite backing with 15 horizontal slates on both sides hung to steel frames</u></b>			
2/6/5	813 x 2032mm single door	No	24	
	<b><u>WINDOWS</u></b>			
	<b><u>Similar Approved</u></b>			
	<b><u>"Nutec" fibre cement window cills</u></b>			
2/6/6	150mm x 15mm thick fibre cement Window sill set flat and slightly projecting, with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in 1:4 cement sand mortar with plastic slip joints at end of sills at plaster reveals and projecting from finished face of wall, all as per manufacturer's recommendations	m	246	
<b>Carried Forward to Summary of Section No.</b>				R
Section No. 2				
4 CLASSROOM BLOCK X 6				
Bill No. 6				
Carpentry and Joinery				

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 7</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>Fixing</u></b></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere.</p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p><b><u>Ceilings &amp; Bulkheads</u></b></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><b><u>Steel components</u></b></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 7 Ceilings,Partitions and Access Flooring</p>			

	<b>Brought Forward</b>			R
	<p><b><u>Proprietary suspended ceilings</u></b></p> <p>Hangers, suspension grids, "lay-in" panels, etc are to be in accordance with the manufacturers' recommendations</p> <p>Where electrical light fittings, diffusers, panels etc are units of the same dimensions as the suspension grid described and allowance must be made in the rates accordingly for their support inclusive of any flexibility in setting out that may be required (ceiling panels have not been deducted and pricing is to take cognisance thereof)</p> <p><b><u>Suspension systems</u></b></p> <p>Where suspensions of ceilings require a sub-grid, the tenderer should include in his rates for the sub-grid. The design of the sub-grid support is not specified, the tenderer is to obtain the necessary requirements and recommendations for a safe installation from the board and suspension system manufacturer to the satisfaction of the structural engineer.</p> <p><b><u>NAILED UP CEILINGS</u></b></p> <p><b><u>FIBRE - CEMENT BOARDS</u></b></p> <p><b><u>Similar Approved</u></b></p> <p><b><u>6mm "Everite Nutec" Fibre-cement boards, jointed with and including galvanised H-type primed pressed steel jointing strips, including brandering as per architect's specifications</u></b></p>			
2/7/1	2400 x 1200mm x 6mm Horizontal ceilings, fixed to and including 38 x 38mm sawn softwood brandering at maximum 400mm centres using 38mm long galvanised nails	m2	1 860	
	<p><b><u>CORNICES</u></b></p> <p><b><u>"Rhino" plasterboard cornice</u></b></p>			
2/7/2	75mm Coved cornice, plugged to brickwork	m	1 210	
	<p><b><u>SUNDRIES</u></b></p>			
	<b>Carried Forward</b>			R
	<p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 7 Ceilings,Partitions and Access Flooring</p>			

<b>Brought Forward</b>			R
	<b><u>Extra over for Trap Doors</u></b>		
2/7/3	Extra over ceiling for 600 x 600mm trap door of 38 x 50mm wrought softwood rebated framing, with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	24
	<b><u>CEILING INSULATION</u></b>		
	<b><u>Insulation</u></b>		
2/7/4	125mm thick Glass wool insulation blanket closely fitted and laid on top of ceiling panels, all in strict accordance with the manufacturer's specifications.	m2	1 860
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 2			
4 CLASSROOM BLOCK X 6			
Bill No. 7			
Ceilings,Partitions and Access Flooring			

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 8</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p>Where ironmongery is described as plugged, prices are to include for screwing to and including approved patent plugs in concrete or brickwork with plaster or tiled finish, etc.</p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items</p> <p>Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered</p> <p>On request returnable samples are to be provided to the principal agent for consideration</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 8 Ironmongery</p>			

	<b>Brought Forward</b>			R
	<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            AN Anodised natural            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>Rates</u></p> <p>The tenderer is to price for supply, taking delivery of, storing and fixing of the ironmongery listed below.</p> <p><b><u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, etc.</u></b></p> <p><b><u>Approved</u></b></p>			
2/8/1	<p>White magnetic boards 4000mm x 1200mm high with aluminium frame plugged @ 1100mm above floor level on centre of the wall</p>	No	24	
	<p><b><u>Swing type Green Chalkboard to comply with CKS-36-1980 or equivalent code of practice, complete with chalk rail as one unit strictly in accordance to manufacturers instructions</u></b></p>			
2/8/2	<p>Overall size 4000 wide x 1250mm high consisting of one chalkboard 1800mm wide, two chalkboards 900mm wide and 2000 x 1250mm high two swing type chalkboards, fixed 900mm high from finished floor level</p>	No	24	
	<p><b><u>SUNDRIES</u></b></p>			
	<b>Carried Forward</b>			R
	<p>Section No. 2            4 CLASSROOM BLOCK X 6            Bill No. 8            Ironmongery</p>			

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	<b>Brought Forward</b>			R
2/8/3	<p><b><u>Approved</u></b></p> <p>"CZ8730SC" Door stop or similarly approved to wall or floors</p>	No	24	
	<b>Carried Forward to Summary of Section No.</b>			R
	Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 8 Ironmongery			

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 9</u></b></p> <p><b><u>METALWORK</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>ALUMINIUM</u></b></p> <p>The contractor is to make due allowance in his prices for complying with the following requirements.</p> <p><b><u>SPECIFICATIONS</u></b></p> <p>User Note:</p> <p><b><u>Glazing</u></b></p> <p>All Safety glazing material (individual panes) are to conform to all standards as stipulated in SANS 10400 Part N and SANS 10137 and any additional Engineer Specifications or relevant SANS glazing regulations not stipulated in this document. All tenderers are referred to the drawings for the glazing specification.</p> <p><b><u>Ironmongery</u></b></p> <p>All rates for windows, shopfronts and doors etc. must include for the supply, taking delivery or/and installation of the ironmongery to be specified.</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 9 Metalwork</p>			

<p style="text-align: center;"><b>Brought Forward</b></p> <p><b><u>Actuators</u></b></p> <p>All rates for shopfronts with actuators to include for the supply and installation of actuators as specified</p> <p><b><u>Scaffolding</u></b></p> <p>All scaffolding should be provided by the contractor and no claims/ qualifications will be accepted.</p> <p><b><u>Protection</u></b></p> <p>With this tender, the glazing sub-contractor must supply a statement concerning protection that will be provided to finishes and components until Practical Completion. This to include specific references to the method of removal of such protection. All tenderers to include cost of protection in tender price.</p> <p><b><u>Installation</u></b></p> <p>All measurements to be checked on site prior to ordering and manufacturing.</p> <p>Aluminium sections and shop drawings to be accepted by Architect prior to manufacturing.</p> <p>Allow for water and weather proof polysulphide sealant to approved specifications all around frame junctions to plaster and other materials.</p> <p><b><u>Profiles</u></b></p> <p>Tenderers to provide typical details of proposed aluminium section to be used in the design.</p> <p><b><u>Structural Silicone</u></b></p> <p>Tenderers to allow a 10 year guarantee on all powdercoating.</p> <p><b><u>Preliminary and Shop Drawings:</u></b></p> <p>The contractor shall submit preliminary design drawings showing basic system sections for the Architect's approval.</p>			R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 9 Metalwork</p>			R	

<p style="text-align: center;"><b>Brought Forward</b></p> <p>After approval and prior to fabrication detailed shop drawings shall be prepared and submitted to the Architect for approval.</p> <p><b><u>Fixing:</u></b></p> <p>The contractor is to take special note of all fixing details of all aluminium elements and must allow in his price for properly securing the aluminium sections to the structure with and including all necessary steel brackets, rails, timber grounds and sub-frames, including all necessary holing and bolting, etc. This fixing is to be adequately spaced and securely fixed to ensure total stiffness of the door frames, windows, etc. as no sagging causing improper functioning of the windows and doors will be accepted.</p> <p><b><u>Deflection of structure:</u></b></p> <p>The contractor is advised to make adequate provision for the design deflection of the structure.</p> <p><b><u>Tolerances:</u></b></p> <p>Sizes are approximate only and measurements on site must be taken before fabrication. Due allowance must be made for tolerances in accordance with the Architect's details.</p> <p><b><u>Protection:</u></b></p> <p>The contractor will be required to protect his work during the course of construction, which protection shall be adequate for the purpose and to the full approval of the Architect.</p> <p>Such protection shall only be removed after a written instruction from the Architect.</p> <p><b><u>Cleaning:</u></b></p> <p>All work must be cleaned down upon completion. Glazing as installed will not be accepted as clean glass and the contractor must allow for polishing glass as and when instructed by the Architect.</p> <p>Note: All windows and doors should be read in conjunction with window and door schedules</p>		R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 9 Metalwork</p>		R	

Brought Forward			R
<b><u>WELDED SCREENS, GATES, ETC.</u></b>			
<b><u>Welded MS gate consisting of 50 x 50 x 2.5mm rectangular tubing section frame with 45 degrees mitre at corners, bolted to reveals with 10mm (10M) rawlbolts and welded with 50 x 50 x 5mm mild steel to walls, with 50 x 50 x 2.5mm mild steel rectangular tube gate leaf with 45 degree mitre at corners and two 50 x 50 x 2.5mm horizontal sections, with 12 x 12mm mild steel vertical style solid square bars at 100mm c/c, including 3x pair of 20mm diameter bullet-hinges per gate, with "Solid blesbok" 460/313 four lever lockset with rebate set, including welding, bolting, holes, bolts etc., all complete as per the architect's specifications</u></b>			
2/9/1	Steel gate to door, size 813mm x 2032mm high	No	24
<b><u>PRESSED STEEL DOOR FRAMES</u></b>			
<b><u>1.2mm thick Single rebated frame suitable for one brick walls, complete with lugs and base ties, with red oxide primer factory finish by manufacturer</u></b>			
2/9/2	813 x 2032mm single door	No	24
<b><u>WINDOWS FRAMES, etc.</u></b>			
<b><u>Standard mild steel school type Top-hung open out window frame (with brass fittings), with burglar bars to opening and fixed sections, consisting of 10mm diameter mild steel round bars to standard NBP2 pattern, welded at intersections and window frames, all as per architect's specification</u></b>			
2/9/3	Window size 1143 x 1272mm high	No	216
<b><u>ALUMINIUM WINDOWS, DOORS, ETC</u></b>			
<b><u>304/VEM 320G expanded metal mesh size 1200mm x 2400mm manufactured in accordance with SANS 190-1:1983 fixed to 76 x 50mm timber purlins using 40x 0.5mm hat channels @ 400mm centres with 12 x 20mm tac screws.</u></b>			
2/9/4	In Ceiling voids	m2	1 514
Carried Forward			R
Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 9 Metalwork			



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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 10</u></b>			
	<b><u>PLASTERING</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No.1, shall equally apply to this Bill.			
	<b><u>SCREEDS</u></b>			
	<b><u>1:4 Cement sand screed on concrete, worked down to a true and even surface with a steel trowel</u></b>			
2/10/1	30mm Thick on floors and landings	m2	1 599	
	<b><u>Granolithic screed on concrete, worked down to a true and even surface with a wood trowel</u></b>			
2/10/2	30mm Thick on floors	m2	365	
	<b><u>INTERNAL PLASTER</u></b>			
	<b><u>One coat smooth 1:5 cement sand plaster on brickwork to receive finish</u></b>			
2/10/3	On brick walls	m2	2 277	
2/10/4	On narrow widths	m2	228	
	<b>Carried Forward</b>			R
	Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 10 Plastering			

		Brought Forward		R
2/10/5	<p><b><u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u></b></p> <p>Aluminium straight edge M-trim suitable for under-screed fixing in vinyl/ceramic, etc. installed as per manufactures recommendation and specification.</p>	m	19	
<p><b>Carried Forward to Summary of Section No.</b></p> <p>Section No. 2                      4 CLASSROOM BLOCK X 6                      Bill No. 10                      Plastering</p>				R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 11</u></b></p> <p><b><u>TILING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>Pricing</u></b></p> <p>Prices are to included for the following: Cutting, handling, labour, adhesive etc.</p> <p><b><u>Fixing</u></b></p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat.</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed, grouted and pointed with suitable adhesives and grouts, as recommended by the Architect. Costs are hereby deemed to include the cost of this requirement.</p> <p>Payment for work that is deemed measurable, in respect of the conditions of contract, and which comprises cutting, leaving, or forming, rectangular holes and notches through tiling is hereby deemed to apply only to holes and notches that do not exceed 600mm girth. Those exceeding 600mm in girth are hereby deemed to be "square cutting", which is hereby deemed to be part of the work description for that type of tiling and is not measurable as a separate item of work.</p> <p><b><u>Wastage</u></b></p> <p>Tile wastage in excess of 10% will be for the tenderer's account.</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 11 Tiling</p>			

<b>Brought Forward</b>			<b>R</b>
<b><u>GENERAL NOTES TO TENDERERS</u></b>			
General notes, described in Bill No. 1, shall equally apply to this Bill.			
<u>Note</u>			
All scaffolding should be provided by the contractor and no claims/qualifications will be accepted.			
<b><u>FLOOR TILING</u></b>			
<b><u>420 x 420 x 11.5mm Thick non-slip ceramic tiles (P.C allowance of R 200.00/m2 excludes V.A.T. but includes delivery to site), includes waste, laying, supply and fixing with an approved adhesive and jointing in waterproof cementitious grout</u></b>			
2/11/1	On floors	m2	1 599
2/11/2	75mm high skirting	m	784
<b><u>ATTIC STOCK</u></b>			
2/11/3	420 x 420 x 11.5mm Thick non-slip ceramic tiles (P.C allowance of R 200.00/m2 excludes V.A.T. but includes delivery to site)	m2	160
<b><u>SUNDRIES</u></b>			
<b><u>10mm aluminium straight edge trim</u></b>			
2/11/4	Dividing strip between tiles and door frames	m	19
<b>Carried Forward to Summary of Section No.</b>			<b>R</b>
Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 11 Tiling			

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 12</u></b></p> <p><b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>uPVC pipes and fittings:</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p><u>Excavations:</u></p> <p>No claim for excavation in material other than "earth" will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling, and has obtained, in writing , authorised classification thereof.</p> <p>"Intermediate material" and " hard rock" shall be as defined in "Earthworks".</p> <p>Quantities of all excavations, carting away excavated material and backfilling are calculated on the nett extent to be formed, or filled, in accordance with drawings and specifications, and the Contractor is to allow in his prices for any bulking.</p> <p>Classes of excavation shall be as S.A.B.S 1200D clause 3.1.2.</p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 12 Plumbing and Drainage</p>			R

	<b>Brought Forward</b>				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 the specific instructions</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>RAINWATER GOODS</u></b></p> <p><b><u>Similar Approved</u></b></p> <p><b><u>Gutters</u></b></p>				
2/12/1	100 x 100 x 0.6mm thick Ogee profile eaves gutter aluminium box gutter, fixed with and including fixing clips to fascia boards	m	562		
2/12/2	Extra over eaves gutter for stopped end	No	48		
2/12/3	Extra over eaves gutter for corner	No	248		
2/12/4	Extra over eaves gutter for outlet	No	60		
	<b><u>Rainwater downpipes</u></b>				
2/12/5	100mm diameter x 0.6mm thick rainwater downpipe with Chromadek finish (Colour: TBC), fixed with and including brackets to wall face, with brackets spaced as per manufacturer's recommendations, and with downpipes spaced as per engineer's specification	m	208		
2/12/6	Extra over downpipe for offset	No	120		
2/12/7	Extra over downpipe for shoe	No	60		
	<b>Carried Forward to Summary of Section No.</b>				R
	<p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 12 Plumbing and Drainage</p>				

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 13</u></b></p> <p><b><u>GLAZING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No. 1, shall equally apply to this Bill.</p> <p><u>Note:</u></p> <p>All glazing to comply with SABS 1263 Part 3:1998. Light and ventilation to comply with Part O if NBR 0400</p> <p><b><u>GLASS TO STEEL WITH PUTTY</u></b></p> <p><b><u>5mm clear floated glass fixed glazing putty</u></b></p>			
2/13/1	<p>Panes exceeding 0.1m2 and not exceeding 0.5m2</p>	m2	313	
	<p><b>Carried Forward to Summary of Section No.</b></p> <p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 13 Glazing</p>			R

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 14</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>PAINTWORK ETC TO NEW WORK</u></b></p> <p><b><u>FIBRE CEMENT</u></b></p> <p><b><u>Prepare and apply one coat universal undercoat and two coats Super Acrylic PVA paint or similar approved, colour to be confirmed by architect</u></b></p>			
2/14/1	On internal ceilings and cornices	m2	1 966	
2/14/2	Fibre cement fascias boards not exceeding 300mm high or wide painted on both side	m	562	
	<p><b><u>FLOATED PLASTER INTERNAL WALLS</u></b></p> <p><b><u>Prepare and apply one coat merit universal undercoat and two coats Super Acrylic PVA paint or similar approved, colour to be confirmed by architect</u></b></p>			
2/14/3	Plastered walls	m2	2 277	
	<p><b><u>METAL SURFACES</u></b></p>			
	<b>Carried Forward</b>			R
	<p>Section No. 2 4 CLASSROOM BLOCK X 6 Bill No. 14 Paintwork</p>			

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<b>Brought Forward</b>			R
<b><u>Prepare and apply one coat Duraphos, one coat universal under coat and two coats gloss enamel paint, colour to be confirmed by architect</u></b>			
2/14/4	On gates, grilles, burglar screens, balustrades, etc (both sides measured on full flat area)	m2	91
2/14/5	On window frames	m2	313
2/14/6	On door frames	m2	30
2/14/7	On mild steel columns, beams, etc	m2	77
2/14/8	On gutters	m	562
2/14/9	On downpipes	m	214
<b><u>WOOD</u></b>			
<b><u>Prepare and paint three coats clear varnish:</u></b>			
2/14/10	On door	m2	79
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 2			
4 CLASSROOM BLOCK X 6			
Bill No. 14			
Paintwork			

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<b>Bill No</b>	<b>SECTION SUMMARY</b>	<b>Page No</b>		<b>Amount</b>
2/1	Earthworks	2/3		
2/2	Concrete,Formwork and Reinforcement	2/7		
2/3	Masonry	2/10		
2/4	Waterproofing	2/11		
2/5	Roof Coverings	2/13		
2/6	Carpentry and Joinery	2/17		
2/7	Ceilings,Partitions and Access Flooring	2/20		
2/8	Ironmongery	2/23		
2/9	Metalwork	2/28		
2/10	Plastering	2/30		
2/11	Tiling	2/32		
2/12	Plumbing and Drainage	2/34		
2/13	Glazing	2/35		
2/14	Paintwork	2/37		
<b>Carried to Final Summary</b>				
Section No. 2 4 CLASSROOM BLOCK X 6			R	

Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 3</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>NOTES</u></b></p> <p><b><u>Carting away of excavated material</u></b></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p> <p><b><u>Filling</u></b></p> <p>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</p> <p>Excavations measured in successive depths of 2m.</p> <p><b><u>SITE CLEARANCE ETC</u></b></p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 1 Earthworks</p>			

<b>Brought Forward</b>				R
<b><u>Site clearance</u></b>				
3/1/1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	695	
<b><u>EXCAVATIONS</u></b>				
<b><u>Excavation in earth not exceeding 2m deep</u></b>				
3/1/2	Trenches	m3	161	
3/1/3	Holes	m3	179	
<b><u>Extra over excavations in earth to trenches and holes for</u></b>				
3/1/4	Excavation in soft rock	m3	34	
3/1/5	Excavation in hard rock	m3	17	
<b><u>Back excavation of vertical sides of excavation in earth for working space including backfilling compacted to 93% Mod AASHTO density</u></b>				
3/1/6	Exceeding 1,5m and not exceeding 3,0m deep for placing and removing formwork to walls etc.. 500mm away from excavated face	m2	240	
<b><u>CARTING AWAY OF EXCAVATED MATERIAL</u></b>				
<b><u>Note:</u></b>				
Description 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.				
3/1/7	Extra over all excavation for carting away surplus material from excavation and / or stockpile on site to a dumping site to be located by the Contractor	m3	267	
<b><u>RISK OF COLLAPSE OF EXCAVATIONS</u></b>				
<b>Carried Forward</b>				R
Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 1 Earthworks				

Brought Forward			R
	<b><u>Risk of collapse to side of excavation in earth not exceeding 1,5m deep</u></b>		
3/1/8	Trenches and holes	m2	700
	<b><u>FILLING, ETC.</u></b>		
	<b><u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density in layers not exceeding 150mm thick</u></b>		
3/1/9	Backfilling to trenches, holes, etc	m3	81
3/1/10	Under floors, steps, pavings, etc	m3	205
	<b><u>Imported gravel filling (G7) stabilise with 2-3% cement compacted to 93% Mod AASHTO density in layers not exceeding 150mm thick</u></b>		
3/1/11	Backfilling to trenches, holes, etc	m3	24
3/1/12	Under floors, steps, pavings, etc	m3	30
	<b><u>Filling supplied by the Contractor under floors, trenches, etc.</u></b>		
3/1/13	Sub-base filling (G5) from excavations under solid floors, steps, etc. compacted to 95% modified AASHTO density in layers not exceeding 150mm thick	m3	36
	<b><u>COMPACTION OF SURFACES</u></b>		
3/1/14	Prepare ground surface by scarifying sub-grade, rip and re-compact 150mm to 90% modified AASHTO density	m2	532
	<b><u>WEED KILLERS, INSECTICIDES, TERMITES, etc.</u></b>		
	<b><u>Protection against termites, ants, etc</u></b>		
3/1/15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	443
3/1/16	To bottom and sides of excavated trenches, Holes, etc.	m2	951
	<b>Carried Forward to Summary of Section No.</b>		
	Section No. 3		
	10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA		
	Bill No. 1		
	Earthworks		
			R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>Cost of tests</u></b></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7, "Tests" of SANS 1200 G, shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the principal agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the principal agent. (Test cubes are measured separately)</p> <p><b><u>Formwork</u></b></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use. 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 style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 2 Concrete,Formwork and Reinforcement</p>			R

<p style="text-align: center;"><b>Brought Forward</b></p> <p>Formwork to soffits of solid slabs, etc. shall be deemed to be to 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.</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>The Tenderer is to note that for the "off-shutter" concrete finish shall be in accordance with the architectural specification 616 CON-140: Smooth + fair finish:-</p> <ul style="list-style-type: none"> <li>· Degree of accuracy: I</li> <li>· Finish: Smooth and even</li> <li>· Form facing material to produce a smooth, hard, uniform texture on the concrete</li> <li>· Steel faced formwork. Joints grout-tight.</li> <li>· Panels shall be as large as practicable and arranged in a regular pattern as a feature of the surface</li> <li>· Formwork tie holes: to the approval of the architect</li> <li>· Repair imperfections: not allowed. Tie bolt holes shall be patched</li> <li>· Not permitted: blowholes, small fins, bulges, irregularities, voids, honeycombing, segregation and other large defects.</li> <li>· Concrete surfaces: No further treatment to form a smooth finish of uniform texture, appearance and colour</li> </ul> <p>Structural Concrete</p> <p>Tenderers are referred to the Structural Engineer's - Standard Specifications which should be read before pricing this trade in particular, but also the other trades. The use of extenders, fly-ash, etc. are clearly described on this drawing.</p>		R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 2 Concrete, Formwork and Reinforcement</p>		R	

<b>Brought Forward</b>				R
<b><u>GENERAL NOTES TO TENDERERS</u></b>				
General notes, described in Bill No.1, shall equally apply to this Bill.				
<b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>				
<b><u>15Mpa/19mm concrete</u></b>				
3/2/1	Blinding	m3	8	
<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACE</u></b>				
<b><u>25MPa/19mm Concrete</u></b>				
3/2/2	Strip footings	m3	40	
<b><u>REINFORCED CONCRETE CAST IN FORMWORK</u></b>				
<b><u>20Mpa/19mm concrete</u></b>				
3/2/3	Concrete Apron cast to fall etc,	m3	20	
<b><u>25MPa/19mm Concrete</u></b>				
3/2/4	Surface beds cast in panels	m3	36	
3/2/5	Slabs including beams and inverted beams	m3	8	
<b><u>TEST BLOCKS</u></b>				
<b><u>Notes:</u></b>				
Concrete strength test cubes, label and send to an approved laboratory for testing, pay all charges and submit report to the Regional Representative. Only successful tests will be paid for (Provisional)				
3/2/6	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	49	
<b><u>SUNDRIES TO CONCRETE</u></b>				
<b>Carried Forward</b>				R
Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 2 Concrete,Formwork and Reinforcement				

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<b>Brought Forward</b>			R
<b><u>Surface treatment</u></b>			
3/2/7	Power float top surface of concrete surface bed to a true and even level finish	m2	536
<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>			
<b><u>Rough formwork to sides</u></b>			
3/2/8	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	625
<b><u>Rough formwork to soffits</u></b>			
3/2/9	Flat slabs not exceeding 250mm thick, propped up not exceeding 3,5m high from bearing level	m2	93
<b><u>MOVEMENTS JOINTS ETC,</u></b>			
<b><u>Expansion joints</u></b>			
3/2/10	10mm soft board or similar approved between concrete and brick wall	m	302
<b><u>REINFORCEMENT (PROVISIONAL)</u></b>			
<b><u>High and mild tensile steel reinforcement to structural concrete work</u></b>			
3/2/11	All diameter bars	t	4
<b><u>Fabric reinforcement:</u></b>			
3/2/12	Type 245 fabric reinforcement in concrete surface beds, slabs, etc.	m2	242
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 2 Concrete,Formwork and Reinforcement			

**LIMPOPO DEPARTMENT OF EDUCATION  
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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 3</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>Sizes in descriptions</u></b></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><b><u>Hollow walls etc</u></b></p> <p>Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole. Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brickseal" bitumen emulsion waterproofing coating.</p> <p><b><u>Face bricks</u></b></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 3 Masonry</p>			

Brought Forward			R
<p><b><u>Pointing</u></b></p> <p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p>			
<p><b><u>BRICKWORK IN FOUNDATION</u></b></p>			
<p><b><u>Brickwork in 73mm burnt clay masonry units class NFP in Class II mortar, laid in stretcher bond with 10mm flush joints</u></b></p>			
3/3/1	One brick wall	m2	173
<p><b><u>SUPERSTRUCTURE BRICKWORK</u></b></p>			
<p><b><u>Brickwork of NFP brick in class II mortar laid in stretcher bond with 10mm flush joints</u></b></p>			
3/3/2	One brick wall	m2	935
3/3/3	Half brick wall	m2	100
3/3/4	Half brick wall, in beamfilling	m2	54
<p><b><u>Mass brickwork in regular piers of NFP brick in class II mortar laid in stretcher bond</u></b></p>			
3/3/5	340 x 230mm Brick Piers	m3	4
3/3/6	360 x 230mm Brick Piers	m3	4
<p><b><u>FACE BRICKWORK</u></b></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p> <p><b><u>"Corobrick" face bricks (Colour: TBC) with PC sum amount of R 4 500.00 per thousand bricks delivered to site (excluding VAT) manufactured in accordance with SANS 227-2007, bedded and jointed in Class II mortar and pointed with recessed 6mm joints in both directions</u></b></p>			
3/3/7	Extra over brickwork for face brickwork in foundations (Provisional)	m2	345
Carried Forward			R
<p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 3 Masonry</p>			

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<b>Brought Forward</b>			R
3/3/8	Extra over brickwork for face brickwork in superstructure	m2	770
3/3/9	Extra over brickwork for face brickwork in brick-on-edge header course lintel	m	34
3/3/10	Extra over brickwork for face brickwork in brick-on-edge header course sills, bedded in mortar and set slightly sloped	m	19
3/3/11	Extra over brickwork for face brickwork to piers	m2	120
3/3/12	Extra over brickwork for face brickwork in beamfilling	m2	54
<b><u>BRICKWORK SUNDRIES</u></b>			
<b><u>Brickwork reinforcement</u></b>			
3/3/13	75mm Wide reinforcement built in horizontally	m	295
3/3/14	150mm Wide reinforcement built in horizontally.	m	3 801
<b><u>"Allied concrete" or similar approved prestressed fabricated lintels</u></b>			
3/3/15	100 x 70mm Lintels in lengths not exceeding 3m	m	30
3/3/16	175 x 70mm Lintels in lengths not exceeding 3m	m	104
<b><u>Turning pieces</u></b>			
3/3/17	110mm Wide turning piece to flat brick lintels	m	96
<b><u>Air bricks etc</u></b>			
3/3/18	Set of 2 240 x 155mm Terracota air bricks as per architects specification	No	18
<b><u>Roof ties</u></b>			
3/3/19	30 x 1.2mm galvanised steel strapping, built into wall for 5 courses and minimum 800mm to be fixed to trusses	No	174
<b><u>MOVEMENTS JOINTS ETC,</u></b>			
<b>Carried Forward</b>			R
Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 3 Masonry			

	<b>Brought Forward</b>				
3/3/20	<p><b><u>Expansion joints</u></b></p> <p>30mm softboard between vertical brick surfaces not exceeding 300mm wide</p>	m2	34	R	
	<p><b>Carried Forward to Summary of Section No.</b></p> <p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 3 Masonry</p>			R	

**LIMPOPO DEPARTMENT OF EDUCATION  
UPGRADES AND ADDITIONS AT  
ST. PAUL HIGH SCHOOL**

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No.1, shall equally apply to this Bill.			
	<b><u>DAMP PROOFING OF WALLS AND FLOORS</u></b>			
	<b><u>One layer of 375 micron "Consol Plastic Brikgrip DPC" embossed damp proof course</u></b>			
3/4/1	Under walls	m2	12	
3/4/2	Under cills, etc.	m2	4	
	<b><u>One layer of 250 micron "USB Green" or similar approved dampproof membrane sealed at laps with PVC self -adhesive tape</u></b>			
3/4/3	Under surface beds.	m2	443	
	<b><u>JOINTS SEALANTS, ETC.</u></b>			
	<b><u>Mastic grey polysulphide sealing compound including raking out of joints filler as necessary</u></b>			
3/4/4	10mm Isolation Joints between surface bed concrete and brick wall	m	302	
	<b>Carried Forward to Summary of Section No.</b>			
	Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 4 Waterproofing			R

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 5</u></b>			
	<b><u>ROOF COVERINGS</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No.1, shall equally apply to this Bill.			
	<b><u>ROOF SHEETING</u></b>			
	<b><u>Similar Approved</u></b>			
	<b><u>0.6mm thick "Brownbuilt Klip-lok light Industrial" galvanised troughed roof sheeting with "Chromadek - Traffic Green" finish on one side, and 0.6mm galvanised steel accessories fixed to timber purlins or rails fixed in strict accordance to the manufacturer's instructions and fixed by an approved erector. A written and approved five (5) year guarantee of water-tightness shall be issued after approval of roofs by the manufacturer</u></b>			
3/5/1	Roof sheeting pitch not exceeding 25 degrees	m2	362	
3/5/2	550mm girth Ridge capping, 3 times bent and notched on site to suit roof profile	m	52	
3/5/3	550mm girth Hip capping, 3 times bent and notched on site to suit roof profile.	m	91	
	<b><u>ROOF AND WALL INSULATION</u></b>			
	<b><u>Similar Approved</u></b>			
	<b>Carried Forward</b>			
	R			
	Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 5 Roof Coverings			

	<b>Brought Forward</b>				R
3/5/4	<p><b><u>Sisalation "Bubble Foil" aluminium foil banded insulation</u></b></p> <p>135mm thick Insulation laid over purlins (at approximately 750mm centres), fixed concurrent with sheeting with and including galvanised steel accessories</p>	m2	362		
	<b>Carried Forward to Summary of Section No.</b>				R
	<p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 5 Roof Coverings</p>				

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 6</u></b></p> <p><b><u>CARPENTRY AND JOINERY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><u>Joinery</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc.</p> <p>Descriptions of hardwood joinery shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.</p> <p><u>Fixing</u></p> <p>Items described as nailed shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>Timber</u></p> <p>All softwood to be South African Pine</p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 6 Carpentry and Joinery</p>			R

<p style="text-align: center;"><b>Brought Forward</b></p> <p><u>Descriptions</u></p> <p>Items described as "bolted" shall be deemed to exclude the bolts and include the holes unless otherwise described.</p> <p>Where the fixing of members is not stated it shall mean the nailing of one timber member to another.</p> <p>The term "planted on" shall mean the nailing of one timber member to another</p> <p>The term "screwed on" shall mean the countersunk screwing of one timber member to another.</p> <p>The term "screwed on and pelleted" shall mean the screwing of one timber member to another with the heads of screw sunk and pelleted.</p> <p>The term "plugged" shall mean the countersunk screwing of a timber member to and including plastic plugs in brickwork or concrete.</p> <p>The term "plugged and pelleted" shall mean the screwing of a timber member to and including plastic plugs in brickwork or concrete with heads of screw sunk and pelleted.</p> <p>Shelving, etc. described as screwed to steel must be fixed from underside and prices are to include for countersunk drilling through the steel for screw fixing.</p> <p>Descriptions of floors, ceilings, joinery, etc. shall be deemed to include for all square cutting</p> <p>Descriptions of items given in linear metre shall be deemed to include for mitres, stopped ends, fitted intersections, etc.</p> <p>Descriptions of rounded angles, rebates, grooves, chamfers, moulded edges, etc. shall be deemed to include for angles, ends, etc.</p> <p><b><u>ROOFS, ETC</u></b></p>		R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 6 Carpentry and Joinery</p>		R	

<b>Brought Forward</b>				R
<b><u>Plate nailed timber roof truss construction</u></b>				
The following is applicable in respect of roof trusses:				
All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245.				
Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish.				
All joints to be close fitted butt joints.				
<b>Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation.</b>				
<b>The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabrication commences.</b>				
<b>Tenderers must study the roof plan and sections as attached to the back of these bills of quantities and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained.</b>				
<b><u>Roof trusses</u></b>				
3/6/1	Design, supply, take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gang boarding, temporary and permanent bracing, etc (measured on plan)	m2	302	
<b><u>Sawn softwood</u></b>				
3/6/2	38 x 114mm Wall plates	m	209	
<b><u>Sundries</u></b>				
3/6/3	Two coats creosote on sawn timbers	m2	77	
<b><u>Similar Approved</u></b>				
<b>Carried Forward</b>				R
Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 6 Carpentry and Joinery				

<b>Brought Forward</b>			R
<b><u>"Everite FC77" Fascia and badge boards</u></b>			
3/6/4	15 x 225mm Pressed fibre cement fascia boards, fixed to supports and roof timbers with one brass screw at maximum 750mm centres, including standard aluminium half round cover strips at all joints, as per architect's specification	m	208
<b><u>DOORS ETC</u></b>			
<b><u>44mm thick solid R&amp;F panel meranti timber doors with masonite backing with 15 horizontal slates on both sides hung to steel frames</u></b>			
3/6/5	813 x 2032mm single door	No	54
3/6/6	914 x 2032mm single door	No	36
<b><u>WINDOWS</u></b>			
<b><u>Similar Approved</u></b>			
<b><u>"Nutec" fibre cement window cills</u></b>			
3/6/7	150mm x 15mm thick fibre cement Window sill set flat and slightly projecting, with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in 1:4 cement sand mortar with plastic slip joints at end of sills at plaster reveals and projecting from finished face of wall, all as per manufacturer's recommendations	m	19
<b>Carried Forward to Summary of Section No.</b>			
Section No. 3			
10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA			
Bill No. 6			
Carpentry and Joinery			
			R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 7</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>Fixing</u></b></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere.</p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p><b><u>Ceilings &amp; Bulkheads</u></b></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><b><u>Steel components</u></b></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 7 Ceilings,Partitions and Access Flooring</p>			

	<b>Brought Forward</b>			R
	<p><b><u>Proprietary suspended ceilings</u></b></p> <p>Hangers, suspension grids, "lay-in" panels, etc are to be in accordance with the manufacturers' recommendations</p> <p>Where electrical light fittings, diffusers, panels etc are units of the same dimensions as the suspension grid described and allowance must be made in the rates accordingly for their support inclusive of any flexibility in setting out that may be required (ceiling panels have not been deducted and pricing is to take cognisance thereof)</p> <p><b><u>Suspension systems</u></b></p> <p>Where suspensions of ceilings require a sub-grid, the tenderer should include in his rates for the sub-grid. The design of the sub-grid support is not specified, the tenderer is to obtain the necessary requirements and recommendations for a safe installation from the board and suspension system manufacturer to the satisfaction of the structural engineer.</p> <p><b><u>NAILED UP CEILINGS</u></b></p> <p><b><u>FIBRE - CEMENT BOARDS</u></b></p> <p><b><u>Similar Approved</u></b></p> <p><b><u>6mm "Everite Nutec" Fibre-cement boards, jointed with and including galvanised H-type primed pressed steel jointing strips, including brandering as per architect's specifications</u></b></p>			
3/7/1	2400 x 1200mm x 6mm Horizontal ceilings, fixed to and including 38 x 38mm sawn softwood brandering at maximum 400mm centres using 38mm long galvanised nails	m2	153	
	<p><b><u>CORNICES</u></b></p> <p><b><u>"Rhino" plasterboard cornice</u></b></p>			
3/7/2	75mm Coved cornice, plugged to brickwork	m	343	
	<p><b><u>SUNDRIES</u></b></p>			
	<b>Carried Forward</b>			R
	<p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 7 Ceilings,Partitions and Access Flooring</p>			

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<b>Brought Forward</b>			R
3/7/3	<p><b><u>Extra over for Trap Doors</u></b></p> <p>Extra over ceiling for 600 x 600mm trap door of 38 x 50mm wrought softwood rebated framing, with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening</p>	No	18
<b><u>CEILING INSULATION</u></b>			
<b><u>Insulation</u></b>			
3/7/4	<p>125mm thick Glass wool insulation blanket closely fitted and laid on top of ceiling panels, all in strict accordance with the manufacturer's specifications.</p>	m2	153
<b>Carried Forward to Summary of Section No.</b>			R
<p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 7 Ceilings,Partitions and Access Flooring</p>			

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 8</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p>Where ironmongery is described as plugged, prices are to include for screwing to and including approved patent plugs in concrete or brickwork with plaster or tiled finish, etc.</p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items</p> <p>Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered</p> <p>On request returnable samples are to be provided to the principal agent for consideration</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 8 Ironmongery</p>			

**LIMPOPO DEPARTMENT OF EDUCATION  
UPGRADES AND ADDITIONS AT  
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	<b>Brought Forward</b>			R
	<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            AN Anodised natural            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>Rates</u></p> <p>The tenderer is to price for supply, taking delivery of, storing and fixing of the ironmongery listed below.</p> <p><b><u>SUNDRIES</u></b></p> <p><b><u>Approved</u></b></p>			
3/8/1	"CZ8730SC" Door stop or similarly approved to wall or floors	No	90	
	<b>Carried Forward to Summary of Section No.</b>			R
	Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 8 Ironmongery			

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 9</u></b></p> <p><b><u>METALWORK</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>ALUMINIUM</u></b></p> <p>The contractor is to make due allowance in his prices for complying with the following requirements.</p> <p><b><u>SPECIFICATIONS</u></b></p> <p>User Note:</p> <p><b><u>Glazing</u></b></p> <p>All Safety glazing material (individual panes) are to conform to all standards as stipulated in SANS 10400 Part N and SANS 10137 and any additional Engineer Specifications or relevant SANS glazing regulations not stipulated in this document. All tenderers are referred to the drawings for the glazing specification.</p> <p><b><u>Ironmongery</u></b></p> <p>All rates for windows, shopfronts and doors etc. must include for the supply, taking delivery or/and installation of the ironmongery to be specified.</p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 9 Metalwork</p>			R

<p style="text-align: center;"><b>Brought Forward</b></p> <p><b><u>Actuators</u></b></p> <p>All rates for shopfronts with actuators to include for the supply and installation of actuators as specified</p> <p><b><u>Scaffolding</u></b></p> <p>All scaffolding should be provided by the contractor and no claims/ qualifications will be accepted.</p> <p><b><u>Protection</u></b></p> <p>With this tender, the glazing sub-contractor must supply a statement concerning protection that will be provided to finishes and components until Practical Completion. This to include specific references to the method of removal of such protection. All tenderers to include cost of protection in tender price.</p> <p><b><u>Installation</u></b></p> <p>All measurements to be checked on site prior to ordering and manufacturing.</p> <p>Aluminium sections and shop drawings to be accepted by Architect prior to manufacturing.</p> <p>Allow for water and weather proof polysulphide sealant to approved specifications all around frame junctions to plaster and other materials.</p> <p><b><u>Profiles</u></b></p> <p>Tenderers to provide typical details of proposed aluminium section to be used in the design.</p> <p><b><u>Structural Silicone</u></b></p> <p>Tenderers to allow a 10 year guarantee on all powdercoating.</p> <p><b><u>Preliminary and Shop Drawings:</u></b></p> <p>The contractor shall submit preliminary design drawings showing basic system sections for the Architect's approval.</p>		R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 9 Metalwork</p>		R	

<p style="text-align: center;"><b>Brought Forward</b></p> <p>After approval and prior to fabrication detailed shop drawings shall be prepared and submitted to the Architect for approval.</p> <p><b><u>Fixing:</u></b></p> <p>The contractor is to take special note of all fixing details of all aluminium elements and must allow in his price for properly securing the aluminium sections to the structure with and including all necessary steel brackets, rails, timber grounds and sub-frames, including all necessary holing and bolting, etc. This fixing is to be adequately spaced and securely fixed to ensure total stiffness of the door frames, windows, etc. as no sagging causing improper functioning of the windows and doors will be accepted.</p> <p><b><u>Deflection of structure:</u></b></p> <p>The contractor is advised to make adequate provision for the design deflection of the structure.</p> <p><b><u>Tolerances:</u></b></p> <p>Sizes are approximate only and measurements on site must be taken before fabrication. Due allowance must be made for tolerances in accordance with the Architect's details.</p> <p><b><u>Protection:</u></b></p> <p>The contractor will be required to protect his work during the course of construction, which protection shall be adequate for the purpose and to the full approval of the Architect.</p> <p>Such protection shall only be removed after a written instruction from the Architect.</p> <p><b><u>Cleaning:</u></b></p> <p>All work must be cleaned down upon completion. Glazing as installed will not be accepted as clean glass and the contractor must allow for polishing glass as and when instructed by the Architect.</p> <p>Note: All windows and doors should be read in conjunction with window and door schedules</p>			R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 9 Metalwork</p>			R	

Brought Forward			R
<b><u>WELDED SCREENS, GATES, ETC.</u></b>			
<b><u>Welded MS gate consisting of 50 x 50 x 2.5mm rectangular tubing section frame with 45 degrees mitre at corners, bolted to reveals with 10mm (10M) rawlbolts and welded with 50 x 50 x 5mm mild steel to walls, with 50 x 50 x 2.5mm mild steel rectangular tube gate leaf with 45 degree mitre at corners and two 50 x 50 x 2.5mm horizontal sections, with 12 x 12mm mild steel vertical style solid square bars at 100mm c/c, including 3x pair of 20mm diameter bullet-hinges per gate, with "Solid blesbok" 460/313 four lever lockset with rebate set, including welding, bolting, holes, bolts etc., all complete as per the architect's specifications</u></b>			
3/9/1	Steel gate to door, size 813mm x 2032mm high	No	18
<b><u>PRESSED STEEL DOOR FRAMES</u></b>			
<b><u>1.2mm thick Single rebated frame suitable for half brick walls, complete with lugs and base ties, with red oxide primer factory finish by manufacturer</u></b>			
3/9/2	813 x 2032mm single door	No	36
<b><u>1.2mm thick Single rebated frame suitable for one brick walls, complete with lugs and base ties, with red oxide primer factory finish by manufacturer</u></b>			
3/9/3	813 x 2032mm single door	No	18
3/9/4	914 x 2032mm single door	No	36
<b><u>WINDOWS FRAMES, etc.</u></b>			
<b><u>Standard mild steel school type Top-hung open out window frame (with brass fittings), with burglar bars to opening and fixed sections, consisting of 10mm diameter mild steel round bars to standard NBP2 pattern, welded at intersections and window frames, all as per architect's specification</u></b>			
3/9/5	Window size 533 x 950mm high	No	36
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 9 Metalwork			

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 10</u></b>			
	<b><u>PLASTERING</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No.1, shall equally apply to this Bill.			
	<b><u>SCREEDS</u></b>			
	<b><u>1:4 Cement sand screed on concrete, worked down to a true and even surface with a steel trowel</u></b>			
3/10/1	30mm Thick on floors and landings	m2	240	
3/10/2	30mm Thick to falls and currents	m2	24	
	<b><u>INTERNAL PLASTER</u></b>			
	<b><u>One coat smooth 1:5 cement sand plaster on brickwork to receive finish</u></b>			
3/10/3	On brick walls	m2	843	
3/10/4	On narrow widths	m2	84	
	<b><u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u></b>			
3/10/5	Aluminium straight edge M-trim suitable for under-screed fixing in vinyl/ceramic, etc. installed as per manufactures recommendation and specification.	m	15	
	<b>Carried Forward to Summary of Section No.</b>			
	Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 10 Plastering			R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 11</u></b></p> <p><b><u>TILING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>Pricing</u></b></p> <p>Prices are to included for the following: Cutting, handling, labour, adhesive etc.</p> <p><b><u>Fixing</u></b></p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat.</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed, grouted and pointed with suitable adhesives and grouts, as recommended by the Architect. Costs are hereby deemed to include the cost of this requirement.</p> <p>Payment for work that is deemed measurable, in respect of the conditions of contract, and which comprises cutting, leaving, or forming, rectangular holes and notches through tiling is hereby deemed to apply only to holes and notches that do not exceed 600mm girth. Those exceeding 600mm in girth are hereby deemed to be "square cutting", which is hereby deemed to be part of the work description for that type of tiling and is not measurable as a separate item of work.</p> <p><b><u>Wastage</u></b></p> <p>Tile wastage in excess of 10% will be for the tenderer's account.</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 11 Tiling</p>			

<b>Brought Forward</b>			R
<b><u>GENERAL NOTES TO TENDERERS</u></b>			
General notes, described in Bill No. 1, shall equally apply to this Bill.			
<u>Note</u>			
All scaffolding should be provided by the contractor and no claims/qualifications will be accepted.			
<b><u>WALL TILING</u></b>			
<b><u>150 x 150 x 6mm ceramic tiles (PC allowance of R 120.00/m2 excludes V.A.T. but includes delivery to site), includes waste, laying, supply and fixing with an approved adhesive and jointing white grout all as per manufacturers specifications</u></b>			
3/11/1	Plastered walls	m2	501
3/11/2	On narrow widths	m2	50
3/11/3	Splash backs	m2	6
<b><u>FLOOR TILING</u></b>			
<b><u>420 x 420 x 11.5mm Thick non-slip ceramic tiles (P.C allowance of R 200.00/m2 excludes V.A.T. but includes delivery to site), includes waste, laying, supply and fixing with an approved adhesive and jointing in waterproof cementitious grout</u></b>			
3/11/4	On floors	m2	265
3/11/5	75mm high skirting	m	656
<b><u>ATTIC STOCK</u></b>			
3/11/6	150 x 150 x 6mm ceramic tiles(PC allowance of R 120.00/m2 excludes V.A.T. but includes delivery to site)	m2	50
3/11/7	420 x 420 x 11.5mm Thick non-slip ceramic tiles (P.C allowance of R 200.00/m2 excludes V.A.T. but includes delivery to site)	m2	24
<b><u>SUNDRIES</u></b>			
<b>Carried Forward</b>			R
Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 11 Tiling			

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	<b>Brought Forward</b>			R
3/11/8	<p><b><u>10mm aluminium straight edge trim</u></b></p> <p>Dividing strip between tiles and door frames</p>	m	15	
	<p><b>Carried Forward to Summary of Section No.</b></p> <p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 11 Tiling</p>			R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 12</u></b></p> <p><b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>uPVC pipes and fittings:</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p><u>Excavations:</u></p> <p>No claim for excavation in material other than "earth" will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling, and has obtained, in writing , authorised classification thereof.</p> <p>"Intermediate material" and " hard rock" shall be as defined in "Earthworks".</p> <p>Quantities of all excavations, carting away excavated material and backfilling are calculated on the nett extent to be formed, or filled, in accordance with drawings and specifications, and the Contractor is to allow in his prices for any bulking.</p> <p>Classes of excavation shall be as S.A.B.S 1200D clause 3.1.2.</p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 12 Plumbing and Drainage</p>			R

	<b>Brought Forward</b>				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 the specific instructions</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>RAINWATER GOODS</u></b></p> <p><b><u>Similar Approved</u></b></p> <p><b><u>Gutters</u></b></p>				
3/12/1	100 x 100 x 0.6mm thick Ogee profile eaves gutter aluminium box gutter, fixed with and including fixing clips to fascia boards	m		208	
3/12/2	Extra over eaves gutter for stopped end	No		72	
3/12/3	Extra over eaves gutter for corner	No		156	
3/12/4	Extra over eaves gutter for outlet	No		36	
	<b><u>Rainwater downpipes</u></b>				
3/12/5	100mm diameter x 0.6mm thick rainwater downpipe with Chromadek finish (Colour: TBC), fixed with and including brackets to wall face, with brackets spaced as per manufacturer's recommendations, and with downpipes spaced as per engineer's specification	m		125	
3/12/6	Extra over downpipe for offset	No		72	
3/12/7	Extra over downpipe for shoe	No		36	
	<b><u>SANITARY FITTINGS</u></b>				
	Refer to sanitary schedule drawing for full description of abbreviations				
	<b><u>WASH HAND BASINS</u></b>				
	<b>Carried Forward</b>				R
	Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 12 Plumbing and Drainage				

	<b>Brought Forward</b>			R
	<b><u>Similar Approved</u></b>			
	<b><u>Vaal Sanitaryware "Hibiscus" vitreous china basin with three semi-punched holes tap holes, including integrated overflow, including chain stay hole through the centre semi-punched tap hole, supplied with plug and chain, hung to walls (PC allowance of R450.00/no excludes V.A.T. but includes delivery to site), includes waste, supply and fixing</u></b>			
3/12/8	WHB, installed complete	No	18	
	<b><u>WATER CLOSET</u></b>			
	<b><u>Similar Approved</u></b>			
	<b><u>Vaal Sanitaryware "Daisy" semi-close coupled water closet comprising double flap heavy duty thermoplastic seat rim pan and matching 9 litre cistern complete with lid, fitments and flush pipe elbow (PC allowance of R2 800.00/no excludes V.A.T. but includes delivery to site), includes waste, supply and fixing</u></b>			
3/12/9	WC, installed complete	No	36	
	<b><u>SINKS, etc.</u></b>			
	<b><u>Stainless steel single bowl sink including integrated supports and legs (PC allowance of R1 500.00/no excludes V.A.T. but includes delivery to site), includes waste, supply and fixing</u></b>			
	<b><u>CHROME PLATED WASTE UNIONS, ETC. (Supply &amp; Fit)</u></b>			
3/12/10	32mm Basin waste union	No	18	
	<b><u>TOILET ROLL HOLDER</u></b>			
	<b><u>To be approved by Architect</u></b>			
3/12/11	130 x 560 x 130mm mild steel vandal proof Toilet paper roll holder (Colour: White), plugged and screwed to walls	No	36	
	<b>Carried Forward</b>			R
	Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 12 Plumbing and Drainage			

	<b>Brought Forward</b>			R
	<b><u>SOAP DISPENSER</u></b>			
	<b><u>To be approved by Architect</u></b>			
3/12/12	110 x 170 x 35mm high plastic Soap dispenser (Colour: White and transparent), with lever button and pump, plugged and screwed to wall	No	11	
	<b><u>PAPER TOWEL DISPENSER</u></b>			
	<b><u>To be approved by Architect</u></b>			
3/12/13	360 x 380 x 240mm high lockable auto-cut (reflex) plastic Paper towel dispenser (Colour: White), plugged and screwed to wall	No	6	
	<b><u>TAPS, VALVES, ETC</u></b>			
	<b><u>Similar Approved</u></b>			
3/12/14	15mm Cobra brass watertight hose Bib tap (Code: 108-15)	No	18	
<b>Carried Forward to Summary of Section No.</b>				
Section No. 3				R
10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA				
Bill No. 12				
Plumbing and Drainage				

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 13</u></b>			
	<b><u>GLAZING</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No. 1, shall equally apply to this Bill.			
	<u>Note:</u>			
	All glazing to comply with SABS 1263 Part 3:1998. Light and ventilation to comply with Part O if NBR 0400			
	<b><u>GLASS TO STEEL WITH PUTTY</u></b>			
	<b><u>6mm obscure floated glass fixed glazing putty</u></b>			
3/13/1	Panes exceeding 0.5m2 and not exceeding 2.0m2	m2	18	
	<b><u>TOPS, SHELVES, DOORS, MIRROR ETC</u></b>			
	<b><u>6mm Polished plate float glass mirrors with square polished edges plugged with chrome plated detachable screws or similarly approved</u></b>			
3/13/2	Mirror 400 x 600 mm high	No	18	
	<b>Carried Forward to Summary of Section No.</b>			
	Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 13 Glazing			R

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 14</u></b></p> <p><b><u>PAINTWORK</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>PAINTWORK ETC TO NEW WORK</u></b></p> <p><b><u>FIBRE CEMENT</u></b></p> <p><b><u>Prepare and apply one coat universal undercoat and two coats Super Acrylic PVA paint or similar approved, colour to be confirmed by architect</u></b></p>			
3/14/1	On internal ceilings and cornices	m2	187	
3/14/2	Fibre cement fascias boards not exceeding 300mm high or wide painted on both side	m	208	
	<p><b><u>Prepare and apply one coat alkali resistant sealer and two coats mat enamel paint, colour to be confirmed by architect</u></b></p>			
3/14/3	Fiber cement window sill not exceeding 300mm high or wide	m	19	
	<p><b><u>FLOATED PLASTER INTERNAL WALLS</u></b></p>			
	<b>Carried Forward</b>			R
	<p>Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA Bill No. 14 Paintwork</p>			

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Brought Forward			R
	<u>Prepare and apply one coat merit universal undercoat and two coats Super Acrylic PVA paint or similar approved, colour to be confirmed by architect</u>		
3/14/4	Plastered walls	m2	843
	<b><u>METAL SURFACES</u></b>		
	<u>Prepare and apply one coat Duraphos, one coat universal under coat and two coats gloss enamel paint, colour to be confirmed by architect</u>		
3/14/5	On gates, grilles, burglar screens, balustrades, etc (both sides measured on full flat area)	m2	68
3/14/6	On window frames	m2	18
3/14/7	On door frames	m2	115
3/14/8	On gutters	m	208
3/14/9	On downpipes	m	128
	<b><u>WOOD</u></b>		
	<u>Prepare and apply one coat universal undercoat and two coats acrylic PVA, colour to be confirmed by architect</u>		
3/14/10	On door	m2	251
	<u>Prepare and paint three coats clear varnish:</u>		
3/14/11	On door	m2	59
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 3			
10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA			
Bill No. 14			
Paintwork			

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Bill No	<u>SECTION SUMMARY</u>	Page No	Amount
3/1	Earthworks	3/3	
3/2	Concrete,Formwork and Reinforcement	3/7	
3/3	Masonry	3/11	
3/4	Waterproofing	3/12	
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3/6	Carpentry and Joinery	3/18	
3/7	Ceilings,Partitions and Access Flooring	3/21	
3/8	Ironmongery	3/23	
3/9	Metalwork	3/27	
3/10	Plastering	3/28	
3/11	Tiling	3/31	
3/12	Plumbing and Drainage	3/35	
3/13	Glazing	3/36	
3/14	Paintwork	3/38	
	<b>Carried to Final Summary</b>		
	Section No. 3 10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEA		R

Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 4</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>NOTES</u></b></p> <p><b><u>Carting away of excavated material</u></b></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p> <p><b><u>Filling</u></b></p> <p>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</p> <p>Excavations measured in successive depths of 2m.</p> <p><b><u>SITE CLEARANCE ETC</u></b></p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 1 Earthworks</p>			

<b>Brought Forward</b>			R
<b><u>Site clearance</u></b>			
4/1/1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	435
<b><u>EXCAVATIONS</u></b>			
<b><u>Excavation in earth not exceeding 2m deep</u></b>			
4/1/2	Trenches	m3	109
<b><u>Extra over excavations in earth to trenches and holes for</u></b>			
4/1/3	Excavation in soft rock	m3	11
4/1/4	Excavation in hard rock	m3	5
<b><u>Back excavation of vertical sides of excavation in earth for working space including backfilling compacted to 93% Mod AASHTO density</u></b>			
<b><u>CARTING AWAY OF EXCAVATED MATERIAL</u></b>			
<b><u>Note:</u></b>			
Description 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.			
4/1/5	Extra over all excavation for carting away surplus material from excavation and / or stockpile on site to a dumping site to be located by the Contractor	m3	62
<b><u>RISK OF COLLAPSE OF EXCAVATIONS</u></b>			
<b><u>Risk of collapse to side of excavation in earth not exceeding 1,5m deep</u></b>			
4/1/6	Trenches and holes	m2	335
<b><u>FILLING, ETC.</u></b>			
<b>Carried Forward</b>			R
Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 1 Earthworks			

<b>Brought Forward</b>			R
<b><u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density in layers not exceeding 150mm thick</u></b>			
4/1/7	Backfilling to trenches, holes, etc	m3	53
4/1/8	Under floors, steps, pavings, etc	m3	237
<b><u>Imported gravel filling (G7) stabilise with 2-3% cement compacted to 93% Mod AASHTO density in layers not exceeding 150mm thick</u></b>			
4/1/9	Backfilling to trenches, holes, etc	m3	16
4/1/10	Under floors, steps, pavings, etc	m3	46
<b><u>Filling supplied by the Contractor under floors, trenches, etc.</u></b>			
4/1/11	Sub-base filling (G5) from excavations under solid floors, steps, etc. compacted to 95% modified AASHTO density in layers not exceeding 150mm thick	m3	46
<b><u>COMPACTION OF SURFACES</u></b>			
4/1/12	Prepare ground surface by scarifying sub-grade, rip and re-compact 150mm to 90% modified AASHTO density	m2	484
<b><u>WEED KILLERS, INSECTICIDES, TERMITES, etc.</u></b>			
<b><u>Protection against termites, ants, etc</u></b>			
4/1/13	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	484
4/1/14	To bottom and sides of excavated trenches, Holes, etc.	m2	444
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 4			
MEDIUM ADMINISTRATION BLOCK			
Bill No. 1			
Earthworks			

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>Cost of tests</u></b></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7, "Tests" of SANS 1200 G, shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the principal agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the principal agent. (Test cubes are measured separately)</p> <p><b><u>Formwork</u></b></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use. 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>			
	<b>Carried Forward</b>			R
	<p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 2 Concrete, Formwork and Reinforcement</p>			

<p style="text-align: center;"><b>Brought Forward</b></p> <p>Formwork to soffits of solid slabs, etc. shall be deemed to be to 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.</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>The Tenderer is to note that for the "off-shutter" concrete finish shall be in accordance with the architectural specification 616 CON-140: Smooth + fair finish:-</p> <ul style="list-style-type: none"> <li>· Degree of accuracy: I</li> <li>· Finish: Smooth and even</li> <li>· Form facing material to produce a smooth, hard, uniform texture on the concrete</li> <li>· Steel faced formwork. Joints grout-tight.</li> <li>· Panels shall be as large as practicable and arranged in a regular pattern as a feature of the surface</li> <li>· Formwork tie holes: to the approval of the architect</li> <li>· Repair imperfections: not allowed. Tie bolt holes shall be patched</li> <li>· Not permitted: blowholes, small fins, bulges, irregularities, voids, honeycombing, segregation and other large defects.</li> <li>· Concrete surfaces: No further treatment to form a smooth finish of uniform texture, appearance and colour</li> </ul> <p>Structural Concrete</p> <p>Tenderers are referred to the Structural Engineer's - Standard Specifications which should be read before pricing this trade in particular, but also the other trades. The use of extenders, fly-ash, etc. are clearly described on this drawing.</p>			R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 2 Concrete, Formwork and Reinforcement</p>			R	

<b>Brought Forward</b>				R
<b><u>GENERAL NOTES TO TENDERERS</u></b>				
General notes, described in Bill No.1, shall equally apply to this Bill.				
<b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>				
<b><u>15Mpa/19mm concrete</u></b>				
4/2/1	Blinding	m3	5	
<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACE</u></b>				
<b><u>25MPa/19mm Concrete</u></b>				
4/2/2	Strip footings	m3	27	
<b><u>REINFORCED CONCRETE CAST IN FORMWORK</u></b>				
<b><u>20Mpa/19mm concrete</u></b>				
4/2/3	Concrete Apron cast to fall etc,	m3	18	
<b><u>25MPa/19mm Concrete</u></b>				
4/2/4	Surface beds cast in panels	m3	40	
4/2/5	Slabs including beams and inverted beams	m3	1	
<b><u>TEST BLOCKS</u></b>				
<b><u>Notes:</u></b>				
Concrete strength test cubes, label and send to an approved laboratory for testing, pay all charges and submit report to the Regional Representative. Only successful tests will be paid for (Provisional)				
4/2/6	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	42	
<b><u>SUNDRIES TO CONCRETE</u></b>				
<b>Carried Forward</b>				R
Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 2 Concrete, Formwork and Reinforcement				

Brought Forward			R
<b><u>Surface treatment</u></b>			
4/2/7	Power float top surface of concrete surface bed to a true and even level finish	m2	489
<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>			
<b><u>Rough formwork to sides</u></b>			
4/2/8	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	277
<b><u>Rough formwork to soffits</u></b>			
4/2/9	Flat slabs not exceeding 250mm thick, propped up not exceeding 3,5m high from bearing level	m2	5
<b><u>MOVEMENTS JOINTS ETC,</u></b>			
<b><u>Saw cuts Joints</u></b>			
4/2/10	3 x 30mm In saw cut joints in floors	m	19
<b><u>Expansion joints</u></b>			
4/2/11	10mm soft board or similar approved between concrete and brick wall	m	87
<b><u>REINFORCEMENT (PROVISIONAL)</u></b>			
<b><u>High and mild tensile steel reinforcement to structural concrete work</u></b>			
4/2/12	All diameter bars	t	2
<b><u>Fabric reinforcement:</u></b>			
4/2/13	Type 245 fabric reinforcement in concrete surface beds, slabs, etc.	m2	305
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 4			
MEDIUM ADMINISTRATION BLOCK			
Bill No. 2			
Concrete, Formwork and Reinforcement			

**LIMPOPO DEPARTMENT OF EDUCATION  
UPGRADES AND ADDITIONS AT  
ST. PAUL HIGH SCHOOL**

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 3</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>Sizes in descriptions</u></b></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><b><u>Hollow walls etc</u></b></p> <p>Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole. Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brickseal" bitumen emulsion waterproofing coating.</p> <p><b><u>Face bricks</u></b></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 3 Masonry</p>			

Brought Forward			R
<b><u>Pointing</u></b>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b><u>BRICKWORK IN FOUNDATION</u></b>			
<b><u>Brickwork in 73mm burnt clay masonry units class NFP in Class II mortar, laid in stretcher bond with 10mm flush joints</u></b>			
4/3/1	One brick wall	m2	126
<b><u>SUPERSTRUCTURE BRICKWORK</u></b>			
<b><u>Brickwork of NFP brick in class II mortar laid in stretcher bond with 10mm flush joints</u></b>			
4/3/2	One brick wall	m2	377
4/3/3	Half brick wall	m2	127
4/3/4	Half brick wall, in beamfilling	m2	14
<b><u>Mass brickwork in regular piers of NFP brick in class II mortar laid in stretcher bond</u></b>			
4/3/5	340 x 230mm Brick Piers	m3	1
4/3/6	360 x 230mm Brick Piers	m3	1
<b><u>FACE BRICKWORK</u></b>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<b><u>"Corobrick" face bricks (Colour: TBC) with PC sum amount of R 4 500.00 per thousand bricks delivered to site (excluding VAT) manufactured in accordance with SANS 227-2007, bedded and jointed in Class II mortar and pointed with recessed 6mm joints in both directions</u></b>			
4/3/7	Extra over brickwork for face brickwork in foundations (Provisional)	m2	252
Carried Forward			R
Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 3 Masonry			

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<b>Brought Forward</b>			R
4/3/8	Extra over brickwork for face brickwork in superstructure	m2	256
4/3/9	Extra over brickwork for face brickwork in brick-on-edge header course lintel	m	41
4/3/10	Extra over brickwork for face brickwork in brick-on-edge header course sills, bedded in mortar and set slightly sloped	m	32
4/3/11	Extra over brickwork for face brickwork to piers	m2	27
4/3/12	Extra over brickwork for face brickwork in beamfilling	m2	14
<b><u>BRICKWORK SUNDRIES</u></b>			
<b><u>Brickwork reinforcement</u></b>			
4/3/13	75mm Wide reinforcement built in horizontally	m	374
4/3/14	150mm Wide reinforcement built in horizontally.	m	1 857
<b><u>"Allied concrete" or similar approved prestressed fabricated lintels</u></b>			
4/3/15	100 x 70mm Lintels in lengths not exceeding 3m	m	43
4/3/16	175 x 70mm Lintels in lengths not exceeding 3m	m	33
<b><u>Turning pieces</u></b>			
4/3/17	110mm Wide turning piece to flat brick lintels	m	57
<b><u>Air bricks etc</u></b>			
4/3/18	Set of 2 240 x 155mm Terracota air bricks as per architects specification	No	4
<b><u>Roof ties</u></b>			
4/3/19	30 x 1.2mm galvanised steel strapping, built into wall for 5 courses and minimum 800mm to be fixed to trusses	No	76
<b><u>MOVEMENTS JOINTS ETC,</u></b>			
<b>Carried Forward</b>			R
Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 3 Masonry			

	<b>Brought Forward</b>			R
4/3/20	<p><b><u>Expansion joints</u></b></p> <p>30mm softboard between vertical brick surfaces not exceeding 300mm wide</p>	m2	18	
	<b>Carried Forward to Summary of Section No.</b>			R
	<p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 3 Masonry</p>			

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UPGRADES AND ADDITIONS AT  
ST. PAUL HIGH SCHOOL**

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No.1, shall equally apply to this Bill.			
	<b><u>DAMP PROOFING OF WALLS AND FLOORS</u></b>			
	<b><u>One layer of 375 micron "Consol Plastic Brikgrip DPC" embossed damp proof course</u></b>			
4/4/1	Under walls	m2	3	
4/4/2	Under cills, etc.	m2	7	
	<b><u>One layer of 250 micron "USB Green" or similar approved dampproof membrane sealed at laps with PVC self -adhesive tape</u></b>			
4/4/3	Under surface beds.	m2	484	
	<b><u>JOINTS SEALANTS, ETC.</u></b>			
	<b><u>Mastic grey polysulphide sealing compound including raking out of joints filler as necessary</u></b>			
4/4/4	3 x 30mm In saw cut joints in floors	m	19	
4/4/5	10mm Isolation Joints between surface bed concrete and brick wall	m	87	
	<b>Carried Forward to Summary of Section No.</b>			
	Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 4 Waterproofing			R

**LIMPOPO DEPARTMENT OF EDUCATION  
UPGRADES AND ADDITIONS AT  
ST. PAUL HIGH SCHOOL**

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 5</u></b>			
	<b><u>ROOF COVERINGS</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No.1, shall equally apply to this Bill.			
	<b><u>ROOF SHEETING</u></b>			
	<b><u>Similar Approved</u></b>			
	<b><u>0.6mm thick "Brownbuilt Klip-lok light Industrial" galvanised troughed roof sheeting with "Chromadek - Traffic Green" finish on one side, and 0.6mm galvanised steel accessories fixed to timber purlins or rails fixed in strict accordance to the manufacturer's instructions and fixed by an approved erector. A written and approved five (5) year guarantee of water-tightness shall be issued after approval of roofs by the manufacturer</u></b>			
4/5/1	Roof sheeting pitch not exceeding 25 degrees	m2	441	
4/5/2	550mm girth Ridge capping, 3 times bent and notched on site to suit roof profile	m	25	
4/5/3	550mm girth Hip capping, 3 times bent and notched on site to suit roof profile.	m	39	
4/5/4	550mm girth close cut and mitred Valley gutter, 4 times bent and including soakers, etc	m	9	
	<b>Carried Forward</b>			R
	Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 5 Roof Coverings			

	<b>Brought Forward</b>			R
	<p><b><u>ROOF AND WALL INSULATION</u></b></p> <p><b><u>Similar Approved</u></b></p> <p><b><u>Sisalation "Bubble Foil" aluminium foil binded insulation</u></b></p>			
4/5/5	<p>135mm thick Insulation laid over purlins (at approximately 750mm centres), fixed concurrent with sheeting with and including galvanised steel accessories</p>	m2	441	
	<p><b>Carried Forward to Summary of Section No.</b></p> <p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 5 Roof Coverings</p>			R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 6</u></b></p> <p><b><u>CARPENTRY AND JOINERY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><u>Joinery</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc.</p> <p>Descriptions of hardwood joinery shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.</p> <p><u>Fixing</u></p> <p>Items described as nailed shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>Timber</u></p> <p>All softwood to be South African Pine</p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 6 Carpentry and Joinery</p>			R

<p style="text-align: center;"><b>Brought Forward</b></p> <p><u>Descriptions</u></p> <p>Items described as "bolted" shall be deemed to exclude the bolts and include the holes unless otherwise described.</p> <p>Where the fixing of members is not stated it shall mean the nailing of one timber member to another.</p> <p>The term "planted on" shall mean the nailing of one timber member to another</p> <p>The term "screwed on" shall mean the countersunk screwing of one timber member to another.</p> <p>The term "screwed on and pelleted" shall mean the screwing of one timber member to another with the heads of screw sunk and pelleted.</p> <p>The term "plugged" shall mean the countersunk screwing of a timber member to and including plastic plugs in brickwork or concrete.</p> <p>The term "plugged and pelleted" shall mean the screwing of a timber member to and including plastic plugs in brickwork or concrete with heads of screw sunk and pelleted.</p> <p>Shelving, etc. described as screwed to steel must be fixed from underside and prices are to include for countersunk drilling through the steel for screw fixing.</p> <p>Descriptions of floors, ceilings, joinery, etc. shall be deemed to include for all square cutting</p> <p>Descriptions of items given in linear metre shall be deemed to include for mitres, stopped ends, fitted intersections, etc.</p> <p>Descriptions of rounded angles, rebates, grooves, chamfers, moulded edges, etc. shall be deemed to include for angles, ends, etc.</p> <p><b><u>ROOFS, ETC</u></b></p>		R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 6 Carpentry and Joinery</p>		R	

	<b>Brought Forward</b>			R
	<p><b><u>Plate nailed timber roof truss construction</u></b></p> <p>The following is applicable in respect of roof trusses:</p> <p>All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245.</p> <p>Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish.</p> <p>All joints to be close fitted butt joints.</p> <p><b>Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation.</b></p> <p><b>The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabrication commences.</b></p> <p><b>Tenderers must study the roof plan and sections as attached to the back of these bills of quantities and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained.</b></p> <p><b><u>Roof trusses</u></b></p>			
4/6/1	Design, supply, take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gang boarding, temporary and permanent bracing, etc (measured on plan)	m2	367	
	<p><b><u>Sawn softwood</u></b></p>			
4/6/2	38 x 114mm Wall plates	m	92	
	<p><b><u>Sundries</u></b></p>			
4/6/3	Two coats creosote on sawn timbers	m2	34	
	<p><b><u>Similar Approved</u></b></p>			
	<b>Carried Forward</b>			R
	<p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 6 Carpentry and Joinery</p>			

<b>Brought Forward</b>		R
<b><u>"Everite FC77" Fascia and badge boards</u></b>		
4/6/4	15 x 225mm Pressed fibre cement fascia boards, fixed to supports and roof timbers with one brass screw at maximum 750mm centres, including standard aluminium half round cover strips at all joints, as per architect's specification	m 94
<b><u>DOORS ETC</u></b>		
<b><u>44mm thick solid R&amp;F panel meranti timber doors with masonite backing with 15 horizontal slates on both sides hung to steel frames</u></b>		
4/6/5	813 x 2032mm single door	No 12
4/6/6	914 x 2032mm single door	No 10
4/6/7	1500 x 2400mm double door	No 2
<b><u>WINDOWS</u></b>		
<b><u>Similar Approved</u></b>		
<b><u>"Nutec" fibre cement window cills</u></b>		
4/6/8	150mm x 15mm thick fibre cement Window sill set flat and slightly projecting, with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in 1:4 cement sand mortar with plastic slip joints at end of sills at plaster reveals and projecting from finished face of wall, all as per manufacturer's recommendations	m 32
<b>Carried Forward to Summary of Section No.</b>		
Section No. 4		
MEDIUM ADMINISTRATION BLOCK		
Bill No. 6		
Carpentry and Joinery		
		R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 7</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>Fixing</u></b></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere.</p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p><b><u>Ceilings &amp; Bulkheads</u></b></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><b><u>Steel components</u></b></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 7 Ceilings,Partitions and Access Flooring</p>			

	<b>Brought Forward</b>			R
	<p><b><u>Proprietary suspended ceilings</u></b></p> <p>Hangers, suspension grids, "lay-in" panels, etc are to be in accordance with the manufacturers' recommendations</p> <p>Where electrical light fittings, diffusers, panels etc are units of the same dimensions as the suspension grid described and allowance must be made in the rates accordingly for their support inclusive of any flexibility in setting out that may be required (ceiling panels have not been deducted and pricing is to take cognisance thereof)</p> <p><b><u>Suspension systems</u></b></p> <p>Where suspensions of ceilings require a sub-grid, the tenderer should include in his rates for the sub-grid. The design of the sub-grid support is not specified, the tenderer is to obtain the necessary requirements and recommendations for a safe installation from the board and suspension system manufacturer to the satisfaction of the structural engineer.</p> <p><b><u>NAILED UP CEILINGS</u></b></p> <p><b><u>FIBRE - CEMENT BOARDS</u></b></p> <p><b><u>Similar Approved</u></b></p> <p><b><u>6mm "Everite Nutec" Fibre-cement boards, jointed with and including galvanised H-type primed pressed steel jointing strips, including brandering as per architect's specifications</u></b></p>			
4/7/1	2400 x 1200mm x 6mm Horizontal ceilings, fixed to and including 38 x 38mm sawn softwood brandering at maximum 400mm centres using 38mm long galvanised nails	m2	284	
	<p><b><u>CORNICES</u></b></p> <p><b><u>"Rhino" plasterboard cornice</u></b></p>			
4/7/2	75mm Coved cornice, plugged to brickwork	m	254	
	<p><b><u>SUNDRIES</u></b></p>			
	<b>Carried Forward</b>			R
	<p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 7 Ceilings,Partitions and Access Flooring</p>			

**LIMPOPO DEPARTMENT OF EDUCATION  
UPGRADES AND ADDITIONS AT  
ST. PAUL HIGH SCHOOL**

	<b>Brought Forward</b>			R
	<b><u>Extra over for Trap Doors</u></b>			
4/7/3	Extra over ceiling for 600 x 600mm trap door of 38 x 50mm wrought softwood rebated framing, with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	2	
	<b><u>CEILING INSULATION</u></b>			
	<b><u>Insulation</u></b>			
4/7/4	125mm thick Glass wool insulation blanket closely fitted and laid on top of ceiling panels, all in strict accordance with the manufacturer's specifications.	m2	284	
	<b>Carried Forward to Summary of Section No.</b>			
	Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 7 Ceilings, Partitions and Access Flooring			R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 8</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p>Where ironmongery is described as plugged, prices are to include for screwing to and including approved patent plugs in concrete or brickwork with plaster or tiled finish, etc.</p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items</p> <p>Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered</p> <p>On request returnable samples are to be provided to the principal agent for consideration</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 8 Ironmongery</p>			

	<b>Brought Forward</b>				R
	<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            AN Anodised natural            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>Rates</u></p> <p>The tenderer is to price for supply, taking delivery of, storing and fixing of the ironmongery listed below.</p> <p><b><u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, etc.</u></b></p> <p><b><u>Approved</u></b></p>				
4/8/1	White magnetic boards 3000mm x 1200mm high with aluminium frame plugged @ 1100mm above floor level on centre of the wall	No	5		
	<p><b><u>SUNDRIES</u></b></p> <p><b><u>Approved</u></b></p>				
4/8/2	"CZ8730SC" Door stop or similarly approved to wall or floors	No	26		
	<b>Carried Forward to Summary of Section No.</b>				R
	Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 8 Ironmongery				

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 9</u></b></p> <p><b><u>METALWORK</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>ALUMINIUM</u></b></p> <p>The contractor is to make due allowance in his prices for complying with the following requirements.</p> <p><b><u>SPECIFICATIONS</u></b></p> <p>User Note:</p> <p><b><u>Glazing</u></b></p> <p>All Safety glazing material (individual panes) are to conform to all standards as stipulated in SANS 10400 Part N and SANS 10137 and any additional Engineer Specifications or relevant SANS glazing regulations not stipulated in this document. All tenderers are referred to the drawings for the glazing specification.</p> <p><b><u>Ironmongery</u></b></p> <p>All rates for windows, shopfronts and doors etc. must include for the supply, taking delivery or/and installation of the ironmongery to be specified.</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 9 Metalwork</p>			

<p style="text-align: center;"><b>Brought Forward</b></p> <p><b><u>Actuators</u></b></p> <p>All rates for shopfronts with actuators to include for the supply and installation of actuators as specified</p> <p><b><u>Scaffolding</u></b></p> <p>All scaffolding should be provided by the contractor and no claims/ qualifications will be accepted.</p> <p><b><u>Protection</u></b></p> <p>With this tender, the glazing sub-contractor must supply a statement concerning protection that will be provided to finishes and components until Practical Completion. This to include specific references to the method of removal of such protection.          All tenderers to include cost of protection in tender price.</p> <p><b><u>Installation</u></b></p> <p>All measurements to be checked on site prior to ordering and manufacturing.</p> <p>Aluminium sections and shop drawings to be accepted by Architect prior to manufacturing.</p> <p>Allow for water and weather proof polysulphide sealant to approved specifications all around frame junctions to plaster and other materials.</p> <p><b><u>Profiles</u></b></p> <p>Tenderers to provide typical details of proposed aluminium section to be used in the design.</p> <p><b><u>Structural Silicone</u></b></p> <p>Tenderers to allow a 10 year guarantee on all powdercoating.</p> <p><b><u>Preliminary and Shop Drawings:</u></b></p> <p>The contractor shall submit preliminary design drawings showing basic system sections for the Architect's approval.</p>		R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 4              MEDIUM ADMINISTRATION BLOCK              Bill No. 9              Metalwork</p>		R	

<p style="text-align: center;"><b>Brought Forward</b></p> <p>After approval and prior to fabrication detailed shop drawings shall be prepared and submitted to the Architect for approval.</p> <p><b><u>Fixing:</u></b></p> <p>The contractor is to take special note of all fixing details of all aluminium elements and must allow in his price for properly securing the aluminium sections to the structure with and including all necessary steel brackets, rails, timber grounds and sub-frames, including all necessary holing and bolting, etc. This fixing is to be adequately spaced and securely fixed to ensure total stiffness of the door frames, windows, etc. as no sagging causing improper functioning of the windows and doors will be accepted.</p> <p><b><u>Deflection of structure:</u></b></p> <p>The contractor is advised to make adequate provision for the design deflection of the structure.</p> <p><b><u>Tolerances:</u></b></p> <p>Sizes are approximate only and measurements on site must be taken before fabrication. Due allowance must be made for tolerances in accordance with the Architect's details.</p> <p><b><u>Protection:</u></b></p> <p>The contractor will be required to protect his work during the course of construction, which protection shall be adequate for the purpose and to the full approval of the Architect.</p> <p>Such protection shall only be removed after a written instruction from the Architect.</p> <p><b><u>Cleaning:</u></b></p> <p>All work must be cleaned down upon completion. Glazing as installed will not be accepted as clean glass and the contractor must allow for polishing glass as and when instructed by the Architect.</p> <p>Note: All windows and doors should be read in conjunction with window and door schedules</p>			R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 9 Metalwork</p>			R	

Brought Forward			R
<b><u>WELDED SCREENS, GATES, ETC.</u></b>			
<b><u>Welded MS gate consisting of 50 x 50 x 2.5mm rectangular tubing section frame with 45 degrees mitre at corners, bolted to reveals with 10mm (10M) rawlbolts and welded with 50 x 50 x 5mm mild steel to walls, with 50 x 50 x 2.5mm mild steel rectangular tube gate leaf with 45 degree mitre at corners and two 50 x 50 x 2.5mm horizontal sections, with 12 x 12mm mild steel vertical style solid square bars at 100mm c/c, including 3x pair of 20mm diameter bullet-hinges per gate, with "Solid blesbok" 460/313 four lever lockset with rebate set, including welding, bolting, holes, bolts etc., all complete as per the architect's specifications</u></b>			
4/9/1	Steel gate to door, size 1500mm x 2400mm high	No	2
<b><u>PRESSED STEEL DOOR FRAMES</u></b>			
<b><u>1.2mm thick Single rebated frame suitable for half brick walls, complete with lugs and base ties, with red oxide primer factory finish by manufacturer</u></b>			
4/9/2	813 x 2032mm single door	No	10
<b><u>1.2mm thick Single rebated frame suitable for one brick walls, complete with lugs and base ties, with red oxide primer factory finish by manufacturer</u></b>			
4/9/3	813 x 2032mm single door	No	2
4/9/4	914 x 2032mm single door	No	10
4/9/5	1500 x 2400mm double door	No	2
<b><u>WINDOWS FRAMES, etc.</u></b>			
<b><u>Standard mild steel school type Top-hung open out window frame (with brass fittings), with burglar bars to opening and fixed sections, consisting of 10mm diameter mild steel round bars to standard NBP2 pattern, welded at intersections and window frames, all as per architect's specification</u></b>			
4/9/6	Window size 1022 x 900mm high	No	3
Carried Forward			R
Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 9 Metalwork			

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<b>Brought Forward</b>				R
4/9/7	Window size 1022 x 949mm high	No	3	
4/9/8	Window size 2000 x 1170mm high	No	1	
4/9/9	Window size 533 x 950mm high	No	5	
4/9/10	Window size 1511 x 1170mm high	No	14	
<b><u>ALUMINIUM WINDOWS, DOORS, ETC</u></b>				
<b><u>Extruded aluminium door frame in configuration with glazed double doors, with laminated safety glass accordingly to ISO 9001:200 Quality Management Standards, including installation of ironmongery, actuators, smoke seal around door frame and all necessary framework, doors, spandrels panels, sealants, closure pieces, gaskets etc, all complete to architect's approval and as per architect's drawings and specifications</u></b>				
4/9/11	Size 1500mm x 2100mm	No	2	
<b><u>304/VEM 320G expanded metal mesh size 1200mm x 2400mm manufactured in accordance with SANS 190-1:1983 fixed to 76 x 50mm timber purlins using 40x 0.5mm hat channels @ 400mm centres with 12 x 20mm tac screws.</u></b>				
4/9/12	In Ceiling voids	m2	284	
<b>Carried Forward to Summary of Section No.</b>				R
Section No. 4				
MEDIUM ADMINISTRATION BLOCK				
Bill No. 9				
Metalwork				

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 10</u></b>			
	<b><u>PLASTERING</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No.1, shall equally apply to this Bill.			
	<b><u>SCREEDS</u></b>			
	<b><u>1:4 Cement sand screed on concrete, worked down to a true and even surface with a steel trowel</u></b>			
4/10/1	30mm Thick on floors and landings	m2	391	
4/10/2	30mm Thick to falls and currents	m2	17	
	<b><u>INTERNAL PLASTER</u></b>			
	<b><u>One coat smooth 1:5 cement sand plaster on brickwork to receive finish</u></b>			
4/10/3	On brick walls	m2	692	
4/10/4	On narrow widths	m2	69	
	<b><u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u></b>			
4/10/5	Aluminium straight edge M-trim suitable for under-screed fixing in vinyl/ceramic, etc. installed as per manufactures recommendation and specification.	m	6	
	<b>Carried Forward</b>			R
	Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 10 Plastering			

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	<b>Brought Forward</b>			R
4/10/6	38 x 1.2mm Aluminium retro-fit similar approved corner protector installed as per manufactures recommendation and specification.	m	37	
	<b>Carried Forward to Summary of Section No.</b>			R
	Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 10 Plastering			

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 11</u></b></p> <p><b><u>TILING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>Pricing</u></b></p> <p>Prices are to included for the following: Cutting, handling, labour, adhesive etc.</p> <p><b><u>Fixing</u></b></p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat.</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed, grouted and pointed with suitable adhesives and grouts, as recommended by the Architect. Costs are hereby deemed to include the cost of this requirement.</p> <p>Payment for work that is deemed measurable, in respect of the conditions of contract, and which comprises cutting, leaving, or forming, rectangular holes and notches through tiling is hereby deemed to apply only to holes and notches that do not exceed 600mm girth. Those exceeding 600mm in girth are hereby deemed to be "square cutting", which is hereby deemed to be part of the work description for that type of tiling and is not measurable as a separate item of work.</p> <p><b><u>Wastage</u></b></p> <p>Tile wastage in excess of 10% will be for the tenderer's account.</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 11 Tiling</p>			

<b>Brought Forward</b>			<b>R</b>
<b><u>GENERAL NOTES TO TENDERERS</u></b>			
General notes, described in Bill No. 1, shall equally apply to this Bill.			
<u>Note</u>			
All scaffolding should be provided by the contractor and no claims/qualifications will be accepted.			
<b><u>WALL TILING</u></b>			
<b><u>150 x 150 x 6mm ceramic tiles (PC allowance of R 120.00/m2 excludes V.A.T. but includes delivery to site), includes waste, laying, supply and fixing with an approved adhesive and jointing white grout all as per manufacturers specifications</u></b>			
4/11/1	Plastered walls	m2	162
4/11/2	On narrow widths	m2	16
4/11/3	Splash backs	m2	1
<b><u>FLOOR TILING</u></b>			
<b><u>420 x 420 x 11.5mm Thick non-slip ceramic tiles (P.C allowance of R 200.00/m2 excludes V.A.T. but includes delivery to site), includes waste, laying, supply and fixing with an approved adhesive and jointing in waterproof cementitious grout</u></b>			
4/11/4	On floors	m2	408
4/11/5	75mm high skirting	m	372
<b><u>ATTIC STOCK</u></b>			
4/11/6	150 x 150 x 6mm ceramic tiles(PC allowance of R 120.00/m2 excludes V.A.T. but includes delivery to site)	m2	16
4/11/7	420 x 420 x 11.5mm Thick non-slip ceramic tiles (P.C allowance of R 200.00/m2 excludes V.A.T. but includes delivery to site)	m2	39
<b><u>SUNDRIES</u></b>			
<b>Carried Forward</b>			<b>R</b>
Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 11 Tiling			

	<b>Brought Forward</b>			R
4/11/8	<p><b><u>10mm aluminium straight edge trim</u></b></p> <p>Dividing strip between tiles and door frames</p>	m	9	
	<b>Carried Forward to Summary of Section No.</b>			R
	<p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 11 Tiling</p>			

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 12</u></b></p> <p><b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>uPVC pipes and fittings:</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p><u>Excavations:</u></p> <p>No claim for excavation in material other than "earth" will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling, and has obtained, in writing , authorised classification thereof.</p> <p>"Intermediate material" and " hard rock" shall be as defined in "Earthworks".</p> <p>Quantities of all excavations, carting away excavated material and backfilling are calculated on the nett extent to be formed, or filled, in accordance with drawings and specifications, and the Contractor is to allow in his prices for any bulking.</p> <p>Classes of excavation shall be as S.A.B.S 1200D clause 3.1.2.</p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 12 Plumbing and Drainage</p>			R

	<b>Brought Forward</b>			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 the specific instructions</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>RAINWATER GOODS</u></b></p> <p><b><u>Similar Approved</u></b></p> <p><b><u>Gutters</u></b></p>			
4/12/1	100 x 100 x 0.6mm thick Ogee profile eaves gutter aluminium box gutter, fixed with and including fixing clips to fascia boards	m	94	
4/12/2	Extra over eaves gutter for stopped end	No	22	
4/12/3	Extra over eaves gutter for corner	No	48	
4/12/4	Extra over eaves gutter for outlet	No	11	
	<p><b><u>Rainwater downpipes</u></b></p>			
4/12/5	100mm diameter x 0.6mm thick rainwater downpipe with Chromadek finish (Colour: TBC), fixed with and including brackets to wall face, with brackets spaced as per manufacturer's recommendations, and with downpipes spaced as per engineer's specification	m	38	
4/12/6	Extra over downpipe for offset	No	22	
4/12/7	Extra over downpipe for shoe	No	11	
	<p><b><u>SANITARY FITTINGS</u></b></p> <p>Refer to sanitary schedule drawing for full description of abbreviations</p> <p><b><u>WASH HAND BASINS</u></b></p>			
	<b>Carried Forward</b>			R
	<p>Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 12 Plumbing and Drainage</p>			

Brought Forward			R
	<b><u>Similar Approved</u></b>		
	<b><u>Vaal Sanitaryware "Hibiscus" vitreous china basin with three semi-punched holes tap holes, including integrated overflow, including chain stay hole through the centre semi-punched tap hole, supplied with plug and chain, hung to walls (PC allowance of R450.00/no excludes V.A.T. but includes delivery to site), includes waste, supply and fixing</u></b>		
4/12/8	WHB, installed complete	No	3
	<b><u>WATER CLOSET</u></b>		
	<b><u>Similar Approved</u></b>		
	<b><u>Vaal Sanitaryware "Daisy" semi-close coupled water closet comprising double flap heavy duty thermoplastic seat rim pan and matching 9 litre cistern complete with lid, fitments and flush pipe elbow (PC allowance of R2 800.00/no excludes V.A.T. but includes delivery to site), includes waste, supply and fixing</u></b>		
4/12/9	WC, installed complete	No	2
	<b><u>SINKS, etc.</u></b>		
	<b><u>Stainless steel single bowl sink including integrated supports and legs (PC allowance of R1 500.00/no excludes V.A.T. but includes delivery to site), includes waste, supply and fixing</u></b>		
4/12/10	Stainless steel Sink, complete.	No	1
	<b><u>CHROME PLATED WASTE UNIONS, ETC. (Supply &amp; Fit)</u></b>		
4/12/11	32mm Basin waste union	No	3
4/12/12	38mm Sink waste union	No	1
	<b><u>TOILET ROLL HOLDER</u></b>		
	<b>Carried Forward</b>		R
	Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 12 Plumbing and Drainage		

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<b>Brought Forward</b>			R
	<b><u>To be approved by Architect</u></b>		
4/12/13	130 x 560 x 130mm mild steel vandal proof Toilet paper roll holder (Colour: White), plugged and screwed to walls	No	2
	<b><u>SOAP DISPENSER</u></b>		
	<b><u>To be approved by Architect</u></b>		
4/12/14	110 x 170 x 35mm high plastic Soap dispenser (Colour: White and transparent), with lever button and pump, plugged and screwed to wall	No	1
	<b><u>PAPER TOWEL DISPENSER</u></b>		
	<b><u>To be approved by Architect</u></b>		
4/12/15	360 x 380 x 240mm high lockable auto-cut (reflex) plastic Paper towel dispenser (Colour: White), plugged and screwed to wall	No	1
	<b><u>TAPS, VALVES, ETC</u></b>		
	<b><u>Similar Approved</u></b>		
4/12/16	15mm Cobra brass watertight hose Bib tap (Code: 108-15)	No	3
4/12/17	15mm Cobra Watertech chrome plated single tap hole Sink mixer with overarm swivel sprout (Code: 3396ST)	No	1
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 4			
MEDIUM ADMINISTRATION BLOCK			
Bill No. 12			
Plumbing and Drainage			

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 13</u></b>			
	<b><u>GLAZING</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No. 1, shall equally apply to this Bill.			
	<u>Note:</u>			
	All glazing to comply with SABS 1263 Part 3:1998. Light and ventilation to comply with Part O if NBR 0400			
	<b><u>GLASS TO STEEL WITH PUTTY</u></b>			
	<b><u>5mm clear floated glass fixed glazing putty</u></b>			
4/13/1	Panes not exceeding 0.1m2	m2	33	
	<b><u>6mm obscure floated glass fixed glazing putty</u></b>			
4/13/2	Panes exceeding 0.5m2 and not exceeding 2.0m2	m2	3	
	<b><u>TOPS, SHELVES, DOORS, MIRROR ETC</u></b>			
	<b><u>6mm Polished plate float glass mirrors with square polished edges plugged with chrome plated detachable screws or similarly approved</u></b>			
4/13/3	Mirror 400 x 600 mm high	No	3	
	<b>Carried Forward to Summary of Section No.</b>			
	Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 13 Glazing			R

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 14</u></b>			
	<b><u>PAINTWORK</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No. 1, shall equally apply to this Bill.			
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>			
	<b><u>FIBRE CEMENT</u></b>			
	<b><u>Prepare and apply one coat universal undercoat and two coats Super Acrylic PVA paint or similar approved, colour to be confirmed by architect</u></b>			
4/14/1	On internal ceilings and cornices	m2	305	
4/14/2	Fibre cement fascias boards not exceeding 300mm high or wide painted on both side	m	94	
	<b><u>Prepare and apply one coat alkali resistant sealer and two coats mat enamel paint, colour to be confirmed by architect</u></b>			
4/14/3	Fiber cement window sill not exceeding 300mm high or wide	m	32	
	<b><u>FLOATED PLASTER INTERNAL WALLS</u></b>			
	<b>Carried Forward</b>			R
	Section No. 4 MEDIUM ADMINISTRATION BLOCK Bill No. 14 Paintwork			

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Brought Forward			R
	<u>Prepare and apply one coat merit universal undercoat and two coats Super Acrylic PVA paint or similar approved, colour to be confirmed by architect</u>		
4/14/4	Plastered walls	m2	692
	<b><u>METAL SURFACES</u></b>		
	<u>Prepare and apply one coat Duraphos, one coat universal under coat and two coats gloss enamel paint, colour to be confirmed by architect</u>		
4/14/5	On gates, grilles, burglar screens, balustrades, etc (both sides measured on full flat area)	m2	29
4/14/6	On window frames	m2	35
4/14/7	On door frames	m2	34
4/14/8	On gutters	m	94
4/14/9	On downpipes	m	39
	<b><u>WOOD</u></b>		
	<u>Prepare and apply one coat universal undercoat and two coats acrylic PVA, colour to be confirmed by architect</u>		
4/14/10	On door	m2	76
	<u>Prepare and paint three coats clear varnish:</u>		
4/14/11	On door	m2	27
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 4			
MEDIUM ADMINISTRATION BLOCK			
Bill No. 14			
Paintwork			

**LIMPOPO DEPARTMENT OF EDUCATION  
UPGRADES AND ADDITIONS AT  
ST. PAUL HIGH SCHOOL**

<b>Bill No</b>	<b>SECTION SUMMARY</b>	<b>Page No</b>		<b>Amount</b>
4/1	Earthworks	4/3		
4/2	Concrete,Formwork and Reinforcement	4/7		
4/3	Masonry	4/11		
4/4	Waterproofing	4/12		
4/5	Roof Coverings	4/14		
4/6	Carpentry and Joinery	4/18		
4/7	Ceilings,Partitions and Access Flooring	4/21		
4/8	Ironmongery	4/23		
4/9	Metalwork	4/28		
4/10	Plastering	4/30		
4/11	Tiling	4/33		
4/12	Plumbing and Drainage	4/37		
4/13	Glazing	4/38		
4/14	Paintwork	4/40		
<b>Carried to Final Summary</b>			R	
Section No. 4 MEDIUM ADMINISTRATION BLOCK				

Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 5</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>NOTES</u></b></p> <p><b><u>Carting away of excavated material</u></b></p> <p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p> <p><b><u>Filling</u></b></p> <p>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</p> <p>Excavations measured in successive depths of 2m.</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 1 Earthworks</p>			

<b>Brought Forward</b>				R
<b><u>LOCATIONAL SPLIT</u></b>				
The locational split is a follows:				
	[E] - 4 Classroom Block			
	[G] - 36 Seats Enviroloos			
	[JB] - Medium Administration Block			
	[S] - 8 Seats Waterborne Toilets			
	[W] - External Works			
<b><u>SITE CLEARANCE ETC</u></b>				
<b><u>Site clearance</u></b>				
5/1/1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	111	
<b><u>EXCAVATIONS</u></b>				
<b><u>Excavation in earth not exceeding 2m deep</u></b>				
5/1/2	Trenches	m3	37	
<b><u>Extra over excavations in earth to trenches and holes for</u></b>				
5/1/3	Excavation in soft rock	m3	4	
5/1/4	Excavation in hard rock	m3	2	
<b><u>Back excavation of vertical sides of excavation in earth for working space including backfilling compacted to 93% Mod AASHTO density</u></b>				
<b><u>CARTING AWAY OF EXCAVATED MATERIAL</u></b>				
<b><u>Note:</u></b>				
Description 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.				
5/1/5	Extra over all excavation for carting away surplus material from excavation and / or stockpile on site to a dumping site to be located by the Contractor	m3	22	
<b>Carried Forward</b>				R
Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 1 Earthworks				

Brought Forward			R
<b><u>RISK OF COLLAPSE OF EXCAVATIONS</u></b>			
<b><u>Risk of collapse to side of excavation in earth not exceeding 1,5m deep</u></b>			
5/1/6	Trenches and holes	m2	126
<b><u>FILLING, ETC.</u></b>			
<b><u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO density in layers not exceeding 150mm thick</u></b>			
5/1/7	Backfilling to trenches, holes, etc	m3	17
5/1/8	Under floors, steps, pavings, etc	m3	40
<b><u>Imported gravel filling (G7) stabilise with 2-3% cement compacted to 93% Mod AASHTO density in layers not exceeding 150mm thick</u></b>			
5/1/9	Backfilling to trenches, holes, etc	m3	5
5/1/10	Under floors, steps, pavings, etc	m3	7
<b><u>Filling supplied by the Contractor under floors, trenches, etc.</u></b>			
5/1/11	Sub-base filling (G5) from excavations under solid floors, steps, etc. compacted to 95% modified AASHTO density in layers not exceeding 150mm thick	m3	7
<b><u>COMPACTION OF SURFACES</u></b>			
5/1/12	Prepare ground surface by scarifying sub-grade, rip and re-compact 150mm to 90% modified AASHTO density	m2	88
<b><u>WEED KILLERS, INSECTICIDES, TERMITES, etc.</u></b>			
<b><u>Protection against termites, ants, etc</u></b>			
5/1/13	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	88
Carried Forward			R
Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 1 Earthworks			



Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>Cost of tests</u></b></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7, "Tests" of SANS 1200 G, shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the principal agent. The testing shall be undertaken by an independent firm or institution nominated by the contractor to the approval of the principal agent. (Test cubes are measured separately)</p> <p><b><u>Formwork</u></b></p> <p>Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use. 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>			
	<b>Carried Forward</b>			R
	<p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 2 Concrete, Formwork and Reinforcement</p>			

<p style="text-align: center;"><b>Brought Forward</b></p> <p>Formwork to soffits of solid slabs, etc. shall be deemed to be to 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.</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>The Tenderer is to note that for the "off-shutter" concrete finish shall be in accordance with the architectural specification 616 CON-140: Smooth + fair finish:-</p> <ul style="list-style-type: none"> <li>· Degree of accuracy: I</li> <li>· Finish: Smooth and even</li> <li>· Form facing material to produce a smooth, hard, uniform texture on the concrete</li> <li>· Steel faced formwork. Joints grout-tight.</li> <li>· Panels shall be as large as practicable and arranged in a regular pattern as a feature of the surface</li> <li>· Formwork tie holes: to the approval of the architect</li> <li>· Repair imperfections: not allowed. Tie bolt holes shall be patched</li> <li>· Not permitted: blowholes, small fins, bulges, irregularities, voids, honeycombing, segregation and other large defects.</li> <li>· Concrete surfaces: No further treatment to form a smooth finish of uniform texture, appearance and colour</li> </ul> <p>Structural Concrete</p> <p>Tenderers are referred to the Structural Engineer's - Standard Specifications which should be read before pricing this trade in particular, but also the other trades. The use of extenders, fly-ash, etc. are clearly described on this drawing.</p>			R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 2 Concrete, Formwork and Reinforcement</p>			R	

Brought Forward			R
<b><u>GENERAL NOTES TO TENDERERS</u></b>			
General notes, described in Bill No.1, shall equally apply to this Bill.			
<b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>			
<b><u>15Mpa/19mm concrete</u></b>			
5/2/1	Blinding	m3	2
<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACE</u></b>			
<b><u>25MPa/19mm Concrete</u></b>			
5/2/2	Strip footings	m3	9
<b><u>REINFORCED CONCRETE CAST IN FORMWORK</u></b>			
<b><u>20Mpa/19mm concrete</u></b>			
5/2/3	Concrete Apron cast to fall etc,	m3	4
<b><u>25MPa/19mm Concrete</u></b>			
5/2/4	Surface beds cast in panels	m3	6
<b><u>TEST BLOCKS</u></b>			
<b><u>Notes:</u></b>			
Concrete strength test cubes, label and send to an approved laboratory for testing, pay all charges and submit report to the Regional Representative. Only successful tests will be paid for (Provisional)			
5/2/5	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	10
<b><u>SUNDRIES TO CONCRETE</u></b>			
Carried Forward			R
Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 2 Concrete,Formwork and Reinforcement			

Brought Forward			R
<b><u>Surface treatment</u></b>			
5/2/6	Power float top surface of concrete surface bed to a true and even level finish	m2	88
<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>			
<b><u>Rough formwork to sides</u></b>			
5/2/7	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	89
<b><u>MOVEMENTS JOINTS ETC,</u></b>			
<b><u>Expansion joints</u></b>			
5/2/8	10mm soft board or similar approved between concrete and brick wall	m	45
<b><u>REINFORCEMENT (PROVISIONAL)</u></b>			
<b><u>High and mild tensile steel reinforcement to structural concrete work</u></b>			
5/2/9	All diameter bars	t	1
<b><u>Fabric reinforcement:</u></b>			
5/2/10	Type 245 fabric reinforcement in concrete surface beds, slabs, etc.	m2	44
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 5			
4 SEATS WATERBORNE TOILET BLOCK X 2			
Bill No. 2			
Concrete,Formwork and Reinforcement			

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 3</u></b></p> <p><b><u>MASONRY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>Sizes in descriptions</u></b></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><b><u>Hollow walls etc</u></b></p> <p>Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole. Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brickseal" bitumen emulsion waterproofing coating.</p> <p><b><u>Face bricks</u></b></p> <p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 3 Masonry</p>			

<b>Brought Forward</b>			R
<b><u>Pointing</u></b>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b><u>BRICKWORK IN FOUNDATION</u></b>			
<b><u>Brickwork in 73mm burnt clay masonry units class NFP in Class II mortar, laid in stretcher bond with 10mm flush joints</u></b>			
5/3/1	One brick wall	m2	47
<b><u>SUPERSTRUCTURE BRICKWORK</u></b>			
<b><u>Brickwork of NFP brick in class II mortar laid in stretcher bond with 10mm flush joints</u></b>			
5/3/2	One brick wall	m2	149
5/3/3	Half brick wall	m2	45
5/3/4	Half brick wall, in beamfilling	m2	7
<b><u>FACE BRICKWORK</u></b>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<b><u>"Corobrick" face bricks (Colour: TBC) with PC sum amount of R 4 500.00 per thousand bricks delivered to site (excluding VAT) manufactured in accordance with SANS 227-2007, bedded and jointed in Class II mortar and pointed with recessed 6mm joints in both directions</u></b>			
5/3/5	Extra over brickwork for face brickwork in foundations (Provisional)	m2	94
5/3/6	Extra over brickwork for face brickwork in superstructure	m2	127
5/3/7	Extra over brickwork for face brickwork in brick-on-edge header course lintel	m	8
<b>Carried Forward</b>			R
Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 3 Masonry			

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<b>Brought Forward</b>			R
5/3/8	Extra over brickwork for face brickwork in brick-on-edge header course sills, bedded in mortar and set slightly sloped	m	8
5/3/9	Extra over brickwork for face brickwork in beamfilling	m2	7
<b><u>BRICKWORK SUNDRIES</u></b>			
<b><u>Brickwork reinforcement</u></b>			
5/3/10	75mm Wide reinforcement built in horizontally	m	131
5/3/11	150mm Wide reinforcement built in horizontally.	m	715
<b><u>"Allied concrete" or similar approved prestressed fabricated lintels</u></b>			
5/3/12	100 x 70mm Lintels in lengths not exceeding 3m	m	11
5/3/13	175 x 70mm Lintels in lengths not exceeding 3m	m	10
<b><u>Turning pieces</u></b>			
5/3/14	110mm Wide turning piece to flat brick lintels	m	15
<b><u>Air bricks etc</u></b>			
5/3/15	Set of 2 240 x 155mm Terracota air bricks as per architects specification	No	4
<b><u>Fair cutting to face brickwork</u></b>			
5/3/16	Fair raking cutting at gables	m	46
<b><u>Roof ties</u></b>			
5/3/17	30 x 1.2mm galvanised steel strapping, built into wall for 5 courses and minimum 800mm to be fixed to trusses	No	37
<b><u>MOVEMENTS JOINTS ETC,</u></b>			
<b><u>Expansion joints</u></b>			
5/3/18	30mm softboard between vertical brick surfaces not exceeding 300mm wide	m2	8
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 5			
4 SEATS WATERBORNE TOILET BLOCK X 2			
Bill No. 3			
Masonry			

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No.1, shall equally apply to this Bill.			
	<b><u>DAMP PROOFING OF WALLS AND FLOORS</u></b>			
	<b><u>One layer of 375 micron "Consol Plastic Brikgrip DPC" embossed damp proof course</u></b>			
5/4/1	Under walls	m2	1	
5/4/2	Under cills, etc.	m2	2	
	<b><u>One layer of 250 micron "USB Green" or similar approved dampproof membrane sealed at laps with PVC self -adhesive tape</u></b>			
5/4/3	Under surface beds.	m2	88	
	<b><u>JOINTS SEALANTS, ETC.</u></b>			
	<b><u>Mastic grey polysulphide sealing compound including raking out of joints filler as necessary</u></b>			
5/4/4	10mm Isolation Joints between surface bed concrete and brick wall	m	45	
	<b>Carried Forward to Summary of Section No.</b>			
	Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 4 Waterproofing			R

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 5</u></b>			
	<b><u>ROOF COVERINGS</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No.1, shall equally apply to this Bill.			
	<b><u>ROOF SHEETING</u></b>			
	<b><u>Similar Approved</u></b>			
	<b><u>0.6mm thick "Brownbuilt Klip-lok light Industrial" galvanised troughed roof sheeting with "Chromadek - Traffic Green" finish on one side, and 0.6mm galvanised steel accessories fixed to timber purlins or rails fixed in strict accordance to the manufacturer's instructions and fixed by an approved erector. A written and approved five (5) year guarantee of water-tightness shall be issued after approval of roofs by the manufacturer</u></b>			
5/5/1	Roof sheeting pitch not exceeding 25 degrees	m2	74	
5/5/2	550mm girth Ridge capping, 3 times bent and notched on site to suit roof profile	m	11	
5/5/3	550mm girth Hip capping, 3 times bent and notched on site to suit roof profile.	m	20	
	<b><u>LOUVRES</u></b>			
	<b><u>Similar Approved</u></b>			
	<b>Carried Forward</b>			R
	Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 5 Roof Coverings			

	<b>Brought Forward</b>				R
	<b><u>NTY Steelworks purpose-made louvre panels fixed to timber purlins including watertight heading joints, necessary sealing strips, fixing accessories etc., pre-painted to match roof sheeting</u></b>				
5/5/4	Steel triangular louvre, 1600 x 600mm high overall	No	4		
	<b><u>ROOF AND WALL INSULATION</u></b>				
	<b><u>Similar Approved</u></b>				
	<b><u>Sisalation "Bubble Foil" aluminium foil banded insulation</u></b>				
5/5/5	135mm thick Insulation laid over purlins (at approximately 750mm centres), fixed concurrent with sheeting with and including galvanised steel accessories	m2	74		
	<b>Carried Forward to Summary of Section No.</b>				
	Section No. 5				
	4 SEATS WATERBORNE TOILET BLOCK X 2				
	Bill No. 5				
	Roof Coverings				R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 6</u></b></p> <p><b><u>CARPENTRY AND JOINERY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><u>Joinery</u></p> <p>Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc.</p> <p>Descriptions of hardwood joinery shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.</p> <p><u>Fixing</u></p> <p>Items described as nailed shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>Timber</u></p> <p>All softwood to be South African Pine</p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 6 Carpentry and Joinery</p>			R

<p style="text-align: center;"><b>Brought Forward</b></p> <p><u>Descriptions</u></p> <p>Items described as "bolted" shall be deemed to exclude the bolts and include the holes unless otherwise described.</p> <p>Where the fixing of members is not stated it shall mean the nailing of one timber member to another.</p> <p>The term "planted on" shall mean the nailing of one timber member to another</p> <p>The term "screwed on" shall mean the countersunk screwing of one timber member to another.</p> <p>The term "screwed on and pelleted" shall mean the screwing of one timber member to another with the heads of screw sunk and pelleted.</p> <p>The term "plugged" shall mean the countersunk screwing of a timber member to and including plastic plugs in brickwork or concrete.</p> <p>The term "plugged and pelleted" shall mean the screwing of a timber member to and including plastic plugs in brickwork or concrete with heads of screw sunk and pelleted.</p> <p>Shelving, etc. described as screwed to steel must be fixed from underside and prices are to include for countersunk drilling through the steel for screw fixing.</p> <p>Descriptions of floors, ceilings, joinery, etc. shall be deemed to include for all square cutting</p> <p>Descriptions of items given in linear metre shall be deemed to include for mitres, stopped ends, fitted intersections, etc.</p> <p>Descriptions of rounded angles, rebates, grooves, chamfers, moulded edges, etc. shall be deemed to include for angles, ends, etc.</p> <p><b><u>ROOFS, ETC</u></b></p>		R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 6 Carpentry and Joinery</p>		R	

	<b>Brought Forward</b>			R
	<p><b><u>Plate nailed timber roof truss construction</u></b></p> <p>The following is applicable in respect of roof trusses:</p> <p>All timber to be sawn softwood in accordance with V4 or M4 as defined in SABS 563 or SABS 1245.</p> <p>Metal connector plates shall have a minimum yield strength of 228 MPa and a minimum ultimate tensile strength of 330 Mpa with hot-dip galvanised finish.</p> <p>All joints to be close fitted butt joints.</p> <p><b>Trusses shall be designed by a registered supplier of prefabricated trusses who shall issue an Engineers Certificate upon completion of the installation.</b></p> <p><b>The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on site before design or fabrication commences.</b></p> <p><b>Tenderers must study the roof plan and sections as attached to the back of these bills of quantities and must obtain prices from a qualified and registered roof truss supplier as no claims in this regard will be entertained.</b></p> <p><b><u>Roof trusses</u></b></p>			
5/6/1	Design, supply, take delivery, temporary store, hoist in position and erect plate nailed timber roof trusses, purlins, gang boarding, temporary and permanent bracing, etc (measured on plan)	m2	62	
	<p><b><u>Sawn softwood</u></b></p>			
5/6/2	38 x 114mm Wall plates	m	44	
	<p><b><u>Sundries</u></b></p>			
5/6/3	Two coats creosote on sawn timbers	m2	16	
	<p><b><u>Similar Approved</u></b></p>			
	<b>Carried Forward</b>			R
	<p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 6 Carpentry and Joinery</p>			

<b>Brought Forward</b>		R
<b><u>"Everite FC77" Fascia and badge boards</u></b>		
5/6/4	15 x 225mm Pressed fibre cement fascia boards, fixed to supports and roof timbers with one brass screw at maximum 750mm centres, including standard aluminium half round cover strips at all joints, as per architect's specification	m 46
5/6/5	15 x 80 x 300mm fibre cement barge board	m 46
<b><u>DOORS ETC</u></b>		
<b><u>44mm thick solid R&amp;F panel meranti timber doors with masonite backing with 15 horizontal slates on both sides hung to steel frames</u></b>		
5/6/6	914 x 2032mm single door	No 8
<b><u>WINDOWS</u></b>		
<b><u>Similar Approved</u></b>		
<b><u>"Nutec" fibre cement window cills</u></b>		
5/6/7	150mm x 15mm thick fibre cement Window sill set flat and slightly projecting, with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in 1:4 cement sand mortar with plastic slip joints at end of sills at plaster reveals and projecting from finished face of wall, all as per manufacturer's recommendations	m 8
<b>Carried Forward to Summary of Section No.</b>		
Section No. 5		
4 SEATS WATERBORNE TOILET BLOCK X 2		
Bill No. 6		
Carpentry and Joinery		
		R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 7</u></b></p> <p><b><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>Fixing</u></b></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 500mm centres, and where described as "bolted", the bolts have been given elsewhere.</p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins, or to be shot-pinned, to brickwork or concrete</p> <p><b><u>Ceilings &amp; Bulkheads</u></b></p> <p>Unless otherwise described ceilings shall be deemed to be horizontal</p> <p><b><u>Steel components</u></b></p> <p>All steel components for ceilings, partitions, etc are to be galvanised in accordance with SANS 121</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 7 Ceilings,Partitions and Access Flooring</p>			

	<b>Brought Forward</b>			R
	<p><b><u>Proprietary suspended ceilings</u></b></p> <p>Hangers, suspension grids, "lay-in" panels, etc are to be in accordance with the manufacturers' recommendations</p> <p>Where electrical light fittings, diffusers, panels etc are units of the same dimensions as the suspension grid described and allowance must be made in the rates accordingly for their support inclusive of any flexibility in setting out that may be required (ceiling panels have not been deducted and pricing is to take cognisance thereof)</p> <p><b><u>Suspension systems</u></b></p> <p>Where suspensions of ceilings require a sub-grid, the tenderer should include in his rates for the sub-grid. The design of the sub-grid support is not specified, the tenderer is to obtain the necessary requirements and recommendations for a safe installation from the board and suspension system manufacturer to the satisfaction of the structural engineer.</p> <p><b><u>NAILED UP CEILINGS</u></b></p> <p><b><u>FIBRE - CEMENT BOARDS</u></b></p> <p><b><u>Similar Approved</u></b></p> <p><b><u>6mm "Everite Nutec" Fibre-cement boards, jointed with and including galvanised H-type primed pressed steel jointing strips, including brandering as per architect's specifications</u></b></p>			
5/7/1	2400 x 1200mm x 6mm Horizontal ceilings, fixed to and including 38 x 38mm sawn softwood brandering at maximum 400mm centres using 38mm long galvanised nails	m2	29	
	<p><b><u>CORNICES</u></b></p> <p><b><u>"Rhino" plasterboard cornice</u></b></p>			
5/7/2	75mm Coved cornice, plugged to brickwork	m	31	
	<p><b><u>SUNDRIES</u></b></p>			
	<b>Carried Forward</b>			R
	<p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 7 Ceilings,Partitions and Access Flooring</p>			



**LIMPOPO DEPARTMENT OF EDUCATION  
UPGRADES AND ADDITIONS AT  
ST. PAUL HIGH SCHOOL**

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 8</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p>Where ironmongery is described as plugged, prices are to include for screwing to and including approved patent plugs in concrete or brickwork with plaster or tiled finish, etc.</p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items</p> <p>Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered</p> <p>On request returnable samples are to be provided to the principal agent for consideration</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 8 Ironmongery</p>			

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	<b>Brought Forward</b>				R
	<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            AN Anodised natural            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>Rates</u></p> <p>The tenderer is to price for supply, taking delivery of, storing and fixing of the ironmongery listed below.</p> <p><b><u>SUNDRIES</u></b></p> <p><b><u>Approved</u></b></p>				
5/8/1	"CZ8730SC" Door stop or similarly approved to wall or floors	No	8		
	<b>Carried Forward to Summary of Section No.</b>				R
	Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 8 Ironmongery				

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 9</u></b></p> <p><b><u>METALWORK</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>ALUMINIUM</u></b></p> <p>The contractor is to make due allowance in his prices for complying with the following requirements.</p> <p><b><u>SPECIFICATIONS</u></b></p> <p>User Note:</p> <p><b><u>Glazing</u></b></p> <p>All Safety glazing material (individual panes) are to conform to all standards as stipulated in SANS 10400 Part N and SANS 10137 and any additional Engineer Specifications or relevant SANS glazing regulations not stipulated in this document. All tenderers are referred to the drawings for the glazing specification.</p> <p><b><u>Ironmongery</u></b></p> <p>All rates for windows, shopfronts and doors etc. must include for the supply, taking delivery or/and installation of the ironmongery to be specified.</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 9 Metalwork</p>			

<p style="text-align: center;"><b>Brought Forward</b></p> <p><b><u>Actuators</u></b></p> <p>All rates for shopfronts with actuators to include for the supply and installation of actuators as specified</p> <p><b><u>Scaffolding</u></b></p> <p>All scaffolding should be provided by the contractor and no claims/ qualifications will be accepted.</p> <p><b><u>Protection</u></b></p> <p>With this tender, the glazing sub-contractor must supply a statement concerning protection that will be provided to finishes and components until Practical Completion. This to include specific references to the method of removal of such protection. All tenderers to include cost of protection in tender price.</p> <p><b><u>Installation</u></b></p> <p>All measurements to be checked on site prior to ordering and manufacturing.</p> <p>Aluminium sections and shop drawings to be accepted by Architect prior to manufacturing.</p> <p>Allow for water and weather proof polysulphide sealant to approved specifications all around frame junctions to plaster and other materials.</p> <p><b><u>Profiles</u></b></p> <p>Tenderers to provide typical details of proposed aluminium section to be used in the design.</p> <p><b><u>Structural Silicone</u></b></p> <p>Tenderers to allow a 10 year guarantee on all powdercoating.</p> <p><b><u>Preliminary and Shop Drawings:</u></b></p> <p>The contractor shall submit preliminary design drawings showing basic system sections for the Architect's approval.</p>		R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 9 Metalwork</p>		R	

<p style="text-align: center;"><b>Brought Forward</b></p> <p>After approval and prior to fabrication detailed shop drawings shall be prepared and submitted to the Architect for approval.</p> <p><b><u>Fixing:</u></b></p> <p>The contractor is to take special note of all fixing details of all aluminium elements and must allow in his price for properly securing the aluminium sections to the structure with and including all necessary steel brackets, rails, timber grounds and sub-frames, including all necessary holing and bolting, etc. This fixing is to be adequately spaced and securely fixed to ensure total stiffness of the door frames, windows, etc. as no sagging causing improper functioning of the windows and doors will be accepted.</p> <p><b><u>Deflection of structure:</u></b></p> <p>The contractor is advised to make adequate provision for the design deflection of the structure.</p> <p><b><u>Tolerances:</u></b></p> <p>Sizes are approximate only and measurements on site must be taken before fabrication. Due allowance must be made for tolerances in accordance with the Architect's details.</p> <p><b><u>Protection:</u></b></p> <p>The contractor will be required to protect his work during the course of construction, which protection shall be adequate for the purpose and to the full approval of the Architect.</p> <p>Such protection shall only be removed after a written instruction from the Architect.</p> <p><b><u>Cleaning:</u></b></p> <p>All work must be cleaned down upon completion. Glazing as installed will not be accepted as clean glass and the contractor must allow for polishing glass as and when instructed by the Architect.</p> <p>Note: All windows and doors should be read in conjunction with window and door schedules</p>			R	
<p style="text-align: center;"><b>Carried Forward</b></p> <p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 9 Metalwork</p>			R	

	Brought Forward				
	<b><u>PRESSED STEEL DOOR FRAMES</u></b>				R
	<b><u>1.2mm thick Single rebated frame suitable for one brick walls, complete with lugs and base ties, with red oxide primer factory finish by manufacturer</u></b>				
5/9/1	914 x 2032mm single door	No	8		
	<b><u>WINDOWS FRAMES, etc.</u></b>				
	<b><u>Standard mild steel school type Top-hung open out window frame (with brass fittings), with burglar bars to opening and fixed sections, consisting of 10mm diameter mild steel round bars to standard NBP2 pattern, welded at intersections and window frames, all as per architect's specification</u></b>				
5/9/2	Window size 1022 x 949mm high	No	8		
	<b>Carried Forward to Summary of Section No.</b>				R
	Section No. 5				
	4 SEATS WATERBORNE TOILET BLOCK X 2				
	Bill No. 9				
	Metalwork				

**LIMPOPO DEPARTMENT OF EDUCATION  
UPGRADES AND ADDITIONS AT  
ST. PAUL HIGH SCHOOL**

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 10</u></b>			
	<b><u>PLASTERING</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No.1, shall equally apply to this Bill.			
	<b><u>SCREEDS</u></b>			
	<b><u>1:4 Cement sand screed on concrete, worked down to a true and even surface with a steel trowel</u></b>			
5/10/1	30mm Thick on floors and landings	m2	67	
5/10/2	30mm Thick to falls and currents	m2	7	
	<b><u>INTERNAL PLASTER</u></b>			
	<b><u>One coat smooth 1:5 cement sand plaster on brickwork to receive finish</u></b>			
5/10/3	On brick walls	m2	231	
5/10/4	On narrow widths	m2	23	
	<b><u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u></b>			
5/10/5	Aluminium straight edge M-trim suitable for under-screed fixing in vinyl/ceramic, etc. installed as per manufactures recommendation and specification.	m	4	
	<b>Carried Forward to Summary of Section No.</b>			R
	Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 10 Plastering			

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 11</u></b></p> <p><b><u>TILING</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>Pricing</u></b></p> <p>Prices are to included for the following: Cutting, handling, labour, adhesive etc.</p> <p><b><u>Fixing</u></b></p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat.</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed, grouted and pointed with suitable adhesives and grouts, as recommended by the Architect. Costs are hereby deemed to include the cost of this requirement.</p> <p>Payment for work that is deemed measurable, in respect of the conditions of contract, and which comprises cutting, leaving, or forming, rectangular holes and notches through tiling is hereby deemed to apply only to holes and notches that do not exceed 600mm girth. Those exceeding 600mm in girth are hereby deemed to be "square cutting", which is hereby deemed to be part of the work description for that type of tiling and is not measurable as a separate item of work.</p> <p><b><u>Wastage</u></b></p> <p>Tile wastage in excess of 10% will be for the tenderer's account.</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 11 Tiling</p>			

<b>Brought Forward</b>			R
<b><u>GENERAL NOTES TO TENDERERS</u></b>			
General notes, described in Bill No. 1, shall equally apply to this Bill.			
<u>Note</u>			
All scaffolding should be provided by the contractor and no claims/qualifications will be accepted.			
<b><u>WALL TILING</u></b>			
<b><u>150 x 150 x 6mm ceramic tiles (PC allowance of R 120.00/m2 excludes V.A.T. but includes delivery to site), includes waste, laying, supply and fixing with an approved adhesive and jointing white grout all as per manufacturers specifications</u></b>			
5/11/1	Plastered walls	m2	123
5/11/2	On narrow widths	m2	12
5/11/3	Splash backs	m2	3
<b><u>FLOOR TILING</u></b>			
<b><u>420 x 420 x 11.5mm Thick non-slip ceramic tiles (P.C allowance of R 200.00/m2 excludes V.A.T. but includes delivery to site), includes waste, laying, supply and fixing with an approved adhesive and jointing in waterproof cementitious grout</u></b>			
5/11/4	On floors	m2	73
5/11/5	75mm high skirting	m	161
<b><u>ATTIC STOCK</u></b>			
5/11/6	150 x 150 x 6mm ceramic tiles(PC allowance of R 120.00/m2 excludes V.A.T. but includes delivery to site)	m2	12
5/11/7	420 x 420 x 11.5mm Thick non-slip ceramic tiles (P.C allowance of R 200.00/m2 excludes V.A.T. but includes delivery to site)	m2	7
<b><u>SUNDRIES</u></b>			
<b>Carried Forward</b>			R
Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 11 Tiling			



Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 12</u></b></p> <p><b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><u>uPVC pipes and fittings:</u></p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p> <p><u>Excavations:</u></p> <p>No claim for excavation in material other than "earth" will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling, and has obtained, in writing , authorised classification thereof.</p> <p>"Intermediate material" and " hard rock" shall be as defined in "Earthworks".</p> <p>Quantities of all excavations, carting away excavated material and backfilling are calculated on the nett extent to be formed, or filled, in accordance with drawings and specifications, and the Contractor is to allow in his prices for any bulking.</p> <p>Classes of excavation shall be as S.A.B.S 1200D clause 3.1.2.</p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 12 Plumbing and Drainage</p>			R

	<b>Brought Forward</b>				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 the specific instructions</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>RAINWATER GOODS</u></b></p> <p><b><u>Similar Approved</u></b></p> <p><b><u>Gutters</u></b></p>				
5/12/1	100 x 100 x 0.6mm thick Ogee profile eaves gutter aluminium box gutter, fixed with and including fixing clips to fascia boards	m		46	
5/12/2	Extra over eaves gutter for stopped end	No		16	
5/12/3	Extra over eaves gutter for corner	No		35	
5/12/4	Extra over eaves gutter for outlet	No		8	
	<p><b><u>Rainwater downpipes</u></b></p>				
5/12/5	100mm diameter x 0.6mm thick rainwater downpipe with Chromadek finish (Colour: TBC), fixed with and including brackets to wall face, with brackets spaced as per manufacturer's recommendations, and with downpipes spaced as per engineer's specification	m		28	
5/12/6	Extra over downpipe for offset	No		16	
5/12/7	Extra over downpipe for shoe	No		8	
	<p><b><u>SANITARY FITTINGS</u></b></p> <p>Refer to sanitary schedule drawing for full description of abbreviations</p> <p><b><u>WASH HAND BASINS</u></b></p>				
	<b>Carried Forward</b>				R
	<p>Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 12 Plumbing and Drainage</p>				

	<b>Brought Forward</b>			R
	<b><u>Similar Approved</u></b>			
	<b><u>Vaal Sanitaryware "Hibiscus" vitreous china basin with three semi-punched holes tap holes, including integrated overflow, including chain stay hole through the centre semi-punched tap hole, supplied with plug and chain, hung to walls (PC allowance of R450.00/no excludes V.A.T. but includes delivery to site), includes waste, supply and fixing</u></b>			
5/12/8	WHB, installed complete	No	8	
	<b><u>WATER CLOSET</u></b>			
	<b><u>Similar Approved</u></b>			
	<b><u>Vaal Sanitaryware "Daisy" semi-close coupled water closet comprising double flap heavy duty thermoplastic seat rim pan and matching 9 litre cistern complete with lid, fitments and flush pipe elbow (PC allowance of R2 800.00/no excludes V.A.T. but includes delivery to site), includes waste, supply and fixing</u></b>			
5/12/9	WC, installed complete	No	8	
	<b><u>SINKS, etc.</u></b>			
	<b><u>Stainless steel single bowl sink including integrated supports and legs (PC allowance of R1 500.00/no excludes V.A.T. but includes delivery to site), includes waste, supply and fixing</u></b>			
	<b><u>CHROME PLATED WASTE UNIONS, ETC. (Supply &amp; Fit)</u></b>			
5/12/10	32mm Basin waste union	No	8	
	<b><u>TOILET ROLL HOLDER</u></b>			
	<b><u>To be approved by Architect</u></b>			
5/12/11	130 x 560 x 130mm mild steel vandal proof Toilet paper roll holder (Colour: White), plugged and screwed to walls	No	8	
	<b>Carried Forward</b>			R
	Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 12 Plumbing and Drainage			

	<b>Brought Forward</b>			R
	<b><u>SOAP DISPENSER</u></b>			
	<b><u>To be approved by Architect</u></b>			
5/12/12	110 x 170 x 35mm high plastic Soap dispenser (Colour: White and transparent), with lever button and pump, plugged and screwed to wall	No	7	
	<b><u>PAPER TOWEL DISPENSER</u></b>			
	<b><u>To be approved by Architect</u></b>			
5/12/13	360 x 380 x 240mm high lockable auto-cut (reflex) plastic Paper towel dispenser (Colour: White), plugged and screwed to wall	No	3	
	<b><u>TAPS, VALVES, ETC</u></b>			
	<b><u>Similar Approved</u></b>			
5/12/14	15mm Cobra brass watertight hose Bib tap (Code: 108-15)	No	8	
<b>Carried Forward to Summary of Section No.</b>				
Section No. 5				R
4 SEATS WATERBORNE TOILET BLOCK X 2				
Bill No. 12				
Plumbing and Drainage				

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ST. PAUL HIGH SCHOOL**

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 13</u></b>			
	<b><u>GLAZING</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No. 1, shall equally apply to this Bill.			
	<u>Note:</u>			
	All glazing to comply with SABS 1263 Part 3:1998. Light and ventilation to comply with Part O if NBR 0400			
	<b><u>GLASS TO STEEL WITH PUTTY</u></b>			
	<b><u>5mm clear floated glass fixed glazing putty</u></b>			
5/13/1	Panes not exceeding 0.1m2	m2	8	
	<b><u>TOPS, SHELVES, DOORS, MIRROR ETC</u></b>			
	<b><u>6mm Polished plate float glass mirrors with square polished edges plugged with chrome plated detachable screws or similarly approved</u></b>			
5/13/2	Mirror 400 x 600 mm high	No	8	
	<b>Carried Forward to Summary of Section No.</b>			R
	Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 13 Glazing			

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ST. PAUL HIGH SCHOOL**

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 14</u></b>			
	<b><u>PAINTWORK</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No. 1, shall equally apply to this Bill.			
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>			
	<b><u>FIBRE CEMENT</u></b>			
	<b><u>Prepare and apply one coat universal undercoat and two coats Super Acrylic PVA paint or similar approved, colour to be confirmed by architect</u></b>			
5/14/1	On internal ceilings and cornices	m2	32	
5/14/2	Fibre cement fascias boards not exceeding 300mm high or wide painted on both side	m	93	
	<b><u>Prepare and apply one coat alkali resistant sealer and two coats mat enamel paint, colour to be confirmed by architect</u></b>			
5/14/3	Fiber cement window sill not exceeding 300mm high or wide	m	8	
	<b><u>FLOATED PLASTER INTERNAL WALLS</u></b>			
	<b>Carried Forward</b>			R
	Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2 Bill No. 14 Paintwork			

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Brought Forward			R
	<u>Prepare and apply one coat merit universal undercoat and two coats Super Acrylic PVA paint or similar approved, colour to be confirmed by architect</u>		
5/14/4	Plastered walls	m2	231
	<b><u>METAL SURFACES</u></b>		
	<u>Prepare and apply one coat Duraphos, one coat universal under coat and two coats gloss enamel paint, colour to be confirmed by architect</u>		
5/14/5	On window frames	m2	8
5/14/6	On door frames	m2	10
5/14/7	On gutters	m	46
5/14/8	On downpipes	m	28
	<b><u>WOOD</u></b>		
	<u>Prepare and apply one coat universal undercoat and two coats acrylic PVA, colour to be confirmed by architect</u>		
5/14/9	On door	m2	30
<b>Carried Forward to Summary of Section No.</b>			R
Section No. 5			
4 SEATS WATERBORNE TOILET BLOCK X 2			
Bill No. 14			
Paintwork			

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<b>Bill No</b>	<b><u>SECTION SUMMARY</u></b>	<b>Page No</b>		<b>Amount</b>
5/1	Earthworks	5/4		
5/2	Concrete,Formwork and Reinforcement	5/8		
5/3	Masonry	5/11		
5/4	Waterproofing	5/12		
5/5	Roof Coverings	5/14		
5/6	Carpentry and Joinery	5/18		
5/7	Ceilings,Partitions and Access Flooring	5/21		
5/8	Ironmongery	5/23		
5/9	Metalwork	5/27		
5/10	Plastering	5/28		
5/11	Tiling	5/31		
5/12	Plumbing and Drainage	5/35		
5/13	Glazing	5/36		
5/14	Paintwork	5/38		
<b>Carried to Final Summary</b>				
Section No. 5 4 SEATS WATERBORNE TOILET BLOCK X 2			R	

Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 6</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>EARTHWORKS (PROVISIONAL)</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this Bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>KEEPING EXCAVATIONS FREE FROM WATER</u></b></p>			
6/1/1	Keeping excavations free of all water other than subterranean water	Item		
	<p><b>Carried Forward to Summary of Section No.</b></p> <p>Section No. 6 EXTERNAL WORKS Bill No. 1 Earthworks</p>		R	

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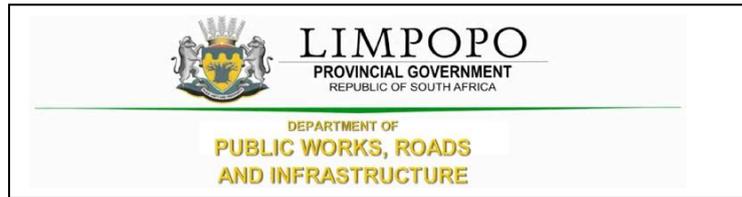
Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 2</u></b></p> <p><b><u>METALWORK</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>FLAG POST</u></b></p>			
6/2/1	2 x 15m high flag poles bolted to steel channel (211mm x 100mm) & channel to be anchored in concrete bases	Item		
	<p><b><u>SUNDRY METAL WORK</u></b></p>			
6/2/2	Allow an amount of (R20 000.00) (Twenty Thousand) for builders work in connection with metalwork sundry items	Item		20 000.00
	<b>Carried Forward to Summary of Section No.</b>			
	Section No. 6 EXTERNAL WORKS Bill No. 2 Metalwork		R	

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Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 3</u></b></p> <p><b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p><b><u>URINALS</u></b></p> <p><b><u>Similar Approved</u></b></p> <p><b><u>Vaal Sanitaryware "Lavatera" vitreous china wall hung urinal with top inlet including 38mm chrome plated domical grating, including Cobra "Junior Flushmaster" exposed chrome plated flush valve, including offset urinal flush pipe, chrome plated bottle trap and parallel nipple (PC allowance of R4 950.00/no excludes V.A.T. but includes delivery to site), includes supply and fixing</u></b></p>			
6/3/1	Urinal, installed complete	No	12	
	<p><b><u>TESTING</u></b></p>			
6/3/2	Testing water pipe system		Item	
	<b>Carried Forward to Summary of Section No.</b>			
	Section No. 6 EXTERNAL WORKS Bill No. 3 Plumbing and Drainage			R

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<b>Bill No</b>	<b><u>SECTION SUMMARY</u></b>	<b>Page No</b>		<b>Amount</b>
6/1	Earthworks	6/1		
6/2	Metalwork	6/2		
6/3	Plumbing and Drainage	6/3		
<b>Carried to Final Summary</b>				
	Section No. 6 EXTERNAL WORKS		R	



### C4.3 PROVISIONAL SUMS

**LIMPOPO DEPARTMENT OF EDUCATION  
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Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO. 7</u></b></p> <p><b><u>BILL NO. 1</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p>Where ironmongery is described as plugged, prices are to include for screwing to and including approved patent plugs in concrete or brickwork with plaster or tiled finish, etc.</p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items</p> <p>Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered</p> <p>On request returnable samples are to be provided to the principal agent for consideration</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 7 PROVISIONAL SUMS Bill No. 1 Ironmongery</p>			

**LIMPOPO DEPARTMENT OF EDUCATION  
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	<b>Brought Forward</b>		R	
	<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            AN Anodised natural            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>Rates</u></p> <p>The tenderer is to price for supply, taking delivery of, storing and fixing of the ironmongery listed below.</p> <p><b><u>BUDGETARY ALLOWANCE</u></b></p>			
7/1/1	Allow an amount of R170 300.00 (One Hundred and Seventy Thousand Three Hundred) for the supply and installation of Ironmongery	Item		170 300.00
	<b>Carried Forward to Summary of Section No.</b>		R	
	Section No. 7 PROVISIONAL SUMS Bill No. 1 Ironmongery			

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Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 2</u></b>			
	<b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b>			
	<b><u>PREAMBLES</u></b>			
	NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.			
	<b><u>GENERAL NOTES TO TENDERERS</u></b>			
	General notes, described in Bill No.1, shall equally apply to this Bill.			
	<b><u>FIRE FIGHTING EQUIPMENT</u></b>			
	<b><u>Extinguishers including initial charge and setting up in position:</u></b>			
7/2/1	9kg dry chemical powder fire extinguisher	No	50	
7/2/2	Fire hose reel with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	14	
	<b><u>TESTING</u></b>			
	<b><u>BUDGETARY ALLOWANCE</u></b>			
7/2/3	Allow an amount of R319 891.00 (Three Hundred and Nineteen Thousand Eight Hundred and Ninety One) for the supply and installation of Sanitary Fitting Sundries		Item	319 891.00
7/2/4	Allow an amount of R594 000.00 (Five Hundred and Ninety Four Thousand) for the supply and installation of Enviro-loo complete		Item	594 000.00
	<b>Carried Forward to Summary of Section No.</b>			
	Section No. 7 PROVISIONAL SUMS Bill No. 2 Plumbing and Drainage			R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 3</u></b></p> <p><b><u>BUDGETARY ALLOWANCES</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill.</p> <p>Provisional Sums are to be expended/utilized only upon:</p> <p>·i) the submission of a minimum of three market related quotations. Quotations for service providers may be solicited by any of the following entities: the main contractor, a member of the consultant team, the implementing agent or the end user.</p> <p><u>Cash discount</u></p> <p>The following provisional sums and prime cost amounts are NET and represent the NET COST of the work described. The contractor shall not be entitled to any discount, percentage or allowance whatsoever on the value of any provisional sum or prime cost amount other than the priced value for profit and attendance as provided for. The provisional sums and prime cost amounts may be deducted in whole or in part from the contract and are subject to adjustment upon completion</p> <p><u>Profit</u></p> <p>Where stated, the contractor may allow for profit if required</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 7 PROVISIONAL SUMS Bill No. 3 Budgetary Allowance</p>			

**LIMPOPO DEPARTMENT OF EDUCATION  
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	<b>Brought Forward</b>		R	
	<p><u>General attendance on nominated/selected subcontractors</u></p> <p>The item "Attendance" which follows each provisional sum for nominated/selected subcontractors' work, shall be deemed to cover all the contractor's costs incurred in providing free of charge to the nominated/selected subcontractors, the following:</p> <p><u>Builder's work</u></p> <p>Builder's work in connection with specialist services is given elsewhere in these bills of quantities</p> <p><b><u>LOCAL AUTHORITY FEES</u></b></p> <p><b><u>Local authority fees for connections</u></b></p>			
7/3/1	<p>Provide the sum of R35 000.00 (Thirty Five Thousand) for sewer, water and electrical connections, etc to the local authority</p>	Item		35 000.00
	<b>Carried Forward to Summary of Section No.</b>			
	<p>Section No. 7 PROVISIONAL SUMS Bill No. 3 Budgetary Allowance</p>		R	

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 4</u></b></p> <p><b><u>PROVISIONAL SUMS</u></b></p> <p><b><u>PREAMBLES</u></b></p> <p>NOTE : The tenderer is referred to the relevant clauses in the Model Preambles for Trades (2008 Edition) as issued by the Association of South African Quantity Surveyors before pricing this bill.</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p>Supplementary preamble items described in Bill No. 1, shall equally apply to this bill.</p> <p><b><u>GENERAL NOTES TO TENDERERS</u></b></p> <p>General notes, described in Bill No.1, shall equally apply to this Bill</p> <p>Provisional Sums are to be expended/utilized only upon:</p> <p>·i) the submission of a minimum of three market related quotations. Quotations for service providers may be solicited by any of the following entities: the main contractor, a member of the consultant team, the implementing agent or the end user.</p> <p><u>Cash discount</u></p> <p>The following provisional sums and prime cost amounts are NET and represent the NET COST of the work described. The contractor shall not be entitled to any discount, percentage or allowance whatsoever on the value of any provisional sum or prime cost amount other than the priced value for profit and attendance as provided for. The provisional sums and prime cost amounts may be deducted in whole or in part from the contract and are subject to adjustment upon completion</p> <p><u>Profit</u></p> <p>Where stated, the contractor may allow for profit if required</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 7 PROVISIONAL SUMS Bill No. 4 Provisional Sums</p>			

**LIMPOPO DEPARTMENT OF EDUCATION  
UPGRADES AND ADDITIONS AT  
ST. PAUL HIGH SCHOOL**

<b>Brought Forward</b>		R
<u>General attendance on nominated/selected subcontractors</u>		
The item "Attendance" which follows each provisional sum for nominated/selected subcontractors' work, shall be deemed to cover all the contractor's costs incurred in providing free of charge to the nominated/selected subcontractors, the following:		
<u>Builder's work</u>		
Builder's work in connection with specialist services is given elsewhere in these bills of quantities		
<b><u>Signage Installation</u></b>		
7/4/1	Allow an amount of R27 000.00 (Twenty Seven Thousand) for the supply and installation of Signage	Item 27 000.00
7/4/2	Attendance	%
7/4/3	Profit	%
<b><u>Joinery Fittings</u></b>		
7/4/4	Allow an amount of R630 000.00 (Six Hundred and Thirty Thousand) for the supply and installation of Joinery Fittings	Item 630 000.00
7/4/5	Attendance	%
7/4/6	Profit	%
<b><u>School Furniture and Fittings</u></b>		
7/4/7	Allow an amount of R1 910 000.00 (One Million Nine Hundred and Ten Thousand) for the supply and installation of School Furniture and Fittings	Item 1 910 000.00
7/4/8	Attendance	%
7/4/9	Profit	%
<b><u>Community Liaison Officer</u></b>		
7/4/10	Allow an amount of R288 000.00 (Two Hundred and Eighty Eight Thousand) for provision of CLO	Item 288 000.00
<b>Carried Forward</b>		R
Section No. 7 PROVISIONAL SUMS Bill No. 4 Provisional Sums		

**LIMPOPO DEPARTMENT OF EDUCATION  
UPGRADES AND ADDITIONS AT  
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	<b>Brought Forward</b>		R	
7/4/11	Attendance		%	
7/4/12	Profit		%	
	<b><u>Health and Safety Agent</u></b>			
7/4/13	Allow an amount of R500 000.00 (Five Hundred Thousand) for provision of Health and Safety Agent	Item		500 000.00
7/4/14	Attendance		%	
7/4/15	Profit		%	
<b>Carried Forward to Summary of Section No.</b>				
Section No. 7				
PROVISIONAL SUMS				
Bill No. 4				
Provisional Sums				

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UPGRADES AND ADDITIONS AT  
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<b>Bill No</b>	<b><u>SECTION SUMMARY</u></b>	<b>Page No</b>		<b>Amount</b>
7/1	Ironmongery	7/2		
7/2	Plumbing and Drainage	7/3		
7/3	Budgetary Allowance	7/5		
7/4	Provisional Sums	7/8		
<b>Carried to Final Summary</b>			R	
Section No. 7 PROVISIONAL SUMS				



#### C4.4 ELECTRICAL AND MECHANICAL INSTALLATION

ST. PAUL SECONDARY SCHOOL				
SUMMARY: <b>ELECTRICAL WORKS</b>				
SECTION	DESCRIPTION	QTY	AMOUNT	TOTAL
1	MV Reticulation	SUM		
2	LV Reticulation	Lot		
3	Administration	1		
4	Four classroom blocks	6		
5	Ablutions Four Seater	6		
6	Ablutions Ten Seater	2		
7	Area lighting	1		
8	Provisional Sum: ICT	Sum		
	<b>SUB TOTAL 1</b>			
<b>TOTAL BID PRICE (Excl VAT)</b>				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>1</b>	<b><u>MV RETICULATION</u></b>				
	Provide the sum of R 130 470.00 for the supply and Install 50kVA 22kV or 11kV/400V pole mounted transformer complete with structures and poles. Supply and install fox conductor ACSR incl. meter Box c/w 3-phase meter				
1.1		Sum	1		
1.2	Profit	%			
1.3	Attendense	%			
<b>TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL
	<b><u>LV RETICULATION</u></b>				
2.1	Distribution Kiosks,  equipment as specified				
2.1.1	Main Kiosk	No	1		
2.1.2	Plinth	No	1		
2.2	Trenching  Excavating, bedding, backfilling, consolidating and making good as specified,				
2.2.1	Pickable soil	m³	175		
2.2.2		m³	75		
2.2.3	Very hard rock	m³	-		rate only
2.2.4	Backfilling and compaction	m³	250		
2.3	110mm dia PVC sleeves for road crossings/cable entries into the building-rate must include for galv steel draw wires in spare sleeves and sealing of ends	m	120		
2.4	Concrete slabs for crossing of other services - rate must include installation 200mm below existing services	m	50		
2.5	Cable warning tape, 300mm above cables	m	80		
2.6	Cable markers, above cables	No	17		
2.7	600/1000V PVC SWA cables, in trenches and sleeves, including labels				
<b>TOTAL FOR BILL - CARRIED FORWARD</b>					

<b>TOTAL FOR BILL - BROUGHT FORWARD</b>				
2.7.1	50mm <sup>2</sup> 4core	m	85	
2.7.2	16mm <sup>2</sup> 2core	m	50	
2.7.3	10mm <sup>2</sup> 2core	m	340	
2.7.4	6mm <sup>2</sup> 2core	m	100	
2.7.5	4mm <sup>2</sup> 2core	m	150	
2.8	600/1000V Cable terminations, for PVC PVC SWA PVC Cu cables, for indoor or outdoor use, as required			
2.8.1	Gland no 5 complete with shroud	No	2	
2.8.2	Gland no 3 complete with shroud	No	2	
2.8.3	Gland no 2 complete with shroud	No	12	
2.9	Earth conductors (HDHC), including ends			
2.9.1	35mm <sup>2</sup>	m	85	
2.9.2	10mm <sup>2</sup>	m	50	
2.9.3	6mm <sup>2</sup>	m	340	
2.9.4	4mm <sup>2</sup>	m	100	
2.9.5	2mm <sup>2</sup>	m	150	
2.10	Testing of this section in the presence of the Employer and/or the Engineer, including all equipment, power generator, etc.	No	1	
<b>TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY</b>				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>3</b>	<b><u>MEDIUM ADMINISTRATION BLOCK</u></b>				
<b>3.1</b>	General trenching work for sleeves along the routes as pegged out on site after co-ordination with other services  Allowance must be made for the sifting of soil when required, removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried out as specified for overall siteworks.				
3.1.1	Trenching through floor for sleeves	m <sup>3</sup>			rate only
3.1.2	Excavation and backfilling in soft soil	m <sup>3</sup>			rate only
3.1.3	Excavation and backfilling in hard rock	m <sup>3</sup>			rate only
<b>3.2</b>	<b>Cable and Data Sleeves</b>				
	Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends				
3.2.1		m			rate only
3.2.2	110mm Diameter for power cable	m			rate only
<b>3.3</b>	<b>Draw Wires</b>				
3.3.1	Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation	m	710		
<b>3.4</b>	<b>Distribution Boards</b>				
	Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays, doors, switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna				
3.4.1	Distribution Board (DB-ADM)	No.	1		
<b>TOTAL FOR BILL - CARRIED FORWARD</b>					

<b>TOTAL FOR BILL - BROUGHT FORWARD</b>				
<b>3.5</b>	<b>Low Voltage PVC Cables</b> Supply and installation of PVC SWA PVC cable which is quantified under LV Reticulation and Bare Copper Earth Wire in sleeves and in trenches  Terminations:			
3.5.1	16mm 4 core cable	No	2	
3.5.2	16mm BCEW	No	2	
<b>3.6</b>	<b>Conduit Work</b>  Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories.  Built or Chase into brick or concrete work:			
3.6.1	20mm PVC Conduit	m	130	
3.6.2	25mm PVC Conduit	m	230	
	In Ceiling space and Timber work or along Purlins			
3.6.3	20mm PVC Conduit	m	250	
	25mm PVC Conduit	m	80	
3.6.4	Girder clamp for chain and wire, STRUTFAST Type AH-1420	No.		rate only
3.6.5	Conduit Boxes  Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories.			
3.6.6	20mm diameter 4 way type(round box)	No	51	
3.6.7	450 x 450mm Bonding tray in roof space	No		rate only
<b>3.7</b>	<b>Wall Boxes</b>  Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work.  Flush mounted type:			
3.7.1	100 x 50 x 50mm	No	12	
3.7.2	100 x 100 x 50mm	No	20	
3.7.3	88 x 275 x 62mm One tier cluster`	No	6	
<b>TOTAL FOR BILL - CARRIED FORWARD</b>				

<b>TOTAL FOR BILL - BROUGHT FORWARD</b>					
<b>3.8</b>	<b>PVC Wiring in conduits:</b>				
3.8.1	2.5 mm <sup>2</sup> for lights circuits	m	650		
3.8.2	4 mm <sup>2</sup> for plug sockets circuits	m	460		
	Stranded Bare Copper Earth Wire				
	Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage.				
3.8.3	2.5 mm <sup>2</sup>	m	650		
3.8.4	4 mm <sup>2</sup>	m	460		
<b>3.9</b>	<b>Light Switches</b>				
	Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas				
3.9.1	16A Single Lever Light Switch	No	11		
3.9.2	2Way 16A Single Lever Light switch	No	2		
3.9.3	Outdoor Photocell Switch	No	1		
3.9.4	90 degree motion sensor light switch	No	3		
<b>3.10</b>	<b>Socket Outlets</b>				
	Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface.				
	The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification.				
	All flush type boxes and special pedestals measured elsewhere.				
	Flush switched sockets type:				
3.10.1	SA/Euro 16A Socket Outlet @1200 A.F.F.L	No	3		
3.10.2	SA/Euro 16A Socket Outlet @300 A.F.F.L	No	17		
3.10.3	One Tier Cluster Wall Box Consisting of The Following: - 16A Normal Socket Un-switched - 16A Dedicated Socket Un-switched - 5A 2 Pin Socket Un-switched - 2x RJ45 Data & Telephone Points		6		
<b>TOTAL FOR BILL - CARRIED FORWARD</b>					

<b>TOTAL FOR BILL - BROUGHT FORWARD</b>				
<b>3.11</b>	<b>Light Fittings</b>			
	Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories.			
	Fittings to be equal and similar approved to the below quoted manufacture.			
3.11.1	1200mm 34W LED IP66 Corrosion Proof Light Fitting	No	25	
3.11.2	8 Inch 15W LED Downlight	No	16	
3.11.3	10W LED Rondo Downlight with Dali Modification	No	2	
3.11.4	15W LED Round Bulkhead with Dali Modification	No	8	
3.11.5	Type B1: Wall mounted bulkhead 2x 18W CFL	No		rate only
<b>3.12</b>	<b>Electrical Tests</b>			
	Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate.			
3.12.1	Building installation	Sum	1	
<b>3.13</b>	<b>Others</b>			
3.13.1	2 compartment power skirting installed in offices	m	10	
3.13.2	Telephone points on Powerskirting; must include draw box, blank cover plate, etc,	No	3	
3.13.3	Telephone points on Powerskirting; must include draw box, blank cover plate, etc,	No	.	rate only
3.13.4	Provide the sum of R15000-00 for earthing and lightning protection installations by specialist	Sum	1	
3.13.5	20A 2pole Isolator, in suitable York Box, for HVAC	No	2	
3.13.6	Supply and install a 150L Solar Water Geyser	No		
3.13.7	Provide the sum of R5500-00 for the supply and installation of school motorised siren c/w timer	Sum	1	
<b>TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY</b>				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>4</b>	<b><u>4 CLASSROOM BLOCK</u></b>				
<b>4.1</b>	General trenching workfor sleeves along the routes as pegged out on site after co-ordination with other services  removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried				
4.1.1	Trenching through floor for sleeves	m³			rate only
4.1.2	Excavation and backfilling in soft soil	m³			rate only
4.1.3	Excavation and backfilling in hard rock	m³			rate only
<b>4.2</b>	<b>Cable and Data Sleeves</b>				
	Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends				
4.2.1	75mm Diameter for Data	m			rate only
4.2.2	110mm Diameter for power cable	m			rate only
	Radius bends:				
4.2.3	75mm Diameter	No			rate only
4.2.4	110mm Diameter	No			rate only
<b>4.3</b>	<b>Draw Wires</b>				
	Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation				
4.3.1		m	1000		
<b>4.4</b>	<b>Distribution Boards</b>				
	Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna				
4.4.1	Distribution Board	No.	1		
<b>TOTAL FOR BILL - CARRIED FORWARD</b>					

<b>TOTAL FOR BILL - BROUGHT FORWARD</b>				
<b>4.5</b>	<b>Low Voltage PVC Cables</b> Supply and installation of PVC SWA PVC cable which is quantified under LV Reticulation and Bare Copper Earth Wire in sleeves and in trenches  Terminations:			
4.5.1	16mm 2 core cable	No	2	
4.5.2	16mm BCEW	No	2	
<b>4.6</b>	<b>Conduit Work</b> Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories.  Built or Chase into brick or concrete work:			
4.6.1	20mm PVC Conduit	m	120	
4.6.2	25mm PVC Conduit	m	440	
	In Ceiling space and Timber work or along Purlins			
4.6.3	20mm PVC Conduit	m	400	
4.6.4	25mm PVC Conduit	m	40	
	Girder clamp for chain and wire, STRUTFAST Type AH-1420	No.		rate only
4.6.5	Conduit Boxes  Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories.			
4.6.6	20mm diameter 4 way type(round box)	No	50	
4.6.7	450 x 450mm Bonding tray in roof space	No		rate only
<b>4.7</b>	<b>Wall Boxes</b> Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work.  Flush mounted type:			
4.7.1	100 x 50 x 50mm	No	8	
4.7.2	100 x 100 x 50mm	No	12	
4.7.3	88 x 275 x 62mm one tier cluster	No	4	
<b>TOTAL FOR BILL - CARRIED FORWARD</b>				

<b>TOTAL FOR BILL - BROUGHT FORWARD</b>				
<b>4.8</b>	<b>PVC Wiring in conduits:</b>			
4.8.1	2.5 mm <sup>2</sup> for lights circuits	m	800	
4.8.2	4 mm <sup>2</sup> for plug sockets circuits	m	470	
	Stranded Bare Copper Earth Wire			
	Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage.			
4.8.3	2.5 mm <sup>2</sup>	m	800	
4.8.4	4 mm <sup>2</sup>	m	470	
<b>4.9</b>	<b>Light Switches</b>			
	Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas			
4.9.1	16A Single Lever Light Switch	No	4	
4.9.2	2Way 16A Single Lever Light switch	No		rate only
4.9.3	2 Lever 2 way	No		rate only
4.9.4	Outdoor Photocell Switch	No	1	
<b>4.10</b>	<b>Socket Outlets</b>			
	Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface.			
	The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification.			
	All flush type boxes and special pedestals measured elsewhere.			
	Flush switched sockets type:			
4.10.1	SA/Euro 16A Socket Outlet @300 A.F.F.L	No	12	
4.10.2	- 16A Normal Socket Un-switched	No	4	
<b>TOTAL FOR BILL - CARRIED FORWARD</b>				

<b>TOTAL FOR BILL - BROUGHT FORWARD</b>					
<b>4.11</b>	<b>Light Fittings</b>				
	Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories.				
	Fittings to be equal and similar approved to the below quoted manufacture.				
4.11.1	1200mm 34W LED IP66 Corrosion Proof Light Fitting	No	20		
4.11.2	15W LED Round Bulkhead with Dali Modification	No	10		
<b>4.12</b>	<b>Electrical Tests</b>				
	Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate.				
4.12.1	Building installation	Sum	1		
<b>4.13</b>	<b>Others</b>				
	Provide the sum of R10000-00 for earthing and lightning protection installations by specialist				
4.13.1		Sum	1		
<b>TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY</b>					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>5</b>	<b><u>ABLUTION BLOCK (4 SEATER)</u></b>				
<b>5.1</b>	General trenching work for sleeves along the routes as pegged out on site after co-ordination with other services  removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried				
5.1.1	Trenching through floor for sleeves	m³			rate only
5.1.2	Excavation and backfilling in soft soil	m³			rate only
5.1.3	Excavation and backfilling in hard rock	m³			rate only
<b>5.2</b>	<b><u>Cable and Data Sleeves</u></b>				
	Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends				
5.2.1		m			rate only
5.2.2	113mm Diameter for power cable	m			rate only
	Radius bends:				
5.2.3	75mm Diameter	No			rate only
5.2.4	113mm Diameter	No			rate only
<b>5.3</b>	<b><u>Draw Wires</u></b>				
	Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation				
5.3.1		m	50		
<b>5.4</b>	<b><u>Distribution Boards</u></b>				
	Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays, doors, switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna				
5.4.1	Distribution Board	No.	1		
<b>TOTAL FOR BILL - CARRIED FORWARD</b>					

<b>TOTAL FOR BILL - BROUGHT FORWARD</b>				
<b>5.5</b>	<b>Low Voltage PVC Cables</b> Supply and installation of PVC SWA PVC cable which is quantified under LV Reticulation and Bare Copper Earth Wire in sleeves and in trenches			
5.5.1	4mm 2 core PVC SWA Cable	m		rate only
5.5.2	4mm BCEW	m		rate only
	Terminations:			
5.5.3	4mm 2core cable	No	2	
5.5.4	4mm BCEW	No	2	
<b>5.6</b>	<b>Conduit Work</b> Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories.  Built or Chase into brick or concrete work:			
5.6.1	20mm PVC Conduit	m		rate only
5.6.2	25mm PVC Conduit	m	15	
	In Ceiling space and Timber work or along Purlins			
5.6.3	20mm PVC Conduit	m	10	
5.6.4	25mm PVC Conduit	m		rate only
5.6.5	Girder clamp for chain and wire, STRUTFAST Type AH-11320	No.		
	Conduit Boxes Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories.			
5.6.6	20mm diameter 13 way type(round box)	No	7	
5.6.7	1350 x 1350mm Bonding tray in roof space	No		rate only
<b>5.7</b>	<b>Wall Boxes</b> Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work.  Flush mounted type:			
5.7.1	100 x 50 x 50mm	No	2	
5.7.2	100 x 100 x 50mm	No	2	
<b>TOTAL FOR BILL - CARRIED FORWARD</b>				

<b>TOTAL FOR BILL - BROUGHT FORWARD</b>				
<b>5.8</b>	<b>PVC Wiring in conduits:</b>			
5.8.1	2.5 mm <sup>2</sup> for lights circuits	m	20	
5.8.2	4 mm <sup>2</sup> for plug sockets circuits	m		rate only
	Stranded Bare Copper Earth Wire			
	Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage.			
5.8.3	2.5 mm <sup>2</sup>	m	20	
5.8.4	4 mm <sup>2</sup>	m		rate only
<b>5.9</b>	<b>Light Switches</b>			
	Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas			
5.9.1	1 Lever 1 way	No	2	
5.9.2	1 Lever 2 way	No		rate only
5.9.3	2 Lever 2 way	No		rate only
5.9.4	Outdoor Photocell Switch	No	1	
<b>5.10</b>	<b>Socket Outlets</b>			
	Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface.			
	The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification.			
	All flush type boxes and special pedestals measured elsewhere.			
	Flush switched sockets type:			
5.10.1	SA/Euro 16A Socket Outlet @300 A.F.F.L	No		rate only
<b>TOTAL FOR BILL - CARRIED FORWARD</b>				

<b>TOTAL FOR BILL - BROUGHT FORWARD</b>					
<b>5.11</b>	<b>Light Fittings</b>				
	Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories.				
	Fittings to be equal and similar approved to the below quoted manufacture.				
5.11.1	1200mm 313W LED IP66 Corrosion Proof Light Fitting	No			rate only
5.11.2	13W LED Rondo Downlight with Dali Modification	No	4		
5.11.3	10W LED Rondo Downlight with Dali Modification	No	4		
5.11.4	Type D1: 17 W Ceiling mounted downlighter	No			rate only
5.11.5	Type B1: Wall mounted bulkhead 2x 17W CFL	No			rate only
<b>5.12</b>	<b>Electrical Tests</b>				
	Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate.				
5.12.1	Building installation	Sum	1		
<b>5.13</b>	<b>Others</b>				
5.13.1	2 compartment power skirting installed in offices	m			rate only
5.13.2	Provide the sum of R2500-00 for earthing and lightning protection installations by specialist	Sum	1		
<b>TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY</b>					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>6</b>	<b><u>ABLUTION BLOCK (10 SEATER)</u></b>				
<b>6.1</b>					
	General trenching workfor sleeves along the routes as pegged out on site after co-ordination with other services				
	removal and carting away of all stones and rocks including dumping off site. Backfilling and compaction shall be carried				
6.1.1	Trenching through floor for sleeves	m³			rate only
6.1.2	Excavation and backfilling in soft soil	m³			rate only
6.1.3	Excavation and backfilling in hard rock	m³			rate only
<b>6.2</b>	<b>Cable and Data Sleeves</b>				
	Supply and installation of PVC Sleeves through floor construction to power distribution board and communication board complete with standard radius sleeve bends				
6.2.1		m			rate only
6.2.2	113mm Diameter for power cable	m			rate only
	Radius bends:				
6.2.3	75mm Diameter	No			rate only
6.2.4	113mm Diameter	No			rate only
<b>6.3</b>	<b>Draw Wires</b>				
6.3.1	Supply and install a 0,6mm diameter galvanised draw wire in sleeves and conduit for data installation	m	55		
<b>6.4</b>	<b>Distribution Boards</b>				
	Supply, delivery, storage and submission of workshop drawings for the Flush mounted architrave steel type power distribution boards complete with flush trays,doors,switch gear mounting trays, copper busbars, neutral and earth bars, correctly sized interna				
6.4.1	Distribution Board	No.	1		
<b>TOTAL FOR BILL - CARRIED FORWARD</b>					

<b>TOTAL FOR BILL - BROUGHT FORWARD</b>				
<b>6.5</b>	<b>Low Voltage PVC Cables</b> Supply and installation of PVC SWA PVC cable which is quantified under LV Reticulation and Bare Copper Earth Wire in sleeves and in trenches			
6.5.1	4mm 2 core PVC SWA Cable	m		rate only
6.5.2	4 mm BCEW  Terminations:	m		rate only
6.5.3	4mm 2 core cable	No	2	
6.5.4	4mm BCEW	No	2	
<b>6.6</b>	<b>Conduit Work</b> Supply, delivery and installation of SABS approved PVC / Galvanised Conduits completed with all required conduit accessories.  Built or Chase into brick or concrete work:			
6.6.1	20mm PVC Conduit	m	5	
6.6.2	25mm PVC Conduit  In Ceiling space and Timber work or along Purlins	m	5	
6.6.3	20mm PVC Conduit	m	50	
6.6.4	25mm PVC Conduit	m	10	
6.6.5	Girder clamp for chain and wire, STRUTFAST Type AH-11320	No.		rate only
6.6.6	Conduit Boxes  Supply and installation of SABS approved conduit boxes, installed in the run of the conduit installation, cast into concrete and built into brickwork or flush inside false ceiling spaces, complete with all required conduit termination accessories.			
6.6.7	20mm diameter 13 way type(round box)	No	20	
6.6.8	1350 x 1350mm Bonding tray in roof space	No		rate only
<b>6.7</b>	<b>Wall Boxes</b> Supply and installation of SABS approved galvanised pressed steel wall boxes for building flush into brickwork or cast into concrete work.  Flush mounted type:			
6.7.1	100 x 50 x 50mm	No	1	
6.7.2	100 x 100 x 50mm	No	2	
<b>TOTAL FOR BILL - CARRIED FORWARD</b>				

<b>TOTAL FOR BILL - BROUGHT FORWARD</b>				
<b>6.8</b>	<b>PVC Wiring in conduits:</b>			
6.8.1	2.5 mm <sup>2</sup> for lights circuits  Stranded Bare Copper Earth Wire  Supply and installation of stranded bare copper earth wire along with PVC wiring in conduits. Tendered rates shall make provision for wastage.	m	55	
6.8.2	2.5 mm <sup>2</sup>	m	55	
<b>6.9</b>	<b>Light Switches</b>			
	Supply and installation of SABS approved type 16A flush and surface type light switches. Final paint finishes shall be confirmed at a later stage, allowance shall however be made as specified in the general specification. All boxes for flush mounting meas			
6.9.1	1 Lever 1 way	No	2	
6.9.2	Outdoor Photocell Switch	No	1	
<b>6.10</b>	<b>Socket Outlets</b>			
	Supply and installation of SABS approved switched and unswitched type flush and surface mounted type 16A switched socket outlets suitable for mounting in flush steel wall boxes or in steel pedestal units or on surface.  The final colour of the paint finish shall be confirmed at a later stage, allowance shall be made as specified in the specification.  All flush type boxes and special pedestals measured elsewhere.  Flush switched sockets type:			
6.10.1	SA/Euro 16A Socket Outlet @300 A.F.F.L	No		rate only
<b>TOTAL FOR BILL - CARRIED FORWARD</b>				

<b>TOTAL FOR BILL - BROUGHT FORWARD</b>				
<b>6.11</b>	<b>Light Fittings</b>			
	Supply, delivery to site, storage and installation of the below specified light fittings complete with lamps, fixing material, mounting and tubes. Allowance must be made in the rates for all the required fixing materials and accessories.			
	Fittings to be equal and similar approved to the below quoted manufacture.			
6.11.1	1200mm 313W LED IP66 Corrosion Proof Light Fitting	No		rate only
6.11.2	15W LED Round Bulkhead with Dali Modification	No	5	
6.11.3	10W LED Rondo Downlight with Dali Modification	No	14	
<b>6.12</b>	<b>Electrical Tests</b>			
	Making provision for the required inspection, tests and the commissioning of the complete installation and the issuing of the required certificate.			
6.12.1	Building installation	Sum	1	
<b>6.13</b>	<b>Others</b>			
6.13.1	Provide the sum of R5000-00 for earthing and lightning protection installations by specialist	Sum	1	
<b>TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY</b>				

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>7</b>	<b>Area Lighting</b>				
<b>7.1</b>	Supply and installation of SABS approved light fittings as per the specification, complete with lamps, mounted as described including accessories necessary to complete the mounting as specified and are measured separately				
7.1.1	3m Steel Pole with brackets and foundation bolts (excluding luminaires), including Delivery to Site and offloading	Sum	6		
7.1.2	ZELA 27W LED light fitting complete with lamps, mounted as described including accessories necessities	no.	6		
7.1.3	22W LED Vapour Proof Light Fitting IP65	No	5		
<b>7.2</b>	<b>Cabling</b>				
	<b>PVC Wiring :</b>				
7.2.1	4mm <sup>2</sup> x 2core copper cable	m	400		
7.2.2		m	400		
<b>7.3</b>	<b>TESTING AND COMISSIONING</b>				
7.3.1	Testing and comissioning of the entire medium and low voltage network and area lighting including the provision of all test equipment required and issuing of a certificate of compliance for the installation.	Sum	1		
<b>CARRIED TO SUMMARY</b>					

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>8</b>	<b><u>PROVISIONAL AMOUNTS : ICT</u></b>				
8.1	Provide the sum of R 304 347.8261 for the instalation of Information and Communication Technologies by specialist service provider in consultation with the Engineer/Consultant	Sum	1		
8.2	Profit	%			
8.3	Attendense	%			
<b>TOTAL FOR BILL - CARRIED FORWARD TO SUMMARY</b>					



## C4.5 CIVIL WORKS

SEC	BILL	PG	ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	1	1		<b>PRELIMINARIES</b>				
1	1	1	1	P&G ALLOWANCE	SUM	1		
				<b>PRELIMINARIES</b>	ST			
<b>3</b>	<b>1</b>	<b>70</b>		<b>SECTION NO. 3</b>				
<b>3</b>	<b>1</b>	<b>70</b>		<b>BILL NO.1</b>				
<b>3</b>	<b>1</b>	<b>70</b>		<b>BULK EARTHWORKS</b>				
3	1	70		Preambles	H4			
3	1	70		Model Preambles for Trades 2008 as published by the Association of South African Quantity Surveyors shall apply.				
3	1	70		<u>SUPPLEMENTARY PREAMBLES</u>	H4			
3	1	70		<u>Items, materials or methods</u>	H4			
3	1	70		Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. The use of trade names for items, materials or methods shall also mean - or other approved - on the condition that prior approval is obtained from the architect.				
3	1	70		<u>Excavations</u>	H4			
3	1	70		No claim for rock excavation will be entertained unless the contractor has timeously notified the Quantity Surveyor thereof prior to backfilling				
				"Soft rock" and "Hard rock" shall be as defined in the Model Preambles for Trades 2008				
3	1	70		<u>WORK GROUP 102</u>	H4			
<b>3</b>	<b>1</b>	<b>70</b>		<b><u>SITE CLEARANCE</u></b>	<b>H2</b>			
3	1	70	2	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	25 120		
<b>3</b>	<b>1</b>	<b>70</b>		<b><u>Extra over all excavations for carting away</u></b>	<b>H3</b>			
3	1	70	3	Surplus material from excavations or stock piles on site to a dumping site to be located by the Contractor	m.km	5 024		
<b>3</b>	<b>1</b>	<b>70</b>		<b><u>EARTHWORKS</u></b>	<b>H2</b>			
<b>3</b>	<b>1</b>	<b>70</b>		<b><u>Bulk excavation</u></b>	<b>H3</b>			
3	1	70	4	Excavate in all materials and use for embankment or fill or dispose, as ordered	m3	2 512		
<b>3</b>	<b>1</b>	<b>70</b>		<b><u>Extra-over for</u></b>	<b>H3</b>			
3	1	70	5	Intermediate for excavation	m3	377		
3	1	70	6	Hard rock excavation	m3	20		
<b>3</b>	<b>1</b>	<b>70</b>		<b><u>Restricted Excavation</u></b>	<b>H3</b>			
3	1	70	7	Excavate for restricted pipe trenches in all A.2.4 materials and use for backfill or dispose	m3	0		
<b>3</b>	<b>1</b>	<b>71</b>		<b><u>Import G5 or better material from the Commercial source or borrowpit for Selected layers compacted to 95% of modified AASHTO maximum density</u></b>	<b>H3</b>			
3	1	71	8	150mm thick	m3	2 512		
3	1	71	9	Overhaul	m.km	12 560		
<b>3</b>	<b>1</b>	<b>71</b>		<b><u>LOFFELSTEIN RETAINING WALLS</u></b>	<b>H2</b>			
3	1	71	10	InfraBlok 425 (425x340x225) Waterloffel or other approved retaining wall stepped and curved to suit required slopes	m2	350		
				<b>BULK EARTHWORKS</b>	ST			

3	2	73	<b>SECTION NO. 3</b>			
3	2	73	<b>BILL NO.2</b>			
3	2	73	<b>WATER SUPPLY</b>			
3	2	73	<u>Preambles</u>	H4		
3	2	73	Model Preambles for Trades 2008 as published by the Association of South African Quantity Surveyors shall apply.			
3	2	73	<u>SUPPLEMENTARY PREAMBLES</u>	H4		
3	2	73	<u>Items, materials or methods</u>	H4		
3	2	73	Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. The use of trade names for items, materials or methods shall also mean - or other approved - on the condition that prior approval is obtained from the architect.			
3	2	73	<u>uPVC Pressure pipes and fittings</u>	H4		
3	2	73	Pipes for water supply shall be of the class stated  Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings  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			
3	2	73	<u>Copper pipes</u>	H4		
3	2	73	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			
3	2	73	<u>Lead pipes and traps</u>	H4		
3	2	73	All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel			

3	2	74		<u>Reducing fittings</u>	H4		
3	2	74		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			
3	2	74		<u>Steel sectional water tanks</u>	H4		
3	2	74		Tanks shall comply with SABS CKS 114			
3	2	74		<u>WORK GROUP 104</u>	H4		
3	2	74		<b><u>EARTHWORKS (PIPE TRENCHES)</u></b>	H2		
3	2	74		<b><u>Site clearance and removal of topsoil</u></b>	H3		
3	2	74	1	Clear vegetation and small trees/shrubs up 2m wide	m	710	
3	2	74		<b><u>Excavate in all materials for trenches, backfill, compact and dispose of surplus material for water pipes up to 90mm in diameter for depths:</u></b>	H2		
3	2	74	2	From 0m Up to 1.5m	m	710	
3	2	74		<b><u>Extra-over item (a) above for:</u></b>	H3		
3	2	74	3	Intermediate excavation	m3	128	
3	2	74	4	Hard rock excavation	m3	19	
3	2	74		<b><u>Extra over all excavations for carting away</u></b>	H3		
3	2	74	5	Surplus material from trench excavations to a dumping site to be located by the Contractor	m3	49	
3	2	74		<b><u>Excavation ancillaries</u></b>	H3		
3	2	74		<b><u>Make up deficiency in backfill material</u></b>	H3		
3	2	74	6	From other necessary excavations on site	m3	49	
3	2	74	7	By importation from designated borrow pits	m3		
3	2	74	8	Compaction in road reserves	m		
3	2	74		<u>WORK GROUP 148</u>	H4		
3	2	74		<b><u>MEDIUM PRESSURE PIPELINES</u></b>	H2		
3	2	74		<b><u>Supply, lay and bed pipes complete with couplings</u></b>	H3		
3	2	74	9	50mm diameter uPVC Class 9 pipes	m	0	
3	2	74	10	50mm diameter uPVC Class 12 pipes	m	0	
3	2	74	11	63mm diameter uPVC Class 9 pipes	m	0	
3	2	74	12	63mm diameter uPVC Class 12 pipes	m		
3	2	74	13	75mm diameter uPVC Class 9 pipes	m	0	
3	2	74	14	75mm diameter uPVC Class 12 pipes	m	180	
3	2	74	15	90mm diameter uPVC Class 12 pipes	m	530	
3	2	74	16	65mm Pressure Reducing Valve	No		
3	2	74	17	75mm Pressure Reducing Valve	No		

3	2	74		<b><u>BEDDING (PIPES)</u></b>	H2		
3	2	74		<b><u>Provision of Bedding from Trench Excavation</u></b>	H3		
3	2	74	18	Selected granular material	m3	256	
3	2	74	19	Selected fill material	m3	426	
3	2	74		<b><u>ELEVATED STEEL TANK PLUS STAND</u></b>	H2		
3	2	75		<b><u>The following in sectional steel water tanks and bases</u></b>	H3		
3	2	75	20	Blinding layer, class 15 Mpa/19mm concrete, 75mm thick for all level where reinforced	m2	27	
3	2	75	21	Concrete for footings class 25 Mpa / 19mm concrete plus anchor blocks, filling where ordered by the engineer	m3	5	
3	2	75	22	Supply, deliver to site and erect 100KL Prestressed steel tank complete with 6m stand,	No	1	
3	2	75	23	Supply and install 50 mm dia Water Meter	No	0	
3	2	75	24	Supply and install 63 mm dia Water Meter	No	0	
3	2	75	25	90 x 90 mm T piece section	No	25	
3	2	75	26	90mm diam. Gate valve	No	2	
3	2	75	27	75 mm diam. Gate valve	No	2	
3	2	75	28	Supply and install 75mm X 32mm dia Saddles	No	28	
3	2	75	29	32 mm diam. Gate valve	No	0	
3	2	75	30	Ref. 617 welded mesh in floor/walls/footing/ slab	m2	60	
3	2	75	31	Supply and install a 5mm (1000 x 1000) Vastrap plate cover and frame for the opening in the reservoir roof	m2	0	
3	2	75	32	Half brick wall including wire ties	m2	0	
3	2	75	33	Supply and install 75mm dia Resilient Seal Flanged Gate Valve (with rising spindle and handwheel, clockwise closing)	No	0	
3	2	75	34	1000mm long X 150mm diameter steel pipe, flanged both ends, 250mm flanged pipe with a 150 x 100 bellmouth, plain ended overflow pipe	No	0	
3	2	75	35	100mm flanged steel pipe with a 90 degree welded long radius bend	No	0	
3	2	75	36	1500 x 100mm flanged steel pipe with welded flanges both ends	No	0	
3	2	75	37	Sitting, Drilling and Equiping of new borehole	No	1	
3	2	75		<b><u>TESTING</u></b>	H2		
3	2	75	38	Testing of yield and water quality of existing borehole and supply and install water package plant as per specialist recommendation	No	1	
3	2	75	39	Testing water pipe system	Item	1	
3	2	75		<b><u>FIRE BOOSTER PUMP</u></b>	H3		
3	2	75	40	Supply and install Grundforce PM Pressure Pump (Q min 12 litres per second and 40m head) or similar with 90 mm inlet and outlet Complete with control panel, electrical connections, Brass Gate 50 mm valves (90 mm and 90mm), Brass Non Return valve (90 mm), Brass In-line Strainer (90 mm), fittings and pipings	No	1	
				WATER SUPPLY	ST		

3	3	77	<b>SECTION NO. 3</b>			
3	3	77	<b>BILL NO.3</b>			
3	3	77	<b>SEWER RETICULATION</b>			
3	3	77	<u>Preambles</u>	H4		
3	3	77	Model Preambles for Trades 2008 as published by the Association of South African Quantity Surveyors shall apply.			
3	3	77	<u>SUPPLEMENTARY PREAMBLES</u>	H4		
3	3	77	<u>Items, materials or methods</u>	H4		
3	3	77	Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. The use of trade names for items, materials or methods shall also mean - or other approved - on the condition that prior approval is obtained from the architect.			
3	3	77	<u>Vitrified clay pipes, etc</u>	H4		
3	3	77	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			
3	3	77	<u>uPVC Pipes and fittings</u>	H4		
3	3	77	Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings			
			Soil, waste and vent pipes and fittings shall be solvent weld jointed			
3	3	77	<u>Reducing fittings</u>	H4		
3	3	77	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			
3	3	77	<u>Septic Tanks</u>	H4		
3	3	77	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			
3	3	78	<u>Laying, backfilling, bedding, etc. of pipes</u>	H4		
3	3	78	Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturer's instructions			
			Where no manufacturer's 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			

3	3	78		<u>WORK GROUP 104</u>	H4		
3	3	78		<b><u>EARTHWORKS (PIPE TRENCHES)</u></b>	H2		
3	3	78		<b><u>Site clearance and removal of topsoil</u></b>	H3		
3	3	78	1	Clear vegetation and small trees/shrubs within 2m wide strip	m	530	
3	3	78		<b><u>EXCAVATION</u></b>	H2		
3	3	78		Excavate in all materials for trenches, backfill, compact and dispose of surplus material for sewers up to 160mm in diameter for depths:	H3		
3	3	78	2	Up to 1.5m	m3	557	
3	3	78	3	Over 1.5m up to 2.5m	m3	0	
3	3	78	4	Over 2.5m up to 3.5m	m3		
3	3	78		<b><u>Extra-over item (a) above for:</u></b>	H3		
3	3	78	5	Intermediate excavation	m3	371	
3	3	78	6	Hard rock excavation	m3	28	
3	3	78	7	Excavate and dispose of unsuitable material from trench bottom (provisional)	m3		
3	3	78		<b><u>Excavation ancillaries</u></b>	H3		
3	3	78		<b><u>Make up deficiency in backfill material</u></b>	H3		
3	3	78	8	From other necessary excavations on site	m3	399	
3	3	78	9	By importation from designated borrow pits	m3		
3	3	78		<u>WORK GROUP 146</u>	H4		
3	3	78		<b><u>SEWERS</u></b>	H2		
3	3	78		<b><u>Supply, lay, joint, bed and test 400KPa Maincore uPVC sewer pipes manufactured to SABS 1601</u></b>	H3		
3	3	78	10	110mm dia.	m	530	
3	3	78	11	160mm dia.	m	0	
3	3	79		<b><u>Extra -over uPVC pipe for specials</u></b>	H3		
3	3	79	12	110mm 90 degree plain bend	m	8	
3	3	79	13	110mm 45 degree plain bend	m	4	
3	3	79	14	110mm 45 degree plain junction	m	6	
3	3	79	15	160mm 90 degree plain bend	m	3	
3	3	79	16	160mm 45 degree plain bend	m	3	
3	3	79	17	160mm 45 degree plain junction	m	2	

3	3	79		<b><u>MANHOLES</u></b>	H2			
3	3	79		<b><u>Supply and construct pre-cast concrete manholes, complete with cover and frame and step irons as per drawings within the following depth ranges (depth measured from invert level to top of the manhole)</u></b>	H3			
3	3	79		<b><u>1000mm dia. Manholes</u></b>	H3			
3	3	79	18	up to 1.5m	No	8		
3	3	79	19	over 1.5m up to 2.0m	No	1		
3	3	79	20	over 2.0m up to 2.5m	No	1		
3	3	79	21	over 2.5m up to 3.0m	No	1		
3	3	79		<b><u>BEDDING AND BACKFILLING (PIPES)</u></b>	H2			
3	3	79		<b><u>Provision of Bedding from Trench Excavation</u></b>	H3			
3	3	79	22	Selected granular material	m3	191		
3	3	79	23	Selected fill material	m3	318		
3	3	79		<b><u>SEWER TREATMENT PLANT</u></b>	H2			
3	3	79		<b><u>Concrete</u></b>	H3			
3	3	79	24	Blinding layer, class 15 Mpa/19mm concrete, 75mm thick for all level where reinforced	m2			
3	3	79	25	Concrete for footings/floors/slabs/walls class 25 Mpa / 19mm concrete plus anchor blocks, filling where ordered by the engineer	m3			
3	3	79		<b><u>Mild steel reinforcement:</u></b>	H3			
3	3	79	26	Mild steel bars	kg			
3	3	79		<b><u>High-Tensile Welded mesh</u></b>	H3			
3	3	79	27	Ref. 617 welded mesh in floor/walls/footing/slab	m2			
3	3	79		<b><u>Brickwork of NFX bricks in 3:1 cement mortar:</u></b>	H3			
3	3	79	28	One brick wall including wire ties	m2			
3	3	79	29	Half brick wall including wire ties	m2			
3	3	79		<b><u>Septic Tank</u></b>	H3			
3	3	79	30	Construct septic tank with french drain as per specification	Item	2		
3	3	79		<b><u>Grease Trap</u></b>	H3			
3	3	79	30	Construct grease trap as per specification	Item	1		
3	3	79		<b><u>1-4 Cement plaster finished with a wooden trowel on brickwork:</u></b>	H3			
3	3	79	31	Internal wall plaster	m2			
3	3	79	32	Supply and install 1600mm x 1200mm Galvanized frame and cover for septic tank and grease trap	No	5		
3	3	79		<b><u>TESTING</u></b>	H2			
3	3	79	33	Testing drainage pipe system	Item	1		
				<b>SEWER RETICULATION</b>	ST			

3	4	81		<b>SECTION NO. 3</b>			
3	4	81		<b>BILL NO.4</b>			
3	4	81		<b>ROADS AND PARKING</b>			
3	4	81		<u>Preambles</u>	H4		
3	4	81		Model Preambles for Trades 2008 as published by the Association of South African Quantity Surveyors shall apply.			
3	4	81		<u>SUPPLEMENTARY PREAMBLES</u>	H4		
3	4	81		<u>Items, materials or methods</u>	H4		
3	4	81		Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. The use of trade names for items, materials or methods shall also mean - or other approved - on the condition that prior approval is obtained from the architect.			
3	4	81		<u>Excavations</u>	H4		
3	4	81		No claim for rock excavation will be entertained unless the contractor has timeously notified the Quantity Surveyor thereof prior to backfilling			
				"Soft rock" and "Hard rock" shall be as defined in the Model Preambles for Trades 2008			
3	4	81		<u>WORK GROUP 154</u>	H4		
3	4	81		<b><u>EARTHWORKS (ROADS, SUBGRADE)</u></b>	<b>H2</b>		
3	4	81		<b><u>Road-bed preparation and compaction of material to</u></b>	<b>H3</b>		
3	4	81	1	Minimum of 90% of modified AASHTO maximum density	m3	0	
3	4	81	2	Minimum of 93% of modified AASHTO maximum density	m3	0	
3	4	81		<b><u>Selected layer compacted to 93% of modified AASHTO maximum density</u></b>	<b>H3</b>		
3	4	81	3	150mm thick	m3	0	
3	4	81		<b><u>Extra -over items 8.3.4 and 8.3.5 for excavation and breaking down material in</u></b>	<b>H3</b>		
3	4	81	4	Intermediate excavation	m3	0	
3	4	81	5	Hard excavation	m3	0	
3	4	81		<b><u>Cut to spoil or stockpile from</u></b>	<b>H3</b>		
3	4	81	6	Soft excavation	m3	1 648	
3	4	81	7	Intermediate excavation	m3	4	
3	4	81	8	Hard excavation	m3	0	
3	4	81	9	Overhaul	m .km	1 652	

3	4	81		<b><u>SUBBASE</u></b>	H2		
3	4	81		<b><u>Construct the subbase course with material excavated in all materials or from borrow pit</u></b>	H3		
3	4	81	10	Subbase 150mm thick and compacted to 95% Mod AASHTO density	m3	1 536	
3	4	81	11	Base 150mm thick constructed with Graded crushed stone from commercial source and compacted to 88% of apparent relative density	m3	0	
3	4	82		<b><u>Process subbase material by the following processes, as relevant, and use in the subbase</u></b>	H3		
3	4	82	12	Stabilization	m3	1 536	
3	4	82		<b><u>Stabilizing agent</u></b>	H3		
3	4	82	13	Ordinary Portland cement	t	44	
3	4	82	14	Lime	t	1	
3	4	82	15	Overbudden	m3	0	
3	4	82		<b><u>BASE</u></b>	H2		
3	4	82		<b><u>Construct the base with gravel material from borrow pits</u></b>	H3		
3	4	82	16	Base 150mm thick and compacted to 97% Mod AASHTO density	m3	1 977	
3	4	82		<b><u>Process base material by the following processes, as relevant and use in base</u></b>	H3		
3	4	82	18	Stabilization	m3	1 977	
3	4	82		<b><u>Stabilizing agent</u></b>	H3		
3	4	82	19	Ordinary Portland cement	t	142	
3	4	82	20	Lime	m		
3	4	82		<b><u>SEGMENTED PAVING</u></b>	H2		
3	4	82		<b><u>Provision of edge Restraints</u></b>	H3		
3	4	82	21	Cast in-situ edging, 200 x 150mm thick Class 25/19 concrete on curves and on straights	m	450	
3	4	82		<b><u>Construction of paving complete</u></b>	H3		
3	4	82	22	Supply and lay 60mm thick segmented paving blocks with 20mm sand (Assembly and walkways)	m2	2 750	
3	4	82	23	Supply and lay 80mm thick segmented paving blocks with 20mm sand	m2	3 840	
3	4	82	24	Cutting units to fit edge restraints (straight, raking, or circular cutting)	m	0	
3	4	82	25	Allow for soil poisoning	m2	6 590	
3	4	82		<b><u>KERBING AND CHANNELING</u></b>	H2		
3	4	82	26	Precast concrete kerbs 280 x 180 x 140 semi-mountable Figure 7	m	650	
3	4	82	27	Precast concrete kerbs Figure 5	m	473	

3	4	82		<b>TESTING OF FILLING MATERIAL AND COMPACTION</b>	H2			
3	4	82		<u>GENERAL</u>	H4			
3	4	82		The following tests are to be carried out when and only if required by the Architect/Engineer				
3	4	82		The letters S M T M, as used in the following descriptions refer to the publication, Standard Methods of Testing Materials and Specification, of the Department of Transport				
3	4	82	28	Allow for testing of approved filling material in an approved laboratory according to S M T M method No A7, to establish the 100% modified AASHTO density thereof	Item	1		
3	4	82	29	Allow for testing of density of compacted filling under roads, etc. by means of the Sand Replacement Method according to S M T M method No A10(a)	Item	1		
				<b>BREAKING UP EXISTING PAVEMENT LAYERS</b>				
3	4	83		Excavating and removing existing bituminous material				
3	4	83		(a) Material intended for recycling with the average depth of excavation				
3	4	83	30					
3	4	83		(ii) Exceeding 30mm but not exceeding 60mm	m2	0		
3	4	83	31	Excavating and spoiling material from an existing pavement and /or the underlying fill:				
3	4	83		(b) Cemented material	m <sup>3</sup>	0		
3	4	83	32	Excavating material from an existing pavement and /or underlying fill in restricted areas				
3	4	83		(a) Extra over item 38.01 for bituminous material excavated separately	m2	Rate Only		
3	4	83		(b) Extra over item 38.04 for other existing pavement				
3	4	83	33	(ii) Cemented material	m <sup>3</sup>	Rate Only		
3	4	83		Sawing or cutting asphalt or cemented pavement layers				
3	4	83	34	(a) Sawing asphalt	m2	0		
3	4	83	35	Backfilling of excavations for patching with				
3	4	83		(a) Chemically stabilized base for a patch with a surface area				
3	4	83	36	(i) Not exceeding 5m2	m <sup>3</sup>	0		
				(ii) Exceeding 5m2 but not 100m2	m <sup>3</sup>	0		
3	5	85		Compacting the floor of excavations for patching	m2	0		
3	5	85		<b>STABILIZATION</b>				
3	5	85		Chemical stabilization extra over unstabilized compacted layers:				
3	5	85		(a) Base layer, 150mm thick	m <sup>3</sup>	0		
				Chemical stabilizing agent:				
3	5	85		(a) Ordinary portland cement	t	0		
				(b) Slaked road lime	t	Rate Only		
3	5	85		Provision and application of water for curing	kl	0		
3	5	85						

				<b>PRIME COAT</b>				
				Prime coat:				
3	5	85		(a) MC-30 cut back bitumen	litre	0		
3	5	85		(b) MSP1	litre	Rate Only		
				Aggregate for blinding	m <sup>2</sup>	Rate Only		
3	5	85		Extra over item 41.01 for applying the prime coat in areas accessible only to hand held equipment	litre	0		
				<b>ASPHALT PAVEMENTS AND SEALS</b>				
3	5	85		Asphalt surfacing ( 60/70 penetration grade bitumen)				
				(a) Medium continuously graded asphalt				
				(i)Thickness -30mm	m <sup>2</sup>	0		
3	5	85		Rolled in chippings (9.5mm)				
3	5	85		(a) in surfacing	t	Rate Only		
3	5	85		Tack coat of 30% stable grade emulsion	litre	0		
3	5	85	1	<b>ROADS AND PARKING</b>	ST			
3	4	81		<b>SECTION NO. 3</b>				
3	4	81		<b>BILL NO.5</b>				
3	4	81		<b>STORMWATER DRAINAGE</b>				
				<u>Preambles</u>	H4			
3	5	85		Model Preambles for Trades 2008 as published by the Association of South African Quantity Surveyors shall apply.				
3	5	85	2					
3	5	85	3	<u>SUPPLEMENTARY PREAMBLES</u>	H4			
				<u>Items, materials or methods</u>	H4			
3	5	85		Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. The use of trade names for items, materials or methods shall also mean - or other approved - on the condition that prior approval is obtained from the architect.				
3	5	85	4					
3	5	85	5	<u>Concrete pipes</u>	H4			
3	5	85		Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings				
3	5	85						
3	5	85	6	<u>Wire gratings</u>	H4			
3	5	85		Descriptions of gutter outlets, etc shall be deemed to include wire balloon gratings				
3	5	85	7					
				<u>Exposed concrete surfaces</u>	H4			
3	5	85		Exposed surfaces of concrete stormwater channels, cover slabs, inspection eve marker slabs, gully tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster				
3	5	85	8					

3	5	85	9	<u>WORK GROUP 104</u>	H4		
3	5	86	10	<b><u>EARTHWORKS (OPEN CHANNEL)</u></b>	<b>H2</b>		
				<b><u>EXCAVATION</u></b>	<b>H3</b>		
3	5	86		Excavate in all materials for trenches, backfill, compact and dispose of surplus material for stormwater channel	m3	208	
3	5	86	11	<b><u>Extra-over item (a) above for:</u></b>	<b>H3</b>		
3	5	86	12	Intermediate excavation	m3	94	
3	5	86		Hard rock excavation	m3	40	
				<b><u>BEDDING AND BACKFILLING</u></b>	<b>H2</b>		
3	5	86	13	<b><u>Provision of Bedding from Trench Excavation</u></b>	<b>H3</b>		
3	5	86	14	Selected granular material for bedding	m3		
3	5	86	15	Selected fill material and backfilling	m3		
3	5	86		<u>WORK GROUP 146</u>	H4		
3	5	86		<u>CONCRETE AND REINFORCEMENT</u>	H4		
				Blinding layer, class 15 Mpa/19mm concrete, 75mm thick for all level where reinforced	m2	8	
				Concrete for footings/floors/slabs/walls class 25 Mpa / 19mm concrete plus anchor blocks, filling where ordered by the engineer	m3	15	
3	5	86	16				
				<b><u>High-Tensile Welded mesh</u></b>	<b>H3</b>		
3	5	86	17	Ref. 245 welded mesh in floor slab	m2	152	
				Ref. 617 welded mesh in floor slab	m2		
3	5	86		Mild steel bars	kg		
3	5	86	18	<u>CONCRETE PIPES</u>	H4		
				<b><u>Supply, lay and bed pipes complete with couplings</u></b>	<b>H3</b>		
				450mm Diameter C50	m	60	
				600mm Diameter C50	m	20	
3	5	86		<b><u>Supply and lay RS40 Grating Unbanded and Banded Rectagrid or similar approved Grid for Storm water drainage</u></b>	<b>H3</b>		
3	5	86	19	2 400 x 1 200 x 50 x 4.5mm RS40 Grating Unbanded Bitumen	No	2	
				1 000 x 500 x 50 x 4.5mm RS40 Grating Banded Bitumen	No	1	
				Supply and install 60 x 60 x 6mm Angle Iron cast into concrete	m	6	

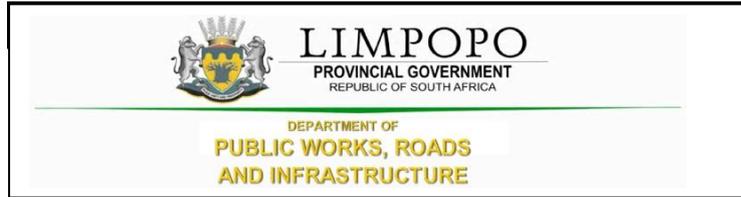
3	6	88					
3	6	88		<b><u>SURFACE V-CHANNELS</u></b>	H2		
3	6	88		<b><u>In-situ 20 MPa/19mm Concrete open stormwater channels finished on all exposed surfaces with woodfloat finish and with angles rounded, cast in approximately 2m lengths with construction joints and expansion joints formed with Flexcell joint filler and sealed with bitumastic joint sealant at 6m intervals, including all formwork, moulds, shallow excavations and filling and laying to falls</u></b>	H3		
3	6	88		V-shaped channel 1200mm wide, 105mm (average) thick and 50 mm deep (concrete = 0,10 m <sup>3</sup> /m) next to existing wall and including the forming of an expansion joint with the existing wall formed with Flexcell joint filler and sealed with bitumastic joint sealant	m	230	
3	6	88		Extra over 900 x 50mm deep stormwater channel for bends, junctions, ends, etc	No		
3	6	88		<b><u>Stormwater outlet spreader, culvert headwall, etc.</u></b>	H3		
3	6	88		Concrete 20MPa/19mm in spreader outlet 2,0m long and x 2,0m wide at open end with 100 x 50mm projecting kerbs along both sides and bricks cast in at 300mm centres and 150mm apart to project 50mm above 75mm concrete surface bed, including all necessary shallow excavations, formwork and finishing with a wood float	No	1	
3	6	88	1				
3	6	88		<b><u>STONE PITCHING</u></b>	H2		
3	6	88		<b><u>Stone pitched of approximately 150mm diameter river stones tightly packed including preparation of ground surface under, top soil filling and planted with grass</u></b>	H3		
3	6	88		150mm Thick lining to open ends of outfall spreaders, ditches, etc.	m2	256	
3	6	88		<b>STORMWATER DRAINAGE</b>	ST		
3	6	88	2	<b>SECTION NO. 3 BILL NO.6 FENCING AND LANDSCAPING</b>			
3	6	89		<u>Preambles</u>	H4		
3	6	89		Model Preambles for Trades 2008 as published by the Association of South African Quantity Surveyors shall apply.			
3	6	89	3				
3	6	89		<b><u>SUPPLEMENTARY PREAMBLES</u></b>	H4		
3	6	89	4	<u>Items, materials or methods</u>	H4		
3	6	89	5	Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. The use of trade names for items, materials or methods shall also mean - or other approved - on the condition that prior approval is obtained from the architect.			
3	6	89					

3	6	89	6	WORK GROUP 124	H4			
3	7	92	1	<b><u>GALVANIZED STEEL PALISADE FENCING</u></b>	H2			
3	7	92	2	<b><u>Palisade fencing, consisting of 75 x 75 x 4mm posts with</u></b>	H3			
3	7	92	3	<b><u>230 x 230mm foot plate welded on, 50 x 50 x 5mm angle</u></b>				
3	7	92	4	<b><u>section top and bottom rail, filled in with 40 x 40 x 4mm</u></b>				
3	7	92	5	<b><u>spear pales at 125mm centres. Posts to be spaced at 3.0m</u></b>				
3	7	92	6	<b><u>and cast in 600 x 600 x 800mm class C concrete bases on</u></b>				
3	7	92	7	<b><u>600 x 600 x 150mm selected fill and with 200 x 200mm</u></b>				
3	7	92	8	<b><u>Class C concrete ground beam along full length of fence</u></b>				
				Supply and install 2400mm high fencing	m			
				Supply and install 2100mm high fencing	m			
				Supply and install 1800mm high fencing	m	675		
				<b><u>Gates formed of 50 x 75mm rectangular hollow section</u></b>	H3			
				<b><u>frame with two horizontal braces and filled in with 10mm</u></b>				
				<b><u>diameter solid vertical bars at 92mm centres complete with</u></b>				
				<b><u>two 254 x 40 x 5mm hook and band hinges with flange built</u></b>				
				<b><u>into wall, barrel bolt to receive padlock, and vertical</u></b>				
				<b><u>extension 600mm long with 6 tying holes for and including</u></b>				
				<b><u>barbed wire, all as detailed on drawing 107 attached as</u></b>				
				<b><u>annexure.</u></b>				
				Double pedestrian gate 1780mm wide x 2400mm high with 254	No	1		
				x 40 x 5mm hook and band hinges with flange built into walls,				
				barrel bolt, and 600mm vertical extensions for razor wire coil				
				(Gate type G6)				
				Double gate 2890mm wide x 1915mm high with 254 x 40 x	No			
				5mm hook and band hinges with flange built into walls and				
				barrel bolt (Gate type G7)				
				Sliding gate 6000m wide x 2454mm high complete with rollers	No	1		
				and v-track including 600mm extension on top for razor wire				
				coil (Gate type G8)				
				FENCING AND LANDSCAPING	ST			

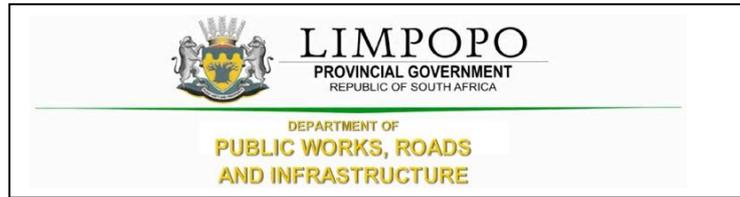
			<b>SUMMARY</b>				
			Bulk Earthworks	Page	-72-		
			Water Supply	Page	-76-		
			Sewer Reticulation	Page	-80-		
			Roads and Parking	Page	-84-		
			Stormwater Drainage	Page	-87-		
			Fencing and Landscaping	Page	-91-		
			<b>TOTAL</b>	ST			<b>R 0.00</b>

Section No	<b><u>FINAL SUMMARY</u></b>	Page No		Amount
1	PRELIMINARIES & GENERAL	1/30		
2	4 CLASSROOM BLOCK X 6	2/38		
3	10 SEATS ENVIROLOO TOILET BLOCK X 2 AND 4 SEATS ENVIROO-LOO TOILET BLOCK X 4 (36 ENVIRO-LOO SEATS)	3/39		
4	MEDIUM ADMINISTRATION BLOCK	4/41		
5	4 SEATS WATERBORNE TOILET BLOCK X 2	5/39		
6	EXTERNAL WORKS	6/4		
7	PROVISIONAL SUMS	7/9		
	Sub- Total (PART A - MAIN BUILDING WORKS)		R	
	<b><u>PART B - ELECTRICAL AND MECHANICAL WORK</u></b>			
	TENDER AMOUNT CARRIED OVER FROM PART B (ELECTRICAL AND MECHANICAL WORK)	Item		
	<b><u>PART C - CIVIL WORK</u></b>			
	TENDER AMOUNT CARRIED OVER FROM PART C (CIVIL WORK)	Item		
	Sub- Total - BUILDING COSTS		R	
	<b><u>CONTINGENCY ALLOWANCE TO THE CONTRACT</u></b>			
	<u>Contingencies:</u>			
	Allow an amount of R1 900 000.00 ( One Million Nine Hundred Thousand ) for contingency allowance to the contract ,to be used at the discretion of the Employer and deducted in whole or in part if not required.	Item		
	<b>Carried Forward</b>		R	

Section No	<u><b>FINAL SUMMARY</b></u>	Page No		Amount
	<b>Brought Forward</b>		R	
	<b><u>PRICE ADJUSTMENT FOR INFLATION TO THE CONTRACT</u></b>			
	<u>Inflation:</u>			
	Allow an amount of R1 900 000.00 ( One Million Nine Hundred Thousand ) for price adjustment for inflation.	Item		
	Sub- Total Excluding VAT		R	
	ADD VAT @ 15%.		R	
	<b>Carried to Form of Tender</b>		R	



## PART C5: SCOPE OF WORKS



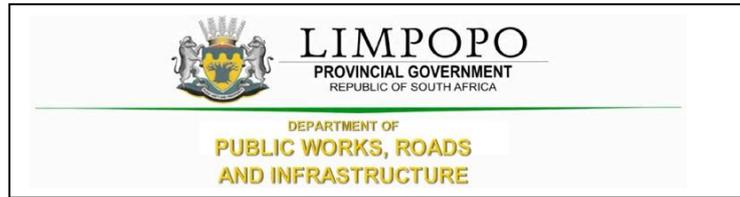
## C5.1 SCOPE OF WORKS

### Overview of the works

The project comprises the construction of the following:

Construction of medium administration block, 24 classrooms, 8 sear waterborne and 36 envirolloo toilets including related external works in accordance with the drawings and specifications that will be provided to the contractor.

The Contractor shall provide sufficient qualified technical staff, field staff, and safety personnel to ensure the Works under this contract be satisfactorily carried out safely and meeting the performance targets and programs. The Contractor shall also provide competent attendant(s) to monitor any works in relation to the scope of works.



## PART C6: EPWP INFRASTRUCTURE GUIDELINE 2015

### PART C6.1: DATA COLLECTION TOOL



**DATA COLLECTION TOOL**

*NOTE: The field with the asterick indicates the mandatory.\*\*\**

**Column A**

**Column B**

**Project Details**

Project Name \*\*\*  
Project Reference Number \*\*\*  
Project description \*\*\*  
Project Start Date \*\*\*  
Project End Date \*\*\*  
Estimated Budget \*\*\*

**Project Location**

Province \*\*\*  
District/Metro Municipality \*\*\*  
Local Municipality/Metro Region \*\*\*  
Latitude (in decimal format)  
Longitude (in decimal format)

**Public Body Details**

Public body sphere \*\*\*  
Reporting public body that is the project owner (and will report on the project) \*\*\*  
Implementing public body type \*\*\*  
Public body that will implement the project  
MIG/IDP reference number allocated to the project

**EPWP Details**

EPWP Sector\*\*\*  
EPWP Program \*\*\*  
EPWP Sub programme \*\*\*

Infrastructure

**Budget Amount**

Financial year \*\*\*  
Total Budget Amount \*\*\*  
Wages \*\*\*  
UIF \*\*\*  
COIDA \*\*\*  
Training  
Administration  
Equipment and materials  
Other  
Describe if other

1

**Outputs and Training**

Output \*\*\*  
Description \*\*\*  
Target Quantity \*\*\*  
Number of persons to be trained

**Contact person**

Title\*\*\*  
Initials\*\*\*  
First Name\*\*\*  
Surname\*\*\*  
Email  
Tel (Office)\*\*\*  
Fax Number  
Cell Number\*\*\*  
Physical Address \*\*\*  
Postal Address  
Postal code



Project Location	
Column A	Column B
Locality Name ***	
Municipality***	
Ward ***	
Subplace***	
Government Facility***	
Project Location ***	

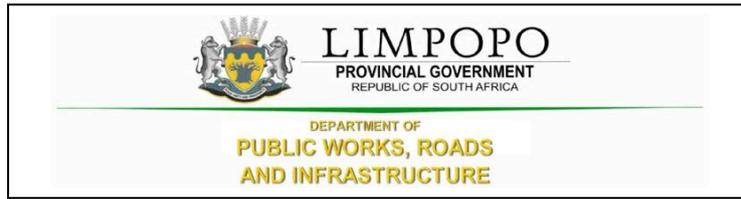




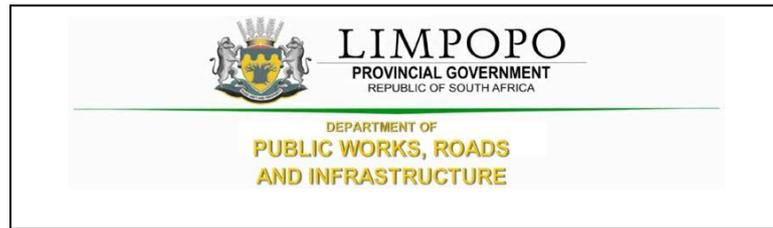
Monthly Progress Report	
Wages ***	
UIF ***	
COIDA ***	
Training	
Administration	
Equipment and materials	
Other	
Describe if other	
Outputs	
Achieved Value ***	
Achieved Percentage ***	

<b>EPWP Employment Information</b>	
<b>Name of Project</b>	
First Name	
Initials	
Surname	
ID Number	
Nationality	
Name of Employer	
Name of Project	
Signature of Employer	
<b>Attachment</b>	
Copy of ID	

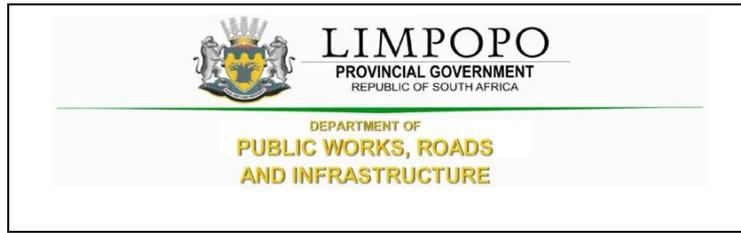
Payment Details ***															
Employer			LDPWR&I												
Project Name			Schoemansdal Museum												
Contract Number															
Reporting Month															
Attach proof of payment or register where employees acknowledged receipt of															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
***	***	***	Idnumber ***	DateOfBirth ***	WageRate ***	No. of Days Worked	AmountPaid ***	WorkDays ***	Training Days Paid	Training Days NonPaid	Total Training Days	Training Course Id	Month ***	Year ***	Signature of Payment Received
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															



**PART C7: SITE INFORMATION AND DRAWINGS**



## PART C7.1: SITE INFORMATION



PART C7.2: DRAWINGS

## **ARCHITECTURAL DRAWINGS**





**FINISHES LEGEND**

**FLOORS:**

**F1- FULLY FLEXIBLE TILES (CORROSION RESISTANT & ANTI-SLIPPER)**  
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 S81:1992 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Fittings to include, ribbed angle files where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Ships Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

**F2- PORCELAIN TILES - MATT**  
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 manufacturers 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 Ships 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, 100% FRY 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 DN 54324 on wire test and 50 body fat at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.

**F4- CEMENT SAND SCREED**  
30mm thick portland 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- GRANULITHIC FINISH**  
22mm thick unsealed 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 10m<sup>2</sup>, 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 60mm thick concrete interlocking paves, 25mpa, 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-SLIPPER)**  
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-Levelled Smooth Screed glued with conductive adhesive to SABS D70 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 PSE 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 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 22mm thick screeds in strict compliance to manufacturers instructions and SABS specification, with cove base and straight tops. 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**  
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**  
F88 face brick in common running bond 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 1586 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade I, in accordance to manufacturer's instructions.

**F3- ALKYD (ENAMEL) PAINT**  
2 no. coats matt (egg shell) finish alkylid (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 681 grade I, 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 1430 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 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- 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
"GypCell Classic" gypsum plasterboard ceilings EQUAL & APPROVED consisting of 1 layer Gyproc Rhinoboard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Ecospecifier listing) fixed to timber bracing installed at maximum 300mm centers using Gyproc Rhinoboard Strap Paint Grabber Screws 32mm of minimum 150mm centers. Apply Gyproc Rhinotape to all joints and skim the ceiling using Gyproc Rhinotile.

**C2- FIBRE CEMENT BOARDS (IS-JOINTS)**  
6mm thick GypCell Prestige 7 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 10171-5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centers using Gyproc Rhinoboard Strap Paint Grabber Screws 32mm of minimum 150mm centers 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 Rhinotile.

**C3- PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED**  
1200mm x 600mm x 15mm Gyproc Celotex 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 fixings at 300mm centers. Donn T38 FR Main Tees (0.4mm 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 tile notch. All tile notches to be in line. Suspends 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 Sabs 3no. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soff.

**ROOF COVERING AND INSULATION:**

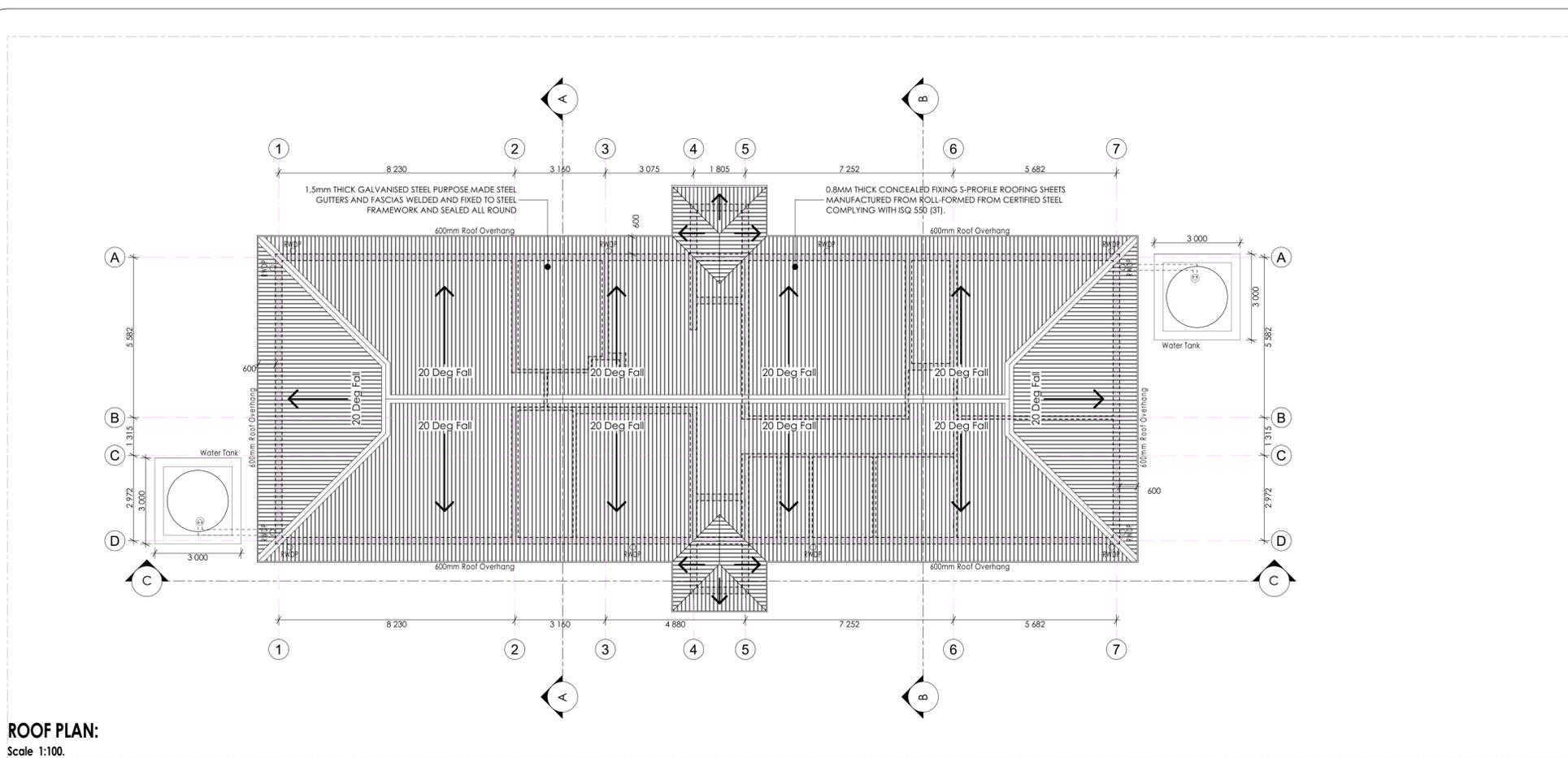
**R1- ENBOSSSED ROOFING SHEET (TWO SIDES)**  
Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISQ 550 (S1). The profile shall have three trapezoidal ribs at 283mm centers giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at 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 covers in strict compliance to manufacturer's instructions.

**Insulation:** SHALL EITHER BE 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 50mm "Tactoboard" manufactured from non-combustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>2</sup> and finished with white metalized foil.

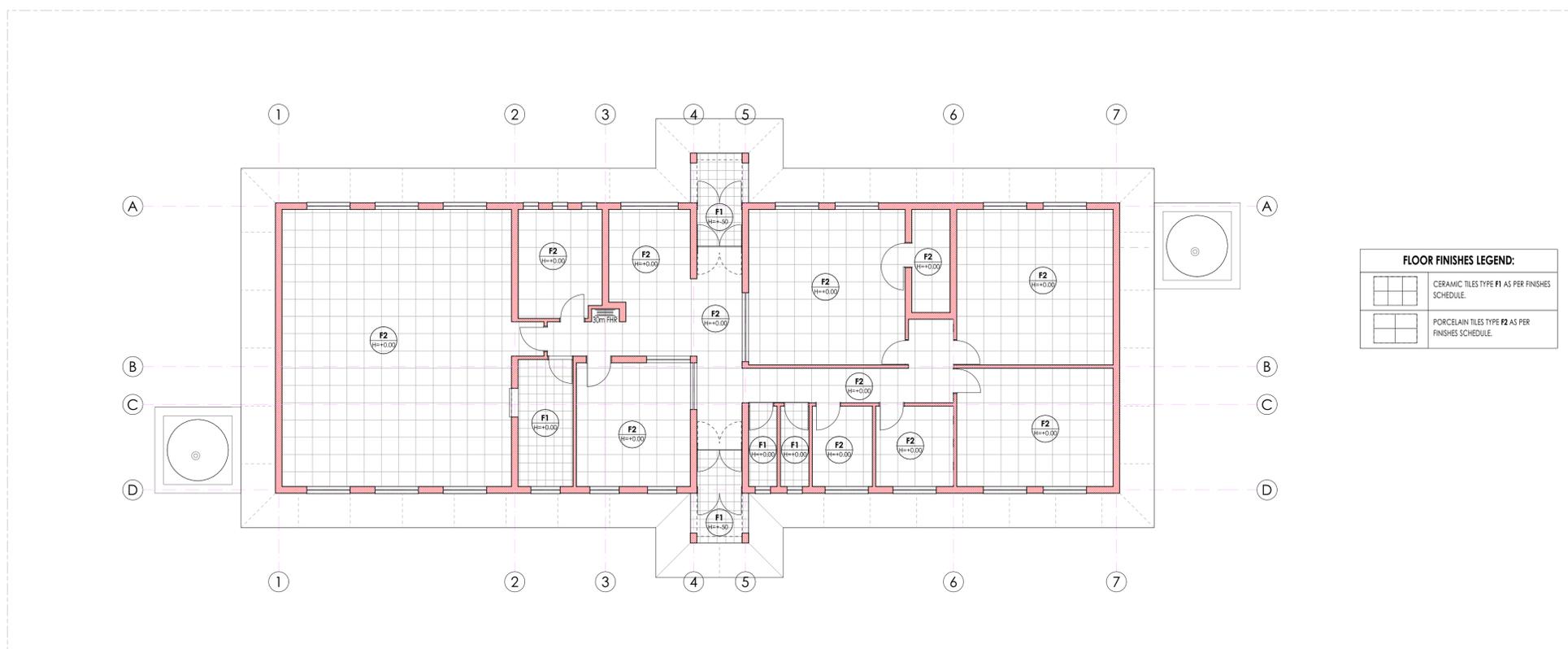
**Galvanised Steel (GI) Gutter:** 150mm wide x 100mm Deep x 0.6mm Eaves Gutter of Commercial Grade Steel With Class Z275 Galvanising To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Fascia Board Together with standard accessories discharging into Rainwater Downpipes.

**Downpipe:** 110 x 110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class Z275 Galvanising 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.

**Fascia board:** 750 x 10 mm Fibre-Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



**ROOF PLAN:**  
Scale 1:100.



**FLOOR FINISHES PLAN:**  
Scale 1:100.

**FLOOR FINISHES LEGEND:**

	CERAMIC TILES TYPE F1 AS PER FINISHES SCHEDULE.
	PORCELAIN TILES TYPE F2 AS PER FINISHES SCHEDULE.

**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	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		

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  
**ST. PAUL SECONDARY SCHOOL-924 650 740**

**RESTORATIVES, REPAIRS & ADDITIONS**  
CONTRACT - SECTION  
**DOCUMENTATION & PROCUREMENT**

DISCIPLINE: **ARCHITECTURAL** 4  
WORK DESCRIPTION - SUB DIVISION: **MEDIUM ADMINISTRATION BLOCK**  
DRAWING DESCRIPTION: **ROOF & FLOOR FINISHESAYOUT**

DRG No. <b>101-02</b>	RESPONSIBLE PROFESSIONAL	02/10	ITEM No.
DESIGN <b>NA</b>	NAME <b>T. MANYADZA</b>	SIGN <b>ES</b>	DRAWN <b>NA</b>
SCALE <b>A5 - SHOWN</b>			CHECK <b>NA</b>
DATE <b>NOV 2019</b>			PR. NUMBER <b>PrArch 43981757</b>

DRAWING CO-ORDINATED

**CONSULTANT**  
**TECTURA - INTERNATIONAL!**

<p>GAUTENG BROADBENT HOUSE 1000 BROADBENT ROAD CLAREMONT 2191 TOLL FREE 0800 000 000 TEL: +27 (0)11 234 234 FAX: +27 (0)11 234 234 WWW.TECTURA.COM</p>	<p>NORTHWEST MIDLANDS DEVELOPMENT 100 MIDLANDS DEVELOPMENT STREET MIDLANDS DEVELOPMENT TEL: +27 (0)18 234 234 FAX: +27 (0)18 234 234 WWW.TECTURA.COM</p>	<p>NORTHERN CAPE 100 NORTHERN CAPE ROAD NORTHERN CAPE TEL: +27 (0)27 234 234 FAX: +27 (0)27 234 234 WWW.TECTURA.COM</p>
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ALSO IN NAIROBI, KENYA AND GABORONE, BOTSWANA

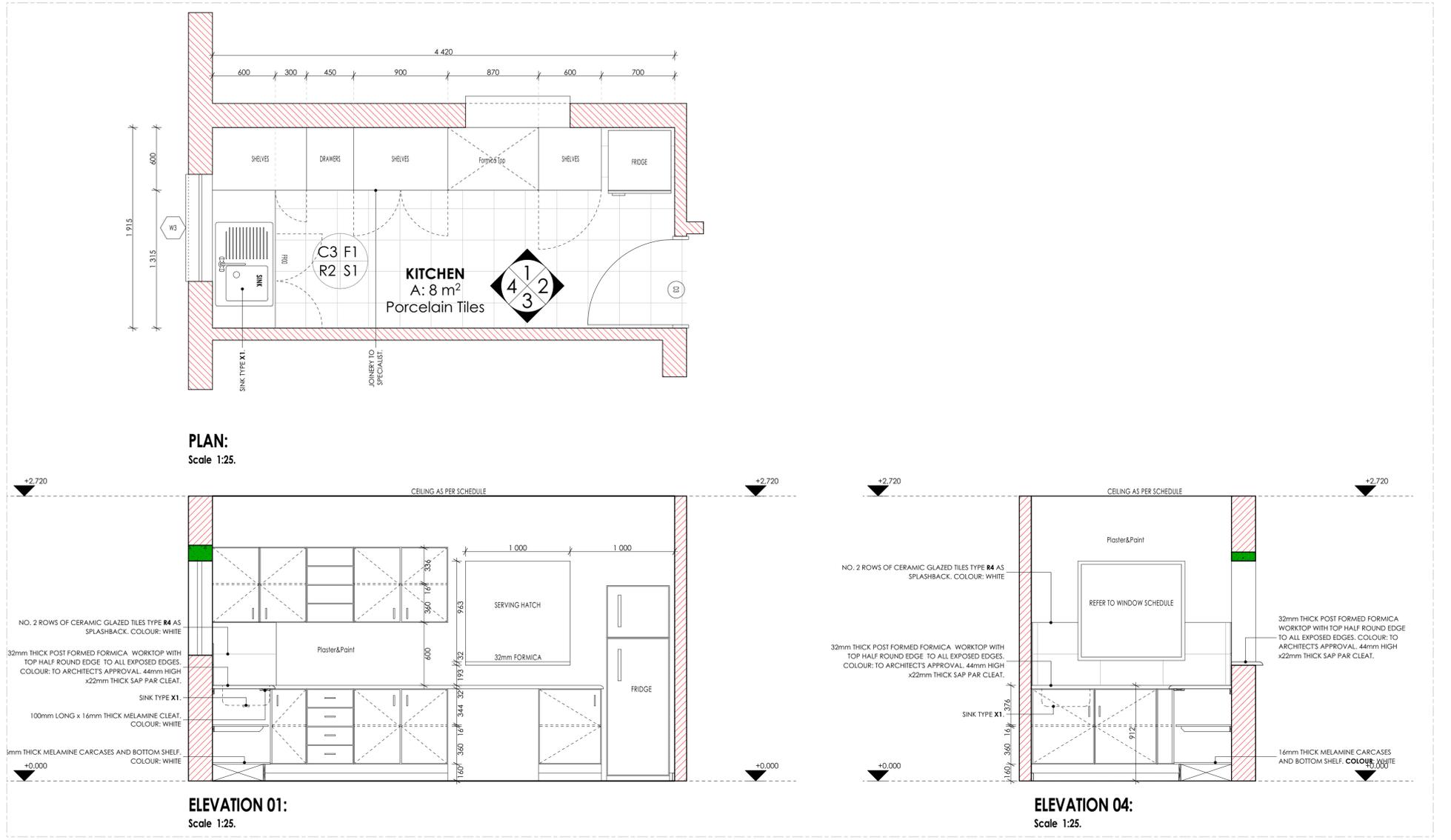
**CONTRACTOR**

CAD SYSTEM	AUTOCAD	FILE NAME	
SIZE	PROJECT NUMBER	REV	
A1	LDPW - PROF/16002/E18	0	



**FINISHES LEGEND**

- FLOORS:**  
**F1- FULLY FLEXIBLE TILES (CORROSION RESISTANT & ANTI-SLIPPER)**  
 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 S81: 1992 (or later revision), and laid to SABS 070 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Fittings 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 - MATT**  
 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 a 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- CARPET TILES**  
 500mm x 500mm, 100% PEV 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 DN S4324 on wire test and SD body test at less than 2kV at 25Hz RH on static electricity. Colour and pattern to architects approval.
- F4- CEMENT SAND SCREED**  
 30mm thick portland 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 10m<sup>2</sup>, 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 80 mm thick concrete interlocking pavers, 25 ppa, 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-SLIPPER)**  
 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 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 PSE 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 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 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with cove base and straight tops. Complete with corner and top trims. Fittings to include, ribbed angle files where there is a 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 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:**  
**R1- FACE BRICK**  
 F88 brick face 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 881 grade I, in accordance to manufacturer's instructions.
- R3- ALKYD (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 alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 881 grade I, 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 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 881 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.
- 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- 9mm 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, Ecospecifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc Rhinoboard Snap Fast Grabber Screws 32mm at maximum 150mm centres. Apply Gyproc Rhinotape to all joints and skim the ceiling using Gyproc Rhinotile.
- C2- FIBRE CEMENT BOARDS (IN JOINTS)**  
 6mm thick Gyproc Fastfix 7 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 10171:5) fixed to Ek 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc Rhinoboard Snap Fast 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 Rhinotile.
- 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 fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, 2150 galvan, 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 tee notch. All fire notches to be in line. Suspends 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 Sabs 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hem-hydrate gypsum plaster on concrete slab soff.
- ROOF COVERING AND INSULATION:**  
**R01- EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 355 (3). The profile shall have three trapezoidal ribs at 203mm centres giving a net cover of 456mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm 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 'Chromadek Colour' and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instructions.
- Insulation:** SHALL EITHER BE: 1) 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 'Fibrocylboard' manufactured from non-combustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>3</sup> and finished with white melafoliate foil.
- Galvanized Steel (GGI) 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 Fascia Board Together with standard accessories discharging into Rainwater Downpipes.
- Downpipe:** 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 or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation Instructions.
- Fascia board:** 750 x 10 mm Fibre-Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



**ISSUED FOR TENDER**

**LEGEND**

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- ITEMS IN RED AND (OR) DASHED LINES ARE TO BE REPAIRED AND (OR) REPLACED

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**FINISHES LEGEND**

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

**SIGNATURE TABLE**

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

**REVISIONS**

REV. NO.	DATE	DESCRIPTION
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**LIMPOPO PROVINCIAL GOVERNMENT**  
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 INSTITUTION  
**ST. PAUL SECONDARY SCHOOL-924 650 740**

**RESTORATIVES, REPAIRS & ADDITIONS**  
 CONTRACT - SECTION  
**DOCUMENTATION & PROCUREMENT**  
 DISCIPLINE ARCHITECTURAL 4  
 WORK DESCRIPTION - SUB DIVISION  
**MEDIUM ADMINISTRATION BLOCK**  
 DRAWING DESCRIPTION  
**ELEVATIONS & KITCHEN JOINERY DETAILS**

DRG. No.	101-04	04/10	ITEM No.
DESIGN	NA	KSN	DRAWN
SCALE	AS SHOWN	ES	CHECK

DATE	RESPONSIBLE NAME	PROFESSIONAL SIGN	PR. NUMBER
NOV 2019	T. MANYADZA		PrArch 43981757

**DRAWING CO-ORDINATED**

**CONSULTANT**  
**TECTURA - INTERNATIONAL!**

**CONTRACTOR**

CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REV
A1	LDPW - PROF/16002/E18	0

# DOOR SCHEDULE:

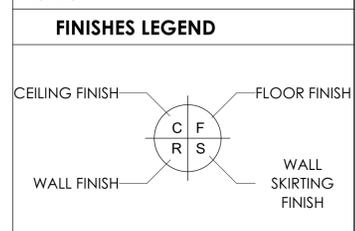
TYPE D1		No. of Doors: 01		TYPE D2		No. of Doors: 08					
<p><b>EXTERIOR DOOR</b></p> <p><b>DOOR DESCRIPTION:</b> 1511mm x 2032mm x 44mm thick heavy duty exterior quality horizontally slatted double sided stable saligna door fitted to comply with SABS 545 exterior grade.</p> <p><b>FRAME:</b> Standard 1.2mm in galvanised mild steel door frame with profile matching wall, to comply with SABS 1129, complete with lugs and fixtures, to accommodate 1613 x 2032 door leaf.</p> <p><b>FRAME FINISH:</b> Washable enamel paint finish complying with SABS 723 for primer, SABS681 for undercoat and SABS 630 type 2 for finish coat. Colour to architect's approval</p> <p><b>DOOR FINISH:</b> Apply three clear eggshell varnish for interior wood to comply with SABS 887 type 1., thin down the first coat with mineral turpentine according to manufacturer's instructions, allowing each coat to dry overnight. Apply approved wood preservative to exposed exterior wood to saturate the surface. With each coat soaking in before the applying further coats, apply to end grain until no further soaking in takes place.</p> <p><b>IRONMONGERY:</b> Approved Lockset as per supplier Door stop - polished brass floor mounted. Approved Aluminium engraving sign plate for appropriate rooms</p> <p><b>HINGES:</b> 6 no. stainless steel medium duty butt hinges.</p>		<p><b>BURGLAR DOOR (DOUBLE)</b></p> <p><b>DOOR DESCRIPTION:</b> Painted galvanised mild steel gate consisting of 10x10mm mild steel bars placed at 100mm centres at a 90° angle, including security mesh, colour to architect's specification, to comply with SABS 681, grade 1, and finish with two (2) coats alkylde egg-shell paint to comply with SABS 630.</p> <p><b>FRAME:</b> 50x50mm galvanised mild steel square tube welded to form frame.</p> <p><b>FRAME FINISH:</b> 1 X coat Zinc Chromate primer 2 x coats gloss enamel (exterior quality)</p> <p><b>DOOR FINISH:</b> Painted mild steel gate consisting of 10x10mm mild steel bars placed at 100mm centres at a 90° angle, including security mesh, to comply with SABS 681, grade 1, and finish with two (2) coats alkylde egg-shell paint to comply with SABS 630. Colour to architect's specification</p> <p><b>IRONMONGERY:</b> Approved Lockset as per supplier</p> <p><b>HINGES:</b> 6 no. stainless steel heavy duty butt hinges.</p>		<p><b>INTERIOR DOOR</b></p> <p><b>DOOR DESCRIPTION:</b> 813mm x 2032mm x 44mm thick interior grade flush hollow core single timber door with 3mm thick ply on both sides with 2 consolidated edges fitted to comply with SABS 545 in pressed steel frame. All painted in accordance with Architect's colour schedule.</p> <p><b>FRAME:</b> Standard 1.6mm galvanised mild steel double rebate pressed metal frame complying to SABS 1129 complete with lugs and fixtures. Frame profiles to suit wall thickness (115mm, 230mm and 345mm) as per floor plans</p> <p><b>FRAME FINISH:</b> Washable enamel paint finish complying with SABS 723 for primer, SABS681 for undercoat and SABS 630 type 2 for finish coat. Colour to architect's approval</p> <p><b>DOOR FINISH:</b> Prime with wood primer to comply with SABS, type 2. Paint one (1) Universal under coat to comply with SABS 681, grade 1, and finish with two (2) coats alkylde egg-shell paint to comply with SABS 630, type 1. Colour to architect's approval</p> <p><b>IRONMONGERY:</b> Approved Lockset as per supplier Door stop - polished brass floor mounted. Approved Aluminium engraving sign plate for appropriate rooms</p> <p><b>HINGES:</b> 3 no. stainless steel medium duty butt hinges.</p>		<p><b>INTERIOR DOOR</b></p> <p><b>DOOR DESCRIPTION:</b> 813mm x 2032mm x 44mm thick interior grade flush hollow core single timber door with 3mm thick ply on both sides with 2 consolidated edges fitted to comply with SABS 545 in pressed steel frame. All painted in accordance with Architect's colour schedule.</p> <p><b>FRAME:</b> Standard 1.6mm galvanised mild steel double rebate galvanised metal frame complying to SABS 1129 complete with lugs and fixtures. Frame profiles to suit wall thickness (115mm, 230mm and 345mm) as per floor plans. Provide 4mm clear glass at the Fanlight.</p> <p><b>FRAME FINISH:</b> Washable enamel paint finish complying with SABS 723 for primer, SABS681 for undercoat and SABS 630 type 2 for finish coat. Colour to architect's approval</p> <p><b>DOOR FINISH:</b> Prime with wood primer to comply with SABS, type 2. Paint one (1) Universal under coat to comply with SABS 681, grade 1, and finish with two (2) coats alkylde egg-shell paint to comply with SABS 630, type 1. Colour to architect's approval</p> <p><b>IRONMONGERY:</b> Approved Lockset as per supplier Door stop - polished brass floor mounted. Approved Aluminium engraving sign plate for appropriate rooms</p> <p><b>HINGES:</b> 3 no. stainless steel medium duty butt hinges.</p>		<p><b>ABLUTIONS DOOR</b></p> <p><b>DOOR DESCRIPTION:</b> 813mm x 2032mm x 44mm thick interior grade flush hollow core single timber door with 3mm thick ply on both sides with 2 consolidated edges fitted to comply with SABS 545 in pressed steel frame. All painted in accordance with Architect's colour schedule.</p> <p><b>FRAME:</b> Standard 1.6mm galvanised mild steel double rebate galvanised metal frame complying to SABS 1129 complete with lugs and fixtures. Frame profiles to suit wall thickness (115mm, 230mm and 345mm) as per floor plans</p> <p><b>FRAME FINISH:</b> Washable enamel paint finish complying with SABS 723 for primer, SABS681 for undercoat and SABS 630 type 2 for finish coat. Colour to architect's approval</p> <p><b>DOOR FINISH:</b> Prime with wood primer to comply with SABS, type 2. Paint one (1) Universal under coat to comply with SABS 681, grade 1, and finish with two (2) coats alkylde egg-shell paint to comply with SABS 630, type 1. Colour to architect's approval</p> <p><b>IRONMONGERY:</b> Approved Lockset as per supplier</p> <p><b>HINGES:</b> VENTILATION GRILLE SIZED TO MECHANICAL ENGINEER'S SPECIFICATIONS 3 no. stainless steel medium duty butt hinges.</p>		<p><b>STRONG ROOM DOOR</b></p> <p><b>DOOR DESCRIPTION:</b> SABS Category 3 vault door with 4 wheel combination lock and 2 x 8 lever key lock and 3 wheel combination. Overall size 900mm x 1865mm high finished in rust proof under coat for final painting.</p> <p><b>FRAME:</b> 50 X 50mm galvanised mild steel square tube welded to form frame.</p> <p><b>FRAME FINISH:</b> 1 X coat Zinc Chromate primer 2 x coats gloss enamel (exterior quality)</p> <p><b>DOOR FINISH:</b> Painted mild steel gate consisting of 10x10mm mild steel bars placed at 100mm centres at a 45° angle, to comply with SABS 681, grade 1, and finish with two (2) coats alkylde egg-shell paint to comply with SABS 630. Colour to architect's specification</p> <p><b>IRONMONGERY:</b> Approved Lockset as per supplier</p> <p><b>HINGES:</b> 3 no. stainless steel heavy duty butt hinges.</p>	

ISSUED FOR TENDER

**LEGEND**

- NEW WALLS
- EXISTING WALL TO BE RETAINED
- EXISTING WALL TO BE DEMOLISHED
- NEW FIXTURES & FITTING TO BE INSTALLED
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**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**  
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DEPARTMENT OF  
**PUBLIC WORKS, ROADS & INFRASTRUCTURE**  
INSTITUTION

**ST. PAUL SECONDARY SCHOOL-924 650 740**

**RESTORATIVES, REPAIRS & ADDITIONS**  
CONTRACT - SECTION

**DOCUMENTATION & PROCUREMENT**  
DISCIPLINE

**ARCHITECTURAL** 4  
WORK DESCRIPTION - SUB DIVISION

**MEDIUM ADMINISTRATION BLOCK**  
DRAWING DESCRIPTION

**DOOR SCHEDULE**

DRG No.	101-05	05/10	ITEM No.
DESIGN	NA	KSN	DRAWN
SCALE	AS SHOWN	ES	CHECK
DATE	RESPONSIBLE PROFESSIONAL		PR. NUMBER
NOV 2019	T. MANYADZA	PrArch	43981757
DRAWING CO-ORDINATED			

CONSULTANT

**TECTURA - INTERNATIONAL!**

ALSO IN NAIROBI, KENYA AND GABORONE, BOTSWANA

CONTRACTOR

CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REV
A1	LDPW - PROF/16002/E18	0



**SANITARY SCHEDULE**

**WC'S URINALS & SHOWER**

**I1: 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 Thermostat 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.

**I2: CERAMIC PARAPLEGIC 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 extension lever.

**I3: CERAMIC PARAPLEGIC 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 Thermostat 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 extension lever. blank flush plate & offset push button for paraplegic access.

**I4: 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.

**I5: CERAMIC STANDARD WC (CC)**  
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 thermostat BS, seat and complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards.

**I6: CERAMIC WALL HUNG URINAL**  
Vitreous china size 415x135x75 mm wall hang bowl urinal to comply with SABS 497. Supplied with suitable 38mm CP domical grating, 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.

**I7: WHB & 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 chairstay hole through the centre semi-punched supplied with a 'Tuscany' pedestal and fitted with 1 No. 'Cobra' WaterTech 15mm chrome pushbutton diamond pillar tap with flanged backnut (code KMZ102) metering tap, 307-32 CP anti-thrill plug with spindle, 308 basin waste, 345/42 CP bottle trap, mounting kit and angle valves.

**I8: DISABLED BASIN**  
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 action pillar-tap, with 1/2 turn ceramic disc head and blue & Red indicators water applications and flanged backnut, chrome plated waste, chrome plated 32 mm 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.

**I9: WHITE GLAZED PORCELAIN WHB (VANITY)**  
Ceramic freecly size 450x350mm oval self-rimming vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with 1 No. chrome plated tap with flanged backnut (code KMZ102) metering 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 slab with silicon sealant between contact areas in strict accordance to manufacturer's specifications.

**I10: SMALL BASIN & 2 TAP STRAY & SHOWER SET (FOR WORKSHOPS)**  
Vitreous china size 455x290mm wash basin to comply with SABS 497 in 2-tap hole configuration supplied with integrated overflow and chairstay hole with 2 No. pillar taps, chrome plated anti-thrill plug with spindle plug, stuffed 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.

**I11: HUNDTY BASIN & 1 No. TAP (FOR LABS)**  
Ceramic fire clay 560x400mm rectangular heavy duty basin in one tap hole configuration to comply with SABS 497 and R415 hole plugged and fitted with 1 No. pillar tap. Chrome Plated anti-thrill plug with spindle 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 2 No. Semi-concealed cast iron brackets in accordance to the manufacturer's specifications.

**I12: 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 action pillar-tap, with 1/2 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.

**I13: CERAMIC SINK**  
Ceramic freecly 435 x 335 x 180 mm rectangular laboratory sink without overflow, with a centre end waste outlet, fitted to the wall on two semi-concealed brackets supplied with all necessary accessories (all to be acid resistant)

**I14: SINGLE WASH TROUGH (SINK) & 2 No. TAPS**  
820mm x 530mm inset wash trough, manufactured from grade 18/10 SS, stainless steel with radiused internal corners and provision for a 40mm dia. outlet, fitted with Approved 2 No. CP bibtaps - plain extended chrome plated, complete with sliding wall flanges, Un-slotted sink waste with back nut, plug with stop, chain and stay, CP, 'P' trap, with deep seal and cleaning eye. Rough brass. Sink installation height = 900mm AFFL. Cut out size 535 x 425mm.

**I15: DOUBLE WASH TROUGH (SINK) & 2 No. TAPS**  
1200 x 530 x 200mm Double bowl wall hung wash trough, manufactured from grade 304 (18/10) SS, radiused internal corners and provision for a 40mm dia. outlet, fitted with Approved 2 No. wall type bibtaps, with Swivel Outlet, adjustable wall flanges and exposed adjustable connections, CP, Un-slotted sink waste with back nut and plug with stop, CP. Double drain black rubber deep seal 'P'-trap. Sink mounted on 2 No. 25mm square SS gallow brackets, front leg and adjustable foot piece of height of 915mm AFFL.

**SANITARY ACCESSORIES**

**K1: SS TOILET ROLL HOLDER - 2 ROLL**  
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: SS WASTE BIN**  
320W x 520H 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.

**K3: SANITARY BIN (PLASTIC)**  
180mm 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.

**K4: SOAP HOLDER**  
Single semi-recessed ceramic soap dish Complete with all necessary accessories and installed in accordance to manufacturer's specifications.

**K5: WALL GRAB RAILS-PARAPLEGIC**  
Stainless steel 914 x 90 x 30mm diameter wall (rear) grab rail, in satin polished finish complete with SS fixing screws and plastic wall plugs. Installed as per manufacturer's instructions.

**K6: GRAB RAILS (RIGHT/LEFT HAND)-PARAPLEGIC**  
Stainless steel 914 x 914 x 30mm diameter (rear) hand 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.

**K7: PAPER TOWEL DISPENSER**  
330mmWx355mmHx230mmD rear 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.

**K8: SOAP DISPENSER (SH)-WALL MOUNTED**  
115W x 270H x 110D Stainless steel hands free soap dispenser. Complete with screws, locking key, and all necessary accessories and installed in accordance to manufacturer's specifications.

**K9: ALUMINIUM COAT HOOKS (Multi-track)**  
800mm Wide x 220mm High x 90mm High Aluminium Multi-track Hat and Coat Hook in multi-track two hooks Configuration With Anodised Silver Finish Complete with Screws.

**K10: 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.

**K11: SHOWER CURTAIN RAIL (slatless)**  
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 uPVC Door Protector manufactured in high impact resistant rigid uPVC (Colour Grey) and cut to suit door width from 3m length, installed strictly in accordance to manufacturer's specifications. Installation height 900mm above FF, or as specified.

**G2: PROTECTOR SCREEN**  
Full down PVC screen 282 x 240 x 1850mm (viewing area 2340 x 1750mm) with wall-mounted code SCM40 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: PINBOARD 1500W X 1000H**  
Pinboard size 1000mm H x 1500mm W comprising of laminated soft board core pinning material beaded all round with anodised aluminium channel surround rimmed at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level.

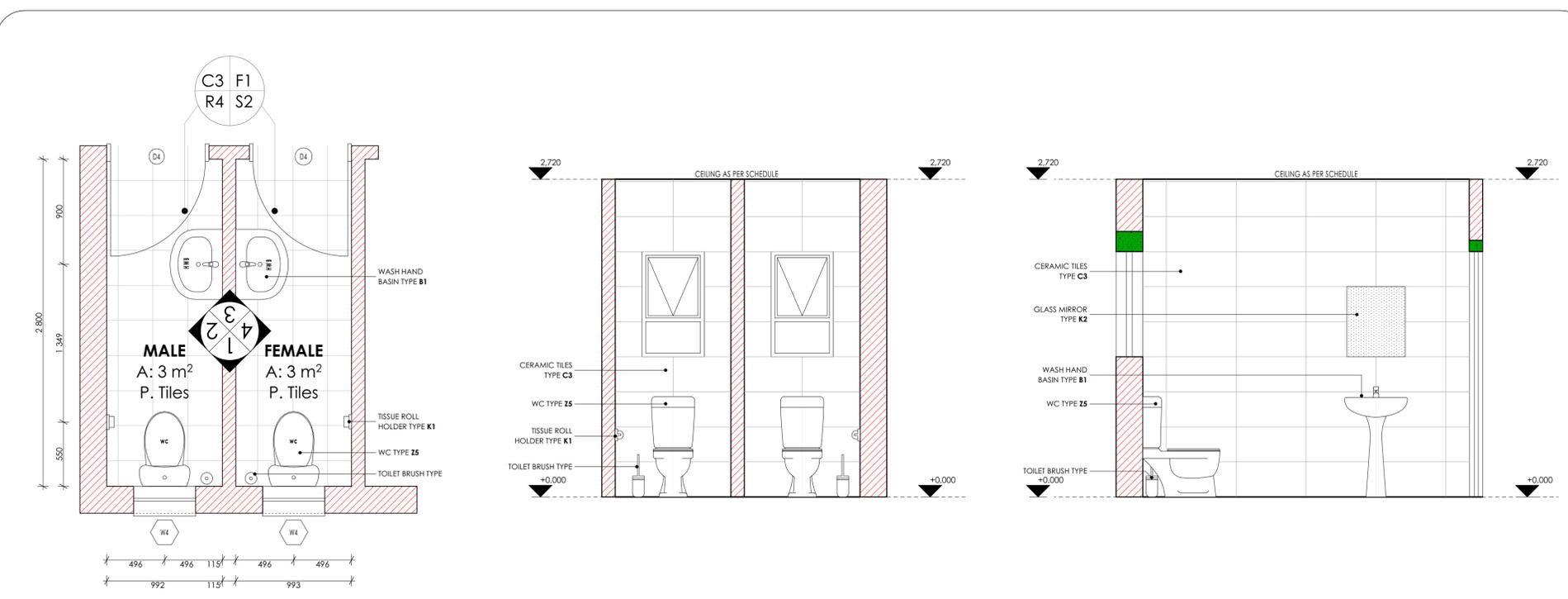
**G4: PINBOARD 900W X 1200H**  
Pinboard size 900mm H x 1200mm W comprising of laminated soft board core pinning material beaded all round with anodised aluminium channel surround rimmed at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level.

**G5: WINDOW NORMAL BUNDS (vertical fabric)**  
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. Till 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 1/4-flow outlets size 110 mm diameter with centre ball, including connections to downpipes.

**G7: SS FLOOR EXPANSION JOINT COVER**  
Concealed heavy duty stainless 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.

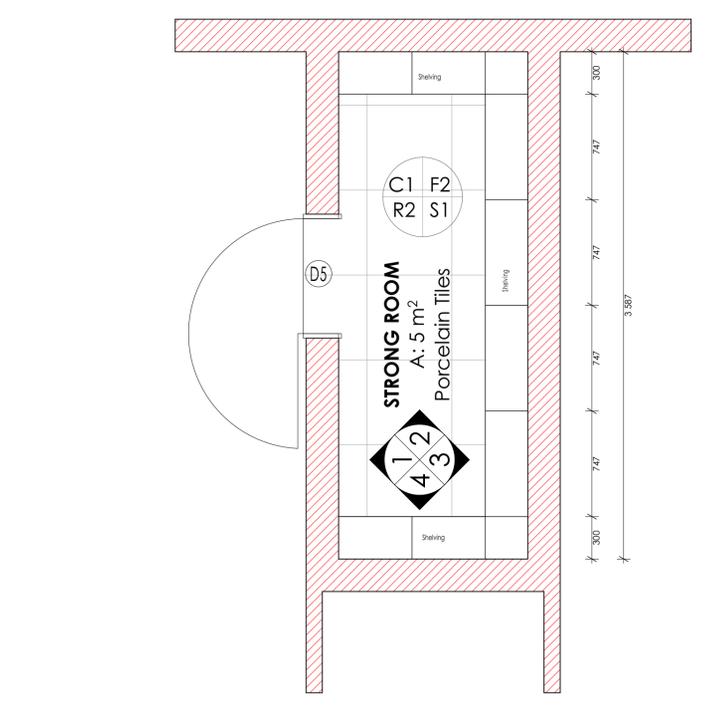
**G8: CHALKBOARDS - GREEN SURFACE COLOUR**  
Vitreous china 1000 standard WHITEBOARD or EQUAL & APPROVED vitreous enameled steel utility school chalkboards wall-mounted size 480mm x 1140mm high manufactured in accordance with SABS Standard CS 36:2004 Edition 4 and suitable for Class 1 Heavy Duty applications, as defined therein. Enamel steel utility chalk board surfaces to be matt and finely structured, olive green in colour (Vitreous Colour Reference - Chalk Board Green LM1797Z), supplied 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 to the manufacturer's instructions.



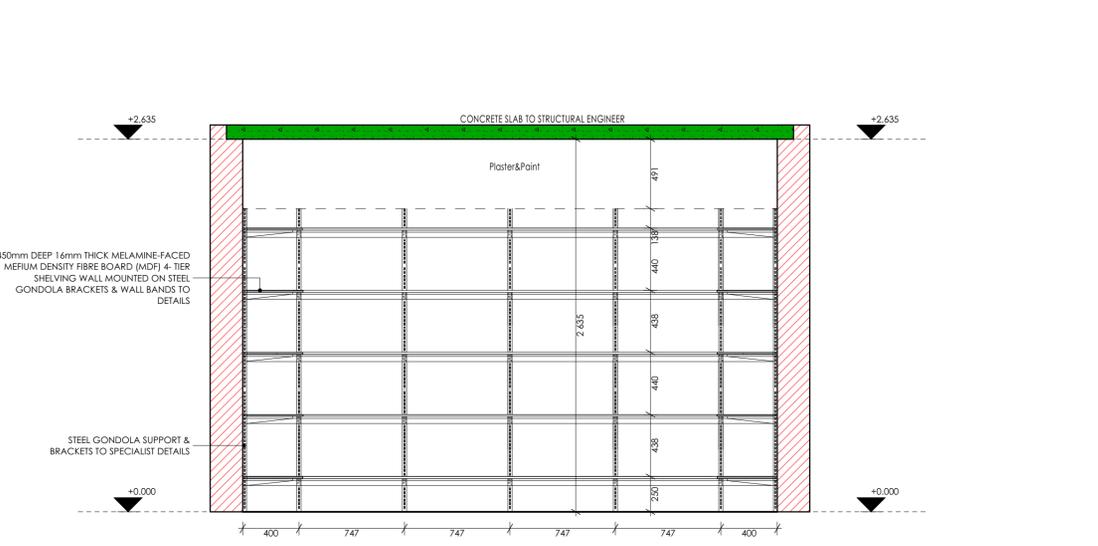
**ABLUTIONS PLAN:**  
Scale 1:25.

**ELEVATION 01:**  
Scale 1:25.

**ELEVATION 02:**  
Scale 1:25.



**STRONG ROOM PLAN:**  
Scale 1:25.



**ELEVATION 03:**  
Scale 1:25.

**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, F, S  
FLOOR FINISH: F, S  
WALL FINISH: W, R, S  
WALL SKIRTING FINISH: S

**SIGNATURE TABLE**

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

**REVISIONS**

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

**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

**DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE**  
INSTITUTION  
**ST. PAUL SECONDARY SCHOOL-924 650 740**

**RESTORATIVES, REPAIRS & ADDITIONS**  
CONTRACT - SECTION  
**DOCUMENTATION & PROCUREMENT**

DISCIPLINE: **ARCHITECTURAL** 4  
WORK DESCRIPTION - SUB DIVISION: **MEDIUM ADMINISTRATION BLOCK**  
DRAWING DESCRIPTION: **ABLUTIONS & STRONG ROOM DTLS**

DRG No. <b>101-07</b>	07/10	ITEM No.
DESIGN <b>NA</b>	<b>KSN</b>	<b>DRAWN</b>
SCALE <b>A5 - SHOWN</b>	<b>ES</b>	<b>CHECK</b>

DATE	RESPONSIBLE PROFESSIONAL NAME	SIGN	PR. NUMBER
NOV 2019	T. MANYADZA		PrArch 43981757

DRAWING CO-ORDINATED

**CONSULTANT**  
**TECTURA - INTERNATIONAL!**

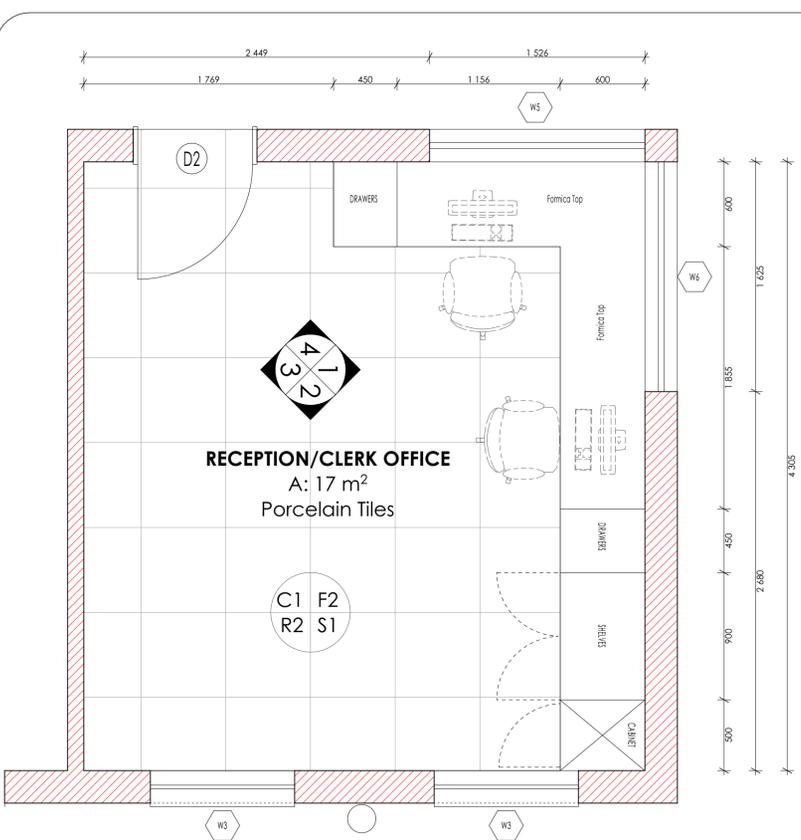
ALSO IN NAIROBI, KENYA AND GABORONE, BOTSWANA

**CONTRACTOR**

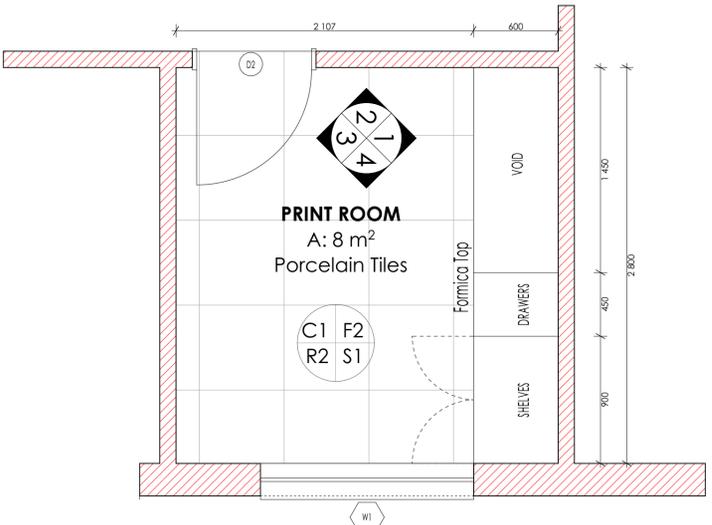
CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REV
A1	LDPW - PROF/16002/E18	0

**SANITARY SCHEDULE**

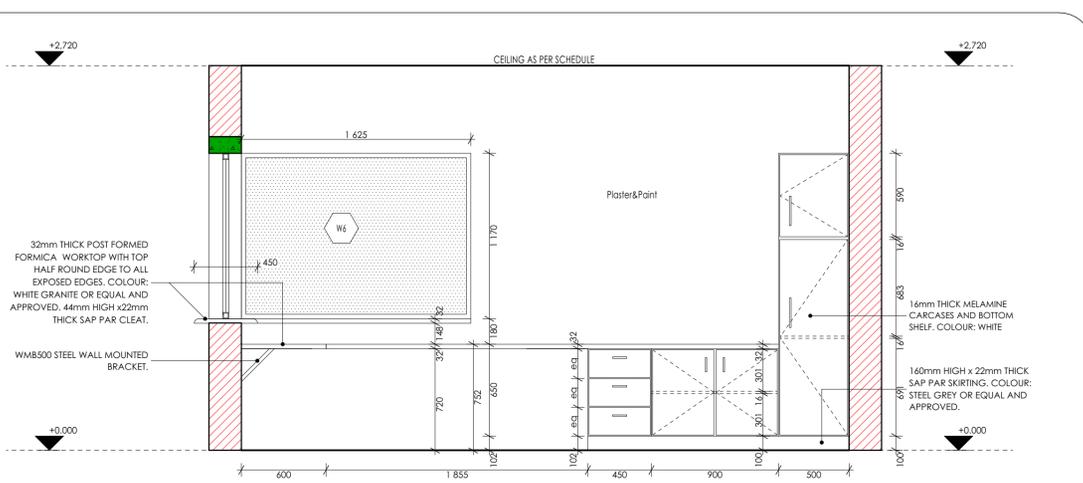
- WC'S URINALS & SHOWER**
- 11: CERAMIC STANDARD WC (CC) CONCEALED CISTERN**  
Vitreous china 90° outlet WC or equal and approved top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 497 & Fitted with "Jazz Thermostatic Plastic Seat". Fitted with Concealed Flushing Cistern for WC 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.
- 12: CERAMIC PARAPLEGIC 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 extension lever.
- 13: CERAMIC PARAPLEGIC 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 Thermostatic 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 extension lever. blank flush plate & offset push button for paraplegic access.
- 14: 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.
- 15: CERAMIC STANDARD WC (CC)**  
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 thermostatic seat and complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards.
- 16: CERAMIC WALL HUNG URINAL**  
Vitreous china size 415x135x75 mm wall hang bowl urinal to comply with SABS 497. Supplied with suitable 38mm CP domical grating. 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.
- WASH-HAND BASIN**
- B1: WH & MIXER TAP**  
Vitreous china size 560 x 415mm rounded "Tuscan", OR EQUAL AND APPROVED basin to comply with SABS 497 with single tap-hole configuration supplied with integrated overflow and chairstole hole through the centre semi-punched supplied with a "Tuscan" pedestal and fitted with 1 No. "Cura Waterflex" 15mm chrome pushbutton demand pillar tap with flanged backnut (code KMZ102) metering tap, 30°-32° CP anti-theft plug with spindle, 308 basin waste, 3454 CP bottle trap, mounting kit and angle valves.
- B2: DISABLED BASIN**  
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 action pillar-tap, with 1/2 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.
- B3: WHITE GLAZED PORCELAIN WH (VANITY)**  
Ceramic freeclay size 450x350mm oval self-rimming vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with 1 No. chrome plated tap with flanged backnut (code KMZ102) metering 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 slab with silicon sealant between contact areas in strict accordance to manufacturer's specifications.
- B4: SMALL BASIN & 2 TAPSTRAY & SHOWER SET (FOR WORKSHOPS)**  
Vitreous china size 455x290mm wash basin to comply with SABS 497 in 2-tap hole configuration supplied with integrated overflow and chairstole hole with 2 No. pillar taps, chrome plated anti-theft plug with spindle 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.
- B6: HYDURY BASIN & 1 No. TAP (FOR LABS)**  
Ceramic fire clay 560x325mm rectangular heavy duty basin in one tap-hole configuration to comply with SABS 497 and R415 hole plugged and fitted with 1 No. pillar tap. Chrome Plated anti-theft plug with spindle 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 2 No. Semi-concealed cast iron brackets in accordance to the manufacturer's specifications.
- B6: 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 action pillar-tap, with 1/2 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:  
• Mirror type K2 • Paper towel dispenser K8 and bin type K3 • Soap dispenser type K9 • Splashback comprising 2 No. rows of wall life 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 906 fitted with: Approved Sink mixer-wall type, chrome plated swivel Outlet, adjustable and supplied with suitable gaskets 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 906 fitted with: Approved Sink mixer-wall type, 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 freeclay 435 x 335 x 180 mm rectangular laboratory sink without overflow, with a centre end waste outlet. fitted to the wall on two semi-concealed brackets supplied with all necessary accessories (all to be acid resistant)
- X4: SINGLE WASH TROUGH (Inset) & 2 no. TAPS**  
820mm x 530mm inset wash trough manufactured from grade 18/10 SS. stainless steel with radiused internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2No. CP bibtaps - plain extended chrome plated, complete with sliding wall flanges. Un-slotted sink waste with back nut, plug with strap, chain and stay. CP, P trap, with deep seal and cleaning eye. Rough brass. Sink installation height = 900mm AFFL. Cut out size 535 x 425mm.
- X5: DOUBLE WASH TROUGH (Inset) & 2 no. TAPS**  
1200 x 530 x 200mm Double bowl wall hung wash trough manufactured from grade 304 (18/10) SS. radiused internal corners and provision for a 40mm dia. outlet. fitted with: Approved 2no wall type bibtaps, with Swivel Outlet, adjustable wall flanges and exposed adjustable connections. CP, Un-slotted sink waste with back nut and plug with strap. CP. Double drain black rubber deep seal P-Trap. Sink mounted on 2no. 25mm square SS 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 bevelled edges 4 times holed for and fixed, with chromium plated dome-headed mirror screws.
- K3: WASTE BIN**  
320W x 520H 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 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 RAILS-PARAPLEGIC**  
Stainless steel 914 x 90 x 30mm diameter wall (rear) 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/LEFT HAND)-PARAPLEGIC**  
Stainless steel 914 x 914 x 25mm diameter (right/left hand 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**  
330mmWx355mmHx230mmD 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 (SH- WALL MOUNTED)**  
115W x 270H x 110D Stainless steel Hands-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)**  
800mm Wide x 220mm High x 90mm High Aluminium Multi-track Hat and Coat Hook in multi-track two hooks Configuration With Anodised Silver Finish Complete with Screws.
- K11: HAND DRYER (Hands free)**  
As per Electrical 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 (aluminum)**  
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 UPVC Door Protector manufactured in high impact resistant rigid UPVC (Colour Grey) and cut to suit door width from 3m length, installed strictly in accordance to manufacturer's specifications. Installation height 900mm above FF, or as specified.
- G2: PROTECTOR SCREEN**  
Full-down UPVC screen size 2440 x 1855mm (viewing area 2340 x 1755mm) with wall-mounted code SCM40 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 1000mm H x 1500mm W comprising of laminated soft board core pinning material beaded all round with anodised aluminium channel surround milled 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 H x 1200mm W comprising of laminated soft board core pinning material beaded all round with anodised aluminium channel surround milled at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level.
- G5: WINDOW NORMAL BLINDS (vertical fabric)**  
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 ties. Tie 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 150-flow outlets size 110 mm diameter with centre ball, including connections to downpipes.
- G7: 36 FLOOR EXPANSION JOINT COVER**  
Concealed heavy-duty stainless 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**  
Vitreous system 1000 standard WHITEBOARD OR EQUAL & APPROVED vitreous enamelled steel utility school chalkboards wall-mounted size 800mm x 1140mm high manufactured in accordance with SABS Standard CS 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 finely structured, olive green in colour (Vitreous Colour Reference - Chalk Board Green LM1797Z), applied 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 to the manufacturer's instructions.



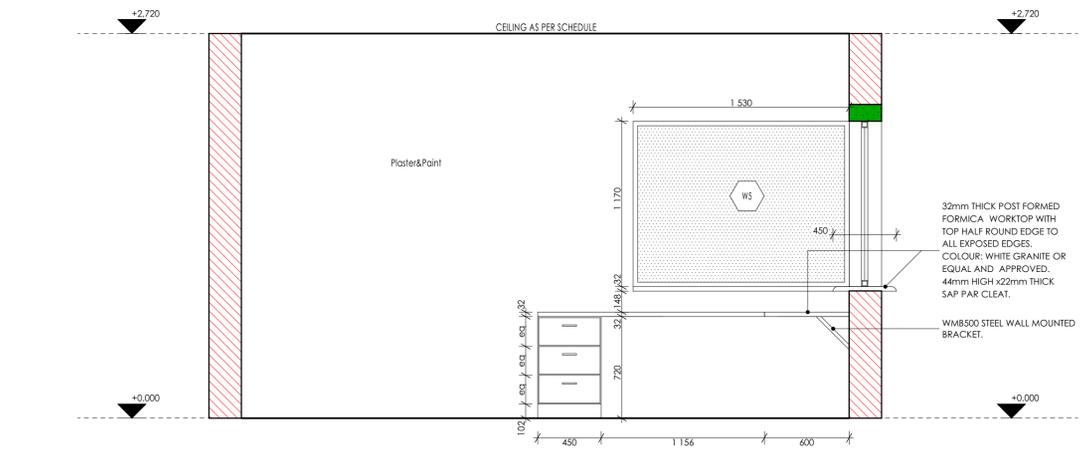
**RECEPTION/CLERK OFFICE PLAN:**  
Scale 1:25.



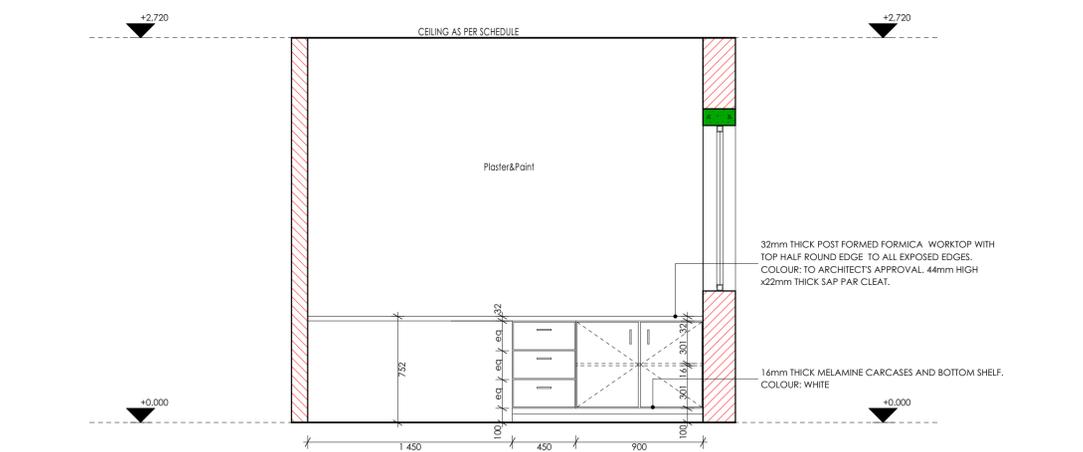
**PRINT ROOM PLAN:**  
Scale 1:25.



**ELEVATION 01:**  
Scale 1:25.



**ELEVATION 04:**  
Scale 1:25.



**ELEVATION 01:**  
Scale 1:25.

**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 F S  
FLOOR FINISH: F S  
WALL FINISH: W S  
WALL SKIRTING FINISH: WS

**SIGNATURE TABLE**

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

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

**REVISIONS**

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

**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF  
**PUBLIC WORKS, ROADS & INFRASTRUCTURE**  
INSTITUTION

**ST. PAUL SECONDARY SCHOOL-924 650 740**

**RESTORATIVES, REPAIRS & ADDITIONS**

CONTRACT - SECTION

**DOCUMENTATION & PROCUREMENT**

DISCIPLINE: ARCHITECTURAL 4  
WORK DESCRIPTION - SUB DIVISION: MEDIUM ADMINISTRATION BLOCK  
DRAWING DESCRIPTION: RCPTN/CLK OFC. | PRINT RM. JOINERY DTLS

**DRG. No. 101-08**      08/10      ITEM No. 43981757

DATE	RESONSIBLE PROFESSIONAL NAME	SIGN	PR. NUMBER
NOV 2019	T. MAN'ADZA		PrArch 43981757

DRAWING CO-ORDINATED

**CONSULTANT**

**TECTURA - INTERNATIONAL!**

ALSO IN NAMPOLI, KENYA AND GABORONE, BOTSWANA

**CONTRACTOR**

CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REV
A1	LDPW - PROF/16002/E18	0

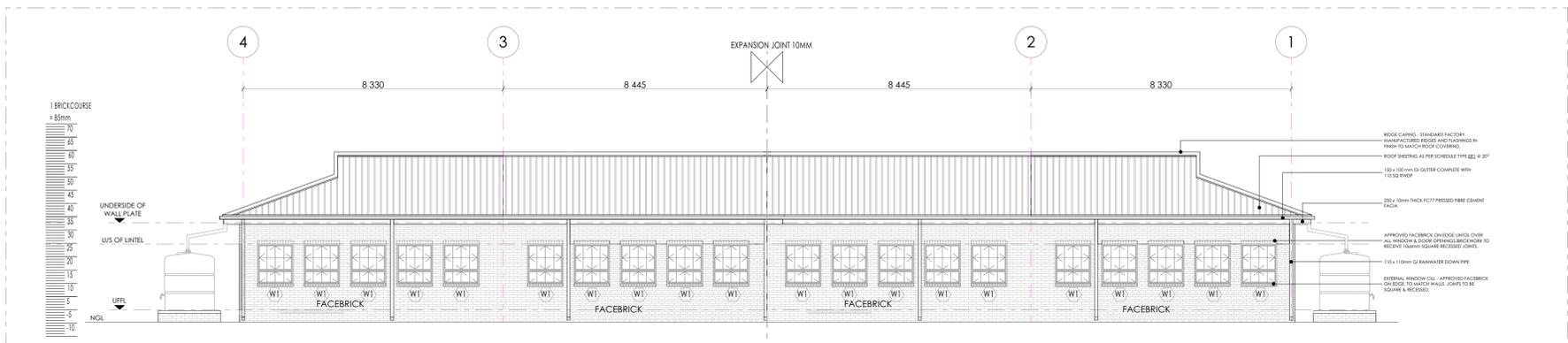




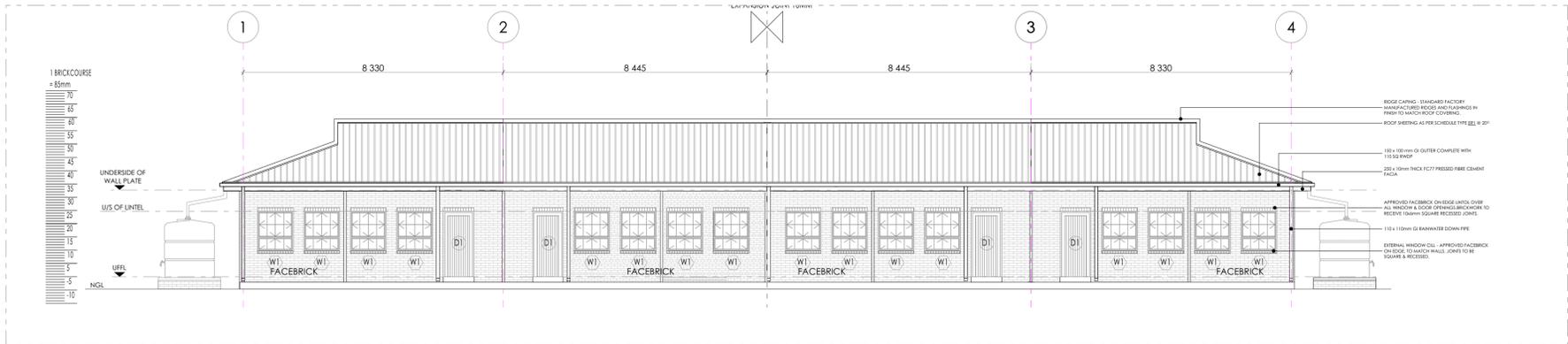


**FINISHES LEGEND**

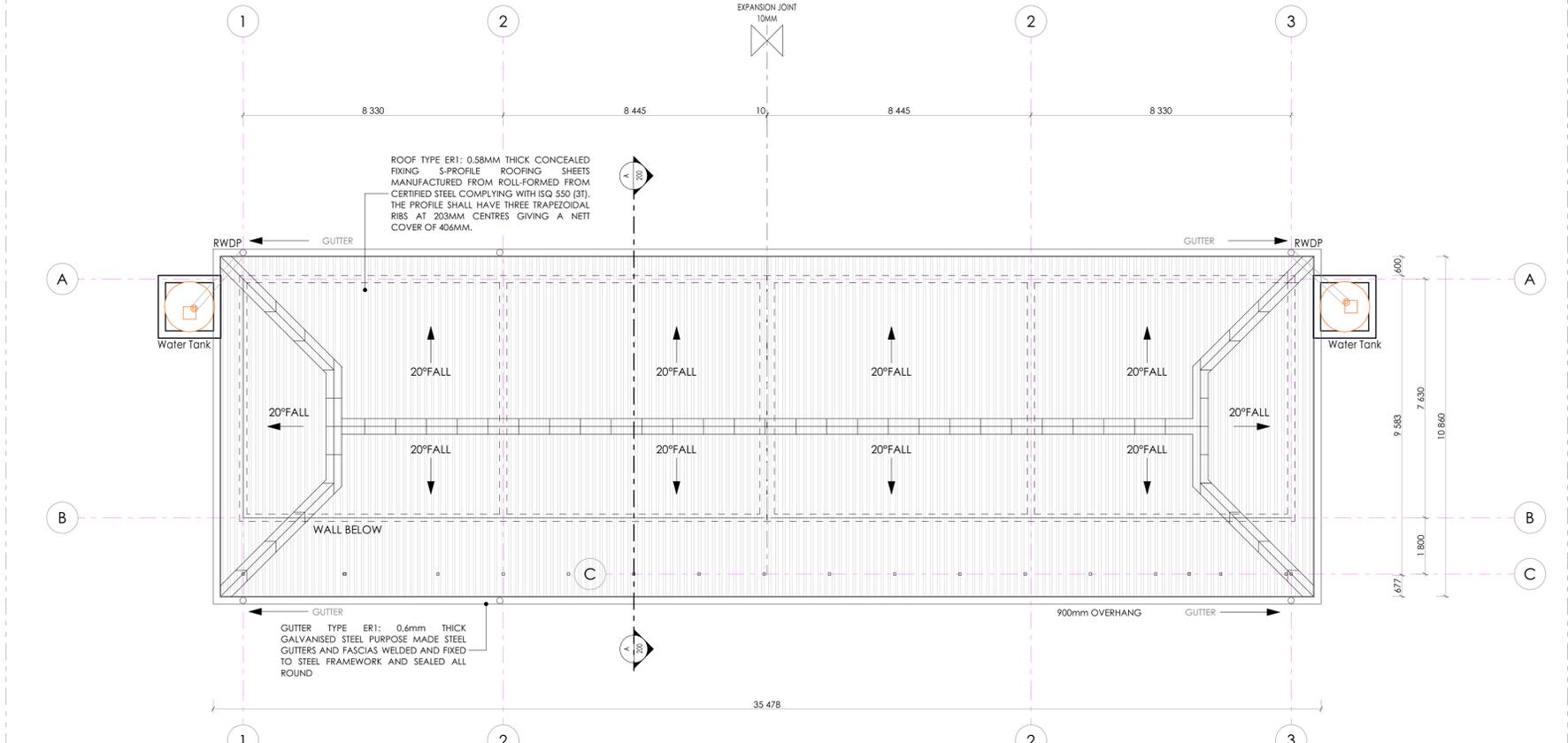
- FLOORS:**
- F1- FULLY FLEXIBLE TILES (CORROSION RESISTANT & ANTI-SLIPPER)**  
300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles to SABS Specification S81: 1992 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. 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.
- 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- CARPET TILES**  
520mm x 520mm, 100% PEV 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 DN S4324 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 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 unglazed 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 10m<sup>2</sup>, 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 60 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-SLIPPER)**  
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-Levelled Smooth Screed glued with conductive adhesive to SABS D70 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 PSE Details installed in All Duct Chambers Accommodating Sanitary Services.
- SKIRTING:**
- S1- HARDWOOD OR EQUAL AND APPROVED**  
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 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with cove base and straight tops. 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**  
75mm high x 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- FACEBRICK**  
F88 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 I, in accordance to manufacturer's instructions.
- W3- ALKYD (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 alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade I, 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 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 681 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 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 to SABS 22 Standard.
- CEILING AND CORNICE:**
- C1- 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
'GypCell Classic' gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber bracing 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 GypCell Fester 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 10171-5) fixed to EX 38mm x 50mm timber bracing 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 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 fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, 2150 g/m<sup>2</sup> 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 tile notch. All tile notches to be in line. Suspends 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 Sabs 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:**
- ER1- EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm 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 203mm centres giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 203mm centres to ensure a positive double interlocking action at 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 covers in strict compliance to manufacturer's instructions.
- Insulation:** SHALL EITHER BE 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 50mm 'Tactoboard' manufactured from non-combustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>2</sup> and finished with white metalized foil.
- Galvanized Steel (G)I 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 Fascia Board Together with standard accessories discharging into Rainwater Downpipes.
- Downpipe:** 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-tapping screws To Manufacturer Installation Instructions.
- Fascia board:** 750 x 10 mm Fibre-Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



**BLOCK SJ-01 REAR ELEVATION**  
SCALE 1:100



**BLOCK SJ-01 FRONT ELEVATION**  
SCALE 1:100



**BLOCK SJ-01 ROOF PLAN**  
SCALE 1:100

**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 F  
FLOOR FINISH: F S  
WALL FINISH: W R S  
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

**ST. PAUL SECONDARY SCHOOL - 924 650 740**

**RESTORATIVES, REPAIRS & ADDITIONS**  
CONTRACT - SECTION

**DOCUMENTATION & PROCUREMENT**  
DISCIPLINE: ARCHITECTURAL 4  
WORK DESCRIPTION - SUB DIVISION: PROTOTYPE DRAWINGS - STAGE 04  
DRAWING DESCRIPTION: 4 CLASSROOMS - ROOF PLAN | FRONT & REAR

DRG. No.	E14-201-02	02/03	ITEM No.
DESIGN	N/A	SMIN	DRAWN
DATE	AS SHOWN	T.M	CHECK
NOV 2019	T. MANYADZA		PfArch 43981757

DRAWING CO-ORDINATED

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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/E18	0

**FINISHES LEGEND**

**FLOORS:**

**F1- FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)**  
300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles in accordance to manufacturer's specifications on cement screed subfloor. Fittings to include, ribbed edge 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.

**F2- PORCELAIN TILES - MATI**  
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. Fittings to include, ribbed edge 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**  
520mm x 520mm x 1008 RFX Staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof jute backing and to comply with BS 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screed in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and BS S4324 on wire test and SD body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.

**F4- Cement Sand Screed**  
30mm thick portland 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 compacted to approved 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**  
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 10m<sup>2</sup>, 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 80 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 (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 D70 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**  
75x15mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with sprayed 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. Fittings to include, ribbed edge tiles where there is change of level. Colour and pattern to architects approval.

**S3- CEMENT SAND SCREED**  
75mm 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 PA 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 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 I, in accordance to manufacturer's instructions.

**W3- ALLOYD ENAMEL PAINT**  
2 no. coats matt (egg shell finish alloyd (jenamel) 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 681 grade I, 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 'S5', 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 107 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- 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
GypCell Classic gypsum plasterboard ceiling OR EQUAL & APPROVED consisting of 1 layer Gyproc Rhinobond 9mm (locally manufactured, ISO 9001 & ISO 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber branding installed at maximum 300mm centres using Gyproc Rhinobond Snap Point Grabber Screws 22mm at maximum 150mm centres. Apply Gyproc Rhinotape to all joints and skim the ceiling using Gyproc Rhinotile.

**C2- FIBRE CEMENT BOARDS (IN JOINTS)**  
6mm thick GypCell Resistor 7 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc Rhinobond 9mm (locally manufactured, ISO 9001 & ISO 14001 certification, recycled paper content, EcoSpecifier listing, non-combustible to SANS 10171-5) fixed to EX 38mm x 50mm timber branding installed at maximum 400mm centres using Gyproc Rhinobond Snap Point Grabber Screws 22mm 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 Rhinotile.

**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 (8mm thickness, 2150 gaud, locally manufactured, recycled content, ISO 9001 & ISO 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspended 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 tile notch. All the notches to be in line. Suspends 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**  
Emulsion (PVA) Paint on Skimmed Plastered Slop: 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hem-hydrate gypsum plaster on concrete slab.

**ROOF COVERING AND INSULATION:**

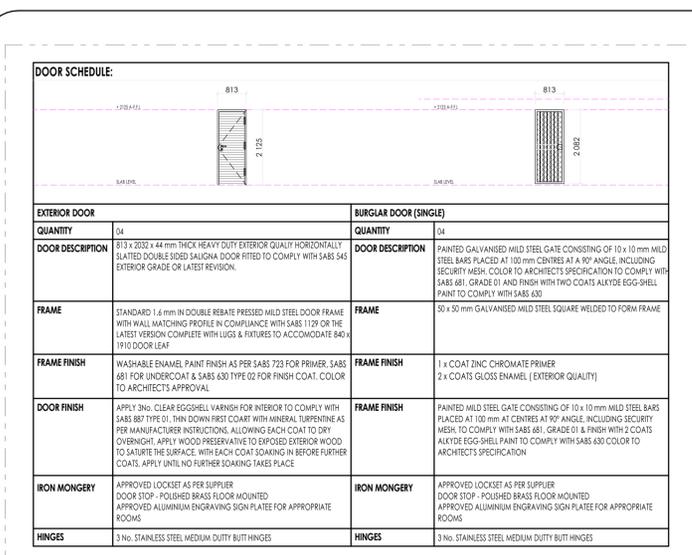
**R1- EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 550 (3). The profile shall have three trapezoidal ribs at 200mm centres giving a net cover of 456mm. The rib height shall be 41mm and provide copillary breaks. The male 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 roofbolts to be coated on both sides with "Global Coat" or Chromokod Colour and laid on structural timber/steel structure incorporating all necessary accessories such as fastenings and eave covers in strict compliance to manufacturer's instructions.

**Insulation:** SHALL BE: 1. 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 "Factoryboard" manufactured from non-combustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>3</sup> and finished with white melisized foil.

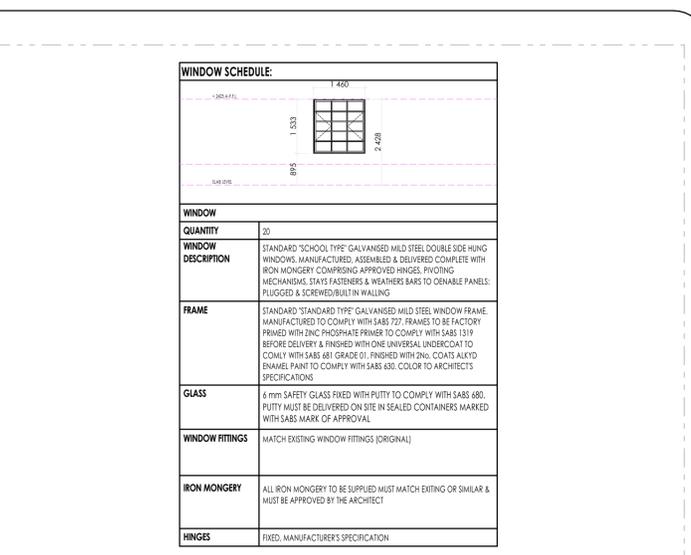
**Galvanized Steel Gullies:** 150mm Wide x 100mm Deep x 60mm Eaves Gutter of Commercial Grade Steel With Class Z275 Galvanizing To Comply With SABS 934 or latest Revision Fixed to Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

**Dampstop:** 110 x 110 x 6.0mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing to Comply With SABS 934 or Latest Revision to be built into wall or cast in concrete columns laid to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation Instructions.

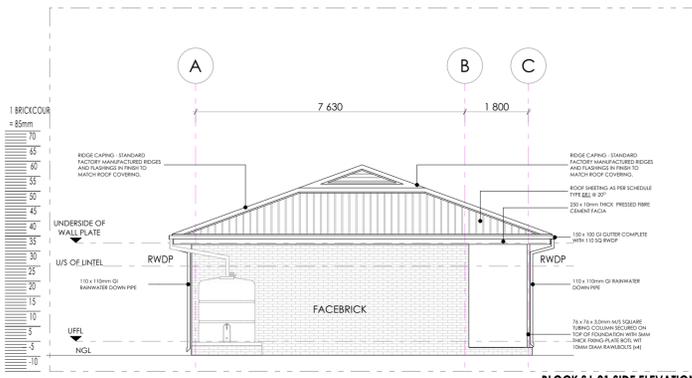
**Facia board:** 750 x 10 mm Fibre-Cement Facia/Barge Board, Screw Fixed to Tuss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic PVA.



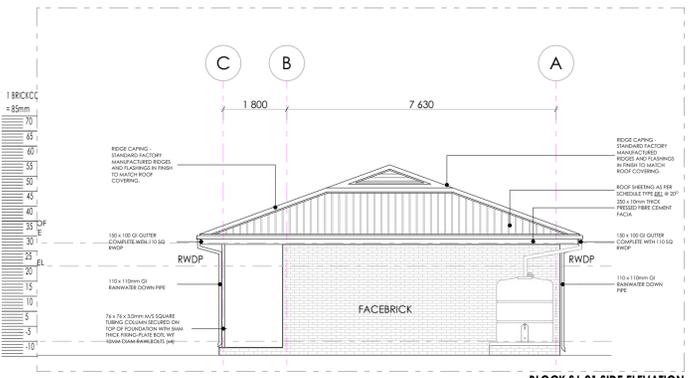
**BLOCK SJ-01 DOOR SCHEDULE**  
SCALE 1:100



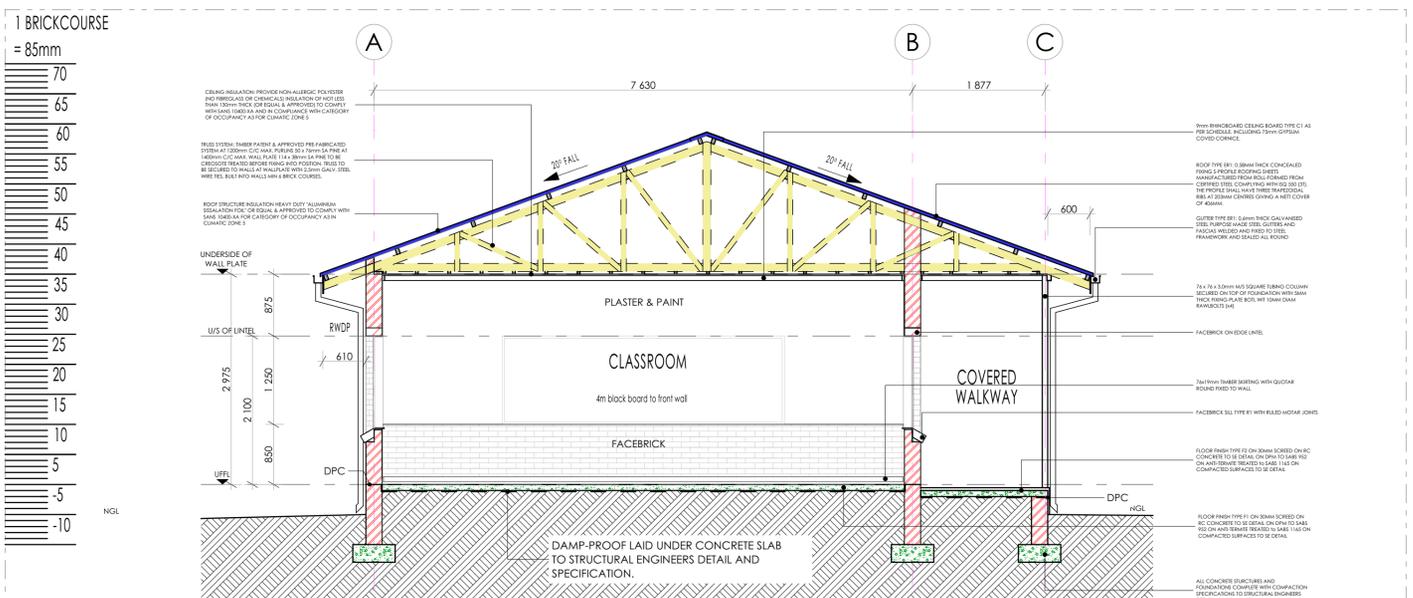
**BLOCK SJ-01 WINDOW SCHEDULE**  
SCALE 1:100



**BLOCK SJ-01 SIDE ELEVATION**  
SCALE 1:100



**BLOCK SJ-01 SIDE ELEVATION**  
SCALE 1:100



**BLOCK SJ-01 SECTION SJ-01**  
SCALE 1:50

**SANITARY SCHEDULE**

**WC'S URINALS & SHOWER**

**W1- CERAMIC STANDARD WC (C/C) - CONCEALED CISTERN**  
Vitreous china 90° outlet or equal and approved, top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 487 & fitted with 'Jazz Thermal Seal 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 487. 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 or equal and approved, top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 487 & fitted with 'Jazz Thermal Seal 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 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 487. 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 487 Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermal seal seat and complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards.

**W6- CERAMIC WALL HUNG URINAL**  
Wall hung bowl urinal to comply with SABS 487. Supplied with suitable 38mm CP domical geyser, 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- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W8- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In one tap hole configuration supplied with integrated overflow and chinatory hole with 2No. chrome plated top with flanged backout (code KM2.102) meeting tap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Bolted mounted on cabinet or vanity slab with silicon bead between overflow and faces in strict accordance to manufacturer's specifications.

**W9- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap hole configuration supplied with integrated overflow and chinatory hole with 2No. chrome plated top with flanged backout (code KM2.102) meeting tap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Bolted mounted on cabinet or vanity slab with silicon bead between overflow and faces in strict accordance to manufacturer's specifications.

**W10- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W11- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W12- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W13- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W14- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W15- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W16- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W17- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W18- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W19- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W20- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W21- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W22- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W23- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W24- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W25- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

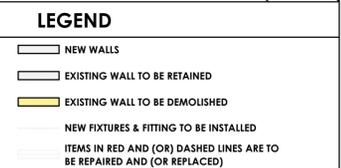
**W26- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap hole configuration fitted with 2 No. chrome plated Elbow action pillar-top, with 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged backout, chrome plated waste, chrome 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.

**W27- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W28- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W29- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

**W30- CERAMIC WALL HUNG URINAL**  
20mm semi rounded lavatory basin to comply with SABS 487. In two tap 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 backout, 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.

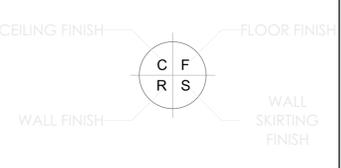


**LEGEND**  
NEW WALLS  
EXISTING WALL TO BE RETAINED  
EXISTING WALL TO BE DEMOLISHED  
NEW FIXTURES & FITTING TO BE INSTALLED  
ITEMS IN RED AND (OR) DASHED LINES ARE TO BE REPAIRED AND CORRECTED

**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		
FIRE EXAMINER		
ENVIRONMENTAL		
ROADS / STORMWATER		
WATER & SANITATION		

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

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

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





**FINISHES LEGEND**

**FLOORS:**

**F1- FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)**  
300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles in accordance to manufacturer's specifications on cement screed subfloor. Fittings to include, ribbed edge 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.

**F2- PORCELAIN TILES - MATI**  
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. Fittings to include, ribbed edge 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, 1.008 PFV staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof jute 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 S4324 on wire test and SD body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.

**F4- CEMENT SAND SCREED**  
30mm thick patted 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 compacted to approved 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**  
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 10m<sup>2</sup>, 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 80 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 (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 Levelled Smooth Screed glued with conductive adhesive to SABS D70 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 sprayed 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. Fittings to include, ribbed edge tiles where there is a change of level. Colour and pattern to architects approval.

**S3- CEMENT SAND SCREED**  
75mm 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 PA's approval. All to be manufactured and installed in strict compliance With SABS 1083, or latest revision.

**WALL FINISHES:**

**F1- FACE BRICK**  
F8 Face brick in common running bond 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 I, in accordance to manufacturer's instructions.

**F3- ALTYD (ENAMEL) PAINT**  
2 no. coats matt (egg shell finish altyd (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 681 grade I, in accordance to manufacturer's instructions.

**F4- GLAZED CERAMIC WALL TILES / ENAMEL PAINT COAT**  
Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'S5', 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 107 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.

**F5- 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- 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
GypCell Classic gypsum plasterboard ceiling OR EQUAL & APPROVED consisting of 1 layer Gyproc Rhinobond 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber branding installed at maximum 300mm centres using Gyproc Rhinobond Strap Fast Grabber Screws 22mm at maximum 150mm centres. Apply Gyproc Rhinotape to all joints and skim the ceiling using Gyproc Rhinotile.

**C2- FIBRE CEMENT BOARDS (IN JOINTS)**  
6mm thick GypCell Resistor 1 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc Rhinobond 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing, non-combustible to SANS 10171-5) fixed to EX 38mm x 50mm timber branding installed at maximum 400mm centres using Gyproc Rhinobond Strap Fast Grabber Screws 22mm 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 Rhinotile.

**C3- PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED**  
1200mm x 600mm X 15mm Gyproc Calotex Pin Perforated or Fine Fibred 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 fittings at 300mm centres. Donn T38 FR Main Tees (8mm thickness, 2150 gaud, 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 tile notch. All the 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 SABS 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 Sags 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hem-hydrate gypsum plaster on concrete slab.

**ROOF COVERING AND INSULATION:**

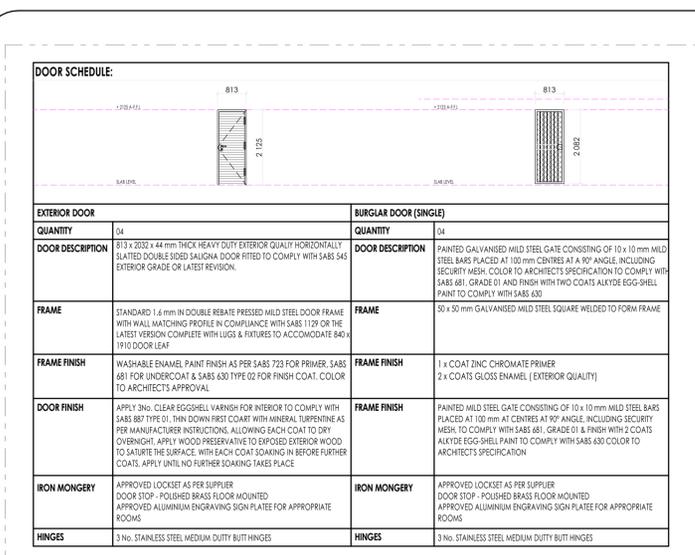
**R1- EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with S2 350 (3). The profile shall have three trapezoidal ribs at 200mm centres giving a net cover of 456mm. The rib height shall be 41mm and provide copillary breaks. The male rib shall have spurs of 28mm centres to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofbolts to be coated on both sides with "Global Coat" or "Chromokod Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as fixings and eave covers in strict compliance to manufacturer's instructions.

**Insulation:** SHALL BE: 1. 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 "Factoryboard" manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>3</sup> and finished with white melisized foil.

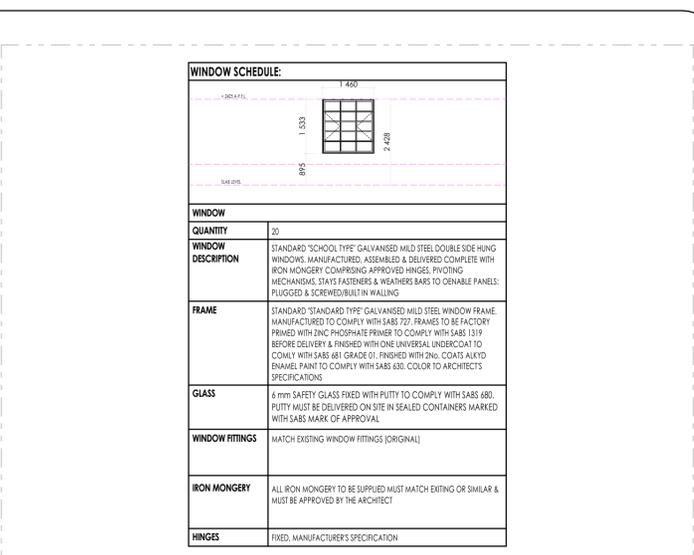
**Galvanized Steel Gullies/Gutters:** 150mm Wide x 100mm Deep x 4.6mm Envek Gutter of Commercial Grade Steel With Class Z275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

**Dampstop:** 110 x 110 x 6.6mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing To Comply With SABS 934 or Latest Revision to be built into wall or cast in concrete columns fixed to brickwork or steel including brackets and fastening screws to Manufacturer Installation Instructions.

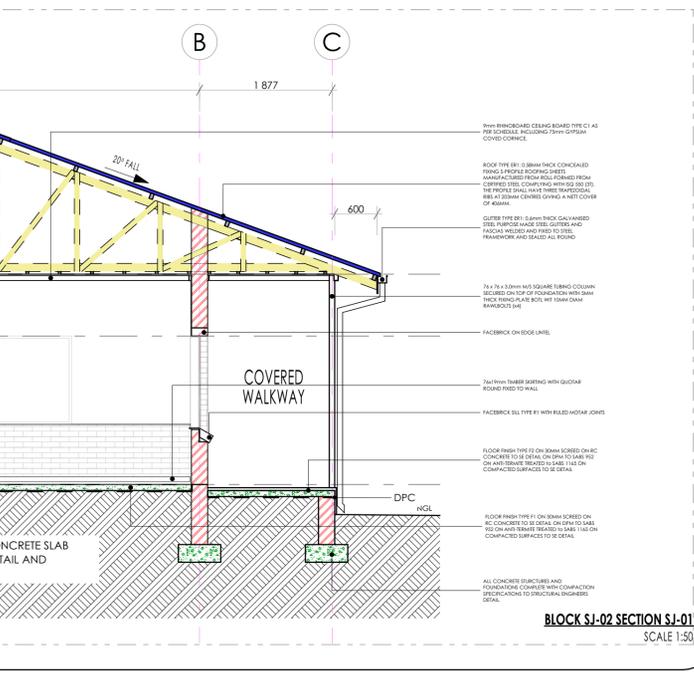
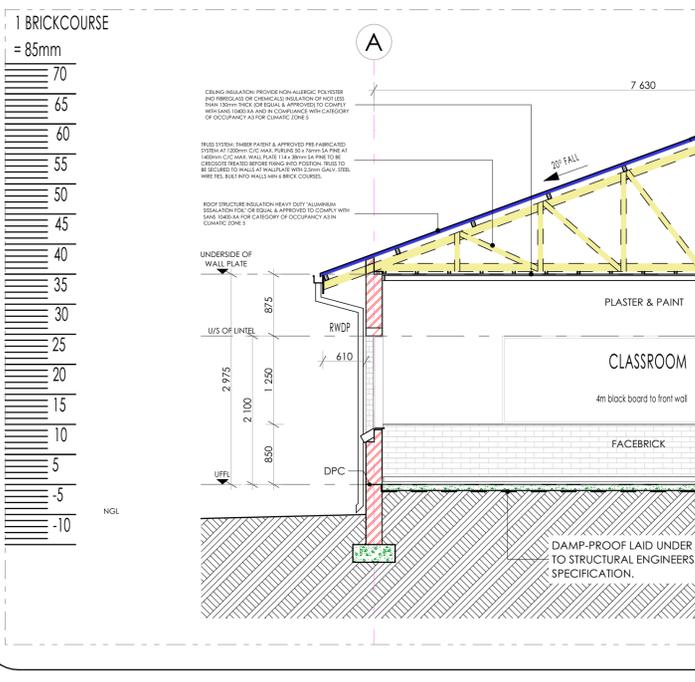
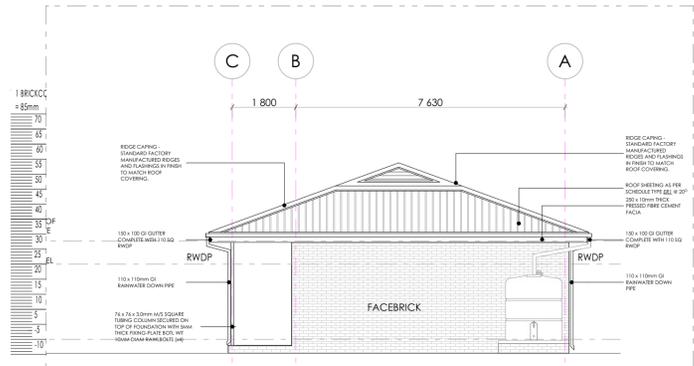
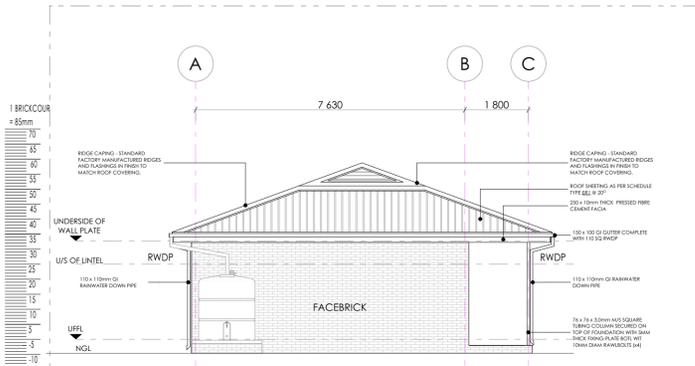
**Facia board:** 750 x 10 mm Fibre-Cement Facia/Barge Board, Screw Fixed To Tuss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic PVA.



**BLOCK SJ-02 DOOR SCHEDULE**  
SCALE 1:100



**BLOCK SJ-02 WINDOW SCHEDULE**  
SCALE 1:100



**SANITARY SCHEDULE**

**WC'S URINALS & SHOWER**

**W1- CERAMIC STANDARD WC (C/C) - CONCEALED CISTERN**  
Vitreous china 90° outlet or equal and approved, top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 487 & fitted with 'Jazz Thermalastic 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 or equal and approved, top inlet closed rim back-to-wall pan to comply with SABS 487. 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 or equal and approved, top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 487 & fitted with 'Jazz Thermalastic 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 487. 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 487 Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermalastic seal and complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards.

**W6- CERAMIC WALL HUNG URINAL**  
Wall hung bowl urinal to comply with SABS 487. Supplied with suitable 38mm CP domical geyring, 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- CERAMIC WALL HUNG URINAL**  
20mm thick Enamelled steel shower tray size 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 comprising of approved:  
- Gazed Shower Cubicle with access door as per standard supply from manufacturer and sized to fit space configuration  
- Overhead shower arm with wall flange.  
- Chrome Plated Shower Head with wall-painted connector  
- Chrome Plated Softy Shower diverter mixer-wal with sliding wall flanges and concealed connectors adjustable from 178 mm to 203 mm centres. Shower tray to be recessed 50 mm into a 100mm high concrete plinth with exposed plinth face laid.

**WASH - HAND BASIN**

**W8- WASH & MIRROR TAP**  
Vital Sanitaryware 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 chinatory hole with a 'Tuscan' pedestal and fitted with 'No. Cobra' pedestal 15mm chrome plated stainless steel with flanged bucket (code KM2 102) meeting tap, 300-32 CP anti-rattle plug with spigole, 300 basin waste, 365/40 CP bottle trap, mounting kit and angle valves.

**W9- 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 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged bucket, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Fied with concealed wall bracket in accordance to the manufacturer's specifications.

**W10- WHITE GLAZED PORCELAIN WASH (VANITY)**  
Ceramic freecast size 455x355mm oval self-rimming vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with 2No. chrome plated tap with flanged bucket (code KM2 102) meeting 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 slab with silicon beaded between contact areas in strict accordance to manufacturer's specifications.

**W11- SMALL BASIN & 2 TAP STRAY & SHOWER SET (FOR WORKSHOPS)**  
Vitreous china size 455x300mm oval basin to comply with SABS 497 in 2 tap hole configuration supplied with integrated overflow and chinatory hole with 2No. pillar tap, chrome plated anti-rattle plug with spigole dia. 32mm 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.

**W12- WASH TAP (FOR LABS)**  
Ceramic freecast heavy duty basin in one tap-hole configuration to comply with SABS 497 and R16 hole plugged and fitted with No. pillar tap. Chrome plated anti-rattle plug with spigole 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.

**W13- 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 action pillar-tap, with 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged bucket, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Fied with concealed wall bracket in accordance to the manufacturer's specifications.  
Combination of sanitaryware, accessories and general fittings comprising of:  
- Mirror type K2, \* Paper towel dispenser K8 and bin type K3, \* Soap dispenser type K9.  
- Spigoback comprising 2no. row of wall fin 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 faired edges. Bowl to be fitted to kitchen cupboard (cupboard elsewhere measured). Grade 304 (18/10) Stainless Steel sink to comply with SABS 906 fitted with: Approved Sink waste-wall 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 faired edges. Bowl to be fitted to kitchen cupboard (cupboard elsewhere measured). Grade 304 (18/10) Stainless Steel sink to comply with SABS 906 fitted with: Approved Sink waste-wall type, 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 435 x 335 x 180 mm rectangular laboratory sink without an overflow, with a centre end waste outlet, fitted to wall on two semi-concealed brackets supplied with all necessary accessories (all to be acid resistant)

**X4- SINGLE WASH TROUGH (2 NO. TAPS)**  
1200 x 550 mm wide wash trough manufactured from grade 18/10 SS, stainless steel with radiused internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2no. CP bibcocks - plan extended chrome plated, complete with sliding wall flange, Un-slotted sink waste with back, plug with strip, chain and stay, CP, 'P' trap, with deep seal and cleaning eye. Rough brass Sink installation height = 900mm AFFL. Cut out size 555 x 425mm.

**X5- DOUBLE WASH TROUGH (ENAMEL) & 2 NO. TAPS**  
1200 x 550 x 200mm Double bowl wash trough manufactured from grade 304 (18/10) SS, stainless steel with radiused internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2no. wash type bibcocks, with Swivel Outlet, adjustable wall flanges and approved adjustable connectors. CP, Double sink waste with back, outlet and plug with strip, CP, Double drain block rubber deep seal 'P'-trap. Sink mounted on 2no. 25mm square S5 gallow brackets, front leg and adjustable foot piece of height of 975mm AFFL.

**SANITARY ACCESSORIES**

**K1- SS TOILET ROLL HOLDER - 2 ROLL**  
Standard stainless steel toilet roll holder (2 roll) 150mm width x 200mm high 275mm depth Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Saffin 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 milled 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 Saffin 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 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 RAILS-PARALEGIC**  
Stainless steel 914 x 90 x 32mm diameter wall (rear) 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/L HAND)-PARALEGIC**  
Stainless steel 914 x 90 x 32mm diameter (right/L) hand side toilet grab rail with 450mm high centre flange, to a satin polished finish complete with SS fixing screws and plastic wall plugs, installed as per manufacturer's instructions.

**K8- PAPER TOWEL DISPENSER**  
330mmWx365mmX225mmD 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 Free 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 Electrical Engineers specification

**K12- TOWEL RAIL**  
15mm 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 UPVC Door Protector manufactured in high impact resistant rigid UPVC (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 SCREWS**  
Full cover UPVC corner size 244 x 185mm (viewing area 234 x 175mm) with wall-mounted code SC0400 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 1000mm H x 1500mm W comprising of laminated self board core priming material beaded all round with anodised aluminium channel surround milled at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level.

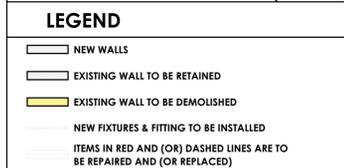
**G4- FINBOARD 300W X 1200H**  
Finboard size 1200mm H x 300mm W comprising of laminated self board core priming material beaded all round with anodised aluminium channel surround milled at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level

**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 (over the window opening) by means of concealed tieing fixings.

**G6- FLOOR DRAIN**  
Cast iron flat type full-flow outlets size 110 mm diameter with centre ball, including connectors to downpipes.

**G7- SS 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 CES 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 finely structured, olive green in colour (Vitreous Colour Reference - Chalk Board Green (LM197/2), supplied 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.



**NOTES**  
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED

DIMENSIONS TO BE READ, NOT TO SCALED FROM THIS DRAWING

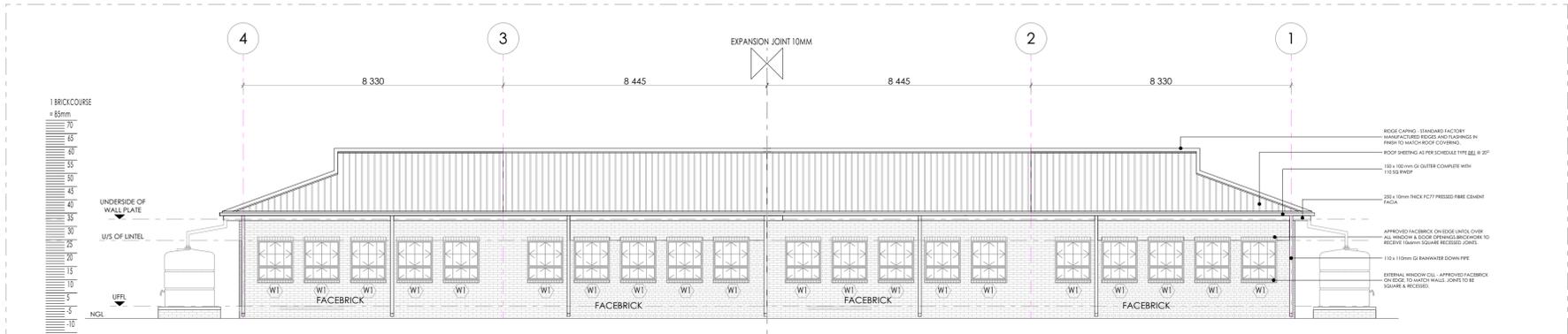
CONTRATORS TO CONFIRM ALL DIMENSIONS ON SITE BEFORE CONSTRUCTION COMMENCES & ANY DISCREPANCY TO BE REPORTED TO THE PROJECT ARCHITECT



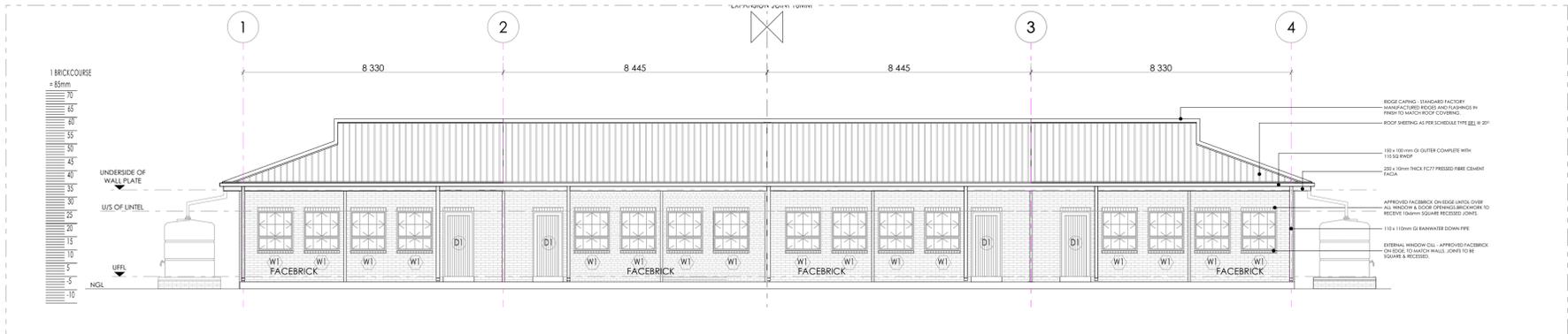


**FINISHES LEGEND**

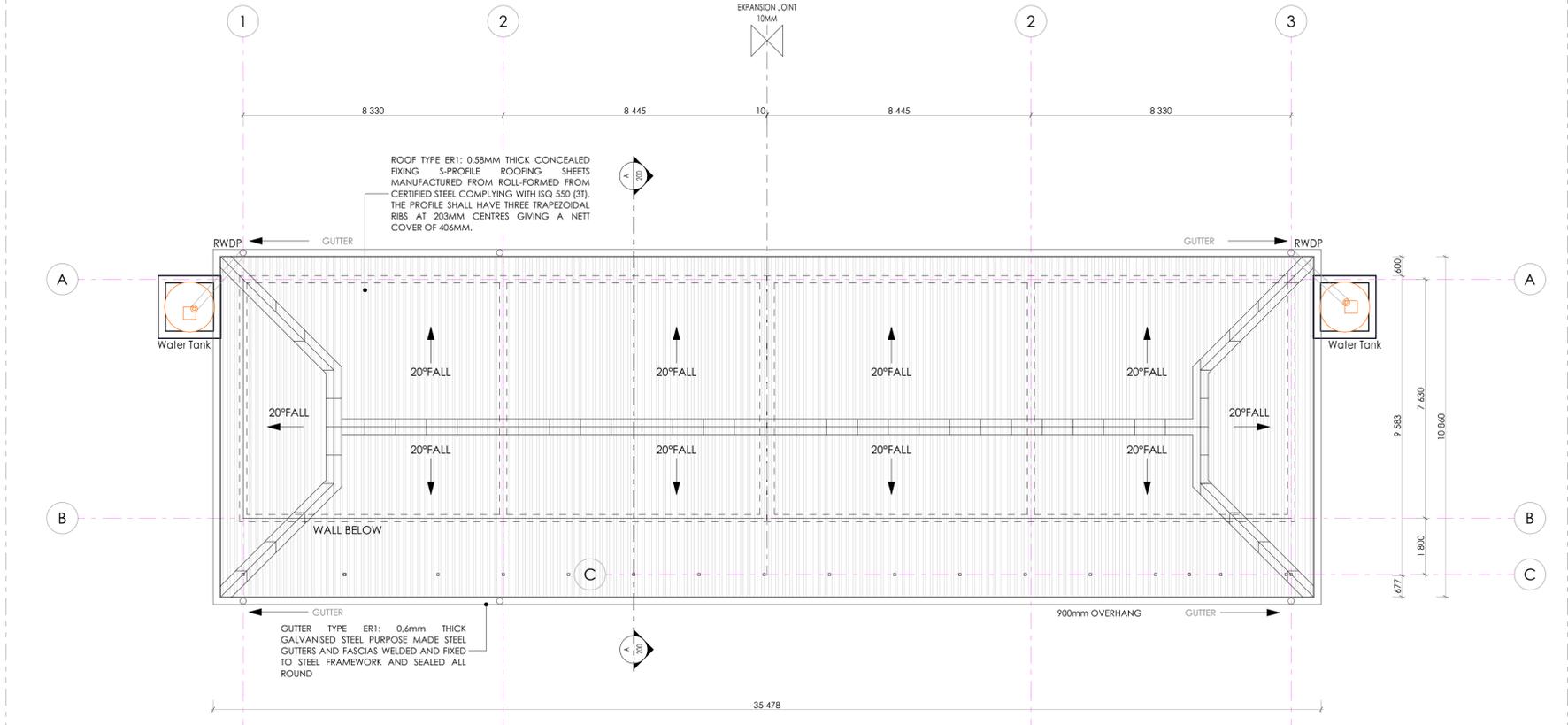
- FLOORS:**
- F1- FULLY FLEXIBLE TILES (CORROSION RESISTANT & ANTI-SLIPPER)**  
300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles to SABS Specification S81:1992 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. 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.
- 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- CARPET TILES**  
520mm x 520mm, 100% PEV 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 DN S4324 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 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 unsealed 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 10m<sup>2</sup>, 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 60mm thick concrete interlocking pavers, 25mpa, 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-SLIPPER)**  
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-Levelled Smooth Screed glued with conductive adhesive to SABS D70 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 PSE Details Installed in All Duct Chambers Accommodating Sanitary Services.
- SKIRTING:**
- S1- HARDWOOD OR EQUAL AND APPROVED**  
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 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 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with cove base and straight tops. 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**  
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:**
- W1- FACEBRICK**  
F88 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 I, in accordance to manufacturer's instructions.
- W3- ALKYD (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 alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade I, 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 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 681 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.
- 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 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 to SABS 22 standard.
- CEILING AND CORNICE:**
- C1- 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
GypCell Classic gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber bracing 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 GypCell Fester 7 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 10171-5) fixed to EX 38mm x 50mm timber bracing 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 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 fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, 2150 g/m<sup>2</sup> 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 tile notch. All tile notches to be in line. Suspends 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 Sabs 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:**
- R1- EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm 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 203mm centres giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 203mm centres to ensure a positive double interlocking action at 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 covers in strict compliance to manufacturer's instructions.
- Insulation:** SHALL EITHER BE 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 50mm 'Tactoboard' manufactured from non-combustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>2</sup> and finished with white metalized foil.
- Galvanized Steel (G)I 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 Fascia Board Together with standard accessories discharging into Rainwater Downpipes.
- Downpipe:** 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-tapping screws To Manufacturer Installation Instructions.
- Fascia board:** 250 x 10 mm Fibre-Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



**BLOCK SJ-03 REAR ELEVATION**  
SCALE 1:100



**BLOCK SJ-03 FRONT ELEVATION**  
SCALE 1:100



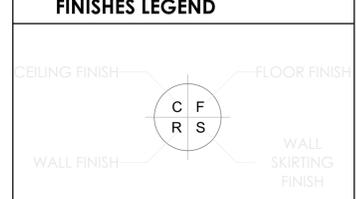
**BLOCK SJ-03 ROOF PLAN**  
SCALE 1:100

**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



**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

**ST. PAUL SECONDARY SCHOOL - 924 650 740**

**RESTORATIVES, REPAIRS & ADDITIONS**  
CONTRACT - SECTION

**DOCUMENTATION & PROCUREMENT**  
DISCIPLINE: ARCHITECTURAL 4  
WORK DESCRIPTION - SUB DIVISION: ARCHITECTURAL  
DRAWING DESCRIPTION: PROTOTYPE DRAWINGS - STAGE 04

**4 CLASSROOMS - ROOF PLAN | FRONT & REAR**

DRG. No.	E18-203-03	02/03	ITEM No.
DESIGN	N/A	SMIN	DRAWN
DATE	AS SHOWN	T.M	CHECK

DATE	NAME	SEGN	PR. NUMBER
NOV 2019	T. MANYADZA		PrArch 43981757

DRAWING CO-ORDINATED

**CONSULTANT**

**TECTURA - INTERNATIONAL!**

SAUTHWICK: 053 933 3333  
CENTRAL: 011 261 2266  
WESTERN CAPE: 021 551 1111  
NORTHERN CAPE: 028 262 1111  
NORTHERN PROVINCE: 031 262 1111  
FREE STATE: 033 262 1111  
KWAZULU-NATAL: 031 262 1111  
LIMPOPO: 011 261 2266  
MPUMALANGA: 011 261 2266  
NORTH WEST: 053 933 3333  
NORTH WEST PROVINCE: 053 933 3333  
OVERSEAS: 0027 21 911 1111  
WWW.TECTURA.COM

**CONTRACTOR**

CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REV
A1	LDPW - PROF/16002/E18	0

**FINISHES LEGEND**

**FLOORS:**  
**F1- FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)**  
 300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles in accordance to manufacturer's specifications on cement screed subfloor. Fittings to include, ribbed edge 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.

**F2- PORCELAIN TILES - MATI**  
 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. Fittings to include, ribbed edge 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, 1.008 PFV staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof jute backing and to comply with BS 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screed in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and BS S4324 on wire test and 60 dB body loss at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.

**F4- CEMENT SAND SCREED**  
 30mm thick portland 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 compacted to approved 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 10m<sup>2</sup>, 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 80 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 (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 D70 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 sprayed 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. Fittings to include, ribbed edge tiles where there is a change of level. Colour and pattern to architects approval.

**S3- CEMENT SAND SCREED**  
 75mm 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 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 (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 I, in accordance to manufacturer's instructions.

**W3- ALTYD (ENAMEL) PAINT**  
 2 no. coats matt (egg shell finish) altyd (enamel) paint to SABS 650, type 2 applied on plastered surfaces with 1 no coat alkali resistant primer primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade I, 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 'S5', 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 107 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- 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
 Gyproc Classic gypsum plasterboard ceiling OR EQUAL & APPROVED consisting of 1 layer Gyproc Rhinobond 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber branding installed at maximum 300mm centres using Gyproc Rhinobond Strap Pairs Grabber Screws 20mm at maximum 150mm centres. Apply Gyproc Rhinotape to all joints and skim the ceiling using Gyproc Rhinotile.

**C2- FIBRE CEMENT BOARDS (H-JOINTED)**  
 6mm thick Gyproc Resistor 7 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc Rhinobond 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing, non-combustible to SANS 10171-5) fixed to EX 38mm x 50mm timber branding installed at maximum 400mm centres using Gyproc Rhinobond Strap Pairs 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 Rhinotile.

**C3- PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED**  
 1200mm x 600mm X 15mm Gyproc Calotex Pin Perforated or Fine Fibred 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 (0.4mm thickness, 2150 gawg, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspended 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 tile notch. All the notches to be in line. Suspends 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 SABS 603 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 SSB. 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hem-hydrate gypsum plaster on concrete slab.

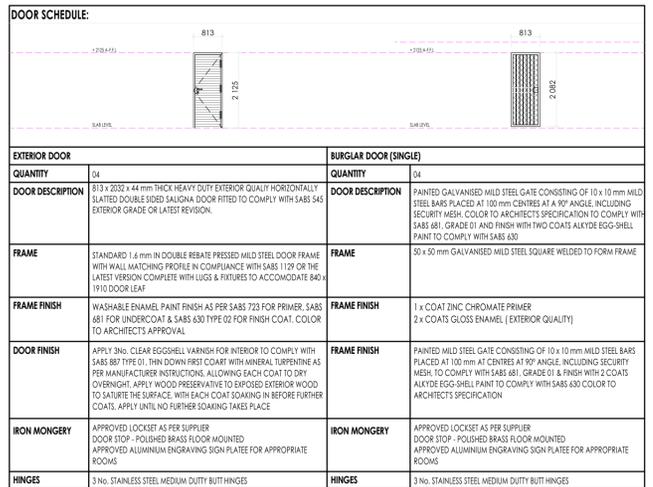
**ROOF COVERING AND INSULATION:**  
**R1- EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 350 (3). The profile shall have three trapezoidal ribs at 200mm centres giving a net cover of 456mm. The rib height shall be 41mm and provide copillary breaks. The male rib shall have spurs of 28mm centres to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofbolts to be coated on both sides with 'Global Coat' or 'Chromokod Colour' and laid on structural timber/steel structure incorporating all necessary accessories such as gables and eave covers in strict compliance to manufacturer's instructions.

**Insulation:** SHALL BE: 1. 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 'Fibroglass' manufactured from non-combustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>3</sup> and finished with white meltable foil.

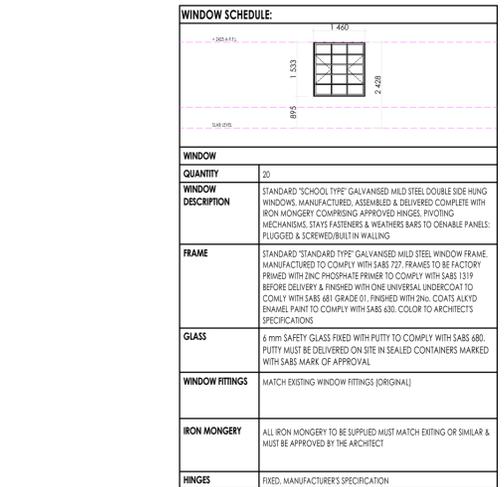
**Galvanized Steel Gullies/Gutters:** 150mm Wide x 100mm Deep x 0.6mm Envel Gutter of Commercial Grade Steel With Class Z275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

**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 wall or cast in concrete columns laid to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation Instructions.

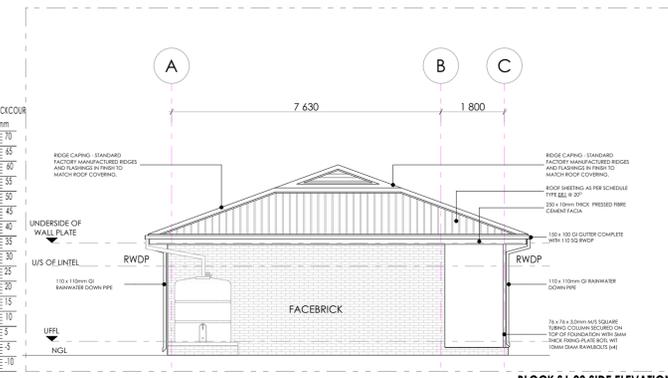
**Facia board:** 750 x 10 mm Fibre-Cement Facia/Barge Board, Screw Fixed To Tuss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic PVA.



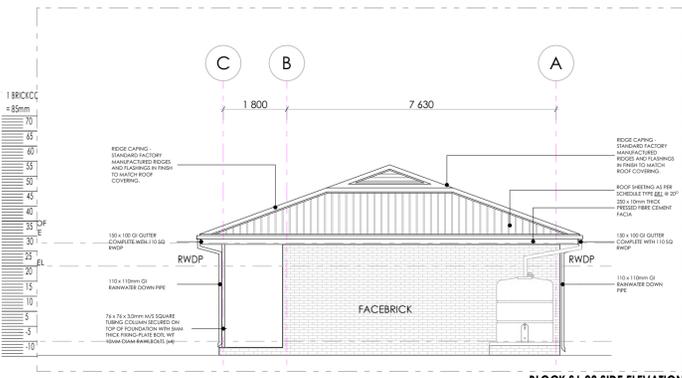
**BLOCK SJ-03 DOOR SCHEDULE**  
SCALE 1:100



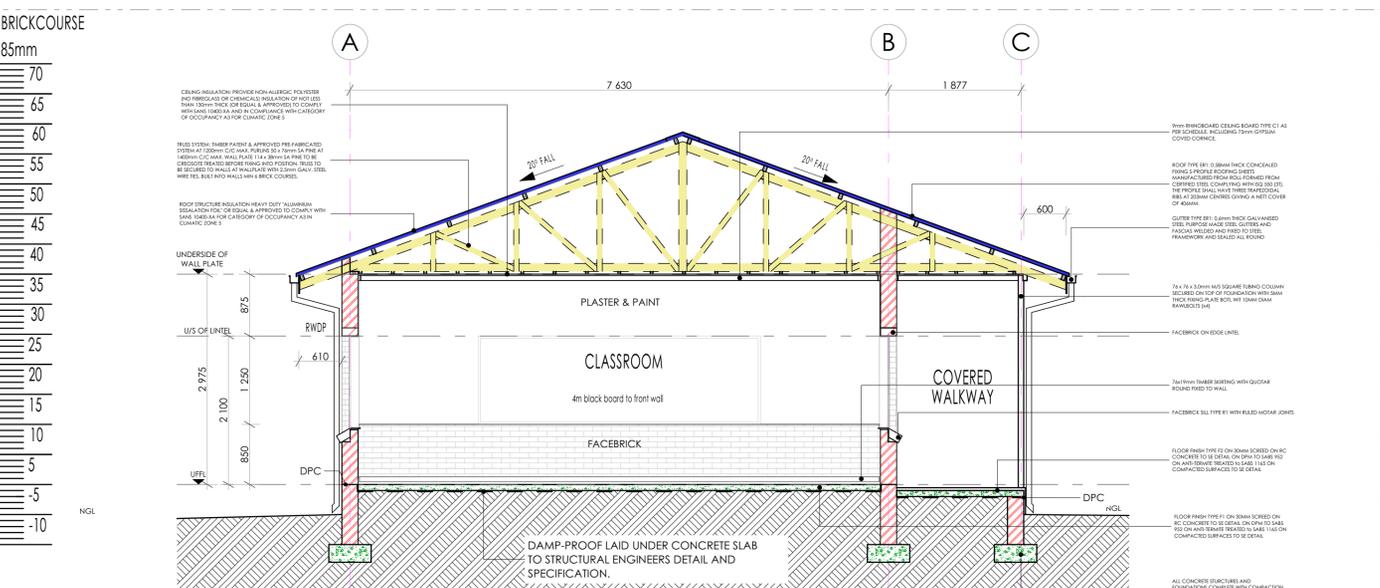
**BLOCK SJ-03 WINDOW SCHEDULE**  
SCALE 1:100



**BLOCK SJ-03 SIDE ELEVATION**  
SCALE 1:100



**BLOCK SJ-03 SIDE ELEVATION**  
SCALE 1:100



**BLOCK SJ-03 SECTION SJ-03**  
SCALE 1:50

**SANITARY SCHEDULE**

**WC'S URINALS & SHOWER**  
**W1- CERAMIC STANDARD WC (C/C) - CONCEALED CISTERN**  
 Vitreous china 90° outlet or equal and approved, top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 487 & fitted with 'Jazz Thermalastic 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 or equal and approved, top inlet closed rim back-to-wall pan to comply with SABS 487. 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 or equal and approved, top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 487 & fitted with 'Jazz Thermalastic 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 487. 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 487 Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermalastic 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 urinal to comply with SABS 487. Supplied with suitable 38mm CP domical geyser, 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 size 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 comprising of approved:  
 - Geyser Shower Cubicle with access door as per standard supply from manufacturer and sized to fit space configuration  
 - Overhead shower arm with wall flange.  
 - Chrome Plated Shower Head with wall piped connector  
 - Chrome Plated Softy Shower diverter mixer-wal with sliding wall flanges and concealed connectors adjustable from 178 mm to 203 mm centres. Shower tray to be recessed 50 mm into a 100mm high concrete pith with exposed pith face tiled.

**WASH - HAND BASIN**  
**W7- WTB & MTP LAYER**  
 Vitreous china 90° outlet, 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 chinatory hole with a 'Tuscan' pedestal and fitted with 'No. Coda' pedestal. 15mm chrome plated stainless steel top with flanged bucket (code KM2.102) meeting tap, 300-32 CP anti-rattle plug with angle valve, 300 basin waste, 365/40 CP bottle trap, mounting kit and angle valves.

**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-top, with 1/4 turn ceramic disc head and blue & red indicators water applications and flanged bucket, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Fied with concealed wall bracket in accordance to the manufacturer's specifications.

**W9- WHITE GLAZED PORCELAIN W/B (VANITY)**  
 Ceramic freecast size 450x350mm oval self-rimming vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with 1No. chrome plated top with flanged bucket (code KM2.102) meeting 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 slab with silicon beaded between contact areas in strict accordance to manufacturer's specifications.

**W10- SMALL BASIN & 2 TAP STRAY & SHOWER SET (FOR WORKSHOPS)**  
 Vitreous china size 450x300mm oval basin to comply with SABS 497 in 2 tap hole configuration supplied with integrated overflow and chinatory hole with 2No. pillar-top, chrome plated anti-rattle plug with geyser disc, fitted 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.

**W11- WUDITY BASIN & No. TAP (FOR LABS)**  
 Vitreous china size 450x300mm 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 spindle plug, fitted 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.

**W12- 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 action pillar-top, with 1/4 turn ceramic disc head and blue & red indicators water applications and flanged bucket, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Fied with concealed wall bracket in accordance to the manufacturer's specifications.  
 Combination of sanitaryware, accessories and general fittings comprising of:  
 - Mirror type C2, - Paper towel dispenser K8 and bin type C4, - Soap dispenser type K9.  
 - Grabrack comprising 2no. row of wall fin 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:**  
**S1- 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 906 fitted with: Approved Sink waste-wall type, chrome plated swivel Outlet, adjustable and supplied with suitable accessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL.

**S2- 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 906 fitted with: Approved Sink waste-wall type, 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.

**S3- CERAMIC SINK**  
 Ceramic freecast 435 x 335 x 180 mm rectangular laboratory sink without an overflow, with a centre end waste outlet, fitted to wall on two semi-concealed brackets supplied with all necessary accessories (all to be acid resistant).

**S4- SINGLE WASH TROUGH (EVAL) & 2 no. TAPS**  
 1200 x 550 x 200mm wide wash trough with rounded ends from grade 18/10 SS, stainless steel with rounded internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2no. CP bibcocks - plan extended chrome plated, complete with sliding wall flange, Un-slotted sink waste with back nut, plug with strip, chain and stay, CP, 'P' trap, with deep seal and cleaning eye. Rough brass Sink installation height = 900mm AFFL. Cut out size 555 x 425mm.

**S5- DOUBLE WASH TROUGH (EVAL) & 2 no. TAPS**  
 1200 x 550 x 200mm Double wash trough with rounded ends from grade 18/10 SS, stainless steel with rounded internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2no. wash type bibcocks, with Swivel Outlet, adjustable wall flanges and approved adjustable connections. CP, Double sink waste with back nut and plug with strip, CP, Double drain back rubber deep seal 'P'-trap. Sink mounted on 2no. 25mm square S5 gallow brackets, front leg and adjustable foot piece of height of 975mm AFFL.

**SANITARY ACCESSORIES**  
**K1- SS TOILET ROLL HOLDER - 2 ROLL**  
 Standard stainless steel toilet roll holder (2 roll) 150mm width x 200mm 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 milled 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 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 RAILS-PARALEGIC**  
 Stainless steel 914 x 90 x 32mm diameter wall (rear) 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-LINE HAND)-PARALEGIC**  
 Stainless steel 914 x 90 x 32mm diameter hand (right) side toilet grab rail with 450mm high centre flange, to a satin polished finish complete with SS fixing screws and plastic wall plugs, installed as per manufacturer's instructions.

**K8- PAPER TOWEL DISPENSER**  
 330mmWx365mmHx220mmD 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 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)**  
 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 Electrical Engineers specification

**K12- TOWEL RAIL**  
 15mm 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 UPVC Door Protector manufactured in high impact resistant rigid UPVC (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 SCREWS**  
 Full-duty UPVC Screws Size 244 x 165mm (including 224 x 175mm) with wall-mounted code SC0400 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 1000mm W comprising of laminated self board core priming material beaded all round with anodised aluminium channel surround milled 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 H x 1200mm W comprising of laminated self board core priming material beaded all round with anodised aluminium channel surround milled at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level.

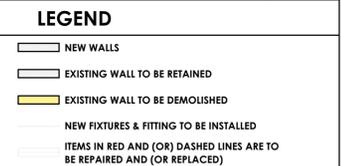
**G5- WINDOW NORMAL BUNDS (vertical blinds)**  
 127 mm vertical deco blinds with anodised aluminium headrail fitted with colour coordinated insert. All runners to be wheeled and fitted with individual clutch mechanism. All runners to be connected by stainless steel links. The mechanism to be operated by a nylon ball chain with a reduction gear inside a fully enclosed cap. Blinds to be face fixed (used 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- SS 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**  
 Vitreous 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 CES 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 finely structured, olive green in colour (Vitreous Colour Reference - Chalk Board Green (LM197/2), supplied 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		
PLAN EXAMINER		
FIRE CONTROL		
ENVIRONMENTAL		
ROADS / STORMWATER		
WATER & SANITATION		

**REVISIONS**

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



**PUBLIC WORKS, ROADS & INFRASTRUCTURE INSTITUTION**

**ST. PAUL SECONDARY SCHOOL-924 650 740**

**RESTORATIVES, REPAIRS & ADDITIONS**

**DOCUMENTATION & PROCUREMENT**

**ARCHITECTURAL 4**

**PROTOTYPE DRAWINGS - STAGE 04**

**SECTION | SIDE ELEVATIONS | SCHEDULES**

DRG. NO.	E18-203-03	03/03	ITEM No.
DESIGN	N/A	S/MIN	DRAWN
DATE	AS SHOWN	T.M	CHECK
NOV 2019	T. NAMEYAZA		PrArch 43981757

**DRAWING CO-ORDINATED**

**CONSULTANT**  
**TECTURA - INTERNATIONAL!**

CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REVISION
A1	LDPW - PROF/16002/E18	0

**FINISHES LEGEND**

**FLOORS:**

**F1- FULLY FLEXIBLE TILES (CORROSION RESISTANT & ANTI-SLIPPER)**  
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 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 Ships Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

**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 Ships 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, 100% PEV 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 DN 54324 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 pozzolanic 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- GRANULITHIC FINISH**  
22mm thick unsealed 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 10m<sup>2</sup>, 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 80 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 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 PSE 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 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 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with cove base and straight tops. 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**  
75mm high x 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:**

**F1- FACE BRICK**  
F88 face brick in common running bond to comply with SABS 227 and forming part of the structural wall.

**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 I, in accordance to manufacturer's instructions.

**F3- ALKYL (ENAMEL) PAINT**  
2 no. coats matt [egg shell] finish alkyl (enamel) paint to SABS 650, 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 I, 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 1584 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.

**F5- 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 to SABS 22 Standard.

**CEILING AND CORNICE:**

**C1- 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
"GypCell Classic" gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc Rhinoboard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc Rhinoboard Snap Point Grabber Screws 32mm at maximum 150mm centres. Apply 1 coat of super PVA external quality point colour to PA's approval. Gyproc Rhinotape to all joints and skim the ceiling using Gyproc Rhinotile.

**C2- FIBRE CEMENT BOARDS (R-JOINTS)**  
6mm thick GypCell Finesse 7 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 10171-5) fixed to EX 38mm x 50mm timber bracing 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 point colour to PA's approval. Gyproc Rhinotape to all joints and skim the ceiling using Gyproc Rhinotile.

**C3- PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED**  
1200mm x 600mm x 15mm Gyproc Celotex 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 Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the tile notch. All fire notches to be in line. Suspends 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 Sabs 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hem-hydrate gypsum plaster on concrete slab soff.

**ROOF COVERING AND INSULATION:**

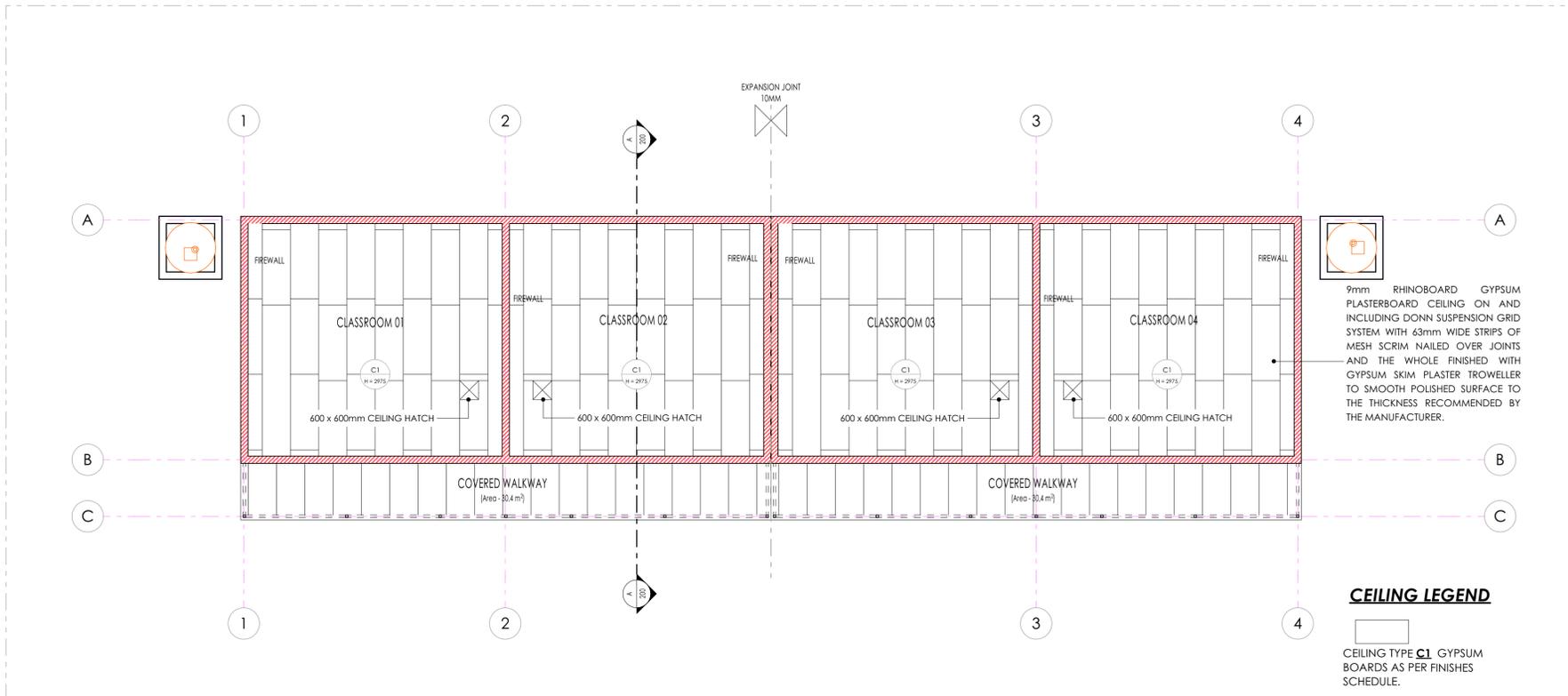
**R1- EMBOSSED ROOFING SHEET (TWO SIDES)**  
Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with S2 350 (S3). The profile shall have three trapezoidal ribs at 203mm centres giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs of 283mm centres to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofbolts 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 cassettes in strict compliance to manufacturer's instructions.

**Insulation:** SHALL EITHER BE 1) 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 "Factoryboard" manufactured from non-combustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>3</sup> and finished with white meltable foil.

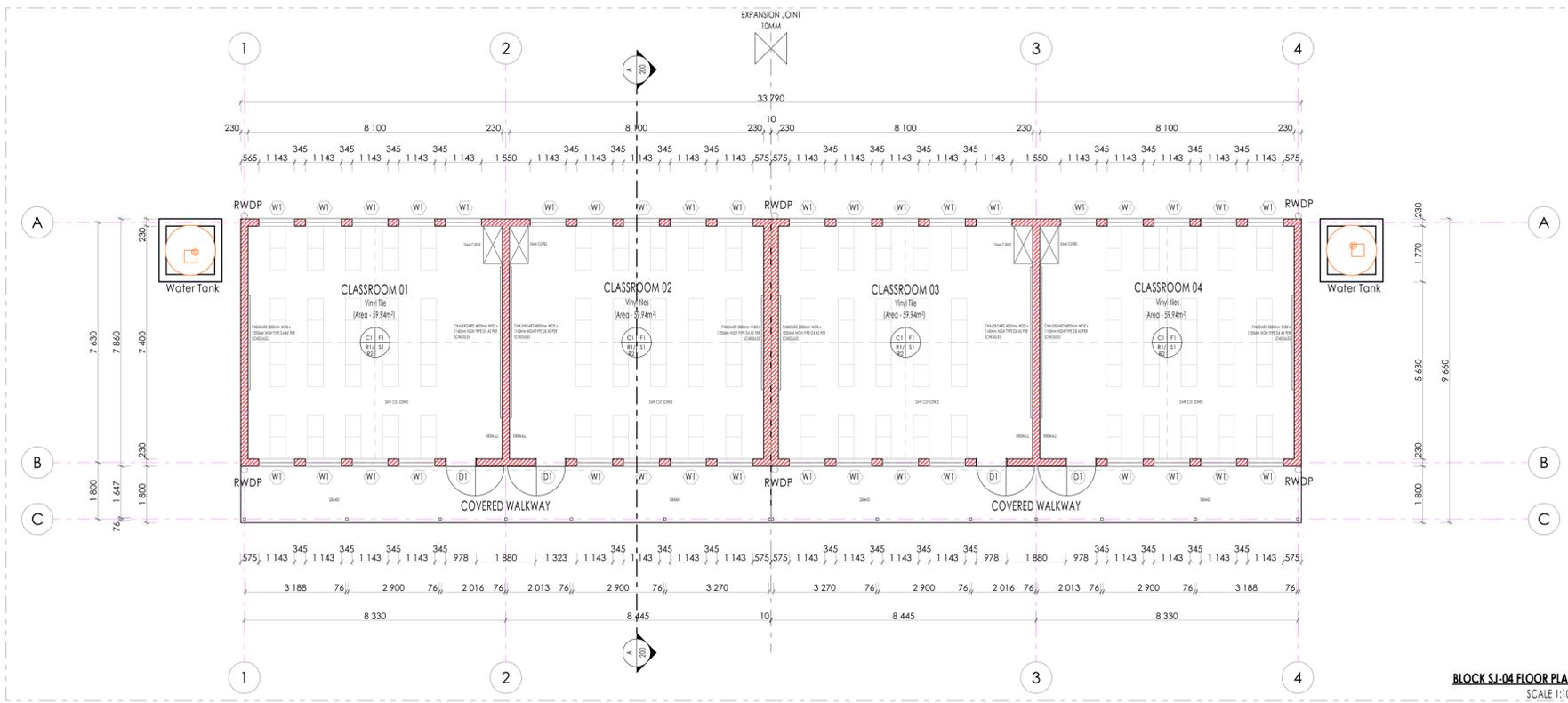
**Galvanized Steel Gullies:** 150mm wide x 100mm Deep x 0.6mm Deep of Commercial Grade Steel With Class 2775 Galvanizing To Comply With SABS 934 or latest Revision Fixed to Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

**Downpipe:** 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class 2775 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.

**Fascia board:** 750 x 10 mm Fibre-Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



**BLOCK S1-04 CEILING PLAN**  
SCALE 1:100



**BLOCK S1-04 FLOOR PLAN**  
SCALE 1:100



**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 F  
FLOOR FINISH: F S  
WALL FINISH: W R  
WALL SKIRTING FINISH: S R

**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

**ST. PAUL SECONDARY SCHOOL-924 650 740**

RESTORATIVES, REPAIRS & ADDITIONS

CONTRACT - SECTION  
**DOCUMENTATION & PROCUREMENT**

DISCIPLINE  
**ARCHITECTURAL** 4

WORK DESCRIPTION - SUB DIVISION  
**PROTOTYPE DRAWINGS - STAGE 04**

DRAWING DESCRIPTION  
**4 CLASSROOMS - GROUND & CEILING PLAN**

DRG. NO.	DATE	DESIGN	AS SHOWN	01/03	SMIN	01/03	T.M	ITEM No.	DRAWN	CHECK
NOV 2019	T. MANYADZA								PrArch	43981757

DRAWING CO-ORDINATED

DATE	NAME	SIGN.	PR. NUMBER

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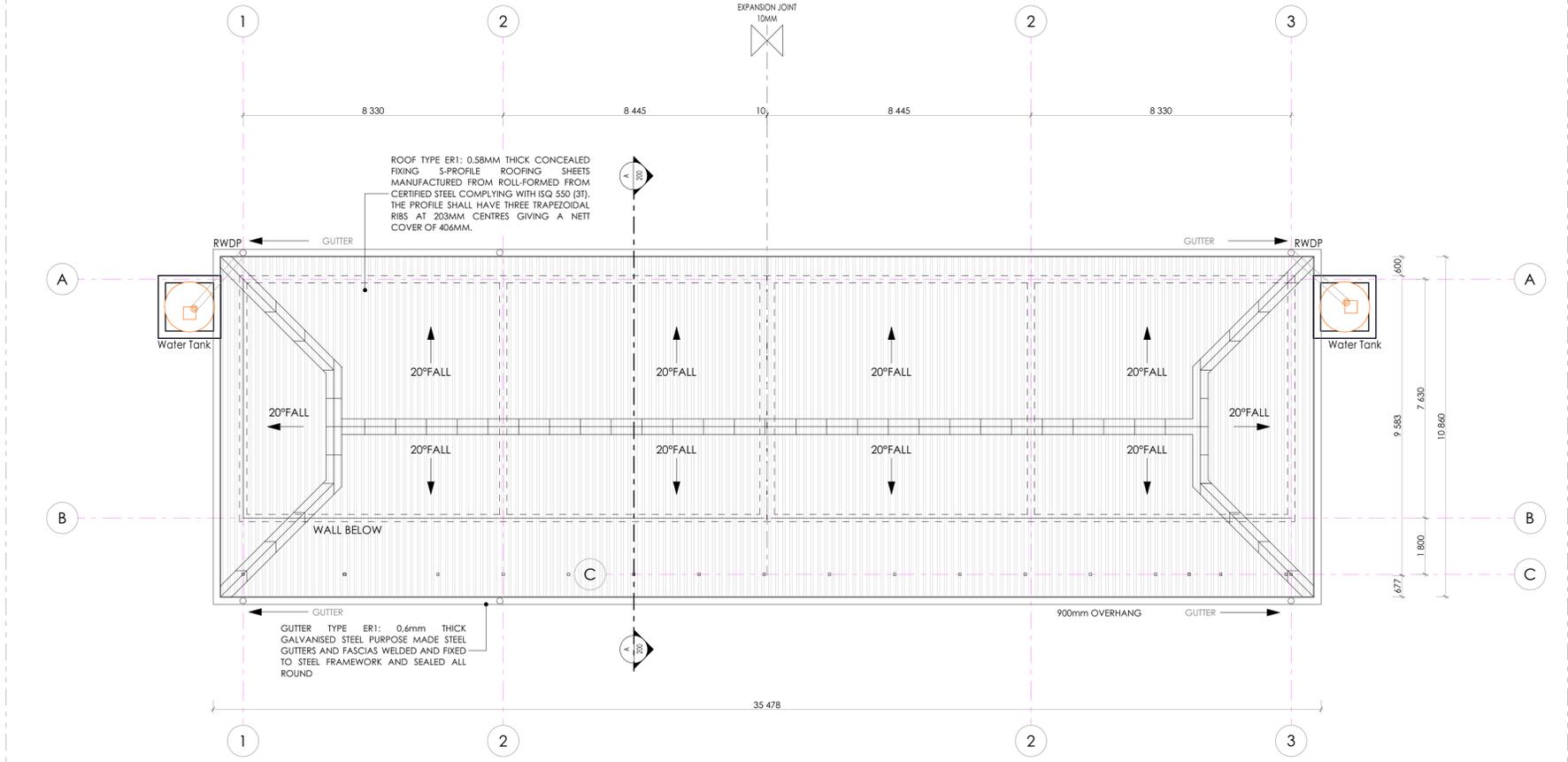
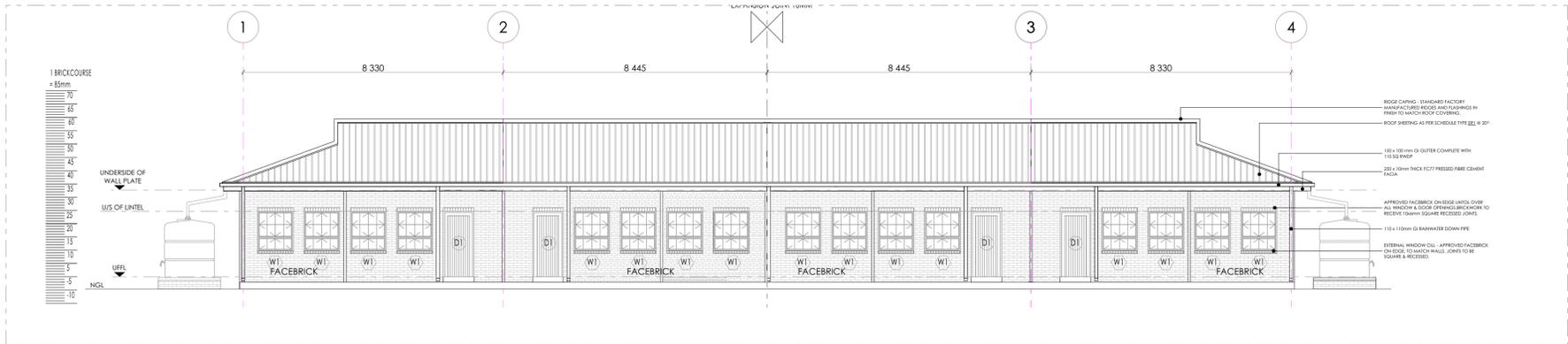
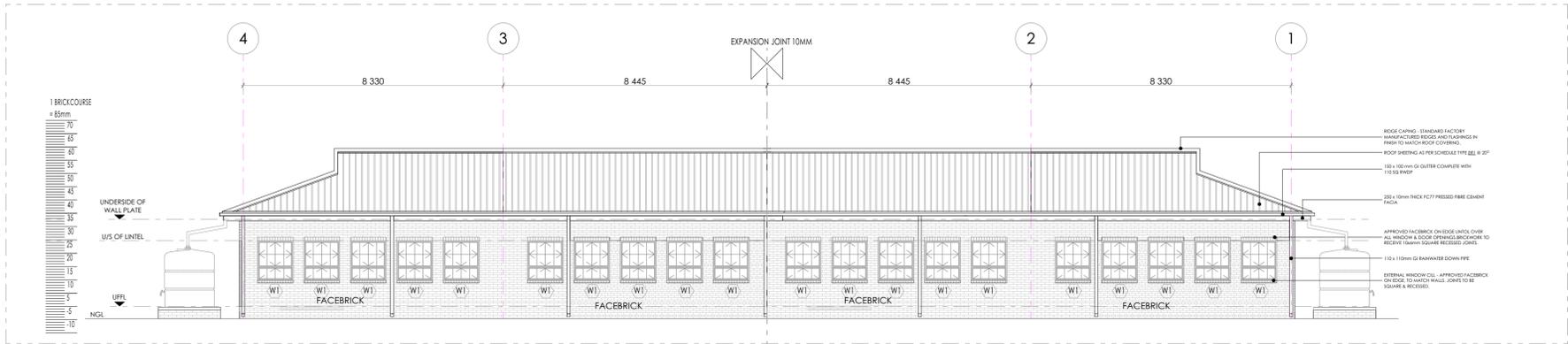
ALSO IN NAIROBI, KENYA AND GABORONE, BOTSWANA

**CONTRACTOR**

CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REV
A1	LDPW - PROF/16002/E18	0

**FINISHES LEGEND**

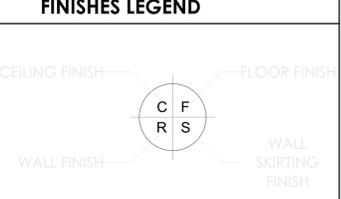
- FLOORS:**
- F1- FULLY FLEXIBLE TILES (CORROSION RESISTANT & ANTI-SLIPPER)**  
300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles to SABS Specification S81:1992 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. 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.
- 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- CARPET TILES**  
520mm x 520mm, 100% PEV 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 DN S4324 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 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 unsealed 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 10m<sup>2</sup>, 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 60mm thick concrete interlocking pavers, 25mpa, 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-SLIPPER)**  
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-Levelled Smooth Screed glued with conductive adhesive to SABS D70 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 PSE Details installed in All Duct Chambers Accommodating Sanitary Services.
- SKIRTING:**
- S1- HARDWOOD OR EQUAL AND APPROVED**  
15 x 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 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with cove base and straight tops. Complete with corner and top trims. Fittings to include, ribbed angle files where there is a 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 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:**
- W1- FACEBRICK**  
F88 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 I, in accordance to manufacturer's instructions.
- W3- ALKYD (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 alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade I, 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 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 681 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.
- 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 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 to SABS 22 standard.
- CEILING AND CORNICE:**
- C1- 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
'GypCell Classic' gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc RhoBoard Snap Point Grabber Screws 32mm at maximum 150mm centres. Apply Gyproc RhoTape to all joints and skim the ceiling using Gyproc RhoNite.
- C2- FIBRE CEMENT BOARDS (H-JOINTED)**  
6.4mm thick GypCell Fester 7 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc RhoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing, non-combustible to SANS 10171-5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc RhoBoard 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 RhoTape to all joints and skim the ceiling using Gyproc RhoNite.
- 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 fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, 2150 g/m<sup>2</sup> 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 tile notch. All tile 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 Sabs 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:**
- ER1- EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm 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 203mm centres giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 203mm centres to ensure a positive double interlocking action at 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 covers in strict compliance to manufacturer's instructions.
- Insulation:** SHALL EITHER BE 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 50mm 'Tactoboard' manufactured from non-combustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>2</sup> and finished with white metalized foil.
- Galvanized Steel (G)I 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 Fascia Board Together with standard accessories discharging into Rainwater Downpipes.
- Downpipe:** 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-tapping screws To Manufacturer Installation Instructions.
- Fascia board:** 750 x 10 mm Fibre-Cement Fascia/Barge Board, Screw Fixed To Truss 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



**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  
**ST. PAUL SECONDARY SCHOOL - 924 650 740**

**RESTORATIVES, REPAIRS & ADDITIONS**

CONTRACT - SECTION  
**DOCUMENTATION & PROCUREMENT**

DISCIPLINE  
**ARCHITECTURAL** 4

WORK DESCRIPTION - SUB DIVISION  
**PROTOTYPE DRAWINGS - STAGE 04**

DRAWING DESCRIPTION  
**4 CLASSROOMS - ROOF PLAN | FRONT & REAR**

DRG. No.	E18-204-03	02/03	ITEM No.
DESIGN	N/A	SMIN	DRAWN
DATE	AS SHOWN	T.M	CHECK

RESPONSIBLE PROFESSIONAL

DATE	NAME	SIGN.	PR. NUMBER
NOV 2019	T. MANYADZA		PrArch 43981757

DRAWING CO-ORDINATED

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**CONTRACTOR**

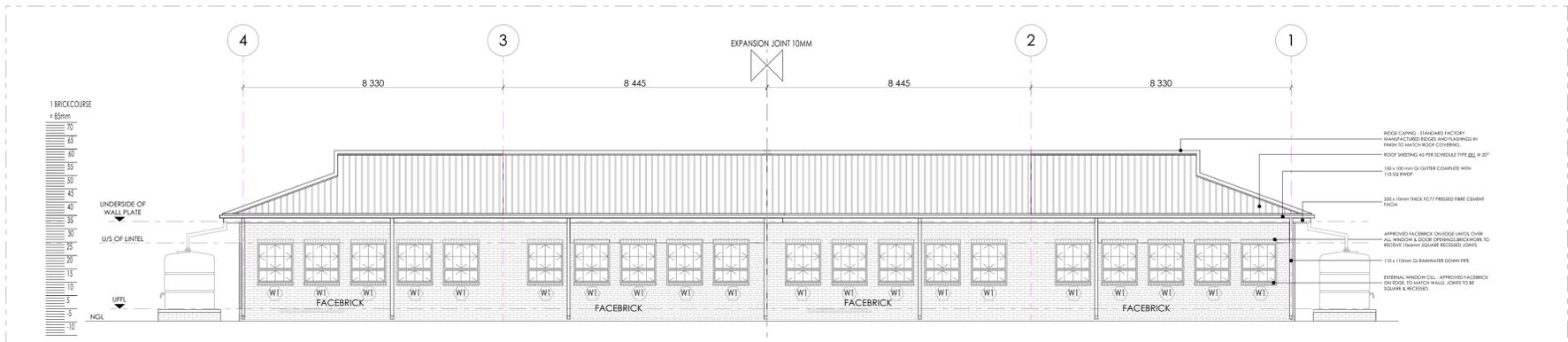
CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REV
A1	LDPW - PROF/16002/E18	0



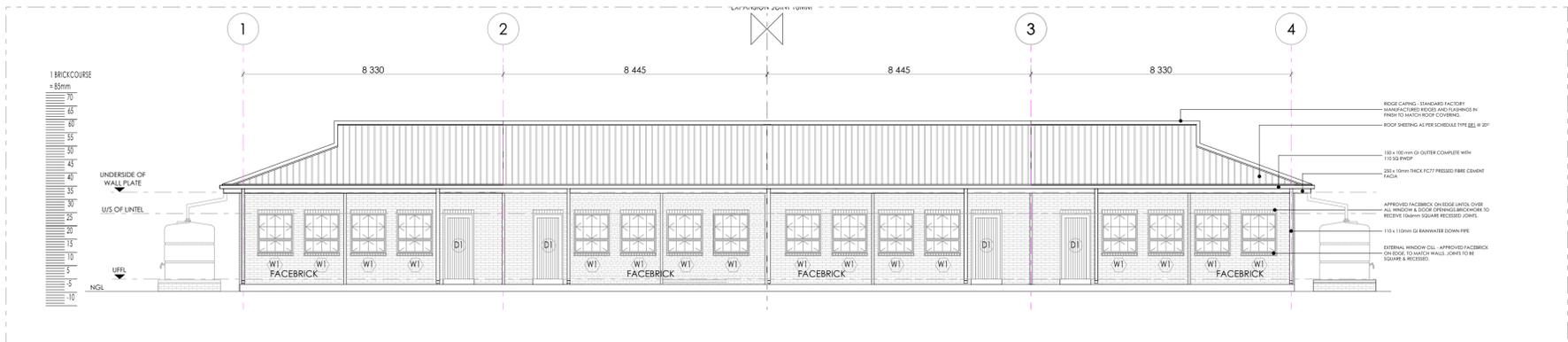


**FINISHES LEGEND**

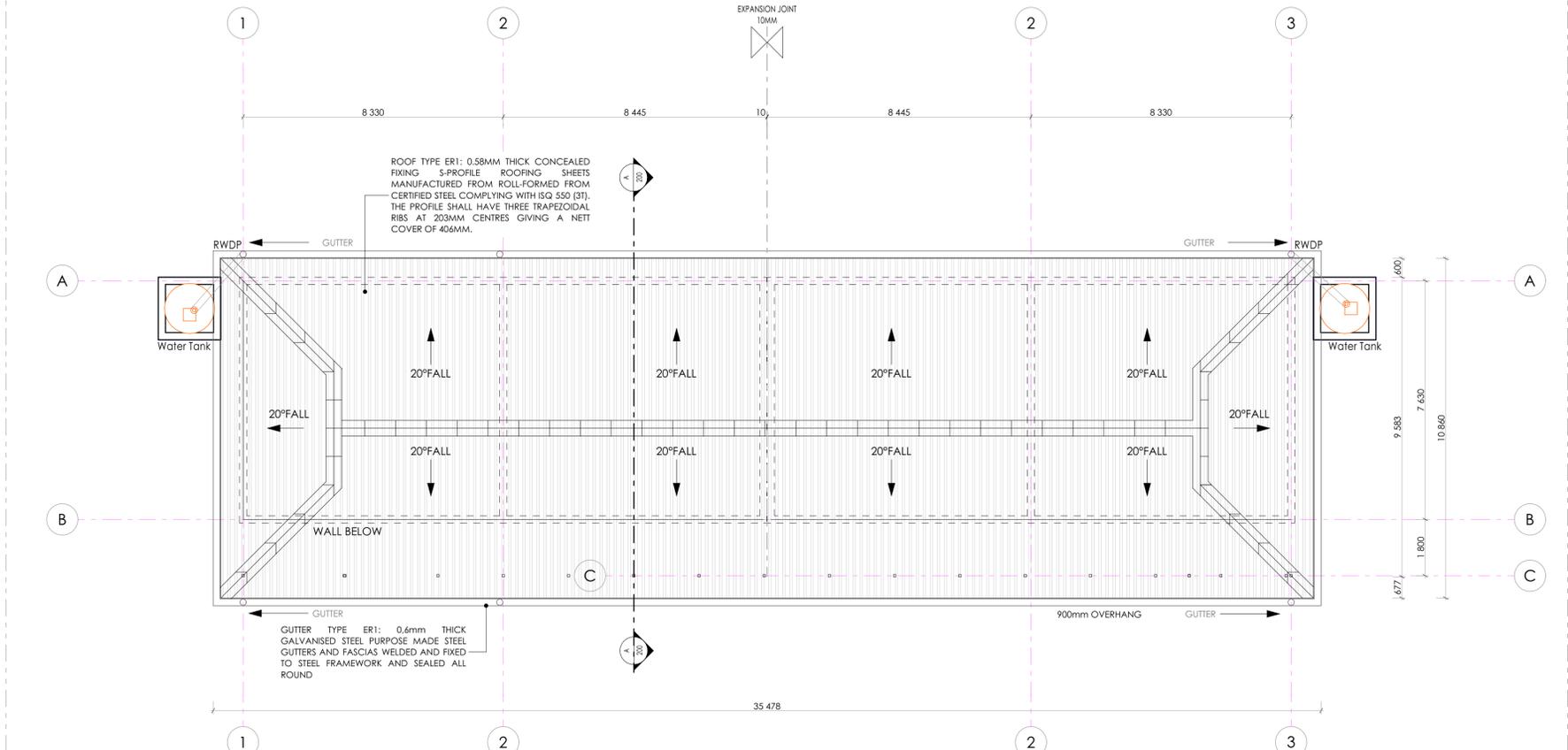
- FLOORS:**
- F1- FULLY FLEXIBLE TILES (CORROSION RESISTANT & ANTI-SLIPPER)**  
300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles to SABS Specification S81:192 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. 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.
- 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- CARPET TILES**  
520mm x 520mm, 100% PEV 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 DN S4324 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 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 unsealed 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 10m<sup>2</sup>, 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 60mm thick concrete interlocking pavers, 25mpa, 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-SLIPPER)**  
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-Levelled Smooth Screed glued with conductive adhesive to SABS D70 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 PSE Details Installed in All Duct Chambers Accommodating Sanitary Services.
- SKIRTING:**
- S1- HARDWOOD OR EQUAL AND APPROVED**  
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 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 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with cove base and straight tops. 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**  
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:**
- W1- FACEBRICK**  
F88 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 I, in accordance to manufacturer's instructions.
- W3- ENAMEL PAINT**  
2 no. coats matt (egg shell) finish alkyl (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 681 grade I, 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 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 681 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.
- 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 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 to SABS 22 standard.
- CEILING AND CORNICE:**
- C1- 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
GypCell Classic gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber bracing 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 GypCell Prestige 7 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 10171-5) fixed to EX 38mm x 50mm timber bracing 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 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 fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, 2150 g/m<sup>2</sup> 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 tile notch. All tile 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 Sabs 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:**
- ER1- EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm 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 203mm centres giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 203mm centres to ensure a positive double interlocking action at 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 covers in strict compliance to manufacturer's instructions.
- Insulation:** SHALL EITHER BE 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 50mm 'Tactoboard' manufactured from non-combustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>2</sup> and finished with white metalized foil.
- Galvanized Steel (G)I 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 Fascia Board Together with standard accessories discharging into Rainwater Downpipes.
- Downpipe:** 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-tapping screws To Manufacturer Installation Instructions.
- Fascia board:** 750 x 10 mm Fibre-Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



**BLOCK SJ-05 REAR ELEVATION**  
SCALE 1:100



**BLOCK SJ-05 FRONT ELEVATION**  
SCALE 1:100



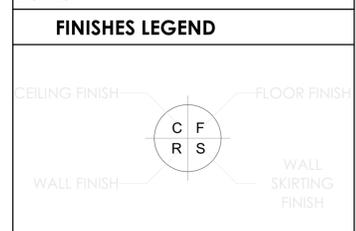
**BLOCK SJ-05 ROOF PLAN**  
SCALE 1:100

**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



**SIGNATURE TABLE**

DISCIPLINE	SIGNATURE	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  
**ST. PAUL SECONDARY SCHOOL - 924 650 740**

**RESTORATIVES, REPAIRS & ADDITIONS**

CONTRACT - SECTION  
**DOCUMENTATION & PROCUREMENT**

DISCIPLINE  
**ARCHITECTURAL** 4

WORK DESCRIPTION - SUB DIVISION  
**PROTOTYPE DRAWINGS - STAGE 04**

DRAWING DESCRIPTION  
**4 CLASSROOMS - ROOF PLAN | FRONT & REAR**

DRG. No.	E18-205-02	02/03	ITEM No.
DESIGN	N/A	SMIN	DRAWN
DATE	AS SHOWN	T.M	CHECK
NOV 2019	T. MANYADZA		PrArch 43981757

DRAWING CO-ORDINATED

**CONSULTANT**

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**CONTRACTOR**

CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REV
A1	LDPW - PROF/16002/E18	0









**FINISHES LEGEND**

**FLOORS:**

**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 S81:1992 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement sand subfloor. Filings 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 - MATI**  
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 Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

**F3: CARPET LAYS**  
500mm x 500mm, 1.008 PFV Staple fibre carpet Lays 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 54324 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 pozzolanic 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: GRANULATING FINISH**  
22mm thick unsealed 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 10m<sup>2</sup>, 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 80 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 (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 Levelled Smooth Screed glued with conductive adhesive to SABS D70 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.

**S1: HARDWOOD OR EQUAL AND APPROVED**  
15x 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 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 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 PA's approval. All to be manufactured and installed in strict compliance With SABS 1083, or latest revision.

**WALL FINISHES:**

**B1: FACE BRICK**  
F8 Face brick in common running bond to comply with SABS 227 and forming part of the structural work.

**B2: 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.

**B3: ALU-TID ENAMEL PAINT**  
2 no. coats matt (egg shell) finish alu-tid (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 681 grade 1, in accordance to manufacturer's instructions.

**B4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO**  
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 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 'B2' to comply with SABS 681 or latest revision applied on 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.

**B5: 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: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
'GypCell Classic' gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc Rhinobond 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc Rhinobond Strap Fast Grabber Screws 32mm at maximum 150mm centres. Apply Gyproc Rhinotape to all joints and skim the ceiling using Gyproc Rhinotile.

**C2: FIBRE CEMENT BOARDS (IN JOINTS)**  
6mm thick GypCell Prestige 7 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc Rhinobond 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing, non-combustible to SANS 10171:5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc Rhinobond Strap 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 Rhinotile.

**C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED**  
1200mm x 600mm x 15mm Gyproc Celotex 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 filings at 300mm centres. Donn TR8 Main Tees (8mm thickness, 1150 galvan. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn TR8V (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 file notches to be in file. 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 603 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 Skinned Plastered Sabs 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hem-hydrate gypsum plaster on concrete slab.

**ROOF COVERING AND INSULATION:**

**E1: EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 330 (3). The profile shall have three trapezoidal ribs at 200mm centres giving a net cover of 456mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have gusset of 28mm 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 'Gobal Coat' or 'Chromokod Color' and laid on structural timber/steel structure incorporating all necessary accessories such as fixings and eave covers in strict compliance to manufacturer's instructions.

**Insulation:** SHALL BE: 1 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 'Fastrorboard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>3</sup> and finished with white meltable foil.

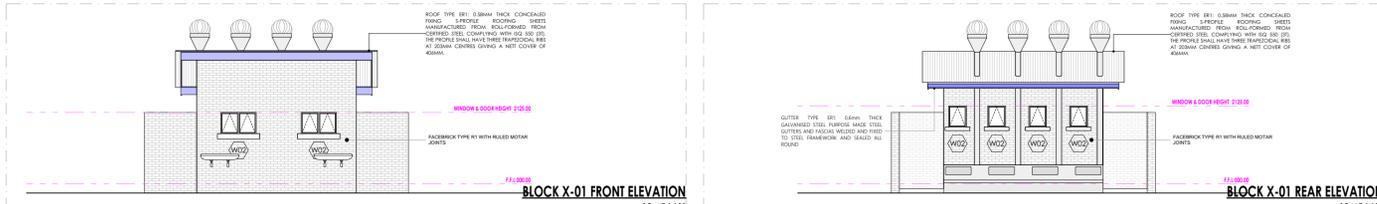
**Galvanized Steel (GI) Gutter:** 150mm Wide x 100mm Deep x 0.6mm Eave Gutter of Commercial Grade Steel With Class 1275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

**Downpipe:** 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class 1275 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 mm Fibre-Cement Facia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

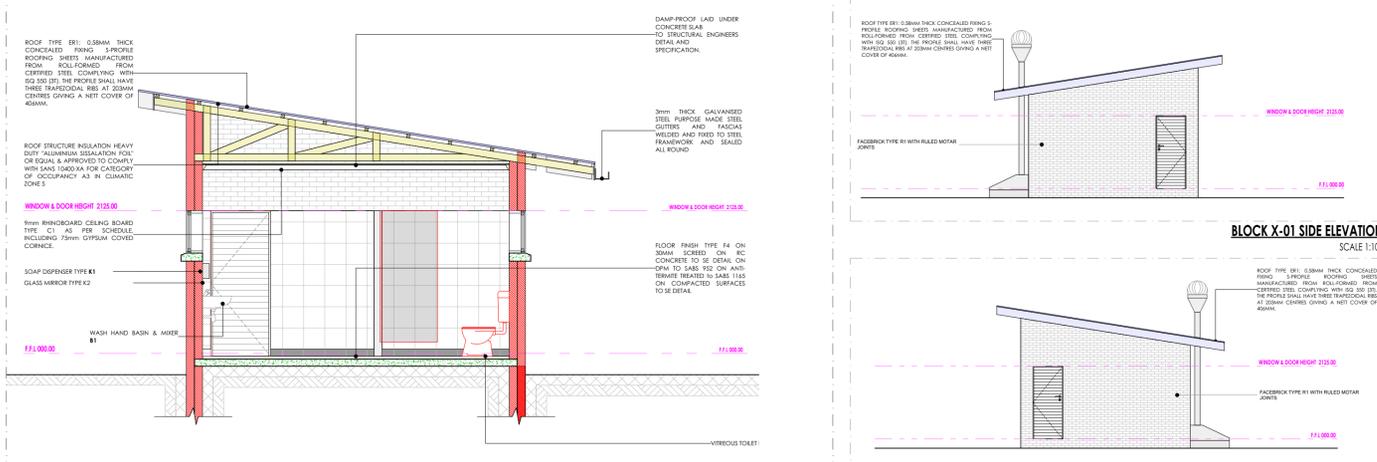
EXTERIOR DOOR		BURGLAR DOOR (SINGLE)		INTERIOR DOOR	
QUANTITY	01	QUANTITY	02	QUANTITY	02
<b>DOOR DESCRIPTION</b>	813 x 2032 x 44 mm THICK HEAVY DUTY EXTERIOR QUALITY HORIZONTALLY SLATED DOUBLE SIDED SALICINA DOOR FITTED TO COMPLY WITH SABS 545 EXTERIOR GRADE OR LATEST REVISION.	<b>DOOR DESCRIPTION</b>	PAINTED GALVANISED MILD STEEL GATE CONSISTING OF 10 x 10 mm MILD STEEL BARS PLACED AT 100 mm CENTRES AT A 90° ANGLE, INCLUDING SECURITY MESH. COLOR TO ARCHITECTS SPECIFICATION TO COMPLY WITH SABS 681, GRADE 01, FINISH WITH TWO COATS ALKTYD EGGSHELL PAINT TO COMPLY WITH SABS 630.	<b>DOOR DESCRIPTION</b>	813 x 2032 x 44 mm 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.
<b>FRAME</b>	STANDARD 1.6 mm 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.	<b>FRAME</b>	50 x 50 mm GALVANISED MILD STEEL SQUARE WELDED TO FORM FRAME	<b>FRAME</b>	STANDARD 1.6 mm 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.
<b>FRAME FINISH</b>	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.	<b>FRAME FINISH</b>	1 x COAT ZINC CHROMATE PRIMER 2 x COATS GLOSS ENAMEL (EXTERIOR QUALITY)	<b>FRAME FINISH</b>	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.
<b>DOOR FINISH</b>	APPLY 3no. CLEAR EGGSHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, 1no. 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 FURTHER COATS. APPLY UNTIL NO FURTHER SOAKING TAKES PLACE.	<b>DOOR FINISH</b>	PAINTED MILD STEEL GATE CONSISTING OF 10 x 10 mm MILD STEEL BARS PLACED AT 100 mm CENTRES AT A 90° ANGLE, INCLUDING SECURITY MESH TO COMPLY WITH SABS 681, GRADE 01 & FINISH WITH 2 COATS ALKTYD EGGSHELL PAINT TO COMPLY WITH SABS 630 COLOR TO ARCHITECTS SPECIFICATION.	<b>DOOR FINISH</b>	APPLY 3no. CLEAR EGGSHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, 1no. 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 FURTHER COATS. APPLY UNTIL NO FURTHER SOAKING TAKES PLACE.
<b>IRON MONGERY</b>	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS.	<b>IRON MONGERY</b>	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS.	<b>IRON MONGERY</b>	APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS.
<b>HINGES</b>	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES	<b>HINGES</b>	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES	<b>HINGES</b>	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES

**BLOCK X-01 DOOR SCHEDULE**  
SCALE: 1:100



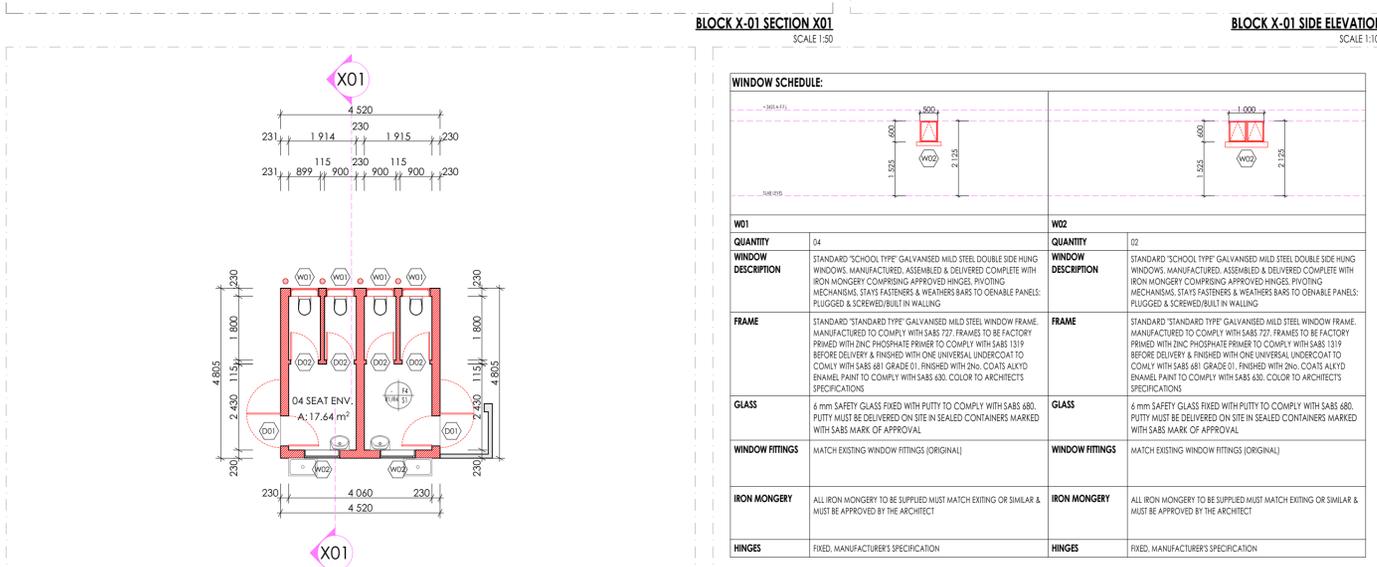
**BLOCK X-01 FRONT ELEVATION**  
SCALE: 1:100

**BLOCK X-01 REAR ELEVATION**  
SCALE: 1:100



**BLOCK X-01 SIDE ELEVATION**  
SCALE: 1:100

**BLOCK X-01 SIDE ELEVATION**  
SCALE: 1:100



**BLOCK X-01 SECTION X01**  
SCALE: 1:50

**BLOCK X-01 FLOOR PLAN**  
SCALE: 1:100

**BLOCK X-01 WINDOW SCHEDULE**  
SCALE: 1:100

**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 Thermostatic 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 (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 Thermostatic 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.

**W3: 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.

**W4: CERAMIC WALL HUNG URINAL**  
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. Floor Mounted to comply with SABS 497. Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermostatic 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 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.

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

**W8: WASH-HAND BASIN**  
**W1: WASH & MIRROR TAP**  
Vitreous china size 450x450mm wash basin to comply with SABS 497 in two tap hole configuration fitted with 2 No chrome plated elbow outlet pillar-tap, with 1/4" turn ceramic disc head and 3/8" & 1/2" indicators water applications and flanged bracket. 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.

**W2: DISABLED BASIN**  
450x450mm semi rounded lavatory basin to comply with SABS 497. In two tap hole configuration fitted with 2 No chrome plated elbow outlet pillar-tap, with 1/4" turn ceramic disc head and 3/8" & 1/2" indicators water applications and flanged bracket. 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.

**W3: WHITE GLAZED PORCELAIN WASH (VANITY)**  
Ceramic freecy size 450x350mm oval self-rimming vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with 2No. chrome plated tap with flanged bracket (code KM2.102) meeting tap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Basin mounted on cabinet or vanity with silicon beaded between contact areas in strict accordance to manufacturer's specifications.

**W4: 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 drain hole with 2No. pillar tap, chrome plated anti-rattle plug with spindle plug, 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.

**W5: URINALY BASIN (No. TAP) (FOR LABS)**  
Vitreous china size 450x300mm rectangular lavatory basin to comply with SABS 497 and 815 hole plugged and fitted with 1No. pillar tap. Chrome Plated anti-rattle plug with spindle plug, 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.

**W6: MEDIC BASIN & FITTINGS (SICK BAY)**  
Vitreous china size 450x300mm rectangular lavatory basin to comply with SABS 497. In two tap hole configuration fitted with 2 No chrome plated elbow outlet pillar-tap, with 1/4" turn ceramic disc head and 3/8" & 1/2" indicators water applications and flanged bracket. 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:  
• Mirror type C1  
• Paper towel dispenser KB and bin type K3  
• Soap dispenser type K5  
• Spoutback comprising 2no. rows of wall fix finish 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:**

**K1: 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.

**K2: 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 overarm swivel Outlet, adjustable wall flanges and supplied with suitable accessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL.

**K3: CERAMIC SINK**  
Ceramic freecy 455 x 335 x 180 mm rectangular lavatory sink without overflow, with a centre end waste outlet. Fitted to the wall on two semi-concealed brackets supplied with all necessary accessories (all to be acid resistant)

**K4: SINGLE WASH TROUGH (Inlet) & 2no. TAPS**  
1200 x 550 x 200mm Double bowl wall hung washbasin manufactured from grade 18/10 SS. stainless steel with radiused internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2no. CP bibcoaps - plain extended chrome plate. complete with sliding wall flanges. Un-slotted sink waste with back nut, plug with strip, chain and stop. CP, P' trap, with deep seal and cleaning eye. Rough brass Sink installation height = 900mm AFFL. Cut out size 555 x 425mm.

**K5: DOUBLE WASH TROUGH (Inlet) & 2no. TAPS**  
1200 x 550 x 200mm Double bowl wall hung washbasin manufactured from grade 304 (18/10) SS. radiused internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2no wall type bibcoaps, with Swivel Outlet, adjustable wall flanges and exposed adjustable connections. CP, Un-slotted sink waste with back nut and plug with strip, CP, Double drain block rubber deep seal 'P'-trap. Sink mounted on 2no. 25mm square S5 gallow brackets, front leg 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: GLASS MIRROR**  
6mm thick clear float glass silver-backed mirror. size 450x900mm height with polished beveled edges 4 times milled and fixed, with chromium plated dome-headed mirror screws

**K3: WASTE BIN**  
280W x 520H 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)**  
1000mm 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 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 BARS (RIGHT-LEFT HAND)-PARALEGIC**  
Stainless steel 914 x 90 x 32mm diameter right hand 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**  
300mmWx350mmx230mmD 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 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 (MULTITRACK)**  
200mm 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 Electrical Engineers specification

**K12: TOWEL RAIL**  
15mm 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 (Height)**  
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 UPVC 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.

**G2: PROTECTOR SCREENS**  
Full height UPVC screen size 2440 x 1850mm (including area 2240 x 1750mm) with wall-mounted code SC4000 Keystone Brackets Adjustable Set of 2, size 200mm. To be supplied complete with all accessories, and fitted in strict accordance with manufactures instructions.

**G3: FINBOARD 150W X 100H**  
Finboard size 1000mm H x 1500mm W comprising of laminated self board core priming material beaded all round with anodised aluminium channel surround milled at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level.

**G4: FINBOARD 300W X 120H**  
Finboard size 1200mm H x 3000mm W comprising of laminated self board core priming material beaded all round with anodised aluminium channel surround milled 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 ratio 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: SS 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 enameled steel utility school chalkboards wall-mounted size 480mm x 1140mm high manufactured in accordance with SABS Standard CE 36/204 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 (Vitreous Chalk Board Green LM197/2), supplied complete with integral anodised aluminium chalk rail (ACKR), 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.



**LEGEND**

	NEW WALLS
	EXISTING WALL TO BE RETAINED
	EXISTING WALL TO BE DEMOLISHED
	NEW FIXTURES & FITTING TO BE INSTALLED

**FINISHES LEGEND**

**FLOORS:**

**F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)**  
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 S81:1992 (or later revision), and laid to SABS 070 (or later revision) and in accordance to manufacturer's specifications on cement sand subfloor. Filings 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 - MATI**  
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 Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

**F3: CARPET LAYS**  
500mm x 500mm, 1.008 PFV 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 BS 54324 on wire test and 60 body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.

**F4: CEMENT SAND SCREED**  
30mm thick pozzolanic 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 approved 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: GRANULATING FINISH**  
22mm thick unsealed 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 10m<sup>2</sup>, 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 80 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 (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 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 PEZ Details Installed in All Duct Chambers Accommodating Sanitary Services.

**F10: SKIRTING**  
15x 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 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.

**F11: 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.

**F12: CEMENT SAND SCREED**  
75mm high 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 PA's approval. All to be manufactured and installed in strict compliance With SABS 1083, or latest revision.

**F13: WALL FINISHES:**

**F1: FACE BRICK**  
F8 Face brick in common running bond 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: ALKALID ENDURANCE PAINT**  
2 no. coats matt (egg shell) finish alkali (jenamel) paint to SABS 650, type 2 applied on plastered surfaces with 1 no coat alkali resistant plaster 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 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 650 or latest revision applied on 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.

**F5: 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.

**F6: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED**  
1200mm x 600mm x 15mm Gyproc Celotex 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 TR8 TR Main Tees @ 4mm thickness, 1150 galvan. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn TR8V (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 tile notch. All the notches to be in line. Suspend 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.

**F7: EMULSION (PVA) PAINT OR EQUAL AND APPROVED**  
Emulsion (PVA) Paint on Stretched Plastered Sides: 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:**

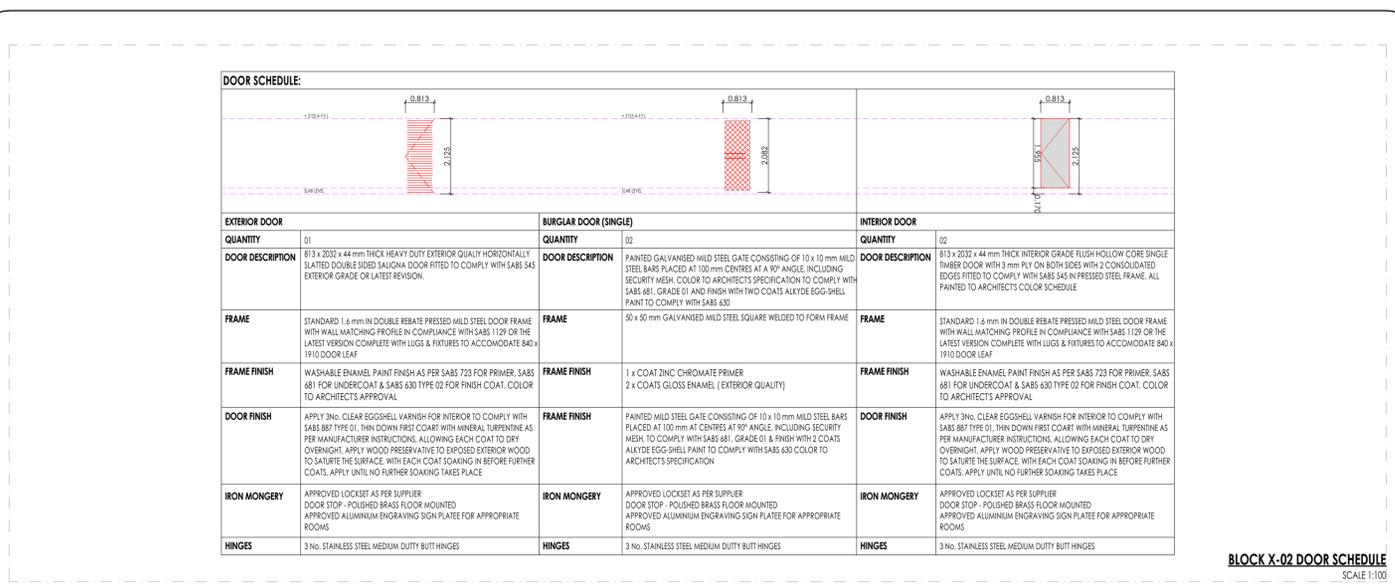
**F1: EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 331 (3). The profile shall have three trapezoidal ribs at 200mm centres giving a net cover of 456mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have gusset 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 'Chromokod Color' and laid on structural timber/steel structure incorporating all necessary accessories such as fastenings and eave covers in strict compliance to manufacturer's instructions.

**Insulation:** SHALL BE: 1 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 'Fastrorboard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>3</sup> and finished with white meltable foil.

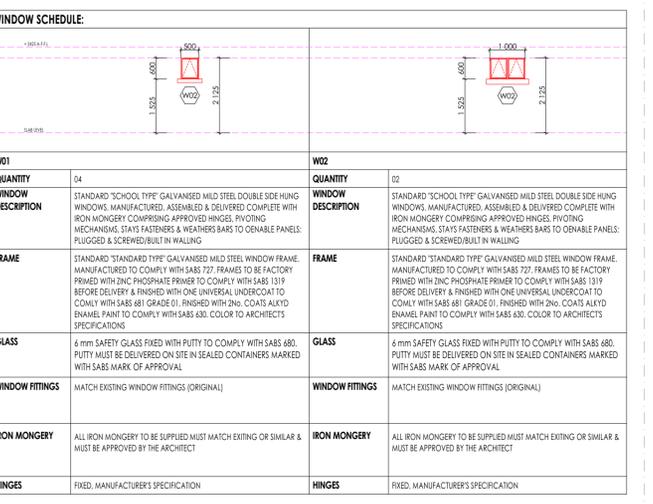
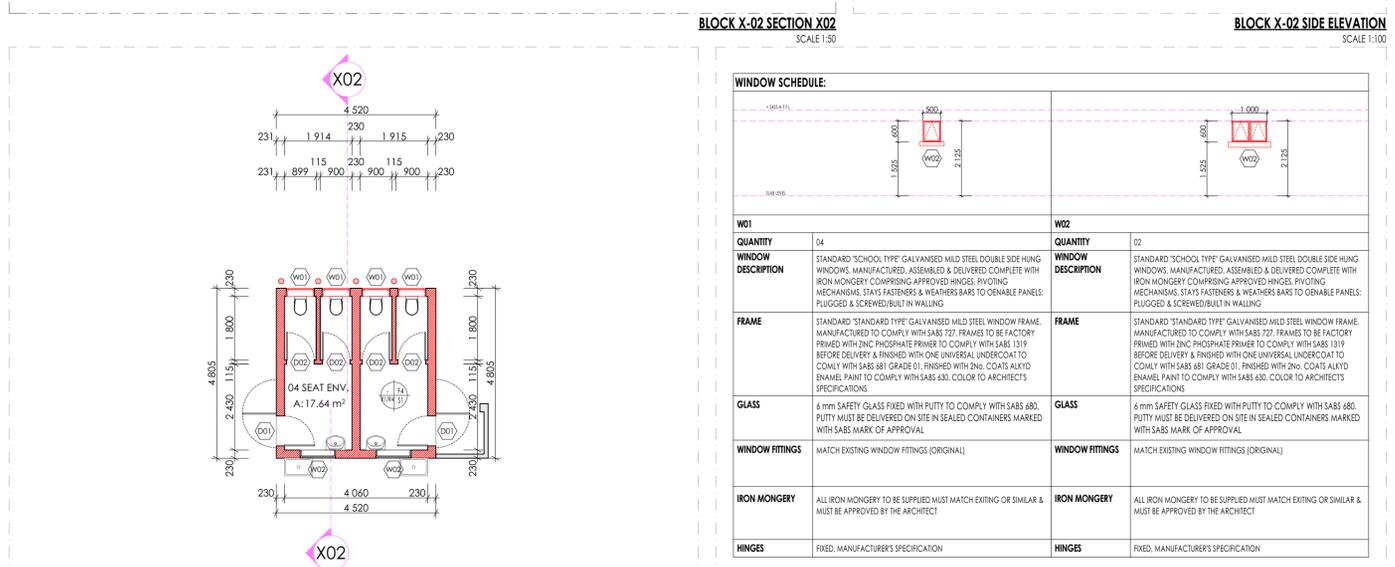
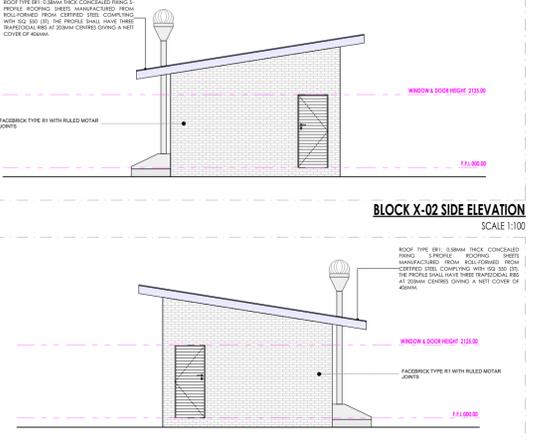
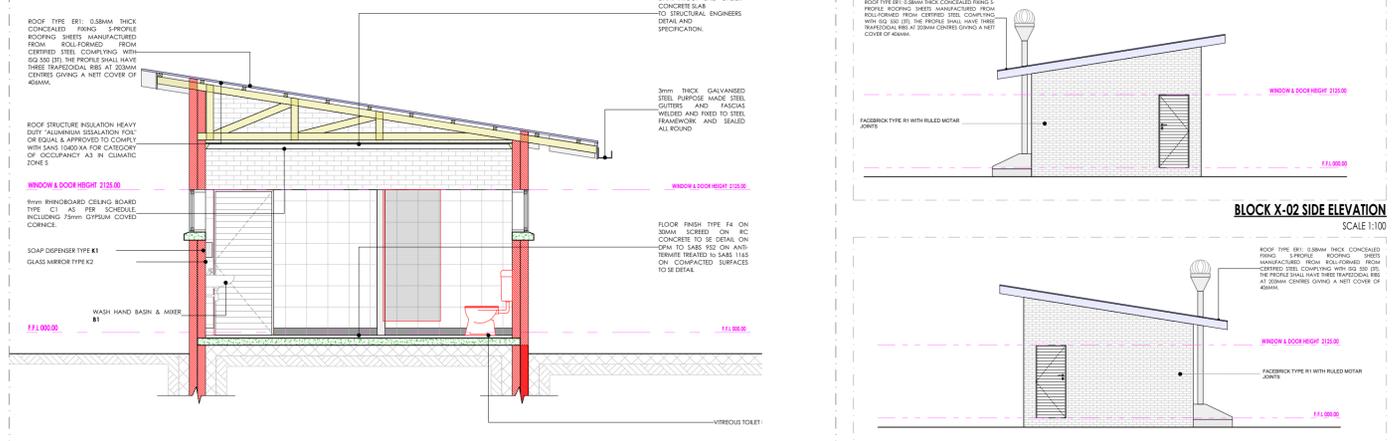
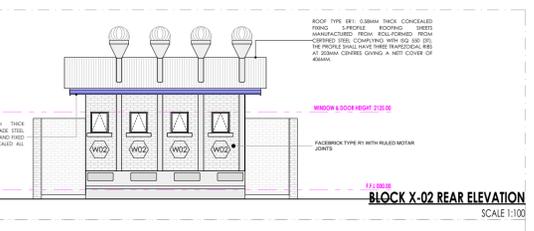
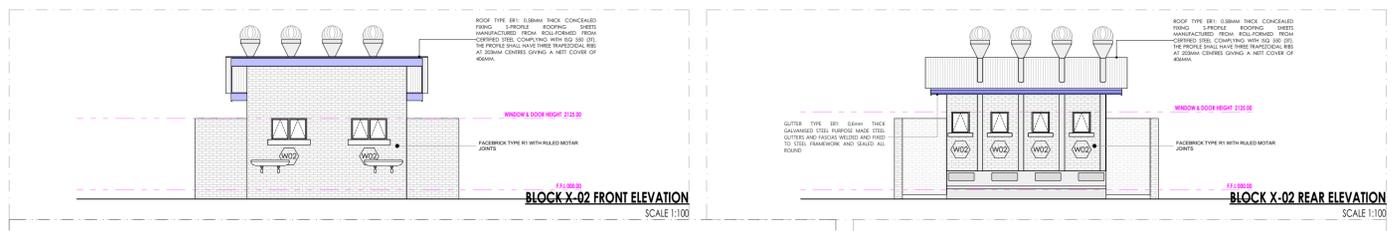
**Galvanized Steel (GI) Gutter:** 150mm Wide x 100mm Deep x 0.6mm Eave Gutter of Commercial Grade Steel With Class 1275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

**Downpipe:** 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class 1275 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 10 mm Fibre-Cement Facia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



**BLOCK X-02 DOOR SCHEDULE**  
SCALE: 1:100



**BLOCK X-02 WINDOW SCHEDULE**  
SCALE: 1:100

**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 Thermo Seal' 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. Floor Mounted to comply with SABS 497 & Fitted with 'Jazz Thermo Seal' 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 extension lever. Blank flush plate & offset push button for passage access.

**W3: 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.

**W4: CERAMIC STANDARD WC (C/C)**  
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 Thermo Seal' 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 extension lever. Blank flush plate & offset push button for passage access.

**W5: CERAMIC WALL HUNG URINAL**  
Vitreous china 90° outlet wall hung urinal to comply with SABS 497. Supplied with suitable 38mm CP domical groling, 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.

**W6: SHOWER**  
2mm Thick Cromelised steel shower tray size 900x900x160 mm manufactured with anti slip pattern, with rounded internal corners, and 38 mm BSP grated waste fitting in corner position fitted with Shower set and complying with SABS 226 compliance of approval.  
• Grated Shower Chubbie with access door as per standard supply from manufacturer and sized to fit space configuration  
• Overhead shower arm with wall flange.  
• Chrome Plated Shower Head with built-in heated connector  
• Chrome Plated Shower Diverter mixer-wal 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.

**W7: WASH HAND BASIN**  
**W1: WASH & MIRROR 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 chinistry hole with the centre semi-punctured supplied with a 'Tuscany' pedestal and fitted with 'No. Cobra Waterless' 15mm chrome push-button operated tap with flanged bucket (code KM2.102) meeting tap, 300-32 CP anti-thrill plug with angle valve, 300 basin waste, 365/40 CP bottle trap, mounting kit and angle valves.

**W2: DISABLED BASIN**  
1200mm 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 3/8" dia Red indicator valve applications and flanged bucket, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Faced with concealed wall bracket in accordance to the manufacturer's specifications.

**W3: WHITE GLAZED PORCELAIN W/B (VANITY)**  
Ceramic freecy size 450x350mm oval self-reming vanity basin to comply with SABS 497 in one top hole configuration supplied without overflow and fitted with 2No. chrome plated tap with flanged bucket (code KM2.102) meeting tap, mounting kit and angle valves. 400mm long flexible inlets and chrome plated bottle trap supplied with all necessary pipe connections. Basins mounted on cabinet or vanity top with silicon beaded between contact areas in strict accordance to manufacturer's specifications.

**W4: 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 chinistry hole with 2No. pillar-top, chrome plated anti-thrill plug with angle valve, 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.

**W5: URINALY BASIN (No. TAP FOR LABS)**  
Vitreous china size 450x300mm heavy duty basin in one tap-hole configuration to comply with SABS 497 and R15 hole plugged and fitted with No. pillar-top. Chrome Plated anti-thrill plug with spindle 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.

**W6: MEDIC BASIN & FITTINGS (SICK BAY)**  
Vitreous china size 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 3/8" dia Red indicator valve applications and flanged bucket, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Faced 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 KB and bin type K3.  
• Soap dispenser type K5.  
• Spoutback comprising 2no. rows of wall tile 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:**

**K1: 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.

**K2: 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, with chrome plated overflow swivel Outlet, adjustable wall flanges and supplied with suitable accessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL.

**K3: CERAMIC SINK**  
Ceramic freecy 455 x 335 x 180 mm rectangular lavatory sink without overflow, with a centre end waste outlet. Fitted to the wall on two semi-concealed brackets supplied with all necessary accessories (fall to be odd resistant)

**K4: SINGLE WASH TROUGH (Type 1) 2 no. TAPS**  
1200 x 550 x 200mm Double bowl wall hung wash trough manufactured from grade 18/10 SS. stainless steel with radiused internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2no. CP bibcocks - plain extended chrome plated, complete with sliding wall flanges. Un-slotted sink waste with back nut, plug with strip, chain and stop, CP, P' trap, with deep seal and cleaning eye. Rough brass Sink installation height = 900mm AFFL. Cut out size 555 x 425mm.

**K5: DOUBLE WASH TROUGH (Type 1) 2 no. TAPS**  
1200 x 550 x 200mm Double bowl wall hung wash trough manufactured from grade 304 (18/10) SS. radiused internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2no wall type bibcocks, with Swivel Outlet, adjustable wall flanges and exposed adjustable connections. CP. Un-slotted sink waste with back nut and plug with strip, CP. Double drain block rubber deep seal 'P'-trap. Sink mounted on 2no. 25mm square S5 gallow brackets, front leg adjustable foot piece of height of 150mm 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: GLASS 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: WASTE BIN**  
280W x 520H 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)**  
160mm 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 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 BARS (HEIGHT ADJUSTABLE) PARALEGIC**  
Stainless steel 914 x 90 x 32mm diameter height adjustable side table 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**  
330mmWx365mmHx230mmD Dish 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 (HIGH WALL MOUNTED)**  
115W x 270H 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 (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 Electrical Engineers specification

**K12: TOWEL RAIL**  
15mm 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 (Height)**  
20mm dia. standard chrome 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 UPVC 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.

**G2: PROTECTOR SCREENS**  
Full height UPVC screen size 2440 x 1850mm (including extra 224 x 1750mm) with wall-mounted code SC4000 Keystone Brackets Adjustable Set of 2, size 200mm. 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 1000mm 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 3000W X 1200H**  
Finboard size 3000mm H x 1200mm 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 ratio 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: SS FLOOR EXPANSION JOINT COVER**  
Concealed heavy duty stainless steel movement joint cover, 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

**FINISHES LEGEND**

**FLOORS:**

**F1. FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)**  
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 S81: 1992 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Fittings 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 - 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 manufacturers specifications and SABS specification. Fittings 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. CARPET TILES**  
500mm x 500mm, 1.008 RFX Staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and laid with BN 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 4760 on fire rating, and BS 54324 on wire test and 60 body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects 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 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 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 10m<sup>2</sup>, 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 80 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 (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 Levelled Smooth Screed glued with conductive adhesive to SABS D70 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 PEZ Details Installed in All Duct Chambers Accommodating Sanitary Services.

**SKIRTING:**

**S1. HARDWOOD OR EQUAL AND APPROVED**  
15 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 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 22mm thick screeds in strict compliance to manufacturers instructions and SABS specification, with Cove base and straight tops. Complete with corner and top trims. Fittings 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 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**  
F8 Face brick in common running bond 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 881 grade 1, in accordance to manufacturer's instructions.

**F3. 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 alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 881 grade 1, in accordance to manufacturer's instructions.

**F4. GLAZED CERAMIC WALL TILES / ENAMEL PAINT COAT**  
Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'S5', 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 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.

**F5. 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. 9mm 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, EcoSpecifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc Rhinoboard Snap Fast Grabber Screws 32mm at maximum 150mm centres. Apply Gyproc Rhinotape to all joints and skim the ceiling using Gyproc Rhinotile.

**C2. FIBRE CEMENT BOARDS (IN JOINTS)**  
6mm thick GypCel 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, EcoSpecifier listing, non-combustible to SABS 10171:5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc Rhinoboard Snap Fast 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 Rhinotile.

**C3. PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED**  
1200mm x 600mm X 15mm Gyproc Celotex 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 @ 4mm thickness, 120g g/g 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 notches to be in file. 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 603 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 Skinned Plastered Sabs 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab base.

**ROOF COVERING AND INSULATION:**

**R1. EMBOSSED ROOFING SHEET (TWO SIDES)**  
Roofing Sheet: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 331 (3). The profile shall have three trapezoidal ribs at 200mm centres giving a net cover of 456mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 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 'Chromalock COAT' and laid on structural timber/steel structure incorporating all necessary accessories such as fittings and eave covers in strict compliance to manufacturer's instructions.

**R2. SMALL GRID BE:** 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 50mm 'Fastrayboard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>2</sup> and finished with white meltable foil.

**Galvanized Steel (GGI) Gutter:** 150mm Wide x 100mm Deep x 0.6mm Enamelled Galvanized Steel With Class 2725 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

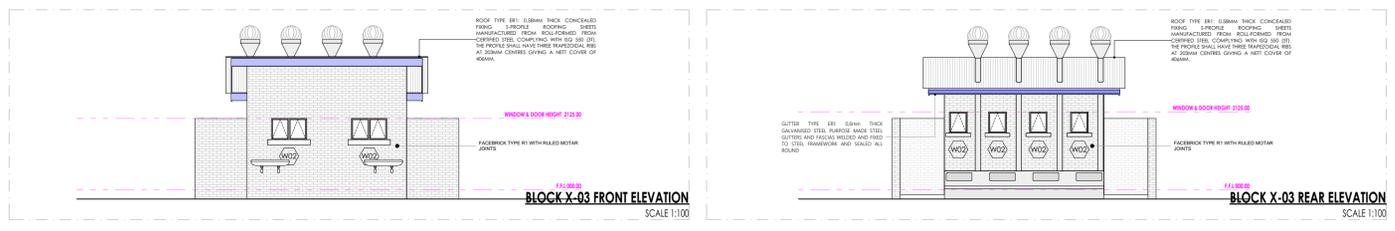
**Downpipe:** 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class 2725 Galvanizing To Comply With SABS 934 or Latest Revision to be built into walls or cast in concrete columns laid to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation instructions.

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

**DOOR SCHEDULE:**

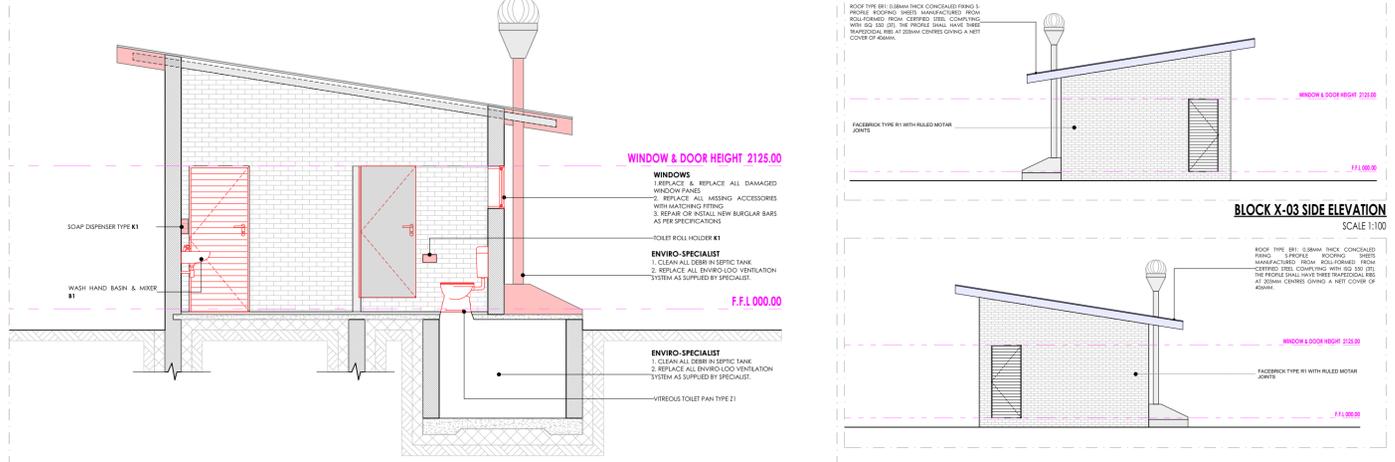
EXTERIOR DOOR	BURGLAR DOOR (SINGLE)	INTERIOR DOOR
<b>QUANTITY</b> 01	<b>QUANTITY</b> 02	<b>QUANTITY</b> 02
<b>DOOR DESCRIPTION</b> 813 x 2032 x 44mm THICK HEAVY DUTY EXTERIOR QUALITY HORIZONTALLY SLATED DOUBLE SIDED SALIGNA DOOR FITTED TO COMPLY WITH SABS 545 EXTERIOR GRADE OR LATEST REVISION.	<b>DOOR DESCRIPTION</b> PAINTED GALVANISED MILD STEEL GATE CONSISTING OF 10 x 10mm MILD STEEL BARS PLACED AT 100mm CENTRES AT A 90° ANGLE, INCLUDING SECURITY MESH TO COMPLY TO ARCHITECTS SPECIFICATION TO COMPLY WITH SABS 681 GRADE 01 AND FINISH WITH TWO COATS ALKTYD EGG SHELL PAINT TO COMPLY WITH SABS 650.	<b>DOOR DESCRIPTION</b> 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.
<b>FRAME</b> 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.	<b>FRAME</b> 50 x 50mm GALVANISED MILD STEEL SQUARE WELDED TO FORM 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.	<b>FRAME</b> 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.
<b>FRAME FINISH</b> WASHABLE ENAMEL PAINT FINISH AS PER SABS 723 FOR PRIMER, SABS 681 FOR UNDERCOAT & SABS 650 TYPE 02 FOR FINISH COAT. COLOR TO ARCHITECTS APPROVAL.	<b>FRAME FINISH</b> 1 x COAT ZINC CHROMATE PRIMER 2 x COATS GLOSS ENAMEL (EXTERIOR QUALITY)	<b>FRAME FINISH</b> WASHABLE ENAMEL PAINT FINISH AS PER SABS 723 FOR PRIMER, SABS 681 FOR UNDERCOAT & SABS 650 TYPE 02 FOR FINISH COAT. COLOR TO ARCHITECTS APPROVAL.
<b>DOOR FINISH</b> APPLY 3no. CLEAR EGG SHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, FIN 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.	<b>DOOR FINISH</b> PAINTED MILD STEEL GATE CONSISTING OF 10 x 10mm MILD STEEL BARS PLACED AT 100mm c/c CENTRES AT A 90° ANGLE, INCLUDING SECURITY MESH TO COMPLY WITH SABS 681 GRADE 01 & FINISH WITH 2 COATS ALKTYD EGG SHELL PAINT TO COMPLY WITH SABS 650 COLOR TO ARCHITECTS SPECIFICATION.	<b>DOOR FINISH</b> APPLY 3no. CLEAR EGG SHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, FIN 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.
<b>IRON MONGERY</b> APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS.	<b>IRON MONGERY</b> APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS.	<b>IRON MONGERY</b> DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS.
<b>HINGES</b> 3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES	<b>HINGES</b> 3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES	<b>HINGES</b> 3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES

**BLOCK X-03 DOOR SCHEDULE**  
SCALE: 1:100



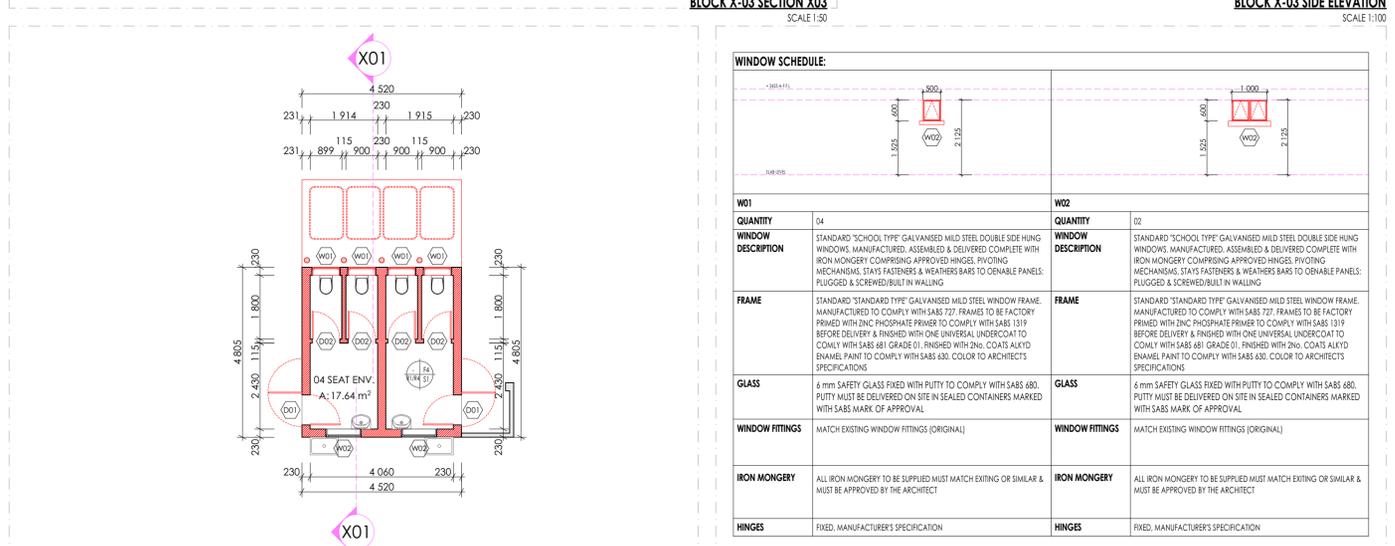
**BLOCK X-03 FRONT ELEVATION**  
SCALE: 1:100

**BLOCK X-03 REAR ELEVATION**  
SCALE: 1:100



**BLOCK X-03 SIDE ELEVATION**  
SCALE: 1:100

**BLOCK X-03 SIDE ELEVATION**  
SCALE: 1:100



**BLOCK X-03 SECTION X03**  
SCALE: 1:50

**BLOCK X-03 WINDOW SCHEDULE**  
SCALE: 1:100

W01	W02
<b>QUANTITY</b> 04	<b>QUANTITY</b> 02
<b>WINDOW DESCRIPTION</b> STANDARD 'SCHOOL' TYPE GALVANISED MILD STEEL DOUBLE SIDE HING WINDOWS, MANUFACTURED, ASSEMBLED & DELIVERED COMPLETE WITH IRON MONGERY COMPRISING APPROVED HINGES, PIVOTING MECHANISMS, STAYS FASTENERS, & WEATHER BARS TO OVENABLE PANELS: PLUGGED & SCREWED/BUILT IN WALLING.	<b>WINDOW DESCRIPTION</b> STANDARD 'SCHOOL' TYPE GALVANISED MILD STEEL DOUBLE SIDE HING WINDOWS, MANUFACTURED, ASSEMBLED & DELIVERED COMPLETE WITH IRON MONGERY COMPRISING APPROVED HINGES, PIVOTING MECHANISMS, STAYS FASTENERS, & WEATHER BARS TO OVENABLE PANELS: PLUGGED & SCREWED/BUILT IN WALLING.
<b>FRAME</b> 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 BEFORE DELIVERY & FINISHED WITH ONE UNIVERSAL UNDERCOAT TO COMPLY WITH SABS 681 GRADE 01, FINISHED WITH 2no. COATS ALKTYD ENAMEL PAINT TO COMPLY WITH SABS 650. COLOR TO ARCHITECTS SPECIFICATIONS.	<b>FRAME</b> 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 BEFORE DELIVERY & FINISHED WITH ONE UNIVERSAL UNDERCOAT TO COMPLY WITH SABS 681 GRADE 01, FINISHED WITH 2no. COATS ALKTYD ENAMEL PAINT TO COMPLY WITH SABS 650. COLOR TO ARCHITECTS SPECIFICATIONS.
<b>GLASS</b> 6 mm SAFETY GLASS FIXED WITH PUTTY TO COMPLY WITH SABS 680. PUTTY MUST BE DELIVERED ON SITE IN SEALED CONTAINERS MARKED WITH SABS MARK OF APPROVAL.	<b>GLASS</b> 6 mm SAFETY GLASS FIXED WITH PUTTY TO COMPLY WITH SABS 680. PUTTY MUST BE DELIVERED ON SITE IN SEALED CONTAINERS MARKED WITH SABS MARK OF APPROVAL.
<b>WINDOW FITTINGS</b> MATCH EXISTING WINDOW FITTINGS (ORIGINAL)	<b>WINDOW FITTINGS</b> MATCH EXISTING WINDOW FITTINGS (ORIGINAL)
<b>IRON MONGERY</b> ALL IRON MONGERY TO BE SUPPLIED MUST MATCH EXISTING OR SIMILAR & MUST BE APPROVED BY THE ARCHITECT	<b>IRON MONGERY</b> ALL IRON MONGERY TO BE SUPPLIED MUST MATCH EXISTING OR SIMILAR & MUST BE APPROVED BY THE ARCHITECT
<b>HINGES</b> FIXED, MANUFACTURER'S SPECIFICATION	<b>HINGES</b> FIXED, MANUFACTURER'S SPECIFICATION

**BLOCK X-03 WINDOW SCHEDULE**  
SCALE: 1:100

**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 Thermal Seal 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. Floor Mounted 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 Thermal Seal 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 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 thermal seal 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 back inlet pan to comply with SABS 497. Supplied with suitable 38mm CP domical grommet, 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.

**W7. SHOWER**  
20mm thick Enamelled steel shower tray size 900x900x160 mm manufactured with anti slip pattern, with rounded internal corners, and 38 mm R3P grated waste fitting in corner position fitted with Shower tray and complying with SABS 226 compliance of approval.  
• Glazed Shower Cubicle with access door as per standard supply from manufacturer and sized to fit space configuration.  
• Overhead shower arm with wall flange.  
• Chrome Plated Shower Head with built-in heated connector.  
• Chrome Plated Shower Diverter mixer-wal with sliding wall flanges and concealed connectors adjustable from 178mm to 203mm centres. Shower tray to be recessed 50 mm into a 100mm high concrete plinth with exposed plinth face.

**W8. WASH-HAND BASIN**  
**W1. WASH & MIRROR TAP**  
Vitreous china size 450 x 415mm rounded 'Tuscany' OR EQUAL AND APPROVE basin to comply with SABS 497 with single tap-hole configuration supplied with integrated overflow and chinistry hole with the centre semi-punctured supplied with a 'Tuscany' pedestal and fitted with 'No. 300a Waterless' 15mm chrome push-button operated pilot tap with flanged bucket (code KM2.102) meeting tap, 300-32 CP anti-thrill plug with angle valve, 300 basin waste, 365/40 CP bottle trap, mounting kit and angle valves.

**W2. DISABLED BASIN**  
Vitreous china size 450x400mm 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 8/6 x 8/6 Red indicators water applications and flanged bucket, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Faced with concealed wall bracket in accordance to the manufacturer's specifications.

**W3. WHITE GLAZED PORCELAIN W/B (VANITY)**  
Ceramic freecy size 450x350mm oval self-removing vanity basin to comply with SABS 497 in one top hole configuration supplied without overflow and fitted with 2No. chrome plated tap with flanged bucket (code KM2.102) meeting tap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Basins mounted on cabinet or vanity top with silicon bead between contact areas in strict accordance to manufacturer's specifications.

**W4. 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 chinistry hole with 2No. pillar-top, chrome plated anti-thrill plug with granite 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.

**W5. URINALY BASIN (No. TAP FOR LABS)**  
Ceramic freecy size 450x300mm 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-thrill plug with granite 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.

**W6. MEDIC BASIN & FITTINGS (SICK BAY)**  
Vitreous china size 450x300mm 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 8/6 x 8/6 Red indicators water applications and flanged bucket, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Faced 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 KB and bin type K3.  
• Soap dispenser type K5.  
• Spoutback comprising 2no. rows of wall fin finish 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 956 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 956 fitted with Approved Sink mixer-wal type, with chrome plated 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 freecy 435 x 335 x 180 mm rectangular laboratory sink without overflow, with a centre end waste outlet. Fitted to wall on two semi-concealed brackets supplied with all necessary accessories (all to be acid resistant)

**X4. SINGLE WASH TROUGH (Taps & 2 no. TAPS)**  
600mm x 500mm inset wash trough manufactured 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 plate, complete with sliding wall flange. Un-slotted sink waste with back nut, plug with strip, chain and stay, CP, 1" trap, with deep seal and cleaning eye. Rough brass Sink installation height = 900mm AFFL. Cut out size 555 x 425mm.

**X5. DOUBLE WASH TROUGH (Taps & 2 no. TAPS)**  
1200 x 550 x 200mm Double bowl 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 flanges and adjustable connections. CP, Un-slotted sink waste with back nut and plug with strip, CP. Double drain back rubber deep seal 1" trap. Sink mounted on 2no. 25mm square SS gallow brackets, front leg 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. GLASS MIRROR**  
6mm thick clear float glass silver-backed mirror. size 450x900mm height with polished beveled edges 4 times beveled front and fixed, with chromium plated dome-headed mirror screws

**K3. WASTE BIN**  
280W x 580H 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)**  
100mm 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 32mm diameter wall reach 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 32mm diameter hand reach 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**  
300mmWx350mmX230mmD Dish 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 (HAND)-WALL MOUNTED**  
115mm 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 Multi-track Hat and Coat Hook in multi-track two hooks Configuration With Anodised Silver Finish Complete with Screws.

**K11. HAND DRYER (Hands free)**  
As per Electrical Engineers specification

**K12. TOWEL RAIL**  
152mm 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 (Height)**  
20mm dia. standard chromum 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 UPVC Door Protector manufactured in high impact resistant rigid PVC (Colour Grey) and cut to full door width from 3m length, installed strictly in accordance to manufacturer's specifications.

**G2. PROTECTOR SCREEN**  
Full height UPVC screen size 2440 x 1850mm (including area 224 x 1750mm) with wall-mounted code SC4000 Keystone Brackets Adjustable Set of 2, size 200mm. To be supplied complete with all accessories, and fitted in strict accordance with manufacturer's instructions.

**FINISHES LEGEND**

**FLOORS:**

**F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)**  
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 S81: 1992 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Fittings 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 - 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 specifications and SABS specification. Fittings 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: CARPET TILES**  
500mm x 500mm, 1.008 RFX Staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and laid 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 S4324 on wire test and 60 body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.

**F4: CEMENT SAND SCREED**  
30mm thick potholed 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 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 10m<sup>2</sup>, 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 80 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 (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 Levelled Smooth Screed glued with conductive adhesive to SABS D70 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 PEZ Details Installed in All Duct Chambers Accommodating Sanitary Services.

**SKIRTING:**

**S1: HARDWOOD OR EQUAL AND APPROVED**  
15 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 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 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with Cove base and straight tops. Complete with corner and top trims. Fittings 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 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**  
F8 Face brick in common running bond 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 881 grade 1, in accordance to manufacturer's instructions.

**F3: 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 alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 881 grade 1, in accordance to manufacturer's instructions.

**F4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COAT**  
Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'S5', 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 'S2' To Comply with SABS 650 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.

**F5: 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: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
'GypCalc Classic' gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc Rhinoboard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc Rhinoboard Snap Fast Grabber Screws 32mm at maximum 150mm centres. Apply Gyproc Rhinotape to all joints and skim the ceiling using Gyproc Rhinotile.

**C2: FIBRE CEMENT BOARDS (IN JOINTS)**  
6mm thick GypCalc Prestress 1 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 10171-5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc Rhinoboard Snap Fast 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 Rhinotile.

**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 (8mm thickness, 150g g/m<sup>2</sup> 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 tile notch. All the 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 Skinned Plastered Sabs 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hem-hydrate gypsum plaster on concrete slab base.

**ROOF COVERING AND INSULATION:**

**R1: EMBOSSED ROOFING SHEET (TWO SIDES)**  
Roofing Sheet: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 331 (3). The profile shall have three trapezoidal ribs at 200mm centres giving a net cover of 456mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 28mm 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 'Chromokod Color' and laid on structural timber/steel structure incorporating all necessary accessories such as fittings and eave covers in strict compliance to manufacturer's instructions.

**R2: SMALL GRID: E1** 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 50mm 'Fibreboard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>2</sup> and finished with white meltable foil.

**Galvanized Steel (GI) Gutter:** 150mm Wide x 100mm Deep x 0.6mm Enamelled Gal Commercial Grade Steel With Class 275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

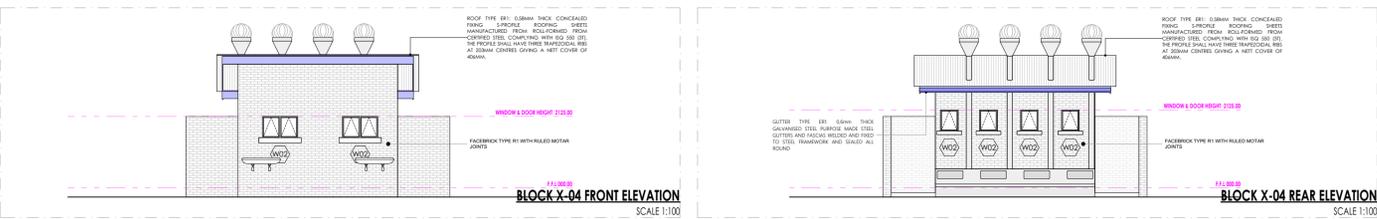
**Dampstop:** 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class 275 Galvanizing To Comply With SABS 934 or Latest Revision to be built into walls or cast in concrete columns laid to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation instructions.

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

EXTERIOR DOOR			BURGLAR DOOR (SINGLE)			INTERIOR DOOR					
QUANTITY	01	DOOR DESCRIPTION	813 x 2032 x 44mm THICK HEAVY DUTY EXTERIOR QUALITY HORIZONTALLY SLATED DOUBLE SIDED SALIGNA DOOR FITTED TO COMPLY WITH SABS 545 EXTERIOR GRADE OR LATEST REVISION.	QUANTITY	02	DOOR DESCRIPTION	PAINTED GALVANISED 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. FINISH WITH TWO COATS ALKYLID ENAMEL PAINT TO COMPLY WITH SABS 630. COLOR TO ARCHITECTS APPROVAL.	QUANTITY	02	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 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	50 x 50mm GALVANISED MILD STEEL SQUARE WELDED TO FORM FRAME	FRAME FINISH	1 x COAT ZINC CHROMATE PRIMER 2 x COATS GLOSS ENAMEL (EXTERIOR QUALITY)	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.
DOOR FINISH	APPLY 3no. CLEAR EGGSHHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, FINISH 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.	DOOR FINISH	APPLY 3no. CLEAR EGGSHHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, FINISH 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.	DOOR FINISH	APPLY 3no. CLEAR EGGSHHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, FINISH 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.	DOOR FINISH	APPLY 3no. CLEAR EGGSHHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, FINISH 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	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.				
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	HINGES	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES				

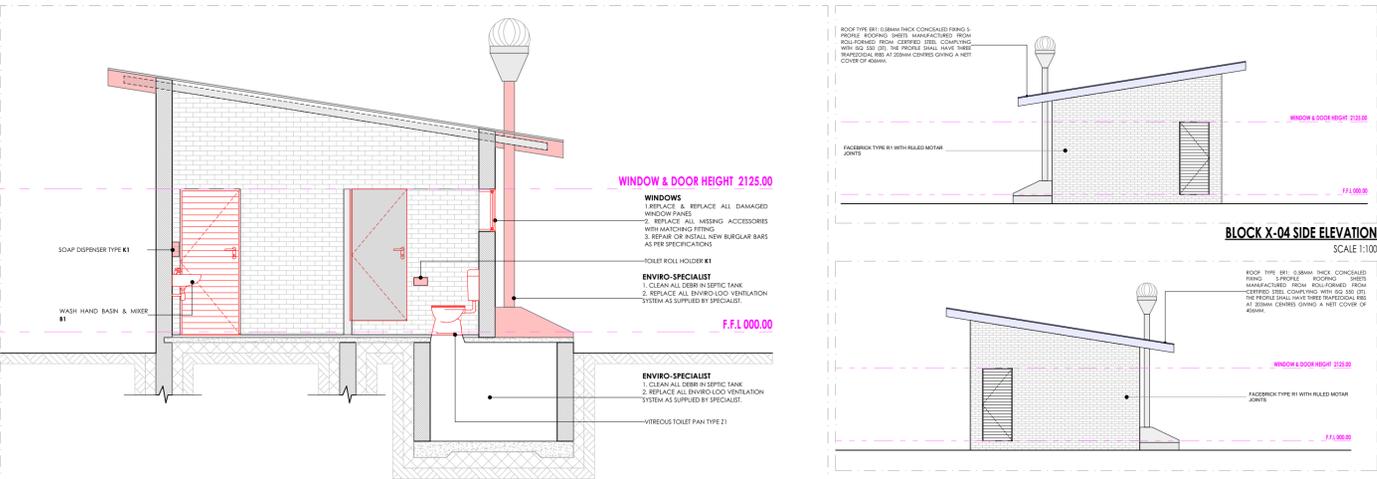
**BLOCK X-04 DOOR SCHEDULE**

SCALE: 1:100



**BLOCK X-04 FRONT ELEVATION**

**BLOCK X-04 REAR ELEVATION**



**BLOCK X-04 SECTION X04**

**BLOCK X-04 SIDE ELEVATION**

W01		W02	
QUANTITY	04	QUANTITY	02
WINDOW DESCRIPTION	STANDARD 'SCHOOL' TYPE GALVANISED MILD STEEL DOUBLE SIDING WINDOWS, MANUFACTURED, ASSEMBLED & DELIVERED COMPLETE WITH IRON MONGERY COMPRISING APPROVED HINGES, PIVOTING MECHANISMS, STAYS FASTENERS, & WEATHER BARS TO OVENABLE PANELS: PLUGGED & SCREWED/BUILT IN WALLING.	WINDOW DESCRIPTION	STANDARD 'SCHOOL' TYPE GALVANISED MILD STEEL DOUBLE SIDING WINDOWS, MANUFACTURED, ASSEMBLED & DELIVERED COMPLETE WITH IRON MONGERY COMPRISING APPROVED HINGES, PIVOTING MECHANISMS, STAYS FASTENERS, & WEATHER BARS TO OVENABLE PANELS: PLUGGED & SCREWED/BUILT IN WALLING.
FRAME	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 BEFORE DELIVERY & FINISHED WITH ONE UNIVERSAL UNDERCOAT TO COMPLY WITH SABS 681 GRADE 01. FINISHED WITH 2no. COATS ALKYLID ENAMEL PAINT TO COMPLY WITH SABS 630. COLOR TO ARCHITECTS SPECIFICATIONS.	FRAME	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 BEFORE DELIVERY & FINISHED WITH ONE UNIVERSAL UNDERCOAT TO COMPLY WITH SABS 681 GRADE 01. FINISHED WITH 2no. COATS ALKYLID ENAMEL PAINT TO COMPLY WITH SABS 630. COLOR TO ARCHITECTS SPECIFICATIONS.
GLASS	6 mm SAFETY GLASS FIXED WITH PUTTY TO COMPLY WITH SABS 680. PUTTY MUST BE DELIVERED ON SITE IN SEALED CONTAINERS MARKED WITH SABS MARK OF APPROVAL.	GLASS	6 mm SAFETY GLASS FIXED WITH PUTTY TO COMPLY WITH SABS 680. PUTTY MUST BE DELIVERED ON SITE IN SEALED CONTAINERS MARKED WITH SABS MARK OF APPROVAL.
WINDOW FITTINGS	MATCH EXISTING WINDOW FITTINGS (ORIGINAL)	WINDOW FITTINGS	MATCH EXISTING WINDOW FITTINGS (ORIGINAL)
IRON MONGERY	ALL IRON MONGERY TO BE SUPPLIED MUST MATCH EXISTING OR SIMILAR & MUST BE APPROVED BY THE ARCHITECT	IRON MONGERY	ALL IRON MONGERY TO BE SUPPLIED MUST MATCH EXISTING OR SIMILAR & MUST BE APPROVED BY THE ARCHITECT
HINGES	FIXED, MANUFACTURER'S SPECIFICATION	HINGES	FIXED, MANUFACTURER'S SPECIFICATION

**BLOCK X-04 WINDOW SCHEDULE**

SCALE: 1:100

**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 Thermal Seal 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. Floor Mounted 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 Thermal Seal 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 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. Floor Mounted to comply with SABS 497. Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermal seal 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 back inlet pan to comply with SABS 497. Supplied with suitable 38mm CP domical grommet, 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**  
20mm thick Enamelled steel shower tray size 900x900x160 mm manufactured with anti slip pattern, with rounded internal corners, and 38 mm BSP grated waste fitting in corner position fitted with Shower tray and complying with SABS 226 compliance of approval.  
• Glazed Shower Cubicle with access door as per standard supply from manufacturer and sized to fit space configuration.  
• Overhead shower arm with wall flange.  
• Chrome Plated Shower Head with built-in heated connector.  
• Chrome Plated Shower diverter mixer-wal 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**

**W1: WASH & MIRROR 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 chinistry hole with the centre semi-punctured supplied with a 'Tuscany' pedestal and fitted with 'Ino. Cobra Waterless' 15mm chrome pushbutton operated pillar tap with flanged backstop (code KM2.102) meeting tap, 300-32 CP anti-fret plug with angle valve.

**W2: DISABLED BASIN**  
20mm semi rounded lavatory basin to comply with SABS 497. In two top hole configuration fitted with 2 No chrome plated Elbow action pillar-tap, with 1/4 turn ceramic disc head and 8/16 Red indicators water applications and flanged backstop. chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Faced with concealed wall bracket in accordance to the manufacturer's specifications.

**W3: WHITE GLAZED PORCELAIN W/IB (VANITY)**  
Ceramic freecy size 450x350mm oval self-removing vanity basin to comply with SABS 497 in one top hole configuration supplied without overflow and fitted with 2No. chrome plated tap with flanged backstop (code KM2.102) meeting tap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Basins mounted on cabinet or vanity slab with silicon bead between contact areas in strict accordance to manufacturer's specifications.

**W4: 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 chinistry hole with 2No. pillar tap, chrome plated anti-fret plug with granite dial, 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.

**W5: URINALY BASIN (No. TAP FOR LABS)**  
Vitreous china size 450x300mm heavy duty basin in one tap-hole configuration to comply with SABS 497 and 8/16 hole plugged and fitted with 1No. pillar tap. Chrome plated anti-fret plug with granite dial, 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.

**W6: MEDIC BASIN & FITTINGS (SICK BAY)**  
Vitreous china size 420mm semi rounded lavatory basin to comply with SABS 497. In two top hole configuration fitted with 2 No chrome plated Elbow action pillar-tap, with 1/4 turn ceramic disc head and 8/16 Red indicators water applications and flanged backstop. chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Faced 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 KB and bin type K3.  
• Soap dispenser type K5.  
• Spoutback comprising 2no. rows of wall fin finish 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 956 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 956 fitted with Approved Sink mixer-wal type, 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 freecy 435 x 335 x 180 mm rectangular laboratory sink without overflow, with a centre end waste outlet. fitted to wall on two semi-concealed brackets supplied with all necessary accessories (all to be acid resistant)

**X4: SINGLE WASH TROUGH (TAP & 2 no. TAPS)**  
600mm x 500mm inset wash trough manufactured 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 strip, chain and stay, CP, 1/2" trap, with deep seal and cleaning eye. Rough brass Sink installation height = 900mm AFFL. Cut out size 555 x 425mm.

**X5: DOUBLE WASH TROUGH (TAP & 2 no. TAPS)**  
1200 x 550 x 200mm Double bowl 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 flanges and adjustable connections. CP, Un-slotted sink waste with back nut and plug with strip, CP. Double drain back rubber deep seal 1/2" trap. Sink mounted on 2no. 25mm square SS gallow brackets, front leg adjustable foot piece of height of 915mm AFFL.

**SANITARY ACCESSORIES**

**K1: SS TOILET ROLL HOLDER & 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-foam, 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 milled and fixed, with chromium plated dome-headed mirror screws

**K3: WASTE BIN**  
280W x 550H 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)**  
100mm 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 32mm diameter wall reach 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 32mm diameter hand reach 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**  
330mmWx350mmX230mmD Dish 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 (HAND)-WALL MOUNTED**  
115W x 270H 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 (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 Electrical Engineers specification

**K12: TOWEL RAIL**  
152mm 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 (Height)**  
20mm dia. standard chromum plated shower curtain rail 1300mm long with flanged ends and screws CP fixing height as per PA's drawing.

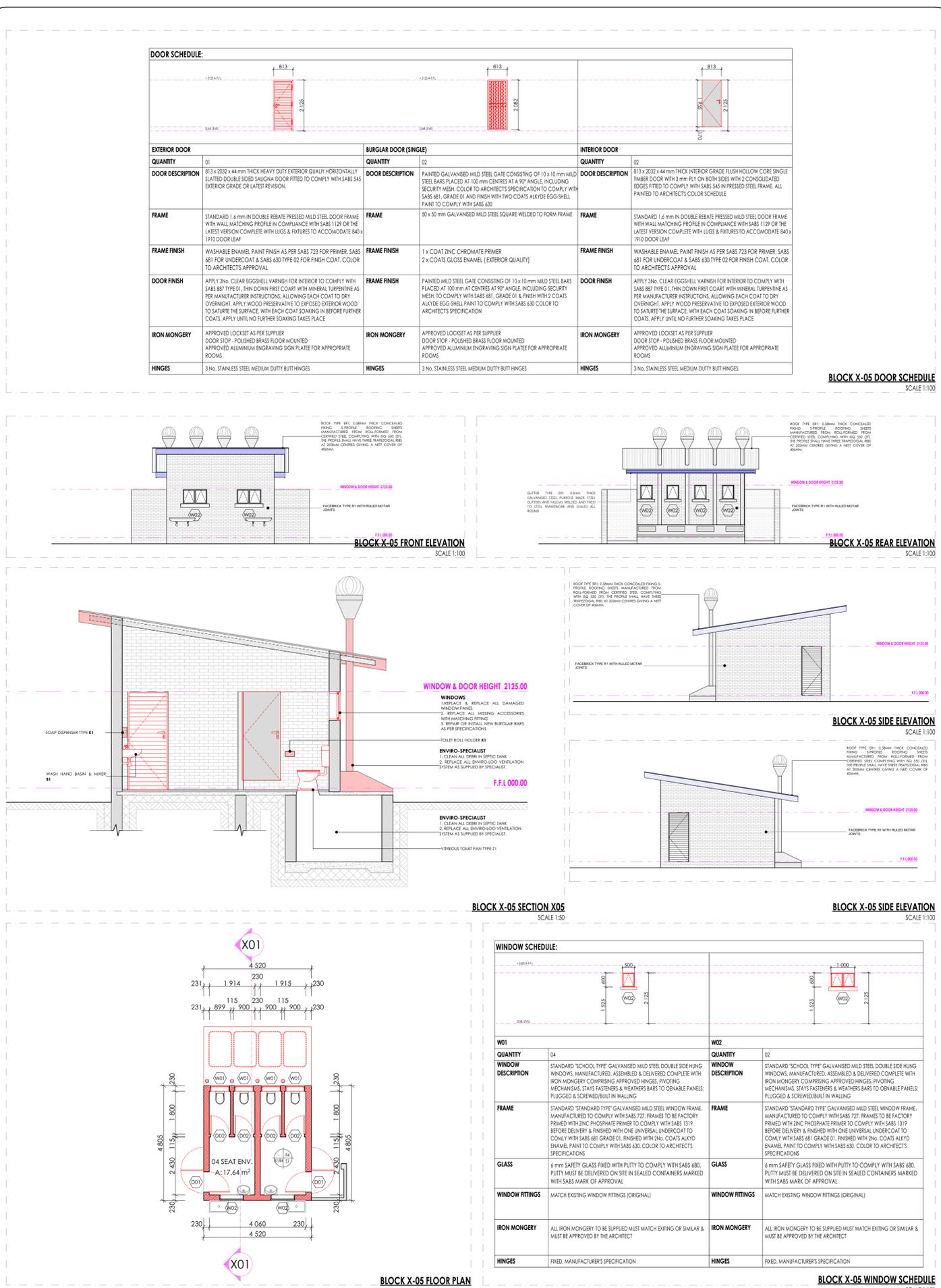
**GENERAL FIXTURES**

**G1: DOOR PROTECTOR**  
200mm wide UPVC Door Protector manufactured in high impact resistant rigid PVC (Colour Grey) and cut to full door width from 3m length, installed strictly in accordance to manufacturer's specifications.

**G2: PROTECTOR SCREEN**  
Full height UPVC screen size

**FINISHES LEGEND**

- FOILS:**
- F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)**  
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 S81: 1992 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Fittings 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 - 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 specifications and SABS specification. Fittings 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: CARPET TILES**  
500mm x 500mm, 1.008 RFX Staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and laid to comply with BS 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screed in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and BS S4324 on wire test and 60 body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects 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 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 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 10m<sup>2</sup>, 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, 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 Levelled Smooth Screed glued with conductive adhesive to SABS D70 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 PEZ Details Installed in All Duct Chambers Accommodating Sanitary Services.
- SKIRTING:**
- S1: HARDWOOD OR EQUAL AND APPROVED**  
15 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 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 22mm thick screeds in strict compliance to manufacturer's instructions and SABS specification, with Cove base and straight tops. Complete with corner and top trims. Fittings 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 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**  
F8 face brick in common running bond 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 881 grade 1, in accordance to manufacturer's instructions.
- F3: 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 alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 881 grade 1, in accordance to manufacturer's instructions.
- F4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COAT**  
Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'S5', 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 1071 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.
- F5: 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: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
GypCalc Classic gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc Rhinoboard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc Rhinoboard Strap Fast Grabber Screws 32mm at maximum 150mm centres. Apply Gyproc Rhinoplate to all joints and skim the ceiling using Gyproc Rhinofix.
- C2: FIBRE CEMENT BOARDS (IN JOINTS)**  
6mm thick GypCalc 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, EcoSpecifier listing, non-combustible to SABS 10171-5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc Rhinoboard Strap Fast 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 Rhinoplate to all joints and skim the ceiling using Gyproc Rhinofix.
- C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED**  
1200mm x 600mm X 15mm Gyproc Celotex 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 (8mm thickness, 150g g/m<sup>2</sup> 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 tile notch. All the 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 Skinned Plastered Sabs 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hem-hydrate gypsum plaster on concrete slab stiff.
- ROOF COVERING AND INSULATION:**
- R1: EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 331 (3). The profile shall have three trapezoidal ribs at 200mm centres giving a net cover of 456mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 28mm 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 'Chromokod Coating' and laid on structural timber/steel structure incorporating all necessary accessories such as fittings and eave covers in strict compliance to manufacturer's instructions.
- Insulation:** SMALL CHIPS: 1 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 'Fastronboard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>3</sup> and finished with white meltable foil.
- Galvanized Steel (GI) Gutter:** 150mm Wide x 100mm Deep x 0.6mm Enamelled Gal Commercial Grade Steel With Class 275 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 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class 275 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 mm Fibre Cement Facia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



- 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 Thermostatic 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. Floor Mounted 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 (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 Thermostatic 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 (C/C)**  
Vitreous china 90° outlet WC or equal to comply with SABS 497 Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermostatic 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 grommet, 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.
- W7: SHOWER**  
20mm thick Enamelled steel shower tray size 900x900x160 mm manufactured with anti slip pattern, with rounded internal corners, and 38 mm BSP grated waste fitting in corner position fitted with Shower tray and complying with SABS 226 compliance of approval.  
• Glazed Shower Cubicle with access door as per standard supply from manufacturer and fixed to its space configuration  
• Overhead shower arm with wall flange.  
• Chrome Plated Shower Head with built-in heated connector  
• Chrome Plated Shower diverter mixer-wal 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: DISABLED BATH**  
20mm 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 8/6 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 connections. Faced with concealed wall bracket in accordance to the manufacturer's specifications.
- W9: WHITE GLAZED PORCELAIN W/B (VANITY)**  
Ceramic freecy size 450x350mm oval self-rimming vanity basin to comply with SABS 497 in one top hole configuration supplied without overflow and fitted with 2No. chrome plated tap with flanged bracket (code KM2.102) meeting tap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Basins mounted on cabinet or vanity top with silicon bead between contact areas in strict accordance to manufacturer's specifications.
- W10: 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 drain hole with 2No. pillar-top, chrome plated anti-rattle plug with splade plug, 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.
- W11: URINAL BASIN (No. TAP FOR LABS)**  
Vitreous china size 450x300mm heavy duty basin in one tap-hole configuration to comply with SABS 497 and 8/6 hole plugged and fitted with 1No. pillar-top, Chrome Plated anti-rattle plug with splade plug, 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.
- W12: MEDIC BASIN & FITTINGS (SICK BAY)**  
Vitreous china size 450x300mm 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 8/6 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 connections. Faced 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 KB and bin type K3  
• Soap dispenser type K5  
• Spoutback comprising 2no. rows of wall fin finish 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 956 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 956 fitted with Approved Sink mixer-wal type, with chrome plated 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 freecy 425 x 335 x 180 mm rectangular laboratory sink without overflow, with a centre end waste 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 300mm inset wash trough manufactured 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 strip, chain and stay, CP, P' 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 350 x 200mm Double bowl 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 flanges and adjustable connections. CP, Un-slotted sink waste with back nut and plug with strip, CP, Double drain back rubber deep seal P'-trap. Sink mounted on 2no. 25mm square SS gallow brackets, front leg adjustable foot piece of height of 915mm AFFL.
- SANITARY ACCESSORIES**
- K1: SS TOLER ROLL HOLDER & 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: GLASS 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: WASTE BIN**  
280W x 580H 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)**  
100mm 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 32mm diameter wall (rear) 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 32mm diameter hand (front) 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**  
330mmWx350mmHx230mmD floor 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 (HAND WASH)**  
115W x 270H 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)**  
800mm Wide x 220mm High x 90mm High Aluminium Multi-track Hat and Coat Hook in multi-track two hooks Configuration With Anodised Silver Finish Complete with Screws.
- K11: HAND DRYER (Hands free)**  
As per Electrical Engineers specification
- K12: TOWEL RAIL**  
152mm 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 (Height)**  
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 UPVC Door Protector manufactured in high impact resistant rigid PVC (Colour Grey) and cut to full door width with 3m length, installed strictly in accordance to manufacturer's specifications.
- G2: PROTECTOR SCREEN**  
Full height UPVC screen size 2440 x 1850mm (including area 224 x 1750mm) with wall-mounted code SC4000 Keystone Brackets Adjustable Set of 2, size 200mm. To be supplied complete with all accessories, and fitted in strict accordance with manufactures instructions.
- G3: FINBOARD 150W X 1000H**  
Finboard size 1500mm H x 1000mm 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 ratio 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: AS 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 36/204 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 (Vitreous Chalk Board Green LM197/2), supplied 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**

**LEGEND**

- EXISTING WALLS
- NEW WALLS 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 F S  
FLOOR FINISH: F  
WALL FINISH: W  
WALL SKIRTING FINISH: S

**SIGNATURE TABLE**

DISCIPLINE	SIGN	DATE
CLIENT		
PLAN EXAMINER		
FIRE CONTROLLER		
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

**ST. PAUL SECONDARY SCHOOL-924 650 740**

**RESTORATIVES, REPAIRS & ADDITIONS**  
CONTRACT - SECTION

**DOCUMENTATION & PROCUREMENT**

DISCIPLINE	NO.
ARCHITECTURAL	4

**STAGE 04 ARCHITECTURAL**  
DRAWING DESCRIPTION

**X-05 FLOOR / SECTION / SIDES / SCHEDULES**

DRG No.	E18-305-01	01/01	ITEM No.
DESIGN	N/A	SMIN	DRAWN
DATE	AS SHOWN	T.M	CHECK

DATE	RESPONSIBLE PROFESSIONAL	PR. NUMBER
NOV 2019	T. MANAYAZA	Pr/Arch 43981757

**DRAWING CO-ORDINATED**

**CONSULTANT**  
**TECTURA - INTERNATIONAL!**

**CONTRACTOR**

CAD SYSTEM	AUTOCAD	FILE NAME
SIZE	PROJECT NUMBER	REV
A1	LDPW - PROF/16002/E18	0

**FINISHES LEGEND**

**FLOORS:**

**F1. FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)**  
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 S81: 1992 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Fittings 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 - 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 specifications and SABS specification. Fittings 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. CARPET TILES**  
500mm x 500mm, 1.008 RFX Staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and laid with BN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screed in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DN S4324 on wire test and 60 body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.

**F4. CEMENT SAND SCREED**  
30mm thick pozzolanic 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 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 unsealed 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 10m<sup>2</sup>, 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 80mm 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 (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 Levelled Smooth Screed glued with conductive adhesive to SABS D70 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 PEZ Details Installed in All Duct Chambers Accommodating Sanitary Services.

**S1. HARDWOOD OR EQUAL AND APPROVED**  
15 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 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 manufacturer's instructions and SABS specification, with Cove base and straight tops. Complete with corner and top trims. Fittings 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 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**  
F8 Face brick in common running bond 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 881 grade 1, in accordance to manufacturer's instructions.

**F3. 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 alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 881 grade 1, in accordance to manufacturer's instructions.

**F4. GLAZED CERAMIC WALL TILES / ENAMEL PAINT COAT**  
Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'S5', 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 'S2' To Comply with SABS 1071 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 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. 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
'GypClac Classic' gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc Rhinoboard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc Rhinoboard Snap Fast Grabber Screws 32mm at maximum 150mm centres. Apply Gyproc Rhinotape to all joints and skim the ceiling using Gyproc Rhinotile.

**C2. FIBRE CEMENT BOARDS (IN JOINTS)**  
6mm thick GypClac Frestar 1 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 10171-5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc Rhinoboard Snap Fast 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 Rhinotile.

**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 (8mm thickness, 150g gaud. 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 tile notch. All the 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 Skinned Plastered Sabs 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hem-hydrate gypsum plaster on concrete slab stiff.

**ROOF COVERING AND INSULATION:**

**E1. EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 331 (3). The profile shall have three trapezoidal ribs at 200mm centres giving a net cover of 456mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 28mm 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 'Chromokod Color' and laid on structural timber/steel structure incorporating all necessary accessories such as fittings and eave covers in strict compliance to manufacturer's instructions.

**Insulation:** SMALL (200) 60: 1 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 'Fastrorboard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>3</sup> and finished with white meltable foil.

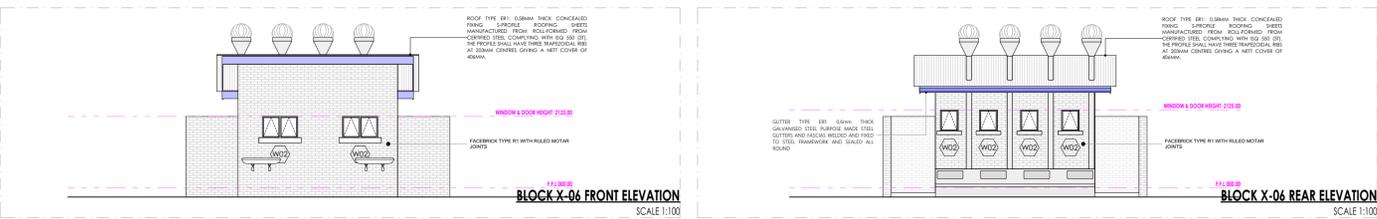
**Galvanized Steel (GI) Gutter:** 150mm Wide x 100mm Deep x 0.6mm Enamelled Galvanized Steel With Class 2725 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

**Dampstop:** 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class 2725 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 10mm Fibre Cement Facia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

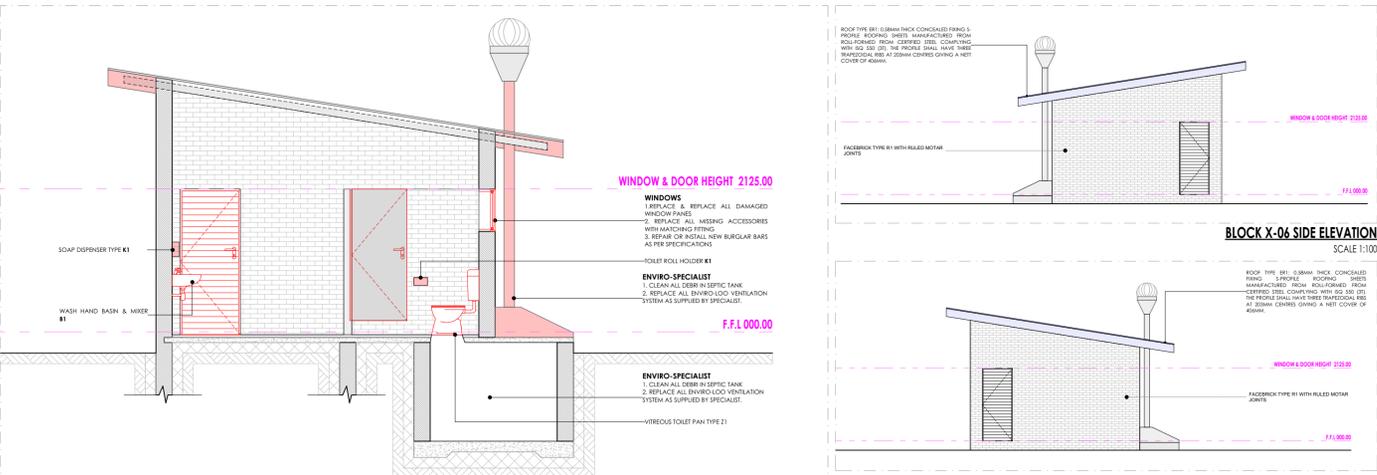
EXTERIOR DOOR		BURGLAR DOOR (SINGLE)		INTERIOR DOOR	
<b>QUANTITY</b>	01	<b>QUANTITY</b>	02	<b>QUANTITY</b>	02
<b>DOOR DESCRIPTION</b>	813 x 2032 x 44mm THICK HEAVY DUTY EXTERIOR QUALITY HORIZONTALLY SLATED DOUBLE SIDED SALIGNA DOOR FITTED TO COMPLY WITH SABS 545 EXTERIOR GRADE OR LATEST REVISION.	<b>DOOR DESCRIPTION</b>	PAINTED GALVANISED MILD STEEL GATE CONSISTING OF 10 x 10mm MILD STEEL BARS PLACED AT 100mm CENTRES AT A 90° ANGLE, INCLUDING SECURITY MESH. COLOR TO ARCHITECT'S SPECIFICATION TO COMPLY WITH SABS 681 GRADE 01. FINISH WITH TWO COATS ALKTYD EGG-SHELL PAINT TO COMPLY WITH SABS 630.	<b>DOOR DESCRIPTION</b>	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 ARCHITECT'S COLOR SCHEDULE.
<b>FRAME</b>	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.	<b>FRAME</b>	50 x 50mm GALVANISED MILD STEEL SQUARE WELDED TO FORM FRAME	<b>FRAME</b>	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.
<b>FRAME FINISH</b>	WASHABLE ENAMEL PAINT FINISH AS PER SABS 723 FOR PRIMER, SABS 681 FOR UNDERCOAT & SABS 630 TYPE 02 FOR FINISH COAT. COLOR TO ARCHITECT'S APPROVAL.	<b>FRAME FINISH</b>	1 x COAT ZINC CHROMATE PRIMER 2 x COATS GLOSS ENAMEL (EXTERIOR QUALITY)	<b>FRAME FINISH</b>	WASHABLE ENAMEL PAINT FINISH AS PER SABS 723 FOR PRIMER, SABS 681 FOR UNDERCOAT & SABS 630 TYPE 02 FOR FINISH COAT. COLOR TO ARCHITECT'S APPROVAL.
<b>DOOR FINISH</b>	APPLY 3no. CLEAR EGG-SHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, 1/2IN 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.	<b>DOOR FINISH</b>	PAINTED MILD STEEL GATE CONSISTING OF 10 x 10mm MILD STEEL BARS PLACED AT 100mm c/c CENTRES AT 90° ANGLE, INCLUDING SECURITY MESH TO COMPLY WITH SABS 681 GRADE 01 & FINISH WITH 2 COATS ALKTYD EGG-SHELL PAINT TO COMPLY WITH SABS 630 COLOR TO ARCHITECT'S SPECIFICATION	<b>DOOR FINISH</b>	APPLY 3no. CLEAR EGG-SHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, 1/2IN 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.
<b>IRON MONGERY</b>	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS.	<b>IRON MONGERY</b>	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS.	<b>IRON MONGERY</b>	DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS.
<b>HINGES</b>	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES	<b>HINGES</b>	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES	<b>HINGES</b>	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES

**BLOCK X-06 DOOR SCHEDULE**  
SCALE: 1:100



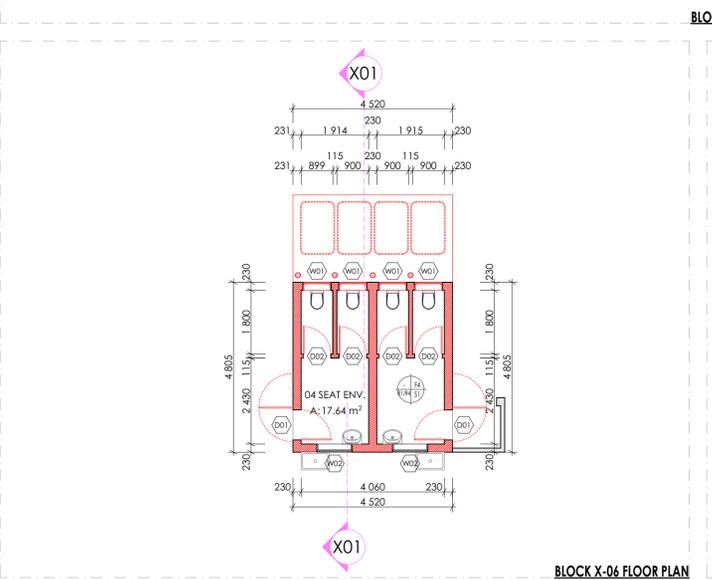
**BLOCK X-06 FRONT ELEVATION**  
SCALE: 1:100

**BLOCK X-06 REAR ELEVATION**  
SCALE: 1:100



**BLOCK X-06 SECTION X01**  
SCALE: 1:50

**BLOCK X-06 SIDE ELEVATION**  
SCALE: 1:100



**BLOCK X-06 FLOOR PLAN**  
SCALE: 1:100

W01		W02	
<b>QUANTITY</b>	04	<b>QUANTITY</b>	02
<b>WINDOW DESCRIPTION</b>	STANDARD 'SCHOOL' TYPE GALVANISED MILD STEEL DOUBLE SIDING WINDOWS, MANUFACTURED, ASSEMBLED & DELIVERED COMPLETE WITH IRON MONGERY COMPRISING APPROVED HINGES, PIVOTING MECHANISMS, STAYS FASTENERS, & WEATHER BARS TO OVENABLE PANELS: PLUGGED & SCREWED/BUILT IN WALLING.	<b>WINDOW DESCRIPTION</b>	STANDARD 'SCHOOL' TYPE GALVANISED MILD STEEL DOUBLE SIDING WINDOWS, MANUFACTURED, ASSEMBLED & DELIVERED COMPLETE WITH IRON MONGERY COMPRISING APPROVED HINGES, PIVOTING MECHANISMS, STAYS FASTENERS, & WEATHER BARS TO OVENABLE PANELS: PLUGGED & SCREWED/BUILT IN WALLING.
<b>FRAME</b>	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 BEFORE DELIVERY & FINISHED WITH ONE UNIVERSAL UNDERCOAT TO COMPLY WITH SABS 681 GRADE 01. FINISHED WITH 2no. COATS ALKTYD ENAMEL PAINT TO COMPLY WITH SABS 630. COLOR TO ARCHITECT'S SPECIFICATIONS	<b>FRAME</b>	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 BEFORE DELIVERY & FINISHED WITH ONE UNIVERSAL UNDERCOAT TO COMPLY WITH SABS 681 GRADE 01. FINISHED WITH 2no. COATS ALKTYD ENAMEL PAINT TO COMPLY WITH SABS 630. COLOR TO ARCHITECT'S SPECIFICATIONS
<b>GLASS</b>	6mm SAFETY GLASS FIXED WITH PUTTY TO COMPLY WITH SABS 680. PUTTY MUST BE DELIVERED ON SITE IN SEALED CONTAINERS MARKED WITH SABS MARK OF APPROVAL.	<b>GLASS</b>	6mm SAFETY GLASS FIXED WITH PUTTY TO COMPLY WITH SABS 680. PUTTY MUST BE DELIVERED ON SITE IN SEALED CONTAINERS MARKED WITH SABS MARK OF APPROVAL.
<b>WINDOW FITTINGS</b>	MATCH EXISTING WINDOW FITTINGS (ORIGINAL)	<b>WINDOW FITTINGS</b>	MATCH EXISTING WINDOW FITTINGS (ORIGINAL)
<b>IRON MONGERY</b>	ALL IRON MONGERY TO BE SUPPLIED MUST MATCH EXISTING OR SIMILAR & MUST BE APPROVED BY THE ARCHITECT	<b>IRON MONGERY</b>	ALL IRON MONGERY TO BE SUPPLIED MUST MATCH EXISTING OR SIMILAR & MUST BE APPROVED BY THE ARCHITECT
<b>HINGES</b>	FIXED, MANUFACTURER'S SPECIFICATION	<b>HINGES</b>	FIXED, MANUFACTURER'S SPECIFICATION

**BLOCK X-06 WINDOW SCHEDULE**  
SCALE: 1:100

**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 Thermal Seal 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. Floor Mounted 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 (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 Thermal Seal 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 (C/C)**  
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 complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermal seal 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 back inlet pan to comply with SABS 497. Supplied with suitable 38mm CP domical groling. 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.

**W7. SHOWER**  
20mm thick Enamelled steel shower tray size 900x900x160mm manufactured with anti slip pattern, with rounded internal corners, and 38mm BSP grated waste fitting in corner position fitted with Shower seat and complying with SABS 226 compliance of approval.  
• Glazed Shower Cubicle with access door as per standard supply from manufacturer and sized to fit space configuration  
• Overhead shower arm with wall flange.  
• Chrome Plated Shower Head with built-in heated connector  
• Chrome Plated Shower diverter mixer-wal with sliding wall flanges and concealed connectors adjustable from 178mm to 203mm centres. Shower tray to be recessed 50mm into a 100mm high concrete plinth with exposed plinth face.

**W8. WASH-HAND BASIN**  
**W1. WASH & MIRROR TAP**  
Vitreous china size 450 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 the centre semi-punctured supplied with a 'Tuscany' pedestal and fitted with 'Ino. Cobra Waterless' 15mm chrome pushbutton operated pilot tap with flanged backstop (code KM2.102) meeting tap, 300-32 CP anti-thrust plug with angle valve.

**W2. DISABLED BASIN**  
200mm 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 8/16 Red indicators water applications and flanged backstop. chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Faced with concealed wall bracket in accordance to the manufacturer's specifications.

**W3. WHITE GLAZED PORCELAIN W/HS (VANITY)**  
Ceramic freecy size 450x350mm oval self-empting vanity basin to comply with SABS 497 in one top hole configuration supplied without overflow and fitted with 2No. chrome plated tap with flanged backstop (code KM2.102) meeting tap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Basins mounted on cabinet or vanity top with silicon bead between contact areas in strict accordance to manufacturer's specifications.

**W4. 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 chinatory hole with 2No. pillar-top, chrome plated anti-thrust plug with granite dial, 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.

**W5. URINARY BASIN (No. TAP FOR LABS)**  
Ceramic freecy size 450x300mm heavy duty basin in one tap-hole configuration to comply with SABS 497 and 8/16 hole plugged and fitted with 1No. pillar-top. Chrome plated anti-thrust plug with granite dial, 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.

**W6. MEDIC BASIN & FITTINGS (SICK BAY)**  
Vitreous china size 450x300mm 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 8/16 Red indicators water applications and flanged backstop. chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Faced 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 KB and bin type K3  
• Soap dispenser type K5  
• Spoutback comprising 2no. rows of wall fin 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 906 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 906 fitted with Approved Sink mixer-wal type, 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 freecy 425 x 335 x 180mm rectangular laboratory sink without overflow, with a centre end waste outlet. Fitted to wall on two semi-concealed brackets supplied with all necessary accessories (all to be acid resistant)

**X4. SINGLE WASH TROUGH (Taps & 2 no. TAPS)**  
600mm x 500mm inset washtrough manufactured from grade 18/10 SS. stainless steel with radiused 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 strip, chain and stay, CP, 'P' trap, with deep seal and cleaning eye. Rough brass Sink installation height = 900mm AFFL. Cut out size 555 x 425mm.

**X5. DOUBLE WASH TROUGH (Taps & 2 no. TAPS)**  
1200 x 550 x 200mm Double bowl wash trough manufactured from grade 304 (18/10) SS. stainless steel with radiused internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2no wall type bibcoaps, with Swivel Outlet, adjustable wall flanges and adjustable connections. CP. Un-slotted sink waste with back nut and plug with strip, CP. Double drain back rubber deep seal 'P'-trap. Sink mounted on 2no. 25mm square SS gallow brackets, front leg adjustable foot piece of height of 915mm AFFL.

**SANITARY ACCESSORIES**  
**K1. SS TOILET ROLL HOLDER & 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-foam, 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 550H 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)**  
100mm 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 BAILS-PARALEGIC**  
Stainless steel 914 x 90 x 32mm diameter wall (rear) grab rail, in satin polished finish complete with SS fixing screws and plastic wall plugs. Installed as per manufacturer's instructions.

**K7. GRAB BAILS (RIGHT LEFT HAND)-PARALEGIC**  
Stainless steel 914 x 90 x 32mm diameter hand (front) 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**  
300mmWx350mmX230mmD Dish 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 (HAND WASH)**  
115W x 270H 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)**  
800mm Wide x 220mm High x 90mm High Aluminium Multi-track Hat and Coat Hook in multi-track two hooks Configuration With Anodised Silver Finish Complete with Screws.

**K11. HAND DRYER (Hands free)**  
As per Electrical Engineers specification

**K12. TOWEL RAIL**  
152mm 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 (Height)**  
20mm dia. standard chromum 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 UPVC Door Protector manufactured in high impact resistant rigid PVC (Colour Grey) and cut off door width from 3m length, installed strictly in accordance to manufacturer's specifications.

**G2. PROTECTOR SCREEN**  
Full-height UPVC screen size 2440 x 1850mm (including area 234 x 1750mm) with wall-mounted code SC4000 Keystone Brackets Adjustable Set of 2, size 200mm. To be supplied complete with all accessories, and fitted in strict accordance with manufactures instructions.

**G3. FINBOARD 150W X 1000H**  
Finboard size 1000mm 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.



**FINISHES LEGEND**

**FLOORS:**

**F1- FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)**  
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 S81: 1992 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. 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.

**F2- PORCELAIN TILES - MATI**  
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. 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- CARPET TILES**  
320mm x 320mm, 1.008 RFX 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 DN S4324 on wire test and SO body test at less than 2kV at 25Hz Rf on static electricity. Colour and pattern to architects approval.

**F4- CEMENT SAND SCREED**  
30mm thick pozzolanic 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**  
60mm 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 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 60 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 (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-Levelled Smooth Screed glued with conductive adhesive to SABS D70 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 PEZ 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 sprayed 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 22mm thick screeds in strict compliance to manufacturers instructions and SABS Specification, with Cove base and straight tops. 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 PA's approval. All to be manufactured and installed in strict compliance With SABS 1083 or latest revision.

**WALL FINISHES:**

**W1- FACE BRICK**  
F88 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 881 grade I, in accordance to manufacturer's instructions.

**W3- ALKYD (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 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 COMBO**  
Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'S5', 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 'S2' To Comply with SABS 1831 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- 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
9mm Classic gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc Rhino-board 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc Rhino-board Snap Point Grabber Screws 32mm at minimum 150mm centres. Apply Gyproc Rhino-tape to all joints and skim the ceiling using Gyproc Rhinocel.

**C2- FIBRE CEMENT BOARDS (IS-JOINTED)**  
6 mm thick Gyproc Fibrax 5 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc Rhino-board 9 mm (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 Rhino-board 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 Rhino-tape to all joints and skim the ceiling using Gyproc Rhinocel.

**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 fixings at 300mm centres. Donn T38 FR Main Tees (8.4mm thickness, 2150 gwg. 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 G2000 Hanger Strap 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 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 Sags: 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hem-hydrate gypsum plaster on concrete slab stiff.

**ROOF COVERING AND INSULATION:**

**R1- EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 333 (3). The profile shall have three trapezoidal ribs at 203mm centres giving a net cover of 456mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 203mm 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 'Chromadek Coatings' and laid on structural timber/steel structure incorporating all necessary accessories such as fastenings and eave covers in strict compliance to manufacturer's instructions.

**Insulation:** SHALL BE: 1- 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 'Fibreboard' manufactured from non-combustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>3</sup> and finished with metalized foil.

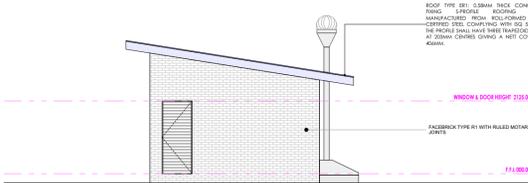
**Galvanized Steel (GI) Gutter:** 150mm Wide x 100mm Deep x 0.6mm Eave Gutter of Commercial Grade Steel With Class 275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

**Dampstop:** 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class 275 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.

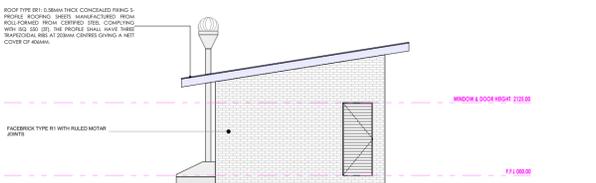
**Facia board:** 750 x 10 mm Fibre-Cement Facia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic PVA.

WINDOW SCHEDULE table with columns for W01, W02, QUANTITY, WINDOW DESCRIPTION, FRAME, GLASS, WINDOW FITTINGS, IRON MONGERY, HINGES.

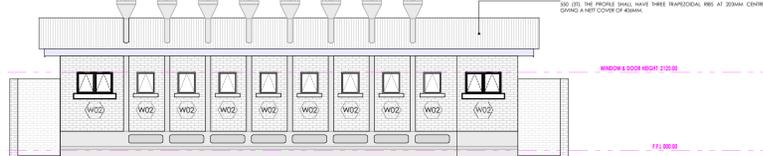
BLOCK Z-01 WINDOW SCHEDULE SCALE 1:100



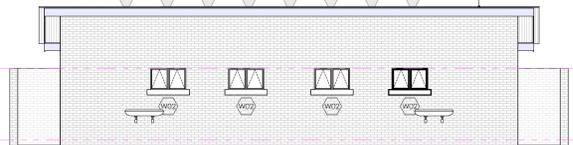
BLOCK Z-01 SIDE ELEVATION SCALE 1:100



BLOCK Z-01 SIDE ELEVATION SCALE 1:100



BLOCK Z-01 REAR ELEVATION SCALE 1:100



BLOCK Z-01 FRONT ELEVATION SCALE 1:100

**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 Thermostat 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 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 Thermostat 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 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 thermostat (S.S. 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 g roofing, 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**  
20mm thick Tricoramic steel shower tray size 900x900x160 mm manufactured with anti slip pattern, with rounded internal corners, and 38 mm R3P grated waste fitting in corner position fitted with Shower set and complying with SABS 226 comprising of approval:

• Gated Shower Curbic with access door as per standard supply from manufacturer and sized to fit space configuration

• Overhead shower arm with wall flange.

• Chrome Plated Shower Head with built-in jetted connector

• Chrome Plated Shower Diverter mixer wall type 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 laid.

**WASH-HAND BASIN**

**W1- WASH & MIRROR TAP**  
Vaal Sanitaryware 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 chairstair hole with the centre semi-punch supplied with a 'Tuscany' pedestal and fitted with 'No. Cobra Waterless' 15mm chrome pushbutton demountable tap top with flanged backstop (code KM2.102) meeting tap, 300-32 CP anti-fret plug with spindle, 300 basin waste, 365/40 CP bottle trap, mounting kit and angle valves.

**W2- DISABLED BASIN**  
1000mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with 2 No chrome plated Elbow action pillar-top, with 1/4 turn ceramic disc head and 8/16 Red indicators water applications and flanged backstop, chrome plated waste, chrome plated 32 mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to the manufacturer's specifications.

**W3- WHITE GLAZED PORCELAIN W/H VANTY**  
Ceramic freeco size 455x355mm wash basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with 1/4 turn chrome plated anti-fret plug with flanged backstop (code KM2.102) meeting tap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Basin mounted on cabinet or vanity base with silicon sealant between cabinet and basin in strict accordance to manufacturer's specifications.

**W4- SMALL BASIN & 2 TAPSTRAY & SHOWER SET (FOR WORKSHOPS)**  
Vitreous china size 455x300mm wash basin to comply with SABS 497 in 2 tap hole configuration supplied with integrated overflow and chairstair hole with 2No. pillar top, chrome plated anti-fret plug with flanged backstop (code KM2.102) meeting 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.

**W5- HEAVY DUTY BASIN & NO. TAP (FOR LABS)**  
Vitreous china size 455x300mm heavy duty basin in one tap-hole configuration to comply with SABS 497 and R16 hole plugged and fitted with 1/4 turn, chrome plated anti-fret plug with flanged backstop (code KM2.102) meeting tap, 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.

**W6- MEDIC BASIN & FITTINGS (SICK BAY)**  
Vitreous china size 420mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with 2 No chrome plated Elbow action pillar-top, with 1/4 turn ceramic disc head and 8/16 Red indicators water applications and flanged backstop, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to the manufacturer's specifications.

Combination of sanitaryware, accessories and general fittings comprising of:

• Mirror type G

• Paper towel dispenser KB and bin type K3.

• Soap dispenser type K5.

• Spatiback comprising 2no. rows of wall tile 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 906 fitted with: Approved Sink mixer-wall 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 906 fitted with: Approved Sink mixer-wall type, with chrome plated 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 freeco 435 x 335 x 180 mm rectangular laboratory sink without overflow, with a centre end waste outlet, fitted to the wall on two semi-concealed brackets supplied with all necessary accessories (all to be acid resistant)

**X4- SINGLE WASH TROUGH (Inset) & 2 no. TAPS**  
300mm x 500mm steel wash trough manufactured from grade 18/10 SS, stainless steel with radiused internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2No. CP bib-taps - plain extended chrome plated, 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 TROUGH (Inset) & 2 no. TAPS**  
750 x 550 x 200mm Double bowl wall hung wash trough manufactured from grade 304 (18/10) SS, radiused internal corners and provision for a 40mm dia. outlet, fitted with: Approved 2no wall type bib-taps, with Swivel Outlet, adjustable wall flanges and exposed adjustable connections. CP, Un-slotted sink waste with back nut and plug with stirrup, CP, Double drain back rubber deep seal 'F'-trap. Sink mounted on 2no. 25mm square SS gallow brackets, front leg and adjustable foot piece of height of 150mm 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 holed for and fixed, with chromium plated dome-headed mirror screws

**K3- SS WASTE BIN**  
325W 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)**  
100mm 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 10 x 32mm diameter wall [rear] 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 914 32mm diameter (right hand) 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**  
300mmWx350mmX230mmD 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 270H 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)**  
800mm Wide x 220mm High x 90mm High Aluminium Multi-track Hat and Coat Hook in multi-track two hooks Configuration With Anodised Silver Finish Complete with Screws.

**K11- HAND DRYER (Hands free)**  
As per Electrical Engineers specification

**K12- TOWEL RAIL**  
152mm 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 1800mm long with flanged ends and screws CP fixing height as per PA's drawing.

**GENERAL FIXTURES**

**G1- DOOR PROTECTOR**  
200mm wide uPVC Door Protector manufactured in high impact resistant rigid uPVC (Colour Grey) and cut to door width from 3m length, installed strictly in accordance to manufacturer's specifications. Installation height 900mm above FL, or as specified.

**G2- PROTECTOR SCREEN**  
Full-cover PVC screen size 2440 x 1850mm (viewing area 2240 x 1750mm) with wall-mounted code SC040 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 150W X 100H**  
Finboard size 1000mm H x 1500mm W comprising of laminated self board core priming material beaded all round with anodised aluminium channel surround milled at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level.

**G4- FINBOARD 300W X 120H**  
Finboard size 1200mm H x 3000mm W comprising of laminated self board core priming material beaded all round with anodised aluminium channel surround milled 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- SS FLOOR EXPANSION JOINT COVER**  
Concealed heavy-duty stainless 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**  
Vitrea system 1000 standard WHITEBOARD or EQUAL & APPROVED vitreous enamelled steel utility school chalkboards wall-mounted size 480mm x 1140mm high manufactured in accordance with SABS Standard CES 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 (Vitreous Colour Reference - Chalk Board Green LM197/2), supplied 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.



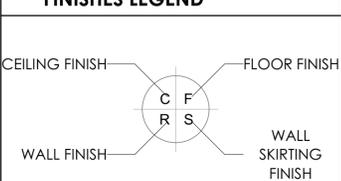
LEGEND table with color-coded boxes for NEW WALLS, EXISTING WALL TO BE RETAINED, EXISTING WALL TO BE DEMOLISHED, NEW FIXTURES & FITTING TO BE INSTALLED, ITEMS IN RED AND (OR) DASHED LINES ARE TO BE REPAIRED AND (OR) REPLACED.

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**



**SIGNATURE TABLE**

Table with columns for DISCIPLINE, SIGN, DATE, CLIENT, FIRE EXAMINER, ENVIRONMENTAL, ROADS / STORMWATER, WATER & SANITATION.

Table with columns for REV. NO., DATE, DESCRIPTION, FIRST ISSUE FOR TENDER.

**REVISIONS**

LIMPOPO PROVINCIAL GOVERNMENT REPUBLIC OF SOUTH AFRICA  
PUBLIC WORKS, ROADS & INFRASTRUCTURE INSTITUTION  
ST. PAUL SECONDARY SCHOOL-924 650 740

**RESTORATIVES, REPAIRS & ADDITIONS**

**DOCUMENTATION & PROCUREMENT**

Table with columns for DISCIPLINE, ARCHITECTURAL, WORK DESCRIPTION - SUB DIVISION.

**STAGE 04 ARCHITECTURAL**

**Z-01 ELEVATIONS | W-SCHEDULE**

Table with columns for DRG No., DESIGN, DATE, E1B-307-02, N/A, AS SHOWN, 02/02, SMTN, T.M, ITEM No., DRAWN, CHECK.

Table with columns for DATE, RESPONSIBLE PROFESSIONAL, PR. NUMBER, NAME, SIGN, PR. NUMBER, DATE, T. NAMEYAZA, P.Prach, 43981757.

**CONSULTANT**

TECTURA - INTERNATIONAL! with contact information for Cape Town, Johannesburg, Durban, and other offices.

**CONTRACTOR**

Table with columns for CAD SYSTEM, AUTOCAD, PROJECT NUMBER, FILE NAME, SIZE, LDPW - PROF/16002/E18, REV, 0.



**FINISHES LEGEND**

**FLOORS:**

**F1- FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)**  
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 S81: 1992 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. 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.

**F2- PORCELAIN TILES - MATI**  
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. 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- CARPET TILES**  
500mm x 500mm, 1.008 RFX 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 DN 54324 on wire test and SO body test at less than 2kV at 25Hz Rn static electricity. Colour and pattern to architects 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 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 10m<sup>2</sup>, 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 80 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 (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-Levelled Smooth Screed glued with conductive adhesive to SABS D70 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 PEZ 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 sprayed 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 22mm thick screeds in strict compliance to manufacturers instructions and SABS specification, with cove base and straight tops. 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 PA's approval. All to be manufactured and installed in strict compliance With SABS 1083 or latest revision.

**WALL FINISHES:**

**W1- FACE BRICK**  
F82 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 881 grade I, in accordance to manufacturer's instructions.

**W3- ALKYD (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 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 COAT**  
Combination of 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'S5', 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- 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**  
'GypClac Classic' gypsum plasterboard ceiling EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber bracing 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 RhinoTape.

**C2- FIBRE CEMENT BOARDS (IS-JOINTS)**  
6.4mm thick GypCel Frestex 7 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 10171:5) fixed to EX 38mm x 50mm timber bracing 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 RhinoTape.

**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 fixings at 300mm centres. Donn T38 FR Main Tees (8.4mm thickness, 2150 gpa. 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 file notches to be in file. Suspend all full length T200 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 Sabs 2no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab stiff.

**ROOF COVERING AND INSULATION:**

**R1- EMBOSSED ROOFING SHEET (TWO SIDES)**  
**Roofing Sheets:** 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 331 (3). The profile shall have three trapezoidal ribs at 203mm centres giving a net cover of 456mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 203mm centres to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofbolts to be coated on both sides with 'Global Coat' or 'Chromadec' coating and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave covers in strict compliance to manufacturer's instructions.

**Insulation:** SHALL BE: 1) 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 'Factoryboard' manufactured from non-combustible glass fibres and thermosetting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>3</sup> and finished with white meltable foil.

**Galvanized Steel (GGI) Gutter:** 150mm Wide x 100mm Deep x 0.6mm Envels 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.

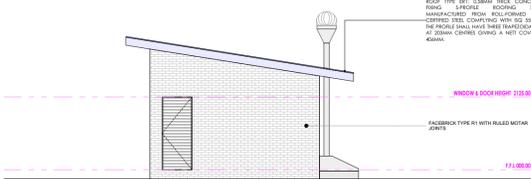
**Dampstop:** 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns laid to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation instructions.

**Facia board:** 750 x 10 mm Fibre-Cement Facia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

WINDOW SCHEDULE:		WINDOW SCHEDULE:	
W01	08	W02	06
<b>QUANTITY</b>	08	<b>QUANTITY</b>	06
<b>WINDOW DESCRIPTION</b>	STANDARD 'SCHOOL TYPE' GALVANISED MILD STEEL DOUBLE SLIDING WINDOWS, MANUFACTURED, ASSEMBLED & DELIVERED COMPLETE WITH IRON MONGERY COMPRISING APPROVED HINGES, PIVOTING MECHANISMS, STAYS FASTENERS & WEATHERERS SABS TO OPENABLE PANELS: PLUGGED & SCREWED/BUILT IN WALLING.	<b>WINDOW DESCRIPTION</b>	STANDARD 'SCHOOL TYPE' GALVANISED MILD STEEL DOUBLE SLIDING WINDOWS, MANUFACTURED, ASSEMBLED & DELIVERED COMPLETE WITH IRON MONGERY COMPRISING APPROVED HINGES, PIVOTING MECHANISMS, STAYS FASTENERS & WEATHERERS SABS TO OPENABLE PANELS: PLUGGED & SCREWED/BUILT IN WALLING.
<b>FRAME</b>	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 BEFORE DELIVERY & FINISHED WITH ONE UNIVERSAL UNDERCOAT TO COMPLY WITH SABS 481 GRADE 01. FINISHES WITH 2no. COATS ALKYD ENAMEL PAINT TO COMPLY WITH SABS 650. COLOR TO ARCHITECT'S SPECIFICATIONS	<b>FRAME</b>	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 BEFORE DELIVERY & FINISHED WITH ONE UNIVERSAL UNDERCOAT TO COMPLY WITH SABS 481 GRADE 01. FINISHES WITH 2no. COATS ALKYD ENAMEL PAINT TO COMPLY WITH SABS 650. COLOR TO ARCHITECT'S SPECIFICATIONS
<b>GLASS</b>	6 mm SAFETY GLASS FIXED WITH PUTTY TO COMPLY WITH SABS 680. PUTTY MUST BE DELIVERED ON SITE IN SEALED CONTAINERS MARKED WITH SABS MARK OF APPROVAL	<b>GLASS</b>	6 mm SAFETY GLASS FIXED WITH PUTTY TO COMPLY WITH SABS 680. PUTTY MUST BE DELIVERED ON SITE IN SEALED CONTAINERS MARKED WITH SABS MARK OF APPROVAL
<b>WINDOW FITTINGS</b>	MATCH EXISTING WINDOW FITTINGS (ORIGINAL)	<b>WINDOW FITTINGS</b>	MATCH EXISTING WINDOW FITTINGS (ORIGINAL)
<b>IRON MONGERY</b>	ALL IRON MONGERY TO BE SUPPLIED MUST MATCH EXISTING OR SIMILAR & MUST BE APPROVED BY THE ARCHITECT	<b>IRON MONGERY</b>	ALL IRON MONGERY TO BE SUPPLIED MUST MATCH EXISTING OR SIMILAR & MUST BE APPROVED BY THE ARCHITECT
<b>HINGES</b>	FIXED, MANUFACTURER'S SPECIFICATION	<b>HINGES</b>	FIXED, MANUFACTURER'S SPECIFICATION

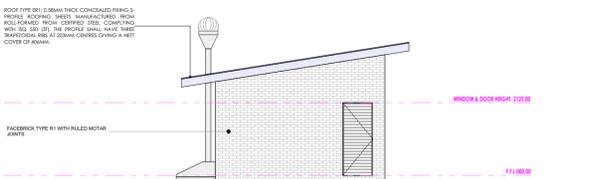
**BLOCK Z-02 WINDOW SCHEDULE**

SCALE 1:100



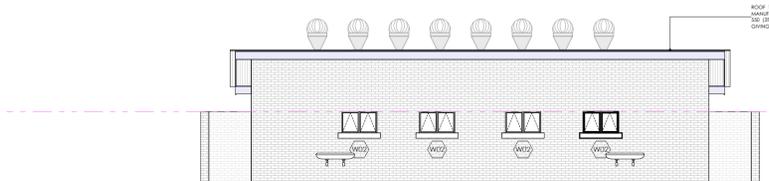
**BLOCK Z-02 SIDE ELEVATION**

SCALE 1:100



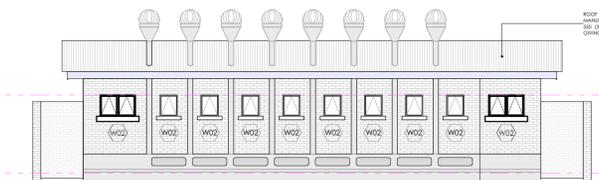
**BLOCK Z-02 SIDE ELEVATION**

SCALE 1:100



**BLOCK Z-02 REAR ELEVATION**

SCALE 1:100



**BLOCK Z-02 FRONT ELEVATION**

SCALE 1:100

**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 Thermostat 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 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 Thermostat 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 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 thermostat (S.S. 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 grommet, 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**

25mm thick Ceramic tiled shower tray size 900x900x160 mm manufactured with anti-slip pattern, with rounded internal corners, and 38 mm R3P grated waste fitting in corner position fitted with Shower set and complying with SABS 226 compliance of approval.  
Ez-Gated Shower Enclosure with access door as per standard supply from manufacturer and sized to fit space configuration  
Overhead shower arm with wall flange.  
Chrome Plated Shower Head with built-in jetted connector  
Chrome Plated Safety Shower diverter mixer-wall type 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 laid.

**WASH - HAND BASIN**

**W1- WASH & MIRROR TAP**

Vaal Sanitaryware 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 chinatory hole through the centre semi-concealed supplied with a 'Tuscany' pedestal and fitted with 'No. Cobra Waterless' 15mm chrome pushbutton operated pilot tap with flanged backstop (code KM2.102) meeting tap, 300-32 CP anti-flick plug with spindle, 300 basin waste, 365/40 CP bottle trap, mounting kit and angle valves.

**W2- DISABLED BASIN**

200mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with 2 No chrome plated Elbow action pillar-top, with 1/4 turn ceramic disc head and 8 x 8 Red indicators water applications and flanged backstop, chrome plated waste, chrome plated 32 mm 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.

**W3- WHITE GLAZED PORCELAIN W/HB (VANITY)**

Ceramic freecry size 455x355mm wash basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with 1No. chrome plated tap with flanged backstop (code KM2.102) meeting 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 slab with silicon sealant between cabinet in strict accordance to manufacturer's specifications.

**W4- SMALL BASIN & 2 TAPSTRAY & SHOWER SET (FOR WORKSHOPS)**

Vitreous china size 455x90mm wash basin to comply with SABS 497 in 2-tap hole configuration supplied with integrated overflow and chinatory hole with 2No. pillar top, chrome plated anti-flick plug with spindle 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.

**W5- HEAVY DUTY BASIN & No. TAP (FOR LABS)**

Vitreous china size 455x90mm heavy duty basin in one tap-hole configuration to comply with SABS 497 and R18 hole plugged and fitted with 1No. pillar top, Chrome Plated anti-flick plug with spindle 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.

**W6- MEDIC BASIN & FITTINGS (SICK BAY)**

Vitreous china size 420mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with 2 No chrome plated Elbow action pillar-top, with 1/4 turn ceramic disc head and 8 x 8 Red indicators water applications and flanged backstop, 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:  
• Mirror type G  
• Paper towel dispenser KB and bin type K3.  
• Soap dispenser type K5.  
• Spoutback comprising 2no. rows of wall fix 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 906 fitted with Approved Sink mixer-wall 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 906 fitted with Approved Sink mixer-wall type, with chrome plated swivel 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 freecry 425 x 335 x 180 mm rectangular laboratory sink without overflow, with a centre end waste outlet, fitted to the wall on two semi-concealed brackets supplied with all necessary accessories (all to be acid resistant)

**W4- SINGLE WASH TROUGH (Inset) & 2 no. TAPS**

300mm x 350mm inset wash trough manufactured from grade 18/10 SS, stainless steel with radiused internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2no. CP bib-taps - plain extended chrome plated, complete with sliding wall flanges, Un-slotted sink waste with back nut, plug with slimp, chain and stay, CP, 'P' trap, with deep seal and cleaning eye. Rough brass Sink installation height = 900mm AFFL. Cut out size 555 x 425mm.

**W5- DOUBLE WASH TROUGH (Inset) & 2 no. TAPS**

300 x 550 x 200mm double bowl wall hung wash trough manufactured from grade 304 (18/10) SS, radiused internal corners and provision for a 40mm dia. outlet, fitted with Approved 2no wall type bib-taps, with Swivel Outlet, adjustable wall flanges and exposed adjustable connections. CP, Un-slotted sink waste with back nut and plug with slimp, CP, Double drain back rubber deep seal 'P'-trap. Sink mounted on 2no. 25mm square SS 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 holer for and fixed, with chromium plated dome-headed mirror screws

**K3- SS WASTE BIN**

325W 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 10 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 BARS (RIGHT & HAND)- PARALEGIC**

Stainless steel 914 x 914 32mm diameter right and left 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**

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 (WASH-WALL MOUNTED)**

115W x 270H 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 (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 Electrical 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 (Height)**

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**

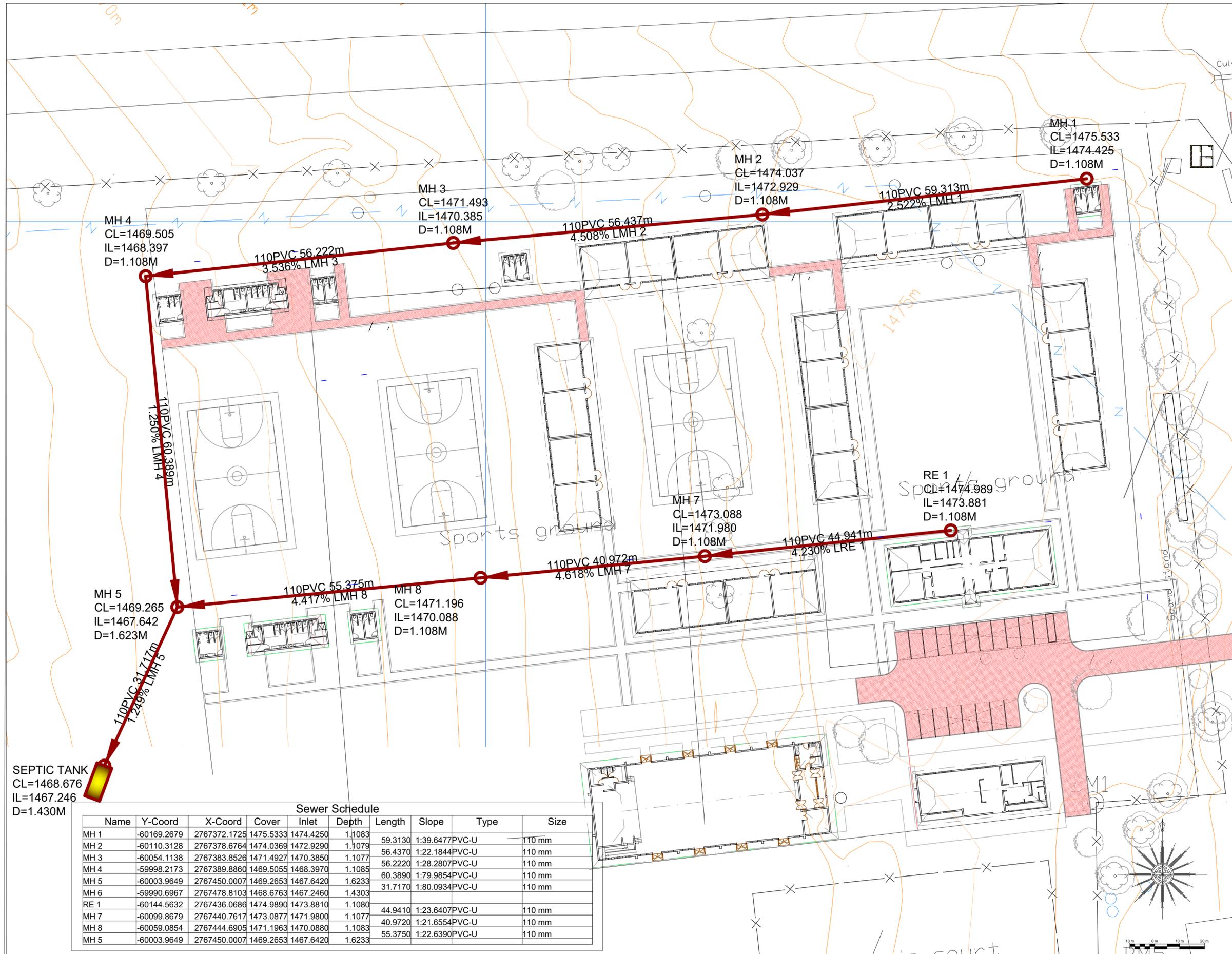
**G1- DOOR PROTECTOR**

200mm wide uPVC Door Protector manufactured in high impact resistant rigid uPVC (Colour Grey) and cut to door width from 3m length, installed strictly in accordance to manufacturer's specifications. Installation height 900mm above FF, or as specified.

**G2- PROTECTOR SCREEN**

Full door u

## **CIVIL DRAWINGS**



CLIENT DEPARTMENT SIGNATURE \_\_\_\_\_

FACILITY STAMP \_\_\_\_\_

FACILITY MANAGER \_\_\_\_\_

INFRASTRUCTURE MANAGER \_\_\_\_\_

GENERAL MANAGER \_\_\_\_\_

Checked by Professional Consultant  
Name \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

**LOWFLOW CONSTRUCTION & ENGINEERING**  
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 E-mail: lowflowsa@gmail.com

**LIMPOPO**  
 PROVINCIAL GOVERNMENT  
 REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF  
**PUBLIC WORKS, ROADS & INFRASTRUCTURE**  
 DEPARTMENT OF PUBLIC WORKS  
 ROADS & INFRASTRUCTURE  
 43 Church Street  
 Polokwane  
 0700  
 TEL: 015 284 7000/1

PROJECT  
**INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE**

DRAWING DESCRIPTION  
**ST PAULS SECONDARY SCHOOL SEWER LAYOUT PLAN**

Drawn: TM Date: 04/02/20

Scale/s: 1:1000

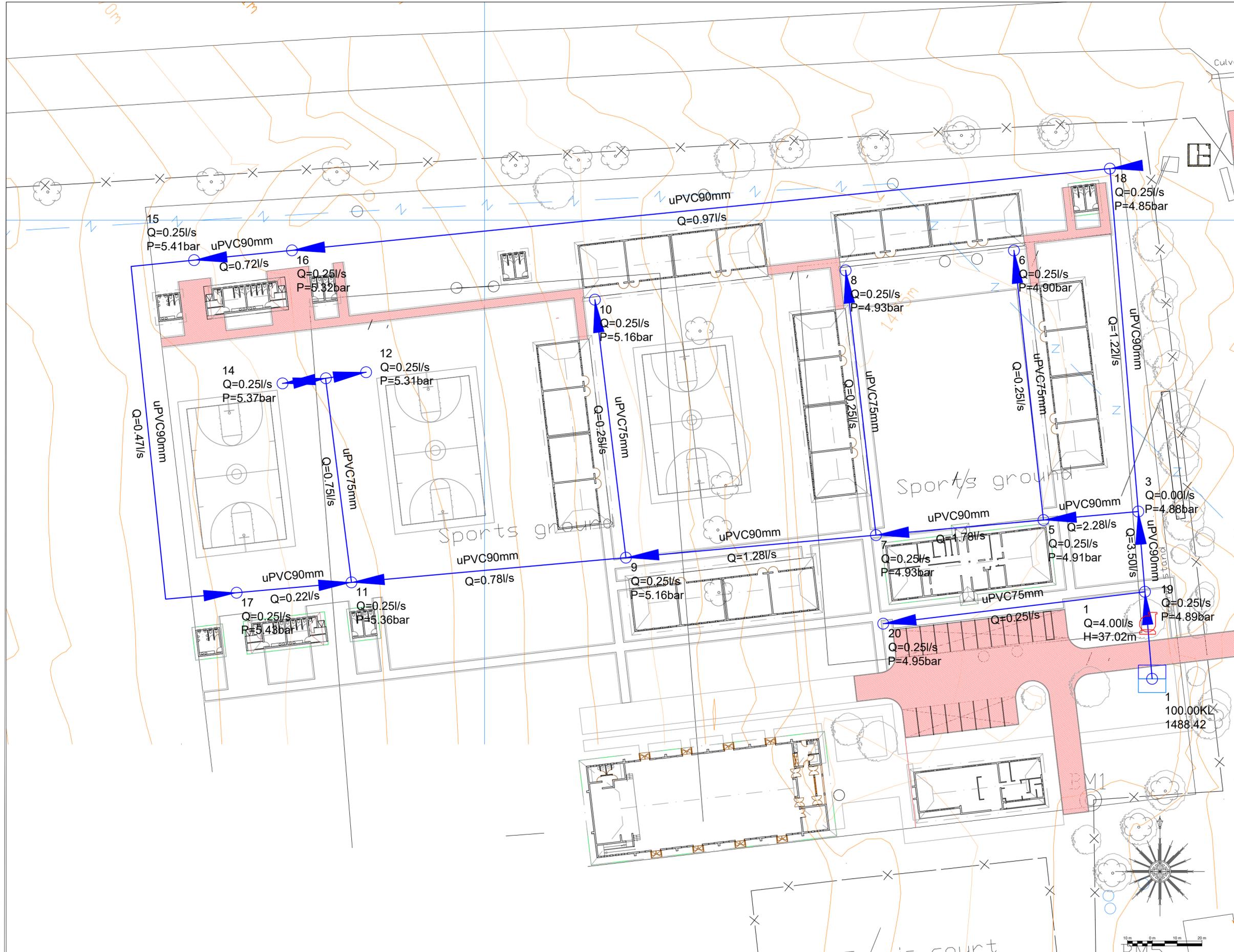
Consultant Drawing number	Revision
<b>B-500-03-1</b>	01

Drawing number	Revision
<b>SEW 080819/1</b>	02

Stamped by plans Approval Committee \_\_\_\_\_

**Sewer Schedule**

Name	Y-Coord	X-Coord	Cover	Inlet	Depth	Length	Slope	Type	Size
MH 1	-60169.2679	2767372.1725	1475.5333	1474.4250	1.1083				
MH 2	-60110.3128	2767378.6764	1474.0369	1472.9290	1.1079	59.3130	1:39.6477	PVC-U	110 mm
MH 3	-60054.1138	2767383.8526	1471.4927	1470.3850	1.1077	56.4370	1:22.1844	PVC-U	110 mm
MH 4	-59998.2173	2767389.8860	1469.5055	1468.3970	1.1085	56.2220	1:28.2807	PVC-U	110 mm
MH 5	-60003.9649	2767450.0007	1469.2653	1467.6420	1.6233	60.3890	1:79.9854	PVC-U	110 mm
MH 6	-59990.6967	2767478.8103	1468.6763	1467.2460	1.4303	31.7170	1:80.0934	PVC-U	110 mm
RE 1	-60144.5632	2767436.0686	1474.9890	1473.8810	1.1080	44.9410	1:23.6407	PVC-U	110 mm
MH 7	-60099.8679	2767440.7617	1473.0877	1471.9800	1.1077	40.9720	1:21.6554	PVC-U	110 mm
MH 8	-60059.0854	2767444.6905	1471.1963	1470.0880	1.1083	55.3750	1:22.6390	PVC-U	110 mm
MH 5	-60003.9649	2767450.0007	1469.2653	1467.6420	1.6233				



CLIENT DEPARTMENT SIGNATURE \_\_\_\_\_

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FACILITY MANAGER \_\_\_\_\_

INFRASTRUCTURE MANAGER \_\_\_\_\_

GENERAL MANAGER \_\_\_\_\_

Checked by Professional Consultant  
Name \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

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Fax: 086 541 0992  
E-mail: lowflowsa@gmail.com

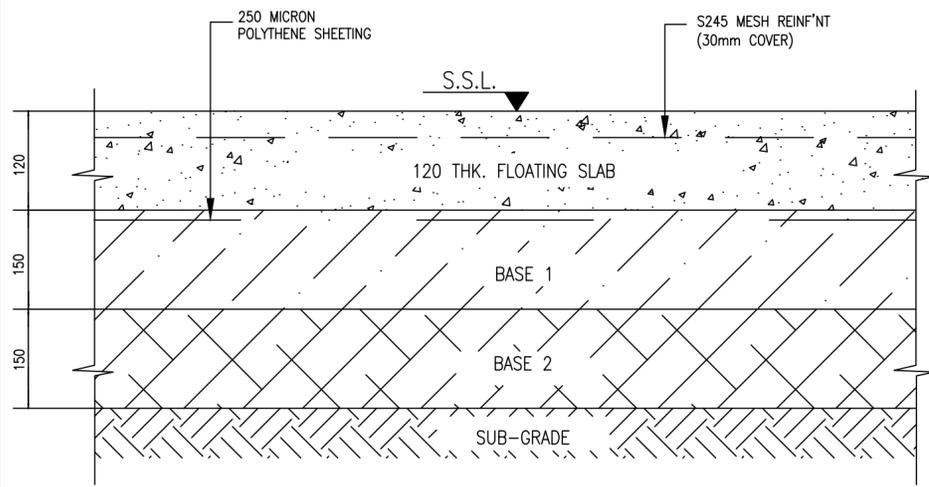
**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF  
**PUBLIC WORKS, ROADS & INFRASTRUCTURE**  
DEPARTMENT OF PUBLIC WORKS  
ROADS & INFRASTRUCTURE  
43 Church Street  
Polokwane  
0700  
TEL: 015 284 7000/1

PROJECT  
**INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE**

DRAWING DESCRIPTION  
**ST PAULS SECONDARY SCHOOL  
WATER LAYOUT PLAN**

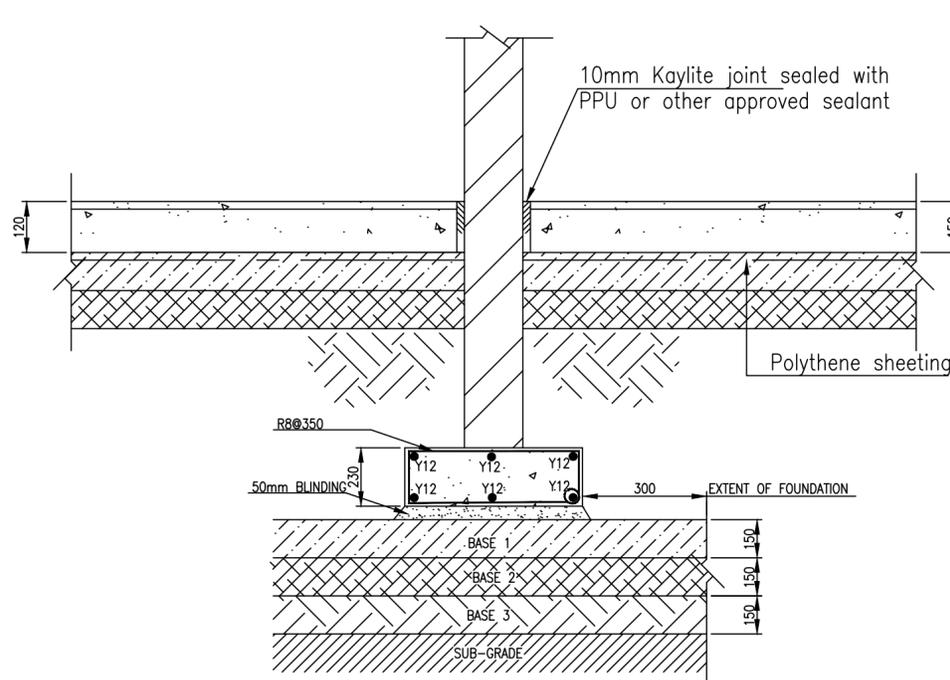
Drawn: TM	Date: 04/02/20
Scale/s: 1:1000	
Consultant Drawing number <b>B-500-03-1</b>	Revision 01
Drawing number <b>WAT 080819/1</b>	Revision 02
Stamped by plans Approval Committee	



TYPICAL DETAIL OF FILL UNDER FLOATING GROUND FLOOR SLABS

UNDER FLOOR TREATMENT

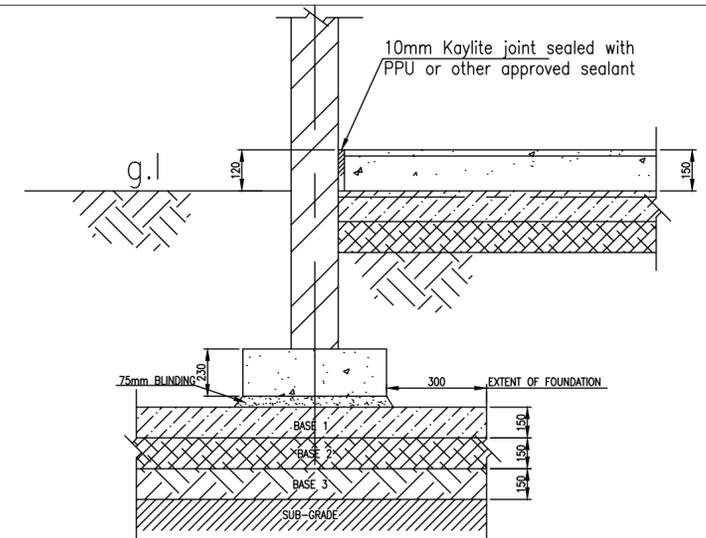
1. REMOVE TOP 150mm SOIL TO WASTE.
2. SCARIFY TOP OF IN-SITU MATERIAL & COMPACT TO 90% MOD AASHTO (SUB-GRADE)
3. IMPORT GRAVEL OF G7 TYPE & STABILISE WITH 2-3% CEMENT TO ACHIEVE 150mm OF WELL COMPACTED FILL TO 93% MOD AASHTO (BASE 2)
4. IMPORT GRAVEL OF G7 TYPE & STABILISE WITH 2-3% CEMENT TO ACHIEVE 150mm OF WELL COMPACTED FILL TO 95% MOD AASHTO (BASE 1)



SECTION B - B

TYPICAL SECTION THROUGH AN INTERNAL WALL

Scale 1:25



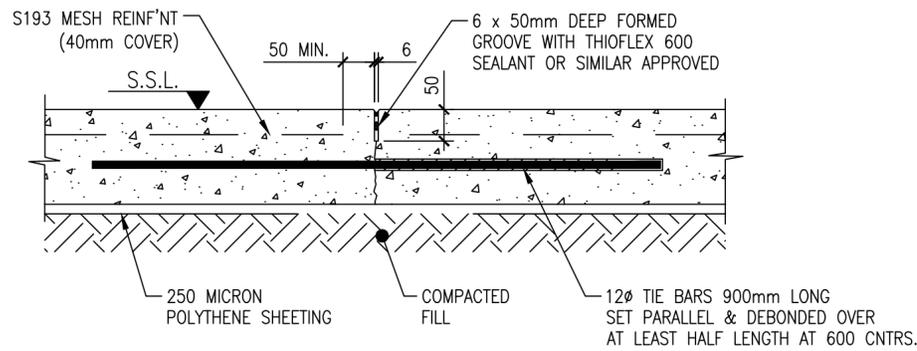
SECTION A - A

TYPICAL SECTION THROUGH AN EXTERNAL WALL

Scale 1:25

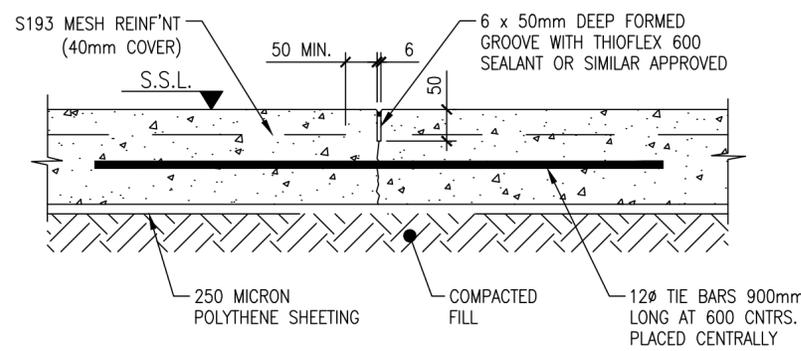
FOUNDATION TREATMENT

1. SCARIFY TOP OF FOUNDATION MATERIAL & COMPACT TO 90% MOD AASHTO (SUB-GRADE)
2. IMPORT GRAVEL OF G7 TYPE & STABILISE WITH 2-3% CEMENT TO ACHIEVE 150mm OF WELL COMPACTED FILL TO 93% MOD AASHTO (BASE 3)
3. IMPORT GRAVEL OF G7 TYPE & STABILISE WITH 2-3% CEMENT TO ACHIEVE 150mm OF WELL COMPACTED FILL TO 95% MOD AASHTO (BASE 2)
4. IMPORT GRAVEL OF G7 TYPE & STABILISE WITH 2-3% CEMENT TO ACHIEVE 150mm OF WELL COMPACTED FILL TO 97% MOD AASHTO (BASE 1)



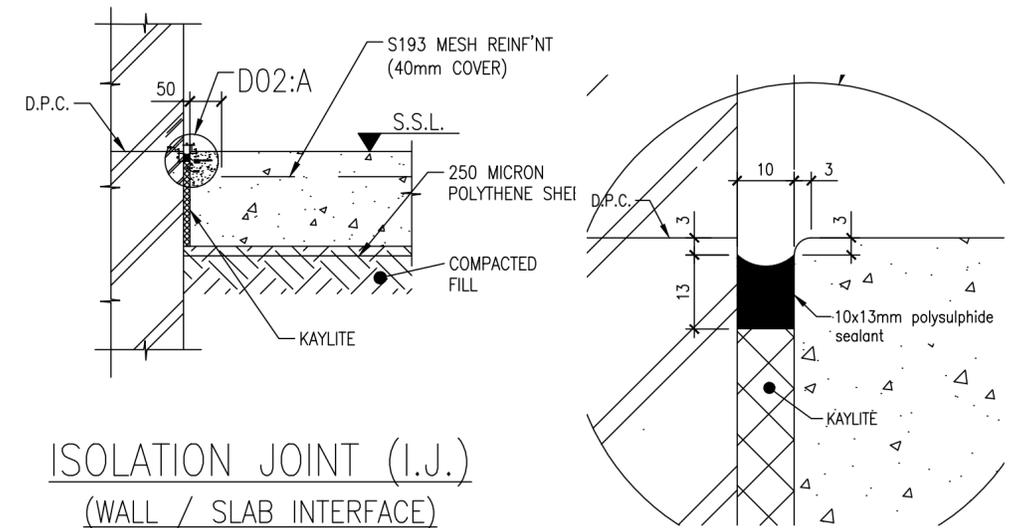
FORMED DEBONDED CONTRACTION JOINT DETAIL

SCALE 1 : 10



FORMED TIED CONSTRUCTION JOINT DETAIL

SCALE 1 : 10



ISOLATION JOINT (I.J.) (WALL / SLAB INTERFACE)

SCALE 1 : 10

No	DATE	REVISION	CONSULT	DIR

DESIGNED BY	NTB
CHECKED BY	TM
DRAWN BY	NTB
CHECKED BY	TM
APPROVED & ADOPTED BY	NTB



CHIEF ENGINEER-LPG-DPW&E	DATE
CONSULTING ENGINEER	DATE

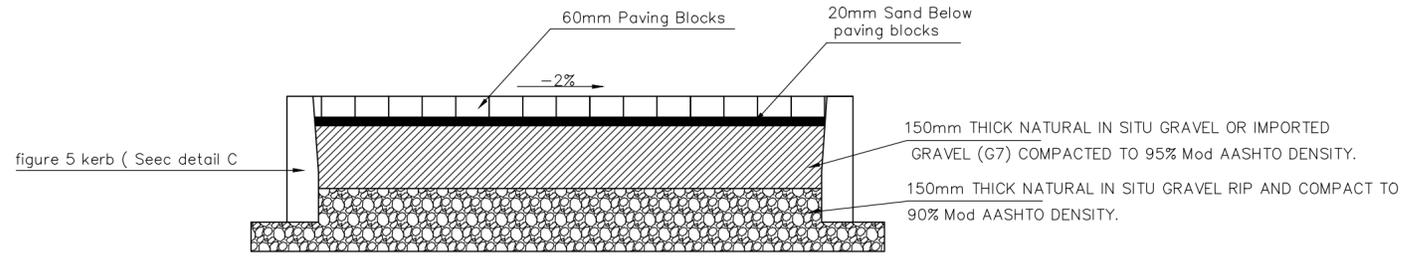
CONTRACT NO.: LDPW.PROF/11026  
ST. PAUL SECONDARY SCHOOL

FOUNDATION TREATMENT DETAIL

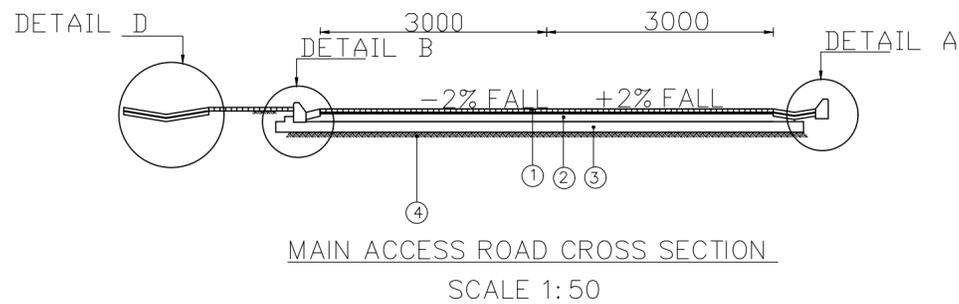
ISSUED FOR TENDER (Full Agreement)	2016 / /	SHEET 1 OF 1
For Department of Public Works	2016 / /	SCALE: AS SHOWN
For Consultant	2016 / /	DRAWING NUMBER: LFCM-005-BOS-201/1
CONSULTANT DRAWING NUMBER: LFCM-005-BOS-201/1		DRAWING NUMBER: LFCM-005-BOS-201/1

**PAVEMENT LAYERS DETAILS (PARKING AREAS)**

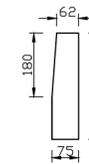
1. SURFACING: 80mm PAVING BLOCKS WITH 20mm SAND
2. BASE: 150mm THICK STABILISED NATURAL GRAVEL LAYER (C4) COMAPCTED TO 96% Mod AASHTO DENSITY.
3. SUB-BASE: 150mm THICK NATURAL IN SITU GRAVEL OR IMPORTED GRAVEL (G7) COMPACTED TO 95% Mod AASHTO DENSITY.
4. IN-SITU 150mm THICK NATURAL IN SITU GRAVEL RIP AND COMPACT TO 90% Mod AASHTO DENSITY.



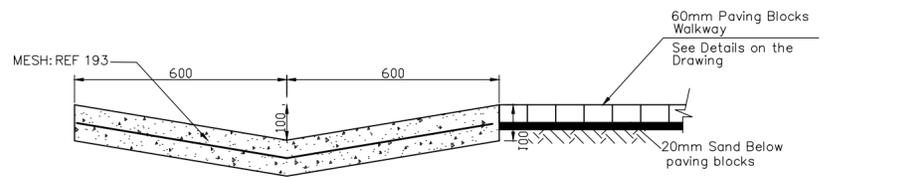
Walkway Cross Section  
SCALE 1:10



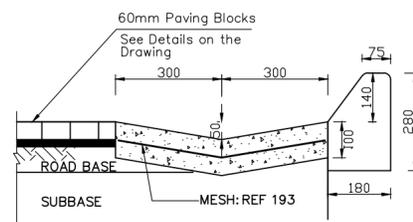
MAIN ACCESS ROAD CROSS SECTION  
SCALE 1:50



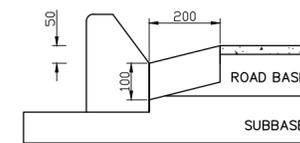
DETAIL C (Figure 5 Kerb)  
Scale 1:10



DETAIL D  
Scale 1:10



DETAIL A (Figure 7 Kerb)  
Scale 1:10



DETAIL B (Figure 7 Kerb)  
Scale 1:10

CLIENT DEPARTMENT SIGNATURE

FACILITY STAMP

FACILITY MANAGER

INFRASTRUCTURE MANAGER

GENERAL MANAGER

Checked by Professional Consultant

Name

Signature

Date

**LOWFLOW CONSTRUCTION & ENGINEERING**  
26 Peace Street  
Tzaneen  
0850  
Tel: 060 311 2170  
Fax: 086 541 0992  
E-mail: lowflowsa@gmail.com



DEPARTMENT OF

**PUBLIC WORKS, ROADS & INFRASTRUCTURE**

**DEPARTMENT OF PUBLIC WORKS  
ROADS & INFRASTRUCTURE**

43 Church Street  
Polokwane  
0700

TEL: 015 284 7000/1

PROJECT

**INFRASTRUCTURE PROVISIONING TO  
SCHOOLS WITH ACUTE INFRASTRUCTURE  
CHALLENGES, INCLUDING STORM DAMAGED  
SCHOOLS IN THE LIMPOPO PROVINCE**

DRAWING DESCRIPTION

**ST. PAUL SECONDARY SCHOOL  
TYPICAL ROAD DETAIL**

Drawn: TM

Date: 04/02/20

Scale/s: 1:1000

Consultant Drawing number

Revision

**B-500-03-1**

01

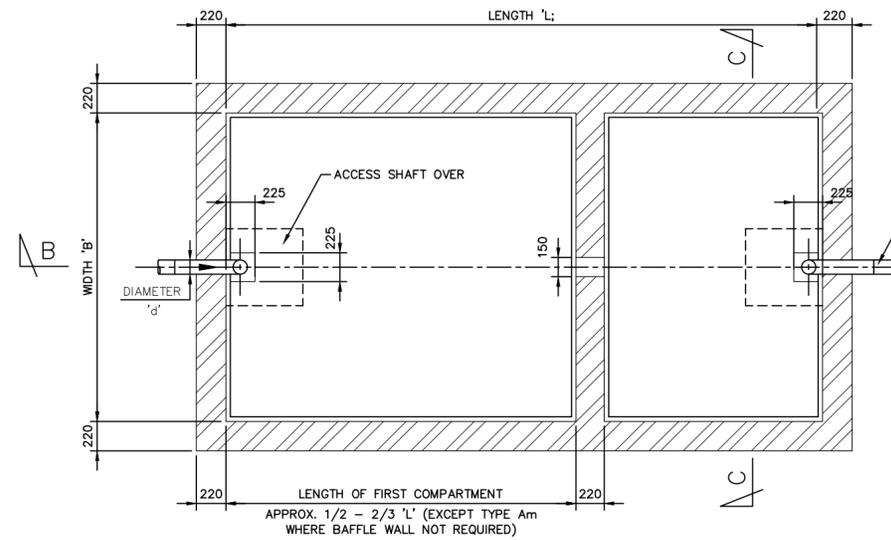
Drawing number

Revision

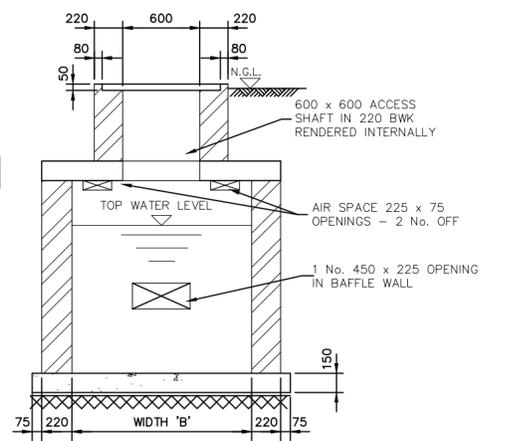
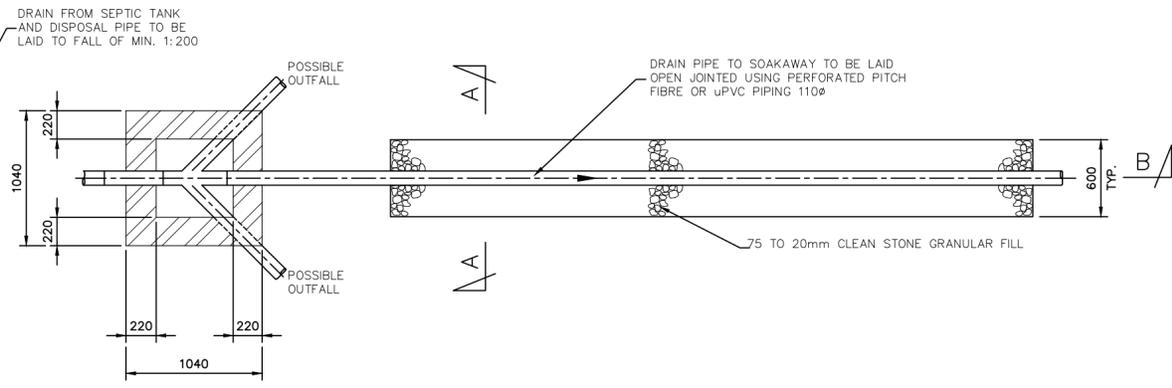
**ETH 080819/1**

02

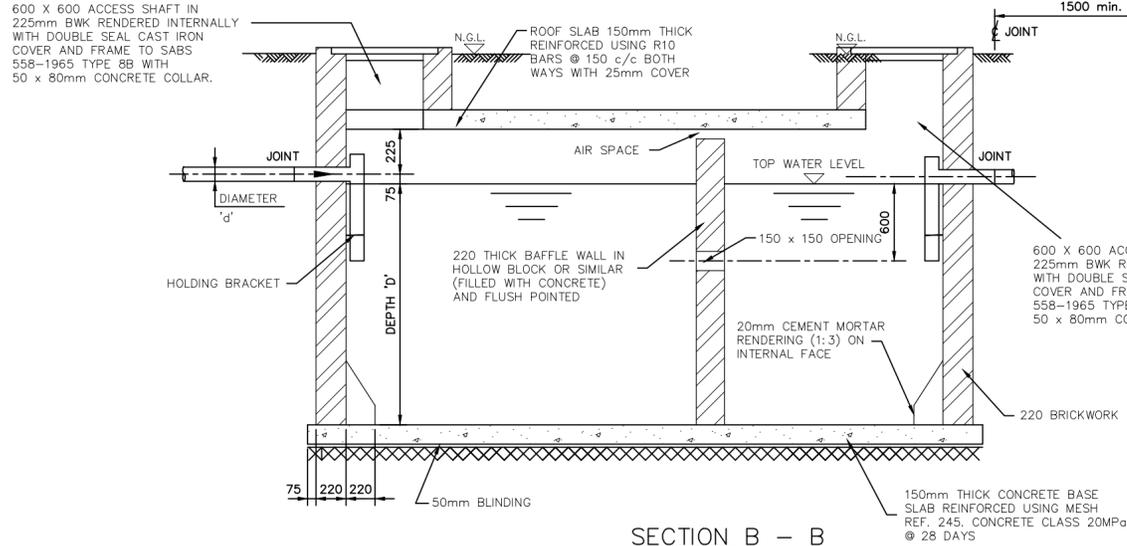
Stamped by plans Approval Committee



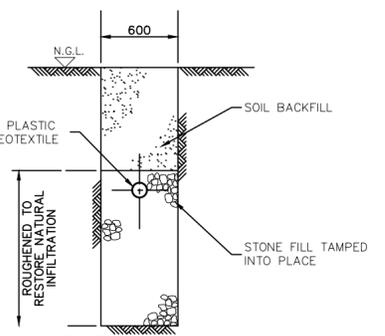
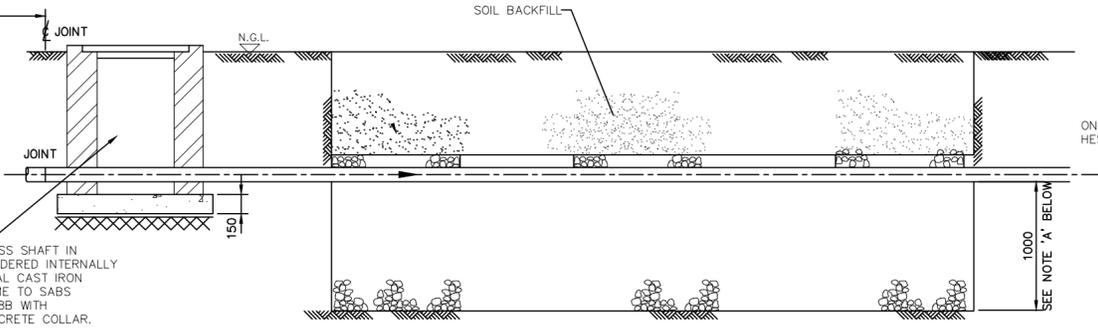
SECTIONAL PLAN  
1 : 25



SECTION C - C  
1 : 25



SECTION B - B  
1 : 25



SECTION A - A  
1 : 25

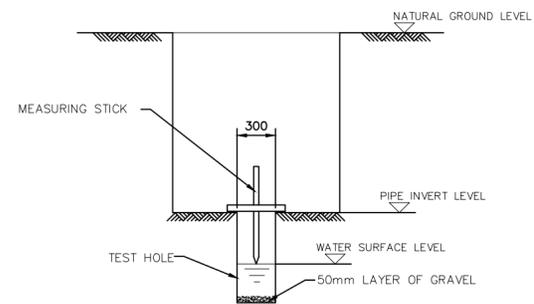
NOTE A:  
LENGTH OF SOAKAWAY TRENCH BASED ON 1m DEPTH BELOW INVERT LEVEL OF PIPE. IF THIS DEPTH IS NOT POSSIBLE DUE TO LOCAL CONDITIONS, THE LENGTH OF TRENCH SHOULD BE VARIED ACCORDINGLY TO GIVE THE EQUIVALENT TRENCH SIDE WALL AREA.

SEPTIC TANK DETAILS						LENGTH OF SOAK AWAY (m)					
TYPE	NO. OF PERSONS	DEPTH 'D' m	WIDTH 'B' m	LENGTH 'L' m	CAPACITY m <sup>3</sup>	PERCOLATION RATE - MINUTES PER 25mm					
						1 OR LESS	5 MINS	10 MINS	15 MINS	30 MINS	60 MINS
Am	1-5	1.15	0.94	1.88	2.04	5.00	5.00	5.00	7.50	10.00	15.00
Bm	6-10	1.15	0.94	2.35	2.55	5.00	7.50	10.00	15.00	20.00	30.00
Cm	11-15	1.15	0.94	3.76	3.57	7.50	11.25	15.00	22.50	30.00	45.00
Dm	16-20	1.15	0.94	4.23	4.59	10.00	15.00	20.00	30.00	40.00	60.00
Em	21-25	1.29	0.94	4.70	5.72	12.50	18.75	25.00	37.50	50.00	75.00
Fm	26-30	1.35	0.94	5.17	6.67	15.00	22.50	30.00	45.00	60.00	90.00
Gm	31-35	1.12	1.41	4.70	7.50	17.25	26.25	35.00	52.50	70.00	105.00
Hm	36-40	1.23	1.41	4.70	8.14	7.50	30.00	40.00	60.00	80.00	120.00
Jm	41-50	1.29	1.41	5.64	10.30	10.00	37.50	50.00	75.00	100.00	150.00
Km	51-60	1.29	1.41	6.64	12.30	10.00	40.00	50.00	75.00	100.00	150.00
Lm	61-70	1.72	1.41	6.11	13.65	15.00	52.50	70.00	105.00	140.00	210.00

NB: TYPE Km TO BE USED FOR THE SCHOOL

PERCOLATION RATE TEST TO DETERMINE THE ABSORPTION RATE OF THE SOIL

- EXCAVATE A TEST HOLE TO THE DEPTH OF THE PROPOSED SOAKAWAY TRENCH BY HAND OR BY AUGER WITH A DIAMETER OF BETWEEN 100mm AND 300mm. IN ORDER TO RECORD RESULTS ACCURATELY IT WILL BE NECESSARY TO DIG A PIT BELOW PIPE INVERT LEVEL PRIOR TO TAKING OUT THE TEST HOLE. REMOVE ALL LOOSE MATERIAL FROM THE BOTTOM OF THE HOLE AND REPLACE WITH A 50mm LAYER OF GRAVEL TO PREVENT SCOUR WHEN FILLING WITH WATER.
- FILL THE TEST HOLE WITH WATER TO A DEPTH OF 300mm AND MAINTAIN THIS LEVEL BY THE ADDITION OF MORE WATER FOR AT LEAST 4 HOURS BEFORE CARRYING OUT THE TEST.
- AFTER ALLOWING THE SOAKING WATER TO PERCOLATE AWAY, FILL THE TEST HOLE TO A DEPTH OF 150mm WITH WATER AND MEASURE THE DROP IN WATER LEVEL OVER A PERIOD OF 30 mins. OR UNTIL THE WATER HAS DRAINED AWAY.
- THE AVERAGE TIME FOR THE WATER TO DROP 25mm IS CALCULATED AND REPRESENTS THE PERCOLATION RATE EXPRESSED IN MINUTES PER 25mm.



ABSORPTION METHOD  
1 : 25

No	DATE	REVISION	CONSULT	DIR

DESIGNED BY	NTB
CHECKED BY	TM
DRAWN BY	NTB
CHECKED BY	TM
APPROVED & ADOPTED BY	NTB

DEPARTMENT OF PUBLIC WORKS

The Head of department  
Limpopo Provincial Government  
Department of Public Works  
Private Bag X9490  
Polokwane, 0700

Tel: +27 (0)15 284 7000  
Fax: +27 (0)15 284 7030

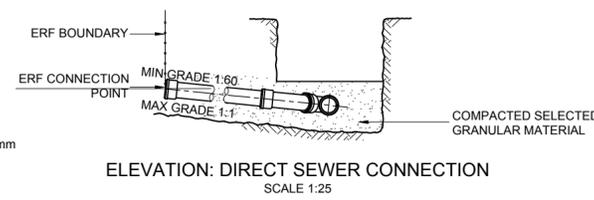
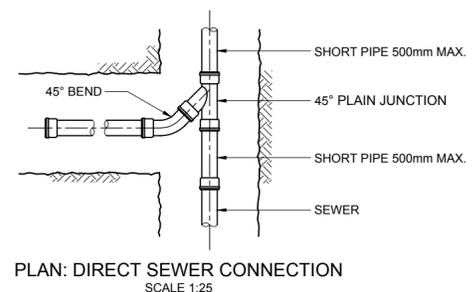
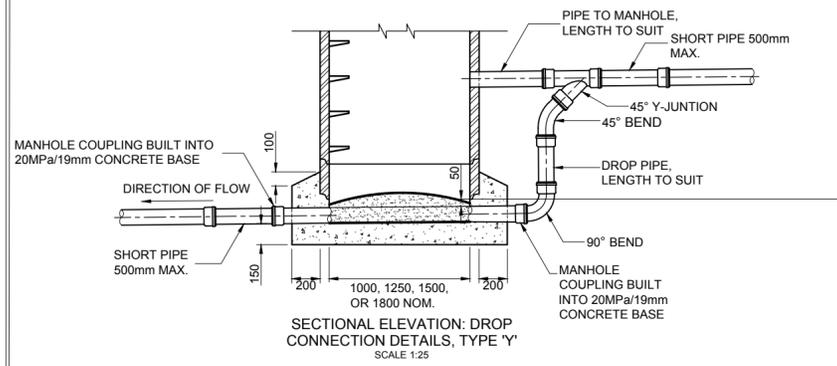
Head Office  
LOWFLOW CONSTRUCTION & ENGINEERING  
26 Peace Street  
Tzaneen  
0850

Tel: 060 311 2170  
Fax: 086 541 9992  
E-mail: lowflows@gmail.com

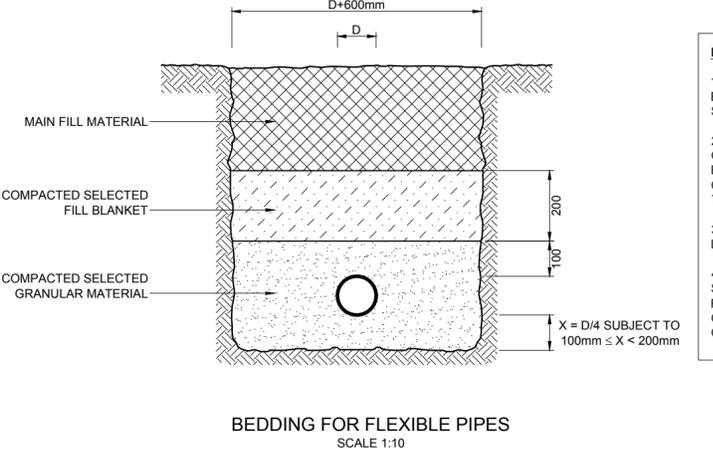
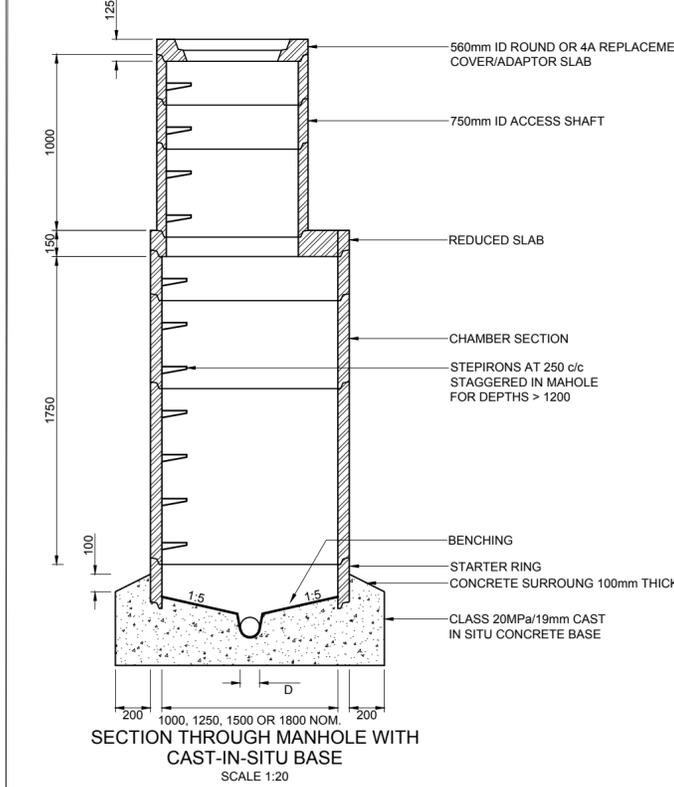
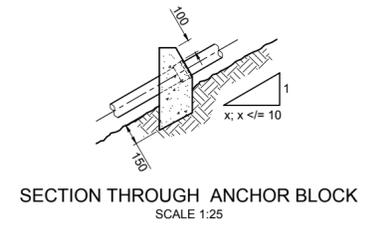
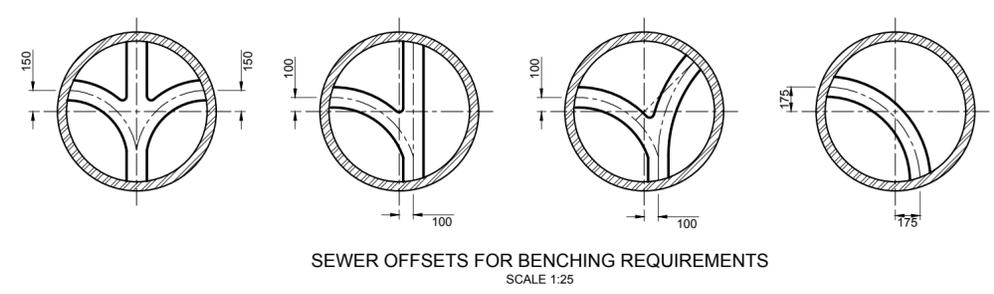
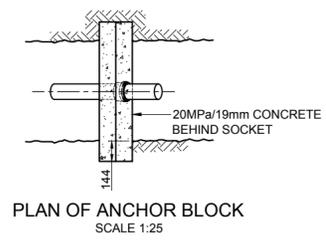
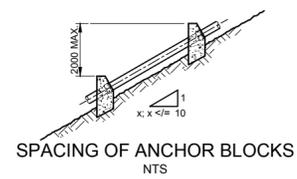
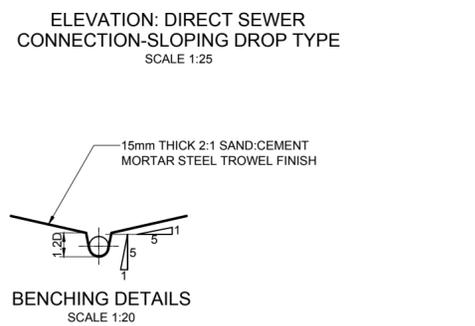
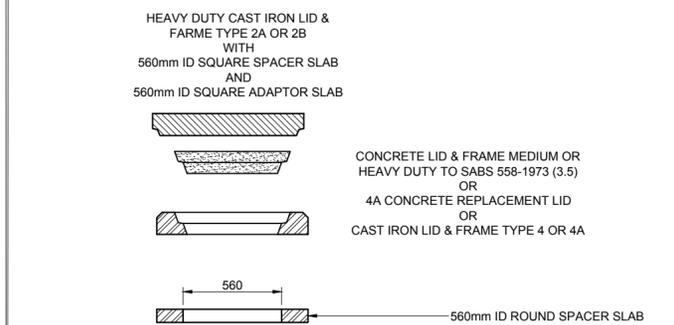
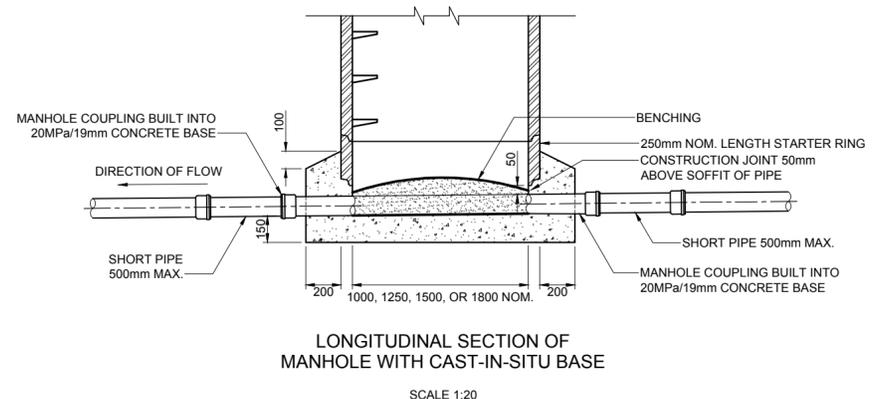
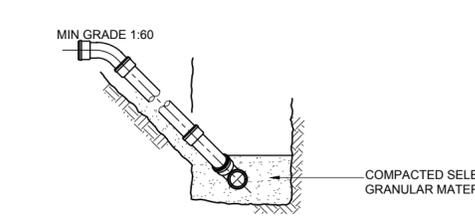
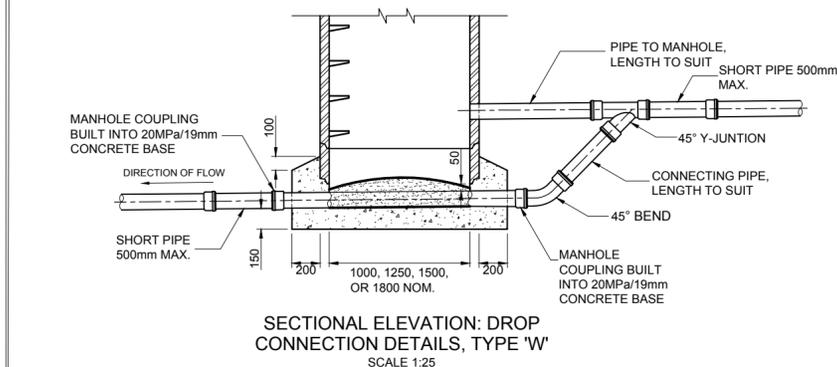
CHIEF ENGINEER-LPG-DPW&L	DATE
CONSULTING ENGINEER	DATE

CONTRACT NO.: LDPW.PROF/11026
ST. PAUL SECONDARY SCHOOL
SEPTIC TANK DETAIL

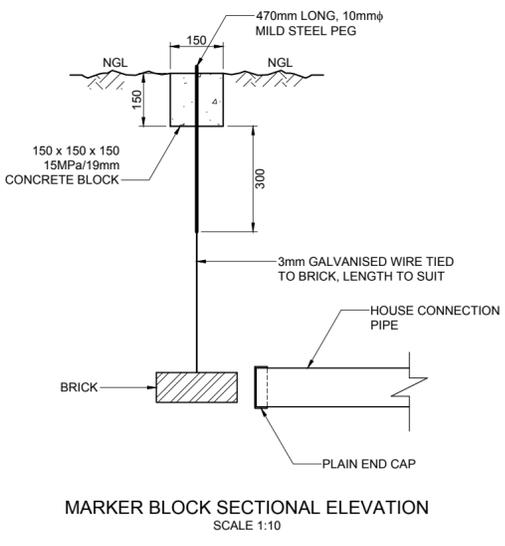
ISSUED FOR TENDER (Full Specification)	SHEET 1 OF 1
For Department of Public Works	SCALE: AS SHOWN
For Consultant	DRAWING NUMBER: LFCM-005-BOS-201/1



- NOTES**
1. ALL MANHOLE COVERS AND FRAMES TO COMPLY WITH SABS 558.
  2. ALL PRECAST MANHOLE RINGS TO COMPLY WITH SABS 1294.
  3. MINIMUM OF TWO SPACER SLABS MUST BE USED TO FACILITATE MINOR ADJUSTMENTS TO FINAL REQUIRED LEVEL.
  4. THE CHAMBER SECTION OF THE MANHOLE TO BE A MAXIMUM OF 2.0m IN HEIGHT.
  5. ACCESS SHAFTS TO BE USED FOR MANHOLES DEEPER THAN 2.0m
  6. TYPE 1 AND TYPE 2A TO BE USED FOR SIDEWALKS AND ROADWAYS RESPECTIVELY.
  7. JOINTS FOR MANHOLE CHAMBERS TO BE SEALED WITH EPOXY 3mm MAXIMUM THICK. INTERNAL FINISH SMOOTHENED BEFORE EXPOXY HARDENS.
  8. ALL PIPES AND FITTINGS WITH CONCRETE SURROUNDS SHALL BE MADE WATERTIGHT.
  9. FLEXIBLE JOINTS SHALL BE CLEAR OF ALL CONCRETE.



- NOTES**
1. SELECTED FILL MATERIAL SHALL BE MATERIAL THAT HAS A PI NOT EXCEEDING 6 AND THAT IS FREE FROM VEGETATION, CLAY LUMPS AND STONES OF DIAMETER EXCEEDING 30mm.
  2. SELECTED GRANULAR MATERIAL SHALL BE MATERIAL OF A GRANULAR NON-COHESIVE NATURE THAT IS SEPARATELY GRADED BETWEEN 0.6mm AND 19mm, IS FREE FROM DRAINING AND HAS A COMPACTIBILITY FACTOR NOT EXCEEDING 0.4 AS DETERMINED BY TESTS SPECIFIED IN SABS 0120 PART 3, SECTION LB 4.2.
  3. SELECTED FILL AND GRANULAR MATERIAL TO BE COMPACTED IN LAYERS NOT EXCEEDING 100mm.
  4. ONLY CLASS S GRANULAR SURROUND WITH OR WITHOUT CEMENT STABILISATION OR CLASS X CONCRETE SURROUND MAY BE USED FOR FLEXIBLE PIPES WHERE CEMENT STABILISATION IS SPECIFIED, CEMENT ADDED TO BE 5% BY VOLUME AT OPTIMUM MOISTURE CONTENT AND COMPACTION TO 90% Mod AASHTO.



CLIENT DEPARTMENT SIGNATURE	
FACILITY STAMP	
FACILITY MANAGER	
INFRASTRUCTURE MANAGER	
GENERAL MANAGER	
Checked by Professional Consultant	
Name	
Signature	Date
<b>LOWFLOW CONSTRUCTION &amp; ENGINEERING</b> 26 Peace Street Tzaneen 0850 Tel: 060 311 2170 Fax: 086 541 0992 E-mail: lowflowsa@gmail.com	
DEPARTMENT OF <b>PUBLIC WORKS, ROADS &amp; INFRASTRUCTURE</b> DEPARTMENT OF PUBLIC WORKS <b>ROADS &amp; INFRASTRUCTURE</b> 43 Church Street Polokwane 0700 TEL: 015 284 7000/1	
PROJECT	
<b>INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE</b>	
DRAWING DESCRIPTION	
<b>ST. PAUL SECONDARY SCHOOL SEWER TYPICAL DETAIL</b>	
Drawn: TM	Date: 04/02/20
Scale/s: 1:1000	
Consultant Drawing number	Revision
<b>B-500-03-1</b>	01
Drawing number	Revision
<b>SEW 080819/1</b>	02
Stamped by plans Approval Committee	

# **ELECTRICAL DRAWINGS**



STATUS CODE	Group Codes BUILDINGS
0 - Feasibility study	BP - Building Pl
1 - Feasibility study	SP - Building Public Address
A - Preliminary Design	BS - Building Service
B - Design Review	BA - Building Architectural
C - Tender Design	BE - Building Electrical
D - Detailed Design	BF - Building Fire Service
E - For Construction	BM - Building Mechanical
F - As-Built	BT - Building Public Telecommunications
G - For Information Only	BU - Building Public Utilities

DRAWING STATUS: FOR TENDER

PROJECT NUMBER: LDPWRI-B/20109

Drawn By: M CHABALALA	Designed By: K SECHOBARDI	Reviewed/Approved By: E VENEIAH
Name: SAID Number	Name: P1 Number	Name: P1 Number Signature

No.	Date	By	Details
A	15.08.2021	EM	FOR TENDER

CLIENT

DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE

CONSULTANT

FOURWAYS OFFICE PARK, BLOCK 5, GROUND FLOOR, Cnr. CEDAR ROAD AND FOURWAYS BOULEVARD, FOURWAYS, 2191  
Tel: 010 110 8724 Fax: 086 659 2099

PROJECT: INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E' ST. PAUL SECONDARY SCHOOL

DRAWING TITLE: SITE PLAN AREA LIGHTING LAYOUT

Symbol	Qty	Description
○	05	25W 3m LED POST TOP FITTING
●	07	ROUND BULBHEAD LIGHT FITTING 14W 4000K CRI>80 t°-25°C TO +45°C IP65 WITH ELECTRONIC CONTROL GEAR
■	00	FLOOR LIGHT FITTING 19W LED STRIPW 4000K CRI>70 100000hrs WARM WHITE L70 t°-35°C TO +35°C IP66
■	07	OPEN CHANNEL FLUORESCENT LED TUBES 2x18W 1200lm T8 4000K CRI>80 50000hrs L80 t°-25°C TO +45°C IP44 WITH PROTECTED LENS AND BICYCLE POOR PROOF

Paper Size: A0	Copyright Reserved	Project code: SPSS - C - BE - TCS - DDW - 005 - A	Scale: 1:300
Checked: REV. No	Date: 15.08.2021	Signature: A	Rev: A



STATUS CODE	Group Codes
0 - Feasibility study	BP - Building Public Buildings
1 - Feasibility study	BP - Building Public Buildings
A - Preliminary Design	BS - Building Services
B - Design Review	BA - Building Architectural
C - Tender Design	BE - Building Electrical
D - Detailed Design	BF - Building Fire Service
E - For Construction	BM - Building Mechanical
F - As-Built	BT - Building Public Telecoms
G - For Information Only	BU - Building Public Utilities

DRAWING STATUS: FOR TENDER

PROJECT NUMBER					
LDPWRI-B/20109					
Drawn By	A1304	Designed By	NNTUTA	Reviewed/Approved By	[Signature]
Name	S.A.I.D. Number	Name	Pr Number	Name	Pr Number
No.	Date	CRD	Details		
A	15.08.2021	EW	FOR TENDER		

CLIENT

DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE

CONSULTANT

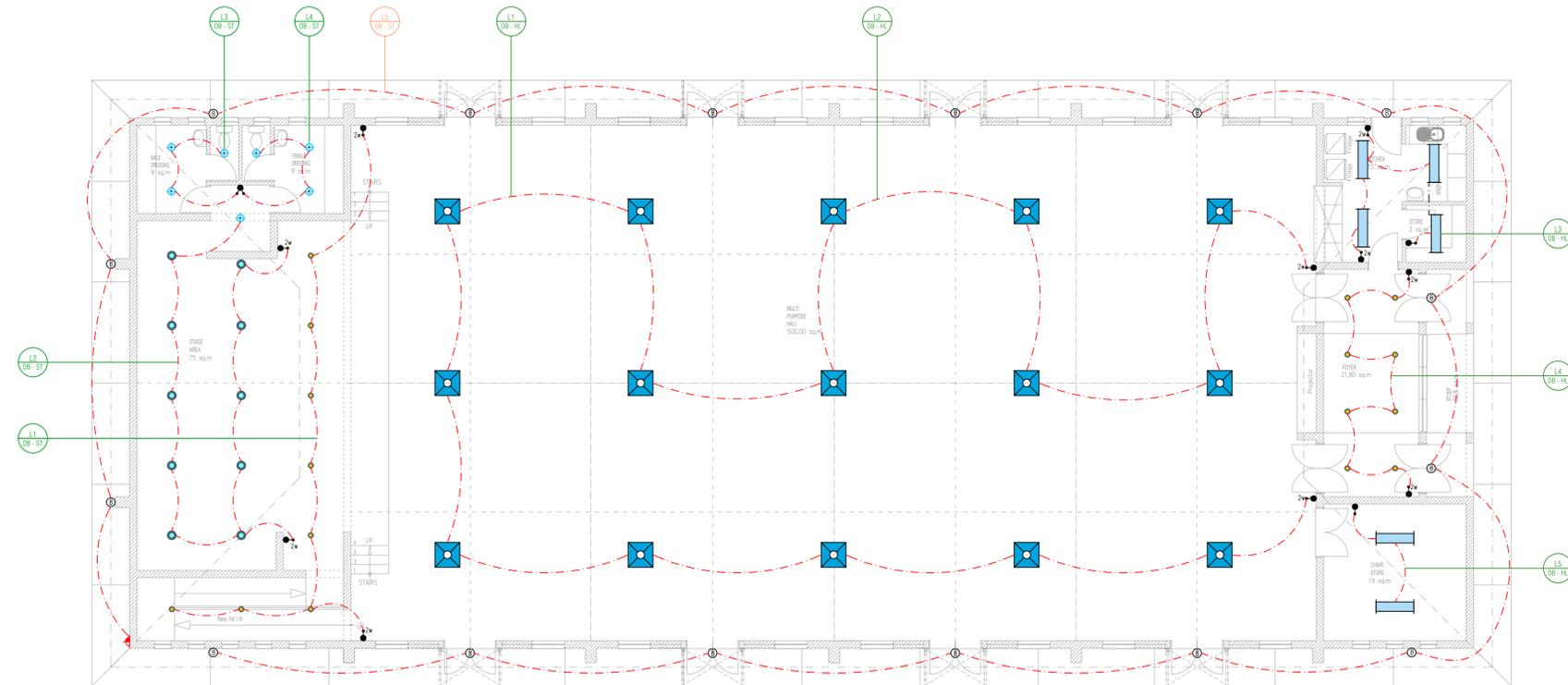
FOURWAYS OFFICE PARK, BLOCK 5, GROUND FLOOR, Cnr. CEDAR ROAD AND FOURWAYS BOULEVARD, FOURWAYS, 2191  
Tel: 010 110 8724 Fax: 086 659 2099

PROJECT: INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE 'CLUSTER E' ST. PAUL SECONDARY SCHOOL

DRAWING TITLE: SITE PLAN SITE POWER RETICULATION LAYOUT

Paper Size	Copyright Reserved	Project code	Drawn	Group	Consultant	Doc. Type	Rev. No.	Rev.
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		SCALE					1:300	
		CHECKED						A
		REV. No						
		DATE						15.08.2021





**LIGHTING LEGEND**

ITEM	DESCRIPTION	QTY
⬇	16A SINGLE LEVER LIGHT SWITCH	02
⬇	2WAY 16A SINGLE LEVER LIGHT SWITCH	10
⬇	16A DOUBLE LEVER LIGHT SWITCH	01
⬇	90 DEG. MOTION SENSOR	00
⬇	180 DEG. MOTION SENSOR	00
⬇	360 DEG. MOTION SENSOR	00
⬇	DAYNIGHT SWITCH	01
⬇	8 INCH 15W LED DOWNLIGHT	16
⬇	TYPE B 8 INCH 15W LED DOWNLIGHT WITH DALI MODIFICATION	10
⬇	10W LED ROKO DOWNLIGHT WITH DALI MODIFICATION	07
⬇	15W LED ROUND BULKHEAD WITH DALI MODIFICATION	16
⬇	VISUAL LED IP40 - 18W 120x60mm WITH DALI MODIFICATION	00
⬇	VISUAL LED IP40 - 18W 100x60mm WITH DALI MODIFICATION	00
⬇	1200mm 30W LED IP65 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION - EMERGENCY	00
⬇	1200mm 30W LED IP65 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION	08
⬇	1200mm x 14W LED OPEN CHANNEL FLUORESCENT LUMINAIRE	00
⬇	140W 90° IP65 SURFACE MOUNT LED LOW BAY WITH DALI MODIFICATION	15
⬇	60W EMERGENCY 120x400mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00
⬇	60W 120x60mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00

STATUS CODE	Group Codes BUILDINGS
0 - Pre - Feasibility study	BP - Building IT
1 - Feasibility study	BP - Building Public Address
A - Preliminary Design	BS - Building Service
B - Design Review	BA - Building Architectural
C - Tender Design	BE - Building Electrical
D - Detailed Design	BF - Building Fire Service
E - For Construction	BM - Building Mechanical
F - As Built	BT - Building Public Telecoms
G - For Information Only	BU - Building Public Utilities

DRAWING STATUS	
<b>FOR TENDER</b>	
PROJECT NUMBER	
<b>LDPWRI-B/20109</b>	
Drawn By	Designed By
M CHABALALA	K SECHOARO
Reviewed/Approved By	
E MENSAH	20100414
Name	S.A.I.D Number
Name	Pr Number
Name	Pr Number
Signature	

No	Date	chkd	Details
A	15.08.2021	EM	FOR TENDER

CLIENT

DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE

CONSULTANT

FOURWAYS OFFICE PARK, BLOCK S, GROUND FLOOR  
Cnr. CEDAR ROAD AND FOURWAYS BOULEVARD, FOURWAYS, 2191  
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PROJECT

INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E

ST. PAUL SECONDARY SCHOOL

DRAWING TITLE

**HALL FLOOR PLAN LIGHTING LAYOUT**

Project code	Studio	Group	Consultant	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 002/1 - A						
SCALE						1:100
CHECKED						A
REV. No						
DATE						15.08.2021



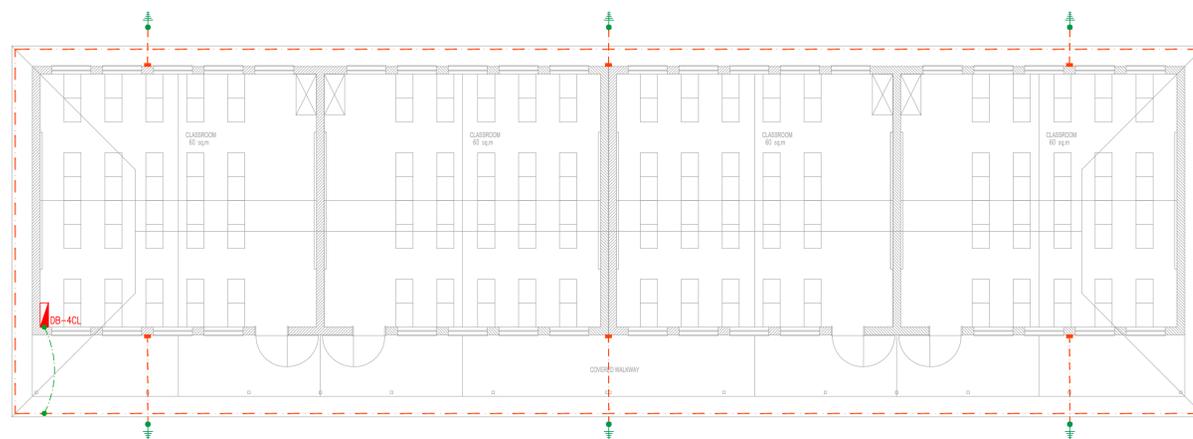
- GENERAL NOTES:
1. EARTH TERMINATION CONDUCTOR TO BE 50mm<sup>2</sup> BCEW.
  2. BONDING CONDUCTOR TO BE 16mm<sup>2</sup> BCEW.
  3. EARTH ELECTRODE (SPIKE) TO BE Ø15mm x 1.5m LONG COPPER SOLID ROUND BAR, AND MUST BE 0.5m BURIED BELOW GROUND LEVEL.
  4. EARTH CONDUCTOR TO BE 0.5m BURIED BELOW GROUND LEVEL.
  5. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH:
    - GP/E6/1 REV.1 - STANDARD QUALITY SPECIFICATION FOR GENERAL INSTALLATIONS (SCHOOLS)
    - GP/E6/2 REV.1 - STANDARD QUALITY SPECIFICATION FOR MATERIALS AND EQUIPMENT (SCHOOLS)

- EARTH TERMINATION NOTES:
- EARTH TERMINATION SYSTEM GENERAL REQUIREMENTS:
2. TYPE B EARTHING ARRANGEMENT SHALL BE USED FOR ANY BUILDING INSTALLATION.
- THE RING EARTH ELECTRODE (TYPE B ARRANGEMENT) SHOULD PREFERABLY:
- BE BURIED AT A DEPTH OF AT LEAST 0.5m AND
  - AT A DISTANCE OF ABOUT 1.5m AWAY FROM THE EXTERNAL WALLS UNLESS STATED OTHERWISE.
3. THE CALCULATION OF AN EARTH TERMINATION SYSTEM SHALL BE DONE IN ACCORDANCE WITH THE FORMULAE IN SANS 10199.

- DOWN CONDUCTORS:
1. DOWN CONDUCTORS MUST BE INSULATED BY AT LEAST 3mm CROSS LINKED POLYETHYLENE.
  2. WARNING NOTICES TO BE INSTALLED TO MINIMISE THE PROBABILITY OF DOWN CONDUCTORS BEING TOUCHED.

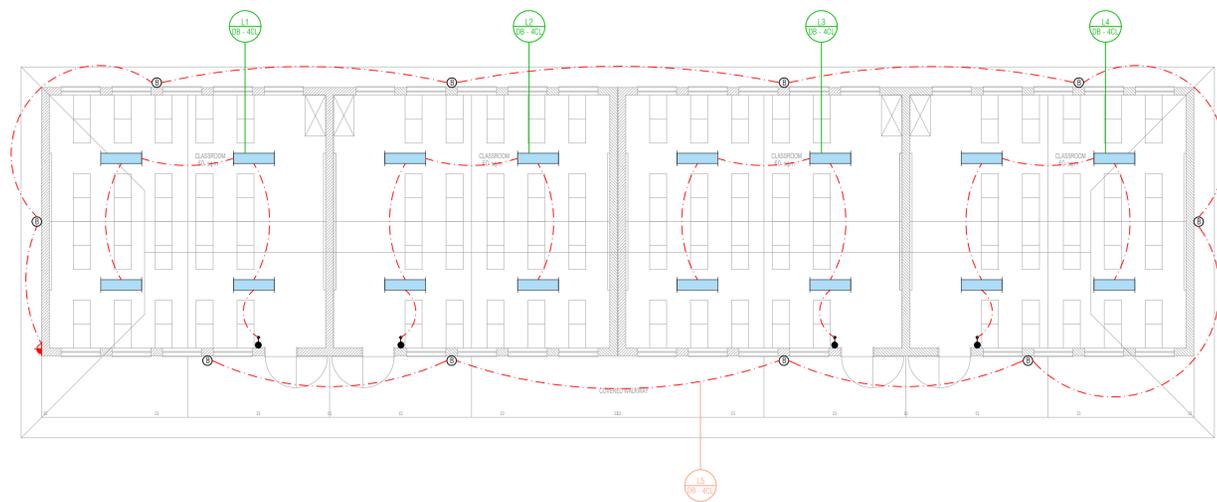
- EARTHING TEST POINT:
1. EARTHING TEST POINT SHOULD BE CAPABLE OF BEING OPENED WITH THE AID OF TOOL.

- THE COMPLETE INSTALLATION MUST COMPLY TO THE FOLLOWING SANS SPECIFICATION:
- SANS 10142: THE WIRING OF PREMISES.
  - SANS 10199: PART 3: EARTHING SYSTEMS GENERAL PROVISIONS.
  - SANS 10199: PART 12: INSTALLATION OF EARTHING SYSTEMS.
  - 10199: THE DESIGN AND INSTALLATION OF AN EARTH ELECTRODE.
  - 10313: THE PROTECTION OF STRUCTURES AGAINST LIGHTNING.
  - SANS 1063: EARTHING SYSTEMS GENERAL PROVISIONS.



SYMBOL	DESCRIPTION
---	EARTH CONDUCTOR
---	DOWN CONDUCTOR
⊕	EARTH ELECTRODE (SPIKE)
●	BONDING TERMINATION
■	EARTHING TEST POINT

STATUS CODE	Group Codes BUILDINGS	DRAWING STATUS	No	Date	chkd	Details	CLIENT	CONSULTANT	PROJECT	Project code	Status	Group	Consultant	Doc Type	Seq No	Rev
0 - Pre - Feasibility study	BP - Building IT	<b>FOR TENDER</b>	A	15.08.2021	EM	FOR TENDER	 DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE	 FOURWAYS OFFICE PARK, BLOCK 5, GROUND FLOOR Cnr. CEDAR ROAD AND FOURWAYS BOULEVARD, FOURWAYS, FOURWAYS, 2191 Tel: (+27) 10 110 8724 Fax: (+27) 86 659 2099	INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E <b>ST. PAUL SECONDARY SCHOOL</b>	SPSS - C - BE - TCS - TDW - 004/4 - A	Copyright Reserved					
1 - Feasibility study	BP - Building Public Address	PROJECT NUMBER <b>LDPWRI-B/20109</b>														
A - Preliminary Design	BS - Building Service	Drawn By														
B - Design Review	BA - Building Architectural	Designed By														
C - Tender Design	BE - Building Electrical	Reviewed/Approved By														
D - Detailed Design	BF - Building Fire Service	N NGCEMU A13204														
E - For Construction	BM - Building Mechanical	N NTUTA														
F - As Built	BT - Building Public Telecoms	E MENSAH 20100414														
G - For Information Only	BU - Building Public Utilities	Name S.A.J.D Number Name Pr Number Name Pr Number Signature														
										SCALE	1:100					
										CHECKED	A					
										REV. No						
										DATE	15.08.2021					



LIGHTING LEGEND		
ITEM	DESCRIPTION	QTY
1	15A SINGLE LEVER LIGHT SWITCH	04
2	2WAY 15A SINGLE LEVER LIGHT SWITCH	00
3	2WAY 15A DOUBLE LEVER LIGHT SWITCH	00
4	90 DEG. MOTION SENSOR	00
5	180 DEG. MOTION SENSOR	00
6	300 DEG. MOTION SENSOR	00
7	DAY/NIGHT SWITCH	01
8	8 INCH 15W LED DOWNLIGHT	00
9	TYPE B 8 INCH 15W LED DOWNLIGHT WITH DALI MODIFICATION	00
10	10W LED ROND0 DOWNLIGHT WITH DALI MODIFICATION	00
11	15W LED ROUND BULKHEAD WITH DALI MODIFICATION	10
12	VISUAL LED IP40 - 15W 1200x50mm WITH DALI MODIFICATION	00
13	VISUAL LED IP40 - 15W 1500x50mm WITH DALI MODIFICATION	00
14	1200mm 3W LED IP66 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION - EMERGENCY	00
15	1200mm 3W LED IP66 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION	16
16	1200mm 2x 14W LED OPEN CHANNEL FLUORESCENT LUMINAIRE	00
17	400x 60 IP65 SURFACE MOUNT LED LOW BAY WITH DALI MODIFICATION	00
18	60W EMERGENCY 1200x600mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00
19	60W 1200x600mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00

STATUS CODE	Group Codes BUILDINGS
0 - Pre - Feasibility study	BP - Building IT
1 - Feasibility study	BP - Building Public Address
A - Preliminary Design	BS - Building Service
B - Design Review	BA - Building Architectural
C - Tender Design	BE - Building Electrical
D - Detailed Design	BF - Building Fire Service
E - For Construction	BM - Building Mechanical
F - As Built	BT - Building Public Telecoms
G - For Information Only	BU - Building Public Utilities

DRAWING STATUS	
<b>FOR TENDER</b>	
PROJECT NUMBER <b>LDPWRI-B/20109</b>	
Drawn By N NGCEMU A13204	Designed By N NTUTA
Reviewed/Approved By E MENSAH 20100414	
Name S.A.J.D Number	Pr Number Signature

No	Date	chkd	Details
A	15.08.2021	EM	FOR TENDER

CLIENT



**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

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

CONSULTANT



**TAKUSA**  
CONSULTING SERVICES

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Fax: (+27) 86 659 2099

PROJECT

INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E  
**ST. PAUL SECONDARY SCHOOL**

DRAWING TITLE

**4x CLASSROOM FLOOR PLAN LIGHTING LAYOUT**

Project code	Subs	Disc	Consultant	Doc Type	Seq No	Rev
Copyright Reserved						
<b>SPSS - C - BE - TCS - TDW - 002/4 - A</b>						
SCALE						1:100
CHECKED						A
REV. No						
DATE						15.08.2021



POWER LEGEND	
ITEM	DESCRIPTION
	TV POINT
	TELEPHONE POINT
	DATA POINT
	SINGLE PHASE ISOLATOR
	SINGLE PHASE ISOLATOR
	SINGLE 15A NORMAL SWITCHED SOCKET OUTLET @1000 A.F.F.L
	2A PLUG 15A SOCKET OUTLET @1200 A.F.F.L
	2A PLUG 15A SOCKET OUTLET @3000 A.F.F.L
	SINGLE 15A NORMAL SWITCHED SOCKET OUTLET IN CEILING VOID
	DOUBLE 15A NORMAL SWITCHED SOCKET OUTLET @1000 A.F.F.L
	DOUBLE 15A NORMAL SWITCHED SOCKET OUTLET @1200 A.F.F.L
	POWER SKIRTING
	PEDESTAL FOR MEETING/PRESENTER'S TABLE CONSISTING OF THE FOLLOWING: - 15A NORMAL SOCKET UN-SWITCHED - 15A DEDICATED SOCKET UN-SWITCHED - SA 2 PIN SOCKET UN-SWITCHED - DATA & TELEPHONE POINTS
	ONE METER CLUSTER WALL BOX CONSISTING OF THE FOLLOWING: - 15A NORMAL SOCKET UN-SWITCHED - 15A DEDICATED SOCKET UN-SWITCHED - SA 2 PIN SOCKET UN-SWITCHED - DATA & TELEPHONE POINTS
	ELECTRICAL DISTRIBUTION BOARD

STATUS CODE	Group Codes BUILDINGS
0 - Pre - Feasibility study	BP - Building IT
1 - Feasibility study	BP - Building Public Address
A - Preliminary Design	BS - Building Service
B - Design Review	BA - Building Architectural
C - Tender Design	BE - Building Electrical
D - Detailed Design	BF - Building Fire Service
E - For Construction	BM - Building Mechanical
F - As Built	BT - Building Public Telecoms
G - For Information Only	BU - Building Public Utilities

DRAWING STATUS		
<b>FOR TENDER</b>		
PROJECT NUMBER <b>LDPWRI-B/20109</b>		
Drawn By N NGCEMU A13204	Designed By N NTUTA	Reviewed/Approved By E MENSAH 20100414
Name S.A.J.D Number	Name Pr Number	Name Pr Number Signature

No	Date	chkd	Details
A	15.08.2021	EM	FOR TENDER

CLIENT

DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE

CONSULTANT

FOURWAYS OFFICE PARK,  
BLOCK 5, GROUND FLOOR  
Cnr. CEDAR ROAD AND  
FOURWAYS BOULEVARD,  
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FOURWAYS,  
2191  
Tel: (+27) 10 110 8724  
Fax: (+27) 86 659 2099

PROJECT

INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E  
**ST. PAUL SECONDARY SCHOOL**

DRAWING TITLE

**4x CLASSROOM FLOOR PLAN  
POWER LAYOUT**

Project code	Studs	Drawn	Consultant	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 001/4 - A						
SCALE						1:100
CHECKED						A
REV. No						
DATE						15.08.2021

GENERAL NOTES:

1. EARTH TERMINATION CONDUCTOR TO BE 50mm<sup>2</sup> BCEW.
2. BONDING CONDUCTOR TO BE 16mm<sup>2</sup> BCEW.
3. EARTH ELECTRODE (SPIKE) TO BE Ø15mm x 1.5m LONG COPPER SOLID ROUND BAR, AND MUST BE 0.5m BURIED BELOW GROUND LEVEL.
4. EARTH CONDUCTOR TO BE 0.5m BURIED BELOW GROUND LEVEL.

EARTH TERMINATION NOTES:

EARTH TERMINATION SYSTEM GENERAL REQUIREMENTS:

2. TYPE B EARTHING ARRANGEMENT SHALL BE USED FOR ANY BUILDING INSTALLATION.

THE RING EARTH ELECTRODE (TYPE B ARRANGEMENT) SHOULD PREFERABLY:

- BE BURIED AT A DEPTH OF AT LEAST 0.5m AND
- AT A DISTANCE OF ABOUT 1.5m AWAY FROM THE EXTERNAL WALLS UNLESS STATED OTHERWISE.

3. THE CALCULATION OF AN EARTH TERMINATION SYSTEM SHALL BE DONE IN ACCORDANCE WITH THE FORMULAE IN SANS 10199.

DOWN CONDUCTORS:

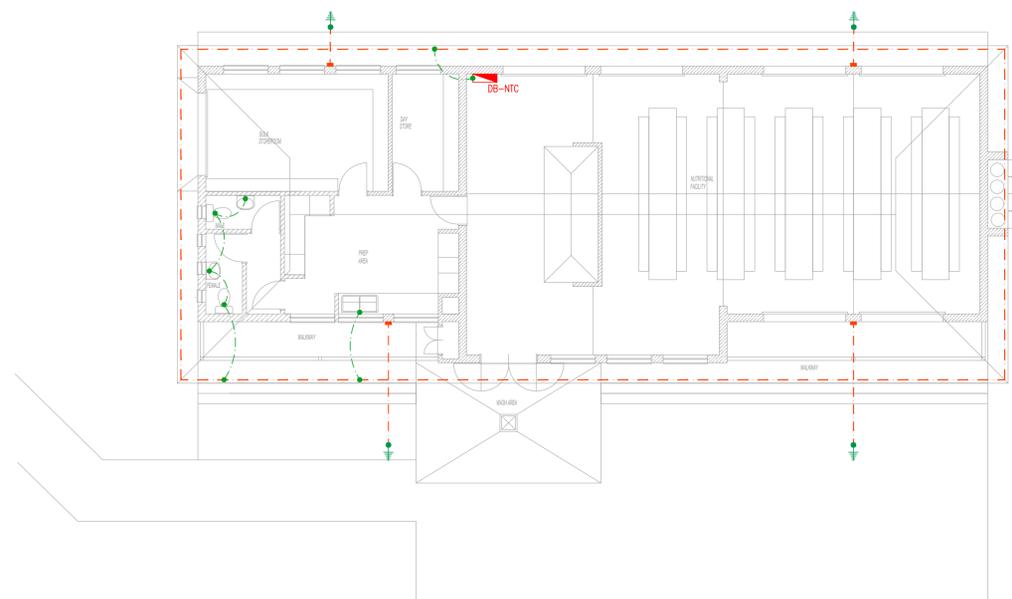
1. DOWN CONDUCTORS MUST BE INSULATED BY AT LEAST 3mm CROSS LINKED POLYETHYLENE.
2. WARNING NOTICES TO BE INSTALLED TO MINIMISE THE PROBABILITY OF DOWN CONDUCTORS BEING TOUCHED.

EARTHING TEST POINT:

1. EARTHING TEST POINT SHOULD BE CAPABLE OF BEING OPENED WITH THE AID OF TOOL.

THE COMPLETE INSTALLATION MUST COMPLY TO THE FOLLOWING SANS SPECIFICATION:

- SANS 10142: THE WIRING OF PREMISES.
- SANS 10198: PART 3: EARTHING SYSTEMS GENERAL PROVISIONS.
- SANS 10198: PART 12: INSTALLATION OF EARTHING SYSTEMS.
- 10199: THE DESIGN AND INSTALLATION OF AN EARTH ELECTRODE.
- 10313: THE PROTECTION OF STRUCTURES AGAINST LIGHTNING.
- SANS 1063: EARTHING SYSTEMS GENERAL PROVISIONS.



SYMBOL	DESCRIPTION
---	EARTH CONDUCTOR
---	DOWN CONDUCTOR
●	EARTH ELECTRODE (SPIKE)
●	BONDING TERMINATION
■	EARTHING TEST POINT

STATUS CODE	Group Codes BUILDINGS	DRAWING STATUS	No	Date	chkd	Details
0 - Pre - Feasibility study	BP - Building IT	<b>FOR TENDER</b>	A	14.08.2021	EM	FOR TENDER
1 - Feasibility study	BP - Building Public Address	PROJECT NUMBER				
A - Preliminary Design	BS - Building Service	<b>LDPWRI-B/20109</b>				
B - Design Review	BA - Building Architectural	Drawn By				
C - Tender Design	BE - Building Electrical	Designed By				
D - Detailed Design	BF - Building Fire Service	Reviewed/Approved By				
E - For Construction	BM - Building Mechanical	N NGCEMU A13204				
F - As Built	BT - Building Public Telecoms	N NTUTA				
G - For Information Only	BU - Building Public Utilities	E MENSAH 20100414				
		Name S.A.I.D Number Name Pr Number Name Pr Number Signature				

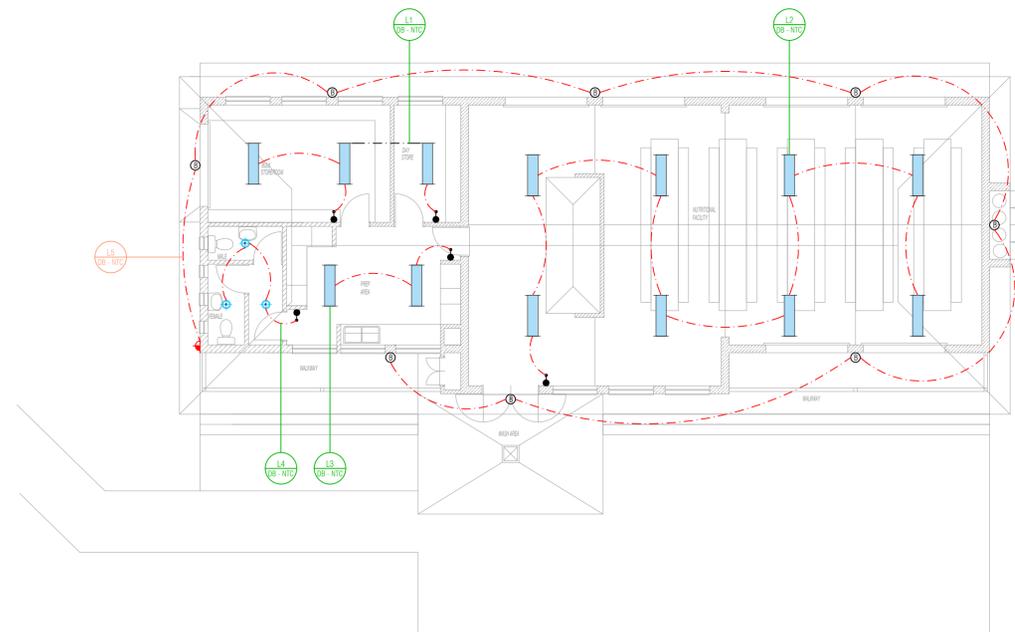
CLIENT	CONSULTANT	PROJECT
<p><b>LIMPOPO</b> PROVINCIAL GOVERNMENT REPUBLIC OF SOUTH AFRICA</p> <p>DEPARTMENT OF <b>PUBLIC WORKS, ROADS &amp; INFRASTRUCTURE</b></p>	<p><b>UTAKUSA</b> CONSULTING SERVICES</p> <p>FOURWAYS OFFICE PARK, BLOCK 5, GROUND FLOOR Cnr. CEDAR ROAD AND FOURWAYS BOULEVARD, FOURWAYS, 2191 Tel: (+27) 10 110 8724 Fax: (+27) 86 659 2099</p>	<p>INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E <b>ST. PAUL SECONDARY SCHOOL</b></p> <p>DRAWING TITLE</p> <p><b>NUTRITION CENTRE FLOOR PLAN EARTHING &amp; LIGHTNING PROTECTION LAYOUT</b></p>

Project code	Status	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 004/10 - A				

SCALE	1:100
CHECKED	
REV: No	<b>A</b>
DATE	14.08.2021

Project code	Status	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 004/10 - A				

Project code	Status	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 004/10 - A				



LIGHTING LEGEND		
ITEM	DESCRIPTION	QTY
1	16A SINGLE LEVER LIGHT SWITCH	05
2	2WAY 16A SINGLE LEVER LIGHT SWITCH	00
3	2WAY 16A DOUBLE LEVER LIGHT SWITCH	00
4	90 DEG. MOTION SENSOR	00
5	180 DEG. MOTION SENSOR	00
6	360 DEG. MOTION SENSOR	00
7	DAY/NIGHT SWITCH	01
8	8 INCH 15W LED DOWNLIGHT	00
9	TYPE B 8 INCH 15W LED DOWNLIGHT WITH DALI MODIFICATION	00
10	10W LED RONDO DOWNLIGHT WITH DALI MODIFICATION	03
11	15W LED ROUND BULKHEAD WITH DALI MODIFICATION	08
12	VISUAL LED IP40 - 15W 120x50mm WITH DALI MODIFICATION	00
13	VISUAL LED IP40 - 15W 150x50mm WITH DALI MODIFICATION	00
14	1200mm 3W LED IP66 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION - EMERGENCY	00
15	1200mm 3W LED IP66 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION	13
16	1200mm 3x 14W LED OPEN CHANNEL FLUORESCENT LUMINAIRE	00
17	1400mm 8W IP66 SURFACE MOUNT LED LOW BAY WITH DALI MODIFICATION	00
18	60W EMERGENCY 1200x600mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00
19	60W 1200x600mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00

STATUS CODE	Group Codes BUILDINGS
0 - Pre - Feasibility study	BP - Building IT
1 - Feasibility study	BP - Building Public Address
A - Preliminary Design	BS - Building Service
B - Design Review	BA - Building Architectural
C - Tender Design	BE - Building Electrical
D - Detailed Design	BF - Building Fire Service
E - For Construction	BM - Building Mechanical
F - As Built	BT - Building Public Telecoms
G - For Information Only	BU - Building Public Utilities

DRAWING STATUS					
FOR TENDER					
PROJECT NUMBER					
LDPWRI-B/20109					
Drawn By	Designed By	Reviewed/Approved By			
N NGCEMU A13204	N NTUTA	E MENSAH 20100414			
Name	S.A.I.D Number	Name	Pr Number	Name	Pr Number

No	Date	chkd	Details
A	14.08.2021	EM	FOR TENDER

CLIENT

DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE

CONSULTANT

FOURWAYS OFFICE PARK, BLOCK 5, GROUND FLOOR Cnr. CEDAR ROAD AND FOURWAYS BOULEVARD, FOURWAYS, 2191  
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PROJECT

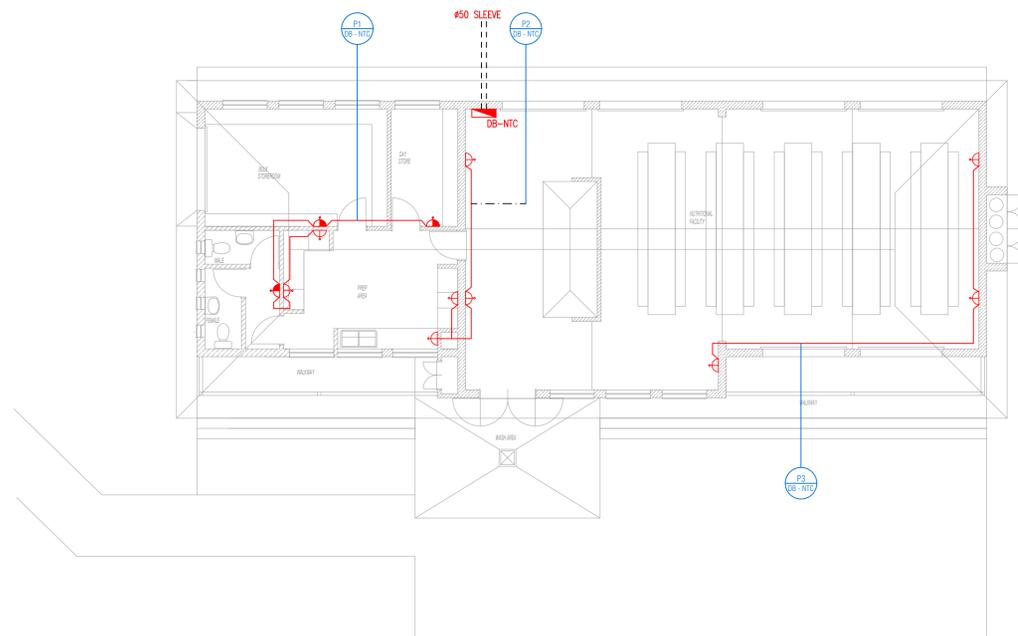
INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E

ST. PAUL SECONDARY SCHOOL

DRAWING TITLE

NUTRITION CENTRE FLOOR PLAN LIGHTING LAYOUT

Project code	SPSS	C- BE	TCS	TDW	002/10 - A	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 002/10 - A								
SCALE							1:100	
CHECKED							A	
REV. No								
DATE							14.08.2021	



POWER LEGEND	
ITEM	DESCRIPTION
	TV POINT
	TELEPHONE POINT
	DATA POINT
	SINGLE PHASE ISOLATOR
	SINGLE PHASE ISOLATOR
	SINGLE 15A NORMAL SWITCHED SOCKET OUTLET @1000 A.F.F.L
	2A PLUG 15A SOCKET OUTLET @1200 A.F.F.L
	2A PLUG 15A SOCKET OUTLET @3000 A.F.F.L
	SINGLE 15A NORMAL SWITCHED SOCKET OUTLET IN CEILING VOID
	DOUBLE 15A NORMAL SWITCHED SOCKET OUTLET @1000 A.F.F.L
	DOUBLE 15A NORMAL SWITCHED SOCKET OUTLET @1200 A.F.F.L
	POWER SKIRTING
	PEDESTAL FOR MEETING/PRESENTER'S TABLE CONSISTING OF THE FOLLOWING: - 15A NORMAL SOCKET UN-SWITCHED - 15A DEDICATED SOCKET UN-SWITCHED - SA 2 PIN SOCKET UN-SWITCHED - DATA & TELEPHONE POINTS
	ONE TIER CLUSTER WALL BOX CONSISTING OF THE FOLLOWING: - 15A NORMAL SOCKET UN-SWITCHED - 15A DEDICATED SOCKET UN-SWITCHED - SA 2 PIN SOCKET UN-SWITCHED - DATA & TELEPHONE POINTS
	ELECTRICAL DISTRIBUTION BOARD

STATUS CODE	Group Codes BUILDINGS	DRAWING STATUS	
0 - Pre - Feasibility study	BP - Building IT	<b>FOR TENDER</b>	
1 - Feasibility study	BP - Building Public Address	PROJECT NUMBER	
A - Preliminary Design	BS - Building Service	<b>LDPWR-B/20109</b>	
B - Design Review	BA - Building Architectural	Drawn By	Designed By
C - Tender Design	BE - Building Electrical	N NGCEMU A13204	N NTUTA
D - Detailed Design	BF - Building Fire Service	Name	Pr Number
E - For Construction	BM - Building Mechanical	Name	Pr Number
F - As Built	BT - Building Public Telecoms	Name	Pr Number
G - For Information Only	BU - Building Public Utilities	Name	Pr Number
		Reviewed/Approved By	Signature
		E MENSAH 20100414	

No	Date	chkd	Details
A	14.08.2021	EM	FOR TENDER

CLIENT

DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE

CONSULTANT

FOURWAYS OFFICE PARK,  
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Fax: (+27) 86 659 2099

PROJECT

INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E

**ST. PAUL SECONDARY SCHOOL**

DRAWING TITLE

**NUTRITION CENTRE FLOOR PLAN  
POWER LAYOUT**

Project code	Studio	Client	Consultant	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 001/10 - A						
SCALE	1:100					
CHECKED	A					
REV. No						
DATE	14.08.2021					

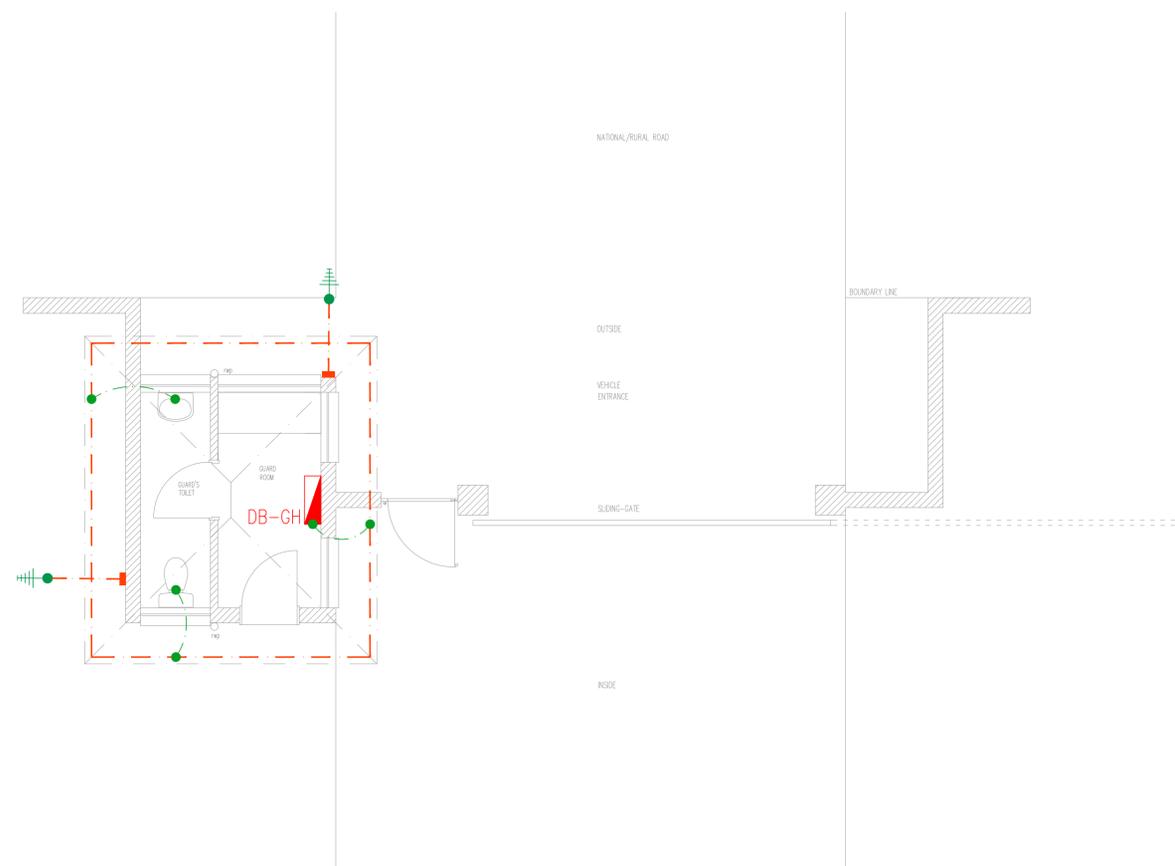
- GENERAL NOTES:
1. EARTH TERMINATION CONDUCTOR TO BE 50mm<sup>2</sup> BCEW.
  2. BONDING CONDUCTOR TO BE 16mm<sup>2</sup> BCEW.
  3. EARTH ELECTRODE (SPIKE) TO BE Ø15mm x 1.5m LONG COPPER SOLID ROUND BAR AND MUST BE 0.5m BURIED BELOW GROUND LEVEL.
  4. EARTH CONDUCTOR TO BE 0.5m BURIED BELOW GROUND LEVEL.

- EARTH TERMINATION NOTES:
- EARTH TERMINATION SYSTEM GENERAL REQUIREMENTS:
2. TYPE B EARTHING ARRANGEMENT SHALL BE USED FOR ANY BUILDING INSTALLATION.
- THE RING EARTH ELECTRODE (TYPE B ARRANGEMENT) SHOULD PREFERABLY:
- BE BURIED AT A DEPTH OF AT LEAST 0.5m AND
  - AT A DISTANCE OF ABOUT 1.5m AWAY FROM THE EXTERNAL WALLS UNLESS STATED OTHERWISE.
3. THE CALCULATION OF AN EARTH TERMINATION SYSTEM SHALL BE DONE IN ACCORDANCE WITH THE FORMULAE IN SANS 10199.

- DOWN CONDUCTORS:
1. DOWN CONDUCTORS MUST BE INSULATED BY AT LEAST 3mm CROSS LINKED POLYETHYLENE.
  2. WARNING NOTICES TO BE INSTALLED TO MINIMISE THE PROBABILITY OF DOWN CONDUCTORS BEING TOUCHED.

- EARTHING TEST POINT:
1. EARTHING TEST POINT SHOULD BE CAPABLE OF BEING OPENED WITH THE AID OF TOOL.

- THE COMPLETE INSTALLATION MUST COMPLY TO THE FOLLOWING SANS SPECIFICATION:
- SANS 10142: THE WIRING OF PREMISES.
  - SANS 10198: PART 3: EARTHING SYSTEMS GENERAL PROVISIONS.
  - SANS 10198: PART 12: INSTALLATION OF EARTHING SYSTEMS.
  - 10199: THE DESIGN AND INSTALLATION OF AN EARTH ELECTRODE.
  - 10313: THE PROTECTION OF STRUCTURES AGAINST LIGHTNING.
  - SANS 1063: EARTHING SYSTEMS GENERAL PROVISIONS.



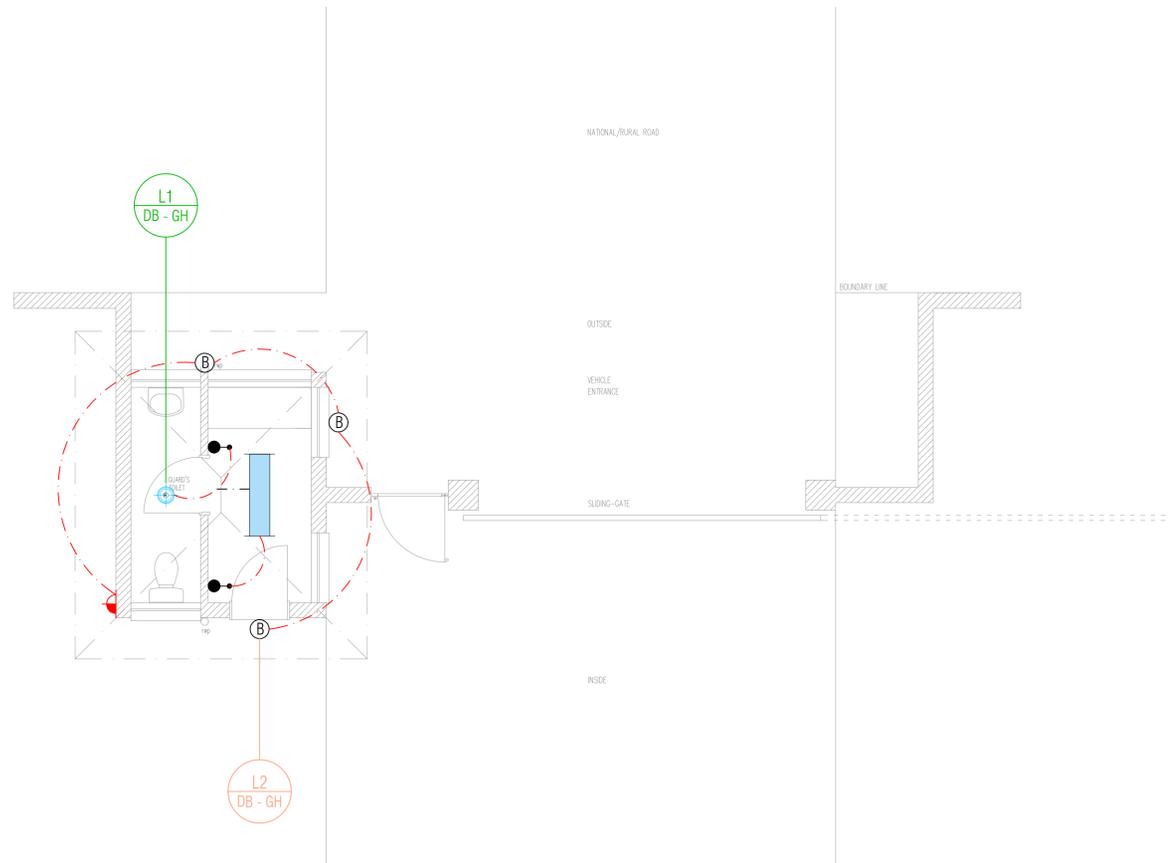
SYMBOL	DESCRIPTION
---	EARTH CONDUCTOR
---	DOWN CONDUCTOR
●	EARTH ELECTRODE (SPIKE)
●	BONDING TERMINATION
■	EARTHING TEST POINT

STATUS CODE	Group Codes BUILDINGS	DRAWING STATUS	No	Date	chkd	Details
0 - Pre - Feasibility study	BP - Building IT	<b>FOR TENDER</b>	A	14.08.2021	EM	FOR TENDER
1 - Feasibility study	BP - Building Public Address	PROJECT NUMBER				
A - Preliminary Design	BS - Building Service	<b>LDPWRI-B/20109</b>				
B - Design Review	BA - Building Architectural	Drawn By				
C - Tender Design	BE - Building Electrical	Designed By				
D - Detailed Design	BF - Building Fire Service	Reviewed/Approved By				
E - For Construction	BM - Building Mechanical	N NGCEMU A13204				
F - As Built	BT - Building Public Telecoms	N NTUTA				
G - For Information Only	BU - Building Public Utilities	E MENSAH 20100414				
		Name S.A.I.D Number Name Pr Number Name Pr Number Signature				

CIENT	CONSULTANT	PROJECT
 <b>LIMPOPO</b> PROVINCIAL GOVERNMENT REPUBLIC OF SOUTH AFRICA <b>DEPARTMENT OF PUBLIC WORKS, ROADS &amp; INFRASTRUCTURE</b>	 <b>TAKUSA</b> CONSULTING SERVICES	FOURWAYS OFFICE PARK, BLOCK 5, GROUND FLOOR Cnr. CEDAR ROAD AND FOURWAYS BOULEVARD, FOURWAYS, 2191 Tel: (+27) 10 110 8724 Fax: (+27) 86 659 2099

PROJECT	DRAWING TITLE
INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E <b>ST. PAUL SECONDARY SCHOOL</b>	<b>GUARD HOUSE FLOOR PLAN</b> <b>EARTHING &amp; LIGHTNING PROTECTION LAYOUT</b>

Project code	Status	Group	Consultant	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 004/11 - A						
SCALE	1:50					
CHECKED	A					
REV: No						
DATE	14.08.2021					



ITEM	DESCRIPTION	QTY
1	16A SINGLE LEVER LIGHT SWITCH	02
2	2WAY 16A SINGLE LEVER LIGHT SWITCH	00
3	2WAY 16A DOUBLE LEVER LIGHT SWITCH	00
4	90 DEG. MOTION SENSOR	00
5	180 DEG. MOTION SENSOR	00
6	300 DEG. MOTION SENSOR	00
7	DAYNIGHT SWITCH	01
8	8 INCH 15W LED DOWNLIGHT	00
9	TYPE B 8 INCH 15W LED DOWNLIGHT WITH DALI MODIFICATION	00
10	15W LED ROUND DOWNLIGHT WITH DALI MODIFICATION	01
11	15W LED ROUND BULKHEAD WITH DALI MODIFICATION	03
12	VISUAL LED IP40 - 18W 120x65mm WITH DALI MODIFICATION	00
13	VISUAL LED IP40 - 18W 100x50mm WITH DALI MODIFICATION	00
14	1200mm 34W LED IP68 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION - EMERGENCY	00
15	1200mm 34W LED IP68 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION	01
16	1200mm 2x 14W LED OPEN CHANNEL FLUORESCENT LUMINAIRE	00
17	1400 80° IP68 SURFACE MOUNT LED LOW BAY WITH DALI MODIFICATION	00
18	60W EMERGENCY 1200x600mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00
19	60W 1200x600mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00

STATUS CODE	Group Codes BUILDINGS
0 - Pre - Feasibility study	BP - Building IT
1 - Feasibility study	BP - Building Public Address
A - Preliminary Design	BS - Building Service
B - Design Review	BA - Building Architectural
C - Tender Design	BE - Building Electrical
D - Detailed Design	BF - Building Fire Service
E - For Construction	BM - Building Mechanical
F - As Built	BT - Building Public Telecoms
G - For Information Only	BU - Building Public Utilities

DRAWING STATUS	
<b>FOR TENDER</b>	
PROJECT NUMBER <b>LDPWRI-B/20109</b>	
Drawn By N NGCEMU A13204	Designed By N NTUTA
Reviewed/Approved By E MENSAB 20100414	
Name S.A.J.D Number	Pr Number Signature

No	Date	chkd	Details
A	14.08.2021	EM	FOR TENDER

CLIENT

DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE

CONSULTANT

FOURWAYS OFFICE PARK, BLOCK 5, GROUND FLOOR  
Cnr. CEDAR ROAD AND FOURWAYS BOULEVARD, FOURWAYS, 2191  
Tel: (+27) 10 110 8724  
Fax: (+27) 86 659 2099

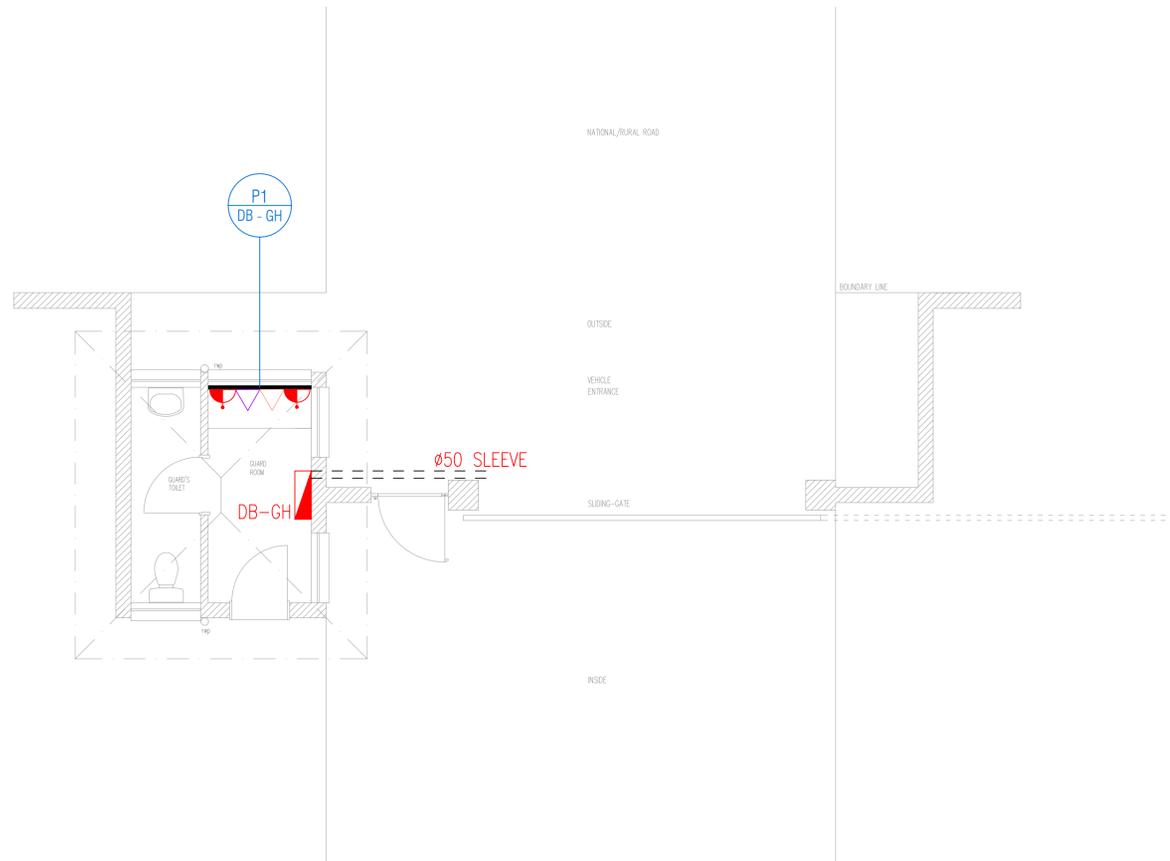
PROJECT

INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E  
**ST. PAUL SECONDARY SCHOOL**

DRAWING TITLE

**GUARD HOUSE FLOOR PLAN LIGHTING LAYOUT**

Project code	STUDIOS	Consultant	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 002/11 - A					
SCALE	1:50				
CHECKED	A				
REV. No					
DATE	14.08.2021				



ITEM	DESCRIPTION
	TV POINT
	TELEPHONE POINT
	DATA POINT
	SINGLE PHASE ISOLATOR
	SINGLE PHASE ISOLATOR
	SINGLE 16A NORMAL SWITCHED SOCKET OUTLET @1000 A.F.F.L.
	2A PLUG 16A SOCKET OUTLET @1000 A.F.F.L.
	2A PLUG 16A SOCKET OUTLET @300 A.F.F.L.
	SINGLE 16A NORMAL SWITCHED SOCKET OUTLET IN CEILING VOID
	DOUBLE 16A NORMAL SWITCHED SOCKET OUTLET @300 A.F.F.L.
	DOUBLE 16A NORMAL SWITCHED SOCKET OUTLET @1200 A.F.F.L.
	POWER SKIRTING
	PEDESTAL FOR MEETING/PRESENTER'S TABLE CONSISTING OF THE FF: - 16A NORMAL SOCKET UN-SWITCHED - 16A DEDICATED SOCKET UN-SWITCHED - SA 2 PIN SOCKET UN-SWITCHED - DATA & TELEPHONE POINTS
	ONE METER CLUSTER WALL BOX CONSISTING OF THE FOLLOWING: - 16A NORMAL SOCKET UN-SWITCHED - 16A DEDICATED SOCKET UN-SWITCHED - SA 2 PIN SOCKET UN-SWITCHED - 2x R45 DATA & TELEPHONE POINTS
	ELECTRICAL DISTRIBUTION BOARD

STATUS CODE	Group Codes BUILDINGS
0 - Pre - Feasibility study	BP - Building IT
1 - Feasibility study	BP - Building Public Address
A - Preliminary Design	BS - Building Service
B - Design Review	BA - Building Architectural
C - Tender Design	BE - Building Electrical
D - Detailed Design	BF - Building Fire Service
E - For Construction	BM - Building Mechanical
F - As Built	BT - Building Public Telecoms
G - For Information Only	BU - Building Public Utilities

DRAWING STATUS	
<b>FOR TENDER</b>	
PROJECT NUMBER	
LDPWR1-B/20109	
Drawn By	Designed By
N NGCEMU A13204	N NTUTA
Reviewed/Approved By	
E MENSAH 20100414	
Name	S.A.I.D Number
Name	Pr Number
Name	Pr Number
Signature	

No	Date	chkd	Details
A	14.08.2021	EM	FOR TENDER

CLIENT

DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE

CONSULTANT

FOURWAYS OFFICE PARK,  
BLOCK 5, GROUND FLOOR  
Cnr. CEDAR ROAD AND  
FOURWAYS BOULEVARD,  
FOURWAYS,  
2191  
Tel: (+27) 10 110 8724  
Fax: (+27) 86 659 2099

PROJECT

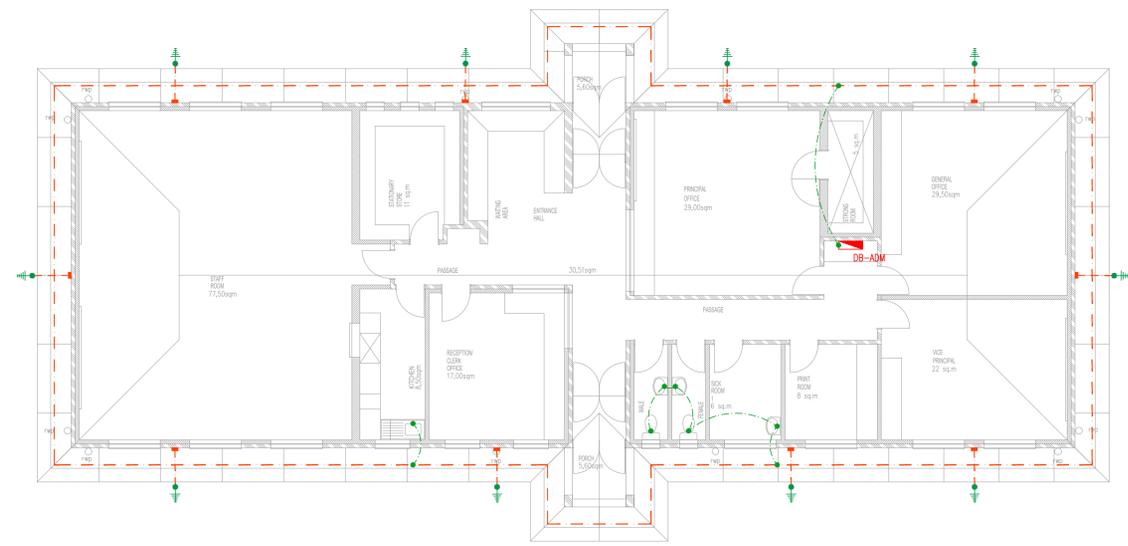
INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E  
**ST. PAUL SECONDARY SCHOOL**

DRAWING TITLE

**GUARD HOUSE FLOOR PLAN  
POWER LAYOUT**

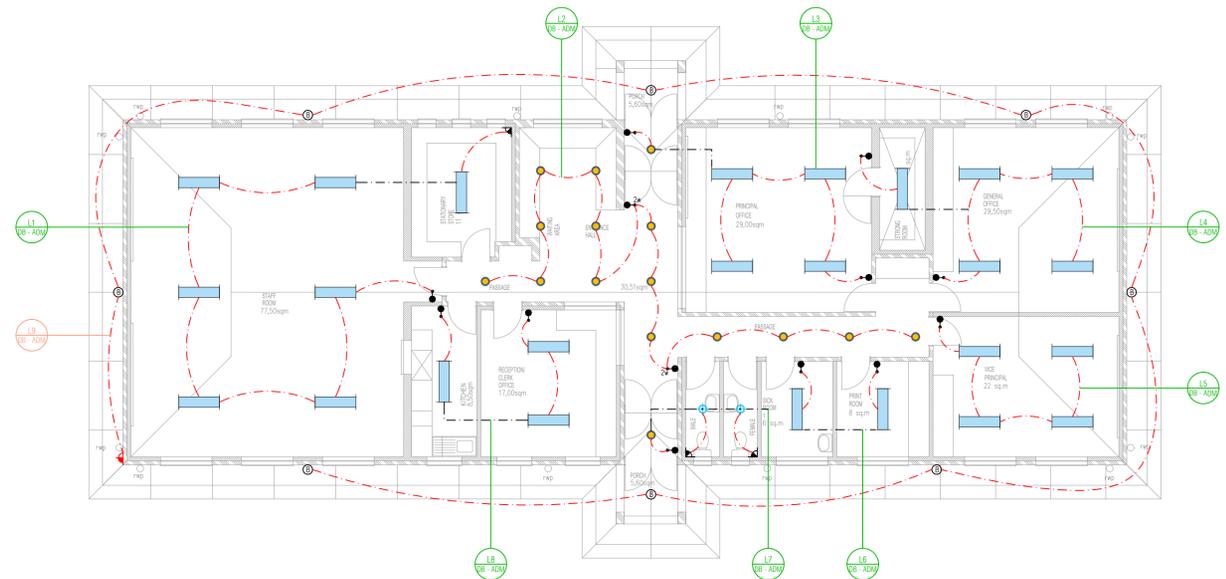
Project code	SPSS	CD	POID	Consultant	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 001/11 - A							
SCALE						1:50	
CHECKED						A	
REV. No							
DATE						14.08.2021	

- GENERAL NOTES:
1. EARTH TERMINATION CONDUCTOR TO BE 50mm<sup>2</sup> BCEE.
  2. BONDING CONDUCTOR TO BE 16mm<sup>2</sup> BCEE.
  3. EARTH ELECTRODE (SPIKE) TO BE #15mm x 1.5m LONG COPPER SOLID ROUND BAR, AND MUST BE 0.5m BURIED BELOW GROUND LEVEL.
  4. EARTH CONDUCTOR TO BE 0.5m BURIED BELOW GROUND LEVEL.
  5. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH:
    - GP/E6/1 REV.1 - STANDARD QUALITY SPECIFICATION FOR GENERAL INSTALLATIONS (SCHOOLS)
    - GP/E6/2 REV.1 - STANDARD QUALITY SPECIFICATION FOR MATERIALS AND EQUIPMENT (SCHOOLS)
- EARTH TERMINATION NOTES:
- EARTH TERMINATION SYSTEM GENERAL REQUIREMENTS:
2. TYPE B EARTHING ARRANGEMENT SHALL BE USED FOR ANY BUILDING INSTALLATION.
- THE RING EARTH ELECTRODE (TYPE B ARRANGEMENT) SHOULD PREFERABLY:
- BE BURIED AT A DEPTH OF AT LEAST 0.5m AND
  - AT A DISTANCE OF ABOUT 1.5m AWAY FROM THE EXTERNAL WALLS UNLESS STATED OTHERWISE.
3. THE CALCULATION OF AN EARTH TERMINATION SYSTEM SHALL BE DONE IN ACCORDANCE WITH THE FORMULAE IN SANS 10199.
- DOWN CONDUCTORS:
1. DOWN CONDUCTORS MUST BE INSULATED BY AT LEAST 3mm CROSS LINKED POLYETHYLENE.
  2. WARNING NOTICES TO BE INSTALLED TO MINIMISE THE PROBABILITY OF DOWN CONDUCTORS BEING TOUCHED.
- EARTHING TEST POINT:
1. EARTHING TEST POINT SHOULD BE CAPABLE OF BEING OPENED WITH THE AID OF TOOL.
- THE COMPLETE INSTALLATION MUST COMPLY TO THE FOLLOWING SANS SPECIFICATION:
- SANS 10142: THE WIRING OF PREMISES.
  - SANS 10198: PART 3: EARTHING SYSTEMS GENERAL PROVISIONS.
  - SANS 10198: PART 12: INSTALLATION OF EARTHING SYSTEMS.
  - 10199: THE DESIGN AND INSTALLATION OF AN EARTH ELECTRODE.
  - 10313: THE PROTECTION OF STRUCTURES AGAINST LIGHTNING.
  - SANS 1063: EARTHING SYSTEMS GENERAL PROVISIONS.



SYMBOL	DESCRIPTION
	EARTH CONDUCTOR
	DOWN CONDUCTOR
	EARTH ELECTRODE (SPIKE)
	BONDING TERMINATION
	EARTHING TEST POINT

STATUS CODE 0 - Pre - Feasibility study 1 - Feasibility study A - Preliminary Design B - Design Review C - Tender Design D - Detailed Design E - For Construction F - As Built G - For Information Only	Group Codes BUILDINGS BP - Building IT BP - Building Public Address BS - Building Service BA - Building Architectural BE - Building Electrical BF - Building Fire Service BM - Building Mechanical BT - Building Public Telecoms BU - Building Public Utilities	DRAWING STATUS <b>FOR TENDER</b>	No A	Date 03.09.2019	chkd EM	Details FOR TENDER	CLIENT  DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE	CONSULTANT  FOURWAYS OFFICE PARK, BLOCK 5, GROUND FLOOR Cnr. CEDAR ROAD AND FOURWAYS BOULEVARD, FOURWAYS, 2191 Tel: (+27) 10 110 8724 Fax: (+27) 86 659 2099	PROJECT INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E <b>ST. PAUL SECONDARY SCHOOL</b>	Project code Status C P O P Consultant Doc Type Seq No Rev SPSS - C - BE - TCS - TDW - 004/12 - A	Copyright Reserved
		PROJECT NUMBER <b>LDPWRI-B/20109</b>	Drawn By N NGCEMU A13204	Designed By N NTUTA	Reviewed/Approved By E MENSAH 20100414 	SCALE 1:100	CHECKED REV: No <b>A</b>	DATE 03.09.2019			



LIGHTING LEGEND

ITEM	DESCRIPTION	QTY
1	16A SINGLE LEVER LIGHT SWITCH	11
2	2WAY 16A SINGLE LEVER LIGHT SWITCH	02
3	2WAY 16A DOUBLE LEVER LIGHT SWITCH	00
4	90 DEG. MOTION SENSOR	03
5	180 DEG. MOTION SENSOR	00
6	360 DEG. MOTION SENSOR	00
7	DAYNIGHT SWITCH	01
8	8 INCH 15W LED DOWNLIGHT	16
9	TYPE B 8 INCH 15W LED DOWNLIGHT WITH DALI MODIFICATION	00
10	10W LED RONDO DOWNLIGHT WITH DALI MODIFICATION	02
11	15W LED ROUND BULKHEAD WITH DALI MODIFICATION	08
12	VIBIAL LED IP40 - 18W 1200x50mm WITH DALI MODIFICATION	00
13	VIBIAL LED IP40 - 18W 1500x50mm WITH DALI MODIFICATION	00
14	1200mm 3W LED IP66 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION - EMERGENCY	00
15	1200mm 3W LED IP66 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION	25
16	1200mm 2x 14W LED OPEN CHANNEL FLUORESCENT LUMINAIRE	00
17	40W 8F 180 SURFACE MOUNT LED LOW BAY WITH DALI MODIFICATION	00
18	60W EMERGENCY 1200x600mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00
19	60W 1200x600mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00

STATUS CODE	Group Codes BUILDINGS
0 - Pre - Feasibility study	BP - Building IT
1 - Feasibility study	BP - Building Public Address
A - Preliminary Design	BS - Building Service
B - Design Review	BA - Building Architectural
C - Tender Design	BE - Building Electrical
D - Detailed Design	BF - Building Fire Service
E - For Construction	BM - Building Mechanical
F - As Built	BT - Building Public Telecoms
G - For Information Only	BU - Building Public Utilities

DRAWING STATUS	
<b>FOR TENDER</b>	
PROJECT NUMBER	
<b>LDPWRI-B/20109</b>	
Drawn By	Designed By
N NGCEMU A13204	N NTUTA
Reviewed/Approved By	
E MENSAH 20100414	
Name	S.A.I.D Number
Name	Pr Number
Name	Pr Number
Signature	

No	Date	chkd	Details
A	03.09.2019	EM	FOR TENDER

CLIENT



**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

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

CONSULTANT



**TAKUSA**  
CONSULTING SERVICES

FOURWAYS OFFICE PARK,  
BLOCK 5, GROUND FLOOR  
Cnr. CEDAR ROAD AND  
FOURWAYS BOULEVARD,  
FOURWAYS,  
2191  
Tel: (+27) 10 110 8724  
Fax: (+27) 86 659 2099

PROJECT

INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E  
**ST. PAUL SECONDARY SCHOOL**

DRAWING TITLE

**ADMINISTRATION FLOOR PLAN  
LIGHTING LAYOUT**

Project code	Subs	Doc	Seq	Rev
SPSS - C - BE - TCS - TDW - 002/12 - A				
SCALE	1:100			
CHECKED	<b>A</b>			
REV. No				
DATE	03.09.2019			



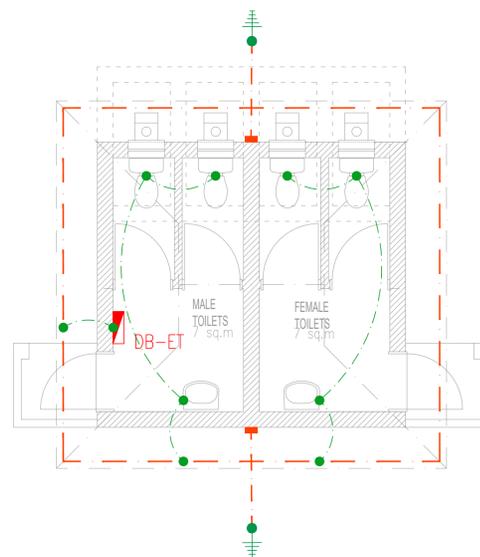
- GENERAL NOTES:
1. EARTH TERMINATION CONDUCTOR TO BE 50mm<sup>2</sup> BCEW.
  2. BONDING CONDUCTOR TO BE 16mm<sup>2</sup> BCEW.
  3. EARTH ELECTRODE (SPIKE) TO BE #15mm x 1.5m LONG COPPER SOLID ROUND BAR, AND MUST BE 0.5m BURIED BELOW GROUND LEVEL.
  4. EARTH CONDUCTOR TO BE 0.5m BURIED BELOW GROUND LEVEL.
  5. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH:
    - GP/E6/1 REV.1 - STANDARD QUALITY SPECIFICATION FOR GENERAL INSTALLATIONS (SCHOOLS)
    - GP/E6/2 REV.1 - STANDARD QUALITY SPECIFICATION FOR MATERIALS AND EQUIPMENT (SCHOOLS)

- EARTH TERMINATION NOTES:
- EARTH TERMINATION SYSTEM GENERAL REQUIREMENTS:
1. TYPE B EARTHING ARRANGEMENT SHALL BE USED FOR ANY BUILDING INSTALLATION.
- THE RING EARTH ELECTRODE (TYPE B ARRANGEMENT) SHOULD PREFERABLY:
- BE BURIED AT A DEPTH OF AT LEAST 0.5m AND
  - AT A DISTANCE OF ABOUT 1.5m AWAY FROM THE EXTERNAL WALLS UNLESS STATED OTHERWISE.
3. THE CALCULATION OF AN EARTH TERMINATION SYSTEM SHALL BE DONE IN ACCORDANCE WITH THE FORMULAE IN SANS 10199.

- DOWN CONDUCTORS:
1. DOWN CONDUCTORS MUST BE INSULATED BY AT LEAST 3mm CROSS LINKED POLYETHYLENE.
  2. WARNING NOTICES TO BE INSTALLED TO MINIMISE THE PROBABILITY OF DOWN CONDUCTORS BEING TOUCHED.

- EARTHING TEST POINT:
1. EARTHING TEST POINT SHOULD BE CAPABLE OF BEING OPENED WITH THE AID OF TOOL.

- THE COMPLETE INSTALLATION MUST COMPLY TO THE FOLLOWING SANS SPECIFICATION:
- SANS 10142: THE WIRING OF PREMISES.
  - SANS 10198: PART 3: EARTHING SYSTEMS GENERAL PROVISIONS.
  - SANS 10199: PART 12: INSTALLATION OF EARTHING SYSTEMS.
  - 10199: THE DESIGN AND INSTALLATION OF AN EARTH ELECTRODE.
  - 10313: THE PROTECTION OF STRUCTURES AGAINST LIGHTNING.
  - SANS 1063: EARTHING SYSTEMS GENERAL PROVISIONS.



SYMBOL	DESCRIPTION
---	EARTH CONDUCTOR
---	DOWN CONDUCTOR
●	EARTH ELECTRODE (SPIKE)
●	BONDING TERMINATION
■	EARTHING TEST POINT

STATUS CODE	Group Codes BUILDINGS	DRAWING STATUS		No	Date	chkd	Details
0 - Pre - Feasibility study	BP - Building IT	<b>FOR TENDER</b>		A	14.08.2021	EM	FOR TENDER
1 - Feasibility study	BP - Building Public Address	PROJECT NUMBER					
A - Preliminary Design	BS - Building Service	<b>LDPWRI-B/20109</b>					
B - Design Review	BA - Building Architectural	Drawn By	Designed By				
C - Tender Design	BE - Building Electrical	N NGCEMU A13204	K SECHOARO				
D - Detailed Design	BF - Building Fire Service	Reviewed/Approved By					
E - For Construction	BM - Building Mechanical						
F - As Built	BT - Building Public Telecoms	Name	S.A.I.D Number	Name	Pr Number	Name	Pr Number
G - For Information Only	BU - Building Public Utilities						

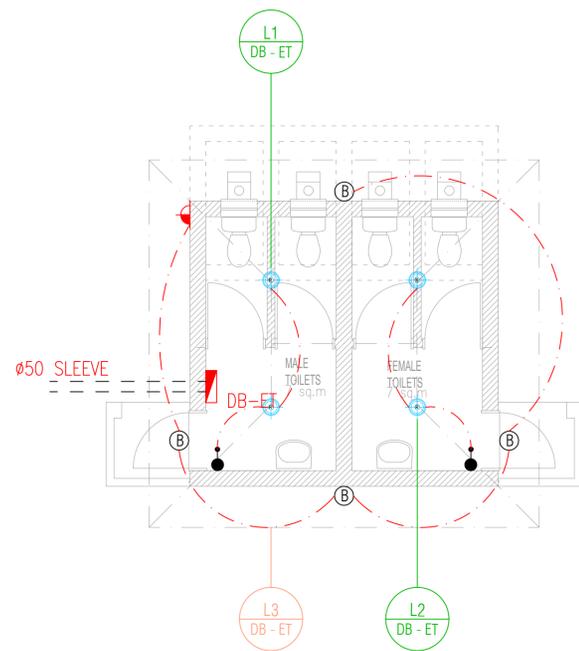
CLIENT	CONSULTANT	PROJECT
<p><b>LIMPOPO</b> PROVINCIAL GOVERNMENT REPUBLIC OF SOUTH AFRICA</p> <p>DEPARTMENT OF <b>PUBLIC WORKS, ROADS &amp; INFRASTRUCTURE</b></p>	<p><b>TAKUSA</b> CONSULTING SERVICES</p> <p>FOURWAYS OFFICE PARK, BLOCK 5, GROUND FLOOR Cnr. CEDAR ROAD AND FOURWAYS BOULEVARD, FOURWAYS, 2191 Tel: (+27) 10 110 8724 Fax: (+27) 86 659 2099</p>	<p>INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E <b>ST. PAUL SECONDARY SCHOOL</b></p> <p>DRAWING TITLE</p> <p><b>ENVIROLOO 4x SEAT A TOILETS FLOOR PLAN EARTHING &amp; LIGHTNING PROTECTION LAYOUT</b></p>

Project code	Status	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 004/13 - A				

SCALE	1:50
CHECKED	
REV. No	<b>A</b>
DATE	14.08.2021

Project code	Status	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 004/13 - A				

Project code	Status	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 004/13 - A				



LIGHTING LEGEND

ITEM	DESCRIPTION	QTY
1	16A SINGLE LEVER LIGHT SWITCH	02
2	2WAY 16A SINGLE LEVER LIGHT SWITCH	00
3	2WAY 16A DOUBLE LEVER LIGHT SWITCH	00
4	90 DEG. MOTION SENSOR	00
5	180 DEG. MOTION SENSOR	00
6	360 DEG. MOTION SENSOR	00
7	DAY/NIGHT SWITCH	01
8	8 INCH 15W LED DOWNLIGHT	00
9	TYPE B 8 INCH 15W LED DOWNLIGHT WITH DALI MODIFICATION	00
10	10W LED RONDOL DOWNLIGHT WITH DALI MODIFICATION	04
11	15W LED ROUND BULKHEAD WITH DALI MODIFICATION	04
12	VISUAL LED IP40 - 18W 1200x50mm WITH DALI MODIFICATION	00
13	VISUAL LED IP40 - 18W 1500x50mm WITH DALI MODIFICATION	00
14	1200mm 34W LED IP66 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION - EMERGENCY	00
15	1200mm 34W LED IP66 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION	00
16	1200mm x 149 LED OPEN CHANNEL FLUORESCENT LUMINAIRE	00
17	ELECTRICAL DISTRIBUTION BOARD	01
18	60W EMERGENCY 1200x400mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00
19	60W 1200x600mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00

STATUS CODE	Group Codes BUILDINGS
0 - Pre - Feasibility study	BP - Building IT
1 - Feasibility study	BP* - Building Public Address
A - Preliminary Design	BS - Building Service
B - Design Review	BA - Building Architectural
C - Tender Design	BE - Building Electrical
D - Detailed Design	BF - Building Fire Service
E - For Construction	BM - Building Mechanical
F - As Built	BT - Building Public Telecoms
G - For Information Only	BU - Building Public Utilities

DRAWING STATUS	
<b>FOR TENDER</b>	
PROJECT NUMBER	
<b>LDPWRI-B/20109</b>	
Drawn By	Designed By
N NGCEMU A13204	K SECHOARO
Reviewed/Approved By	
E MNSAH 20100414	
Name	S.A.I.D Number
Name	Pr Number
Name	Pr Number
Signature	

No	Date	chkd	Details
A	14.08.2021	EM	FOR TENDER

CLIENT



DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE

CONSULTANT



FOURWAYS OFFICE PARK, BLOCK 5, GROUND FLOOR Cnr. CEDAR ROAD AND FOURWAYS BOULEVARD, FOURWAYS, 2191  
Tel: (+27) 10 110 8724 Fax: (+27) 86 659 2099

PROJECT

INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E

**ST. PAUL SECONDARY SCHOOL**

DRAWING TITLE

**ENVIROLOO 4x SEAT A TOILETS FLOOR PLAN LIGHTING LAYOUT**

Project code	Studio	Group	Consultant	Doc Type	Seq No	Rev
Copyright Reserved						
<b>SPSS - C - BE - TCS - TDW - 002/13 - A</b>						
SCALE						1:50
CHECKED						A
REV. No						
DATE						14.08.2021

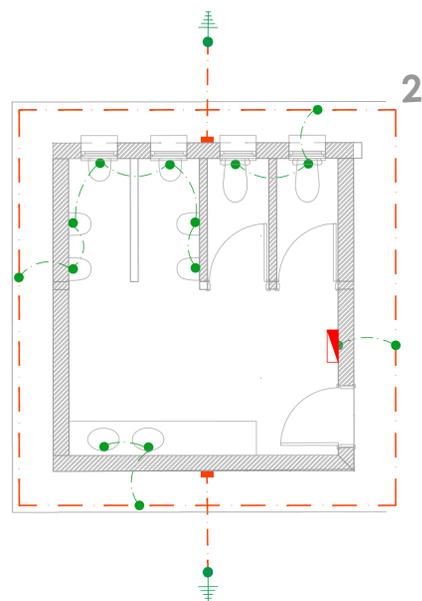
- GENERAL NOTES:
1. EARTH TERMINATION CONDUCTOR TO BE 50mm<sup>2</sup> BCEW.
  2. BONDING CONDUCTOR TO BE 16mm<sup>2</sup> BCEW.
  3. EARTH ELECTRODE (SPIKE) TO BE #15mm x 1.5m LONG COPPER SOLID ROUND BAR, AND MUST BE 0.5m BURIED BELOW GROUND LEVEL.
  4. EARTH CONDUCTOR TO BE 0.5m BURIED BELOW GROUND LEVEL.
  5. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH:
    - GP/E6/1 REV.1 - STANDARD QUALITY SPECIFICATION FOR GENERAL INSTALLATIONS (SCHOOLS)
    - GP/E6/2 REV.1 - STANDARD QUALITY SPECIFICATION FOR MATERIALS AND EQUIPMENT (SCHOOLS)

- EARTH TERMINATION NOTES:
- EARTH TERMINATION SYSTEM GENERAL REQUIREMENTS:
2. TYPE B EARTHING ARRANGEMENT SHALL BE USED FOR ANY BUILDING INSTALLATION.
- THE RING EARTH ELECTRODE (TYPE B ARRANGEMENT) SHOULD PREFERABLY:
- BE BURIED AT A DEPTH OF AT LEAST 0.5m AND
  - AT A DISTANCE OF ABOUT 1.5m AWAY FROM THE EXTERNAL WALLS UNLESS STATED OTHERWISE.
3. THE CALCULATION OF AN EARTH TERMINATION SYSTEM SHALL BE DONE IN ACCORDANCE WITH THE FORMULAE IN SANS 10199.

- DOWN CONDUCTORS:
1. DOWN CONDUCTORS MUST BE INSULATED BY AT LEAST 3mm CROSS LINKED POLYETHYLENE.
  2. WARNING NOTICES TO BE INSTALLED TO MINIMISE THE PROBABILITY OF DOWN CONDUCTORS BEING TOUCHED.

- EARTHING TEST POINT:
1. EARTHING TEST POINT SHOULD BE CAPABLE OF BEING OPENED WITH THE AID OF TOOL.

- THE COMPLETE INSTALLATION MUST COMPLY TO THE FOLLOWING SANS SPECIFICATION:
- SANS 10142: THE WIRING OF PREMISES.
  - SANS 10198: PART 3: EARTHING SYSTEMS GENERAL PROVISIONS.
  - SANS 10199: PART 12: INSTALLATION OF EARTHING SYSTEMS.
  - 10199: THE DESIGN AND INSTALLATION OF AN EARTH ELECTRODE.
  - 10313: THE PROTECTION OF STRUCTURES AGAINST LIGHTNING.
  - SANS 1063: EARTHING SYSTEMS GENERAL PROVISIONS.



SYMBOL	DESCRIPTION
---	EARTH CONDUCTOR
---	DOWN CONDUCTOR
●	EARTH ELECTRODE (SPIKE)
●	BONDING TERMINATION
■	EARTHING TEST POINT

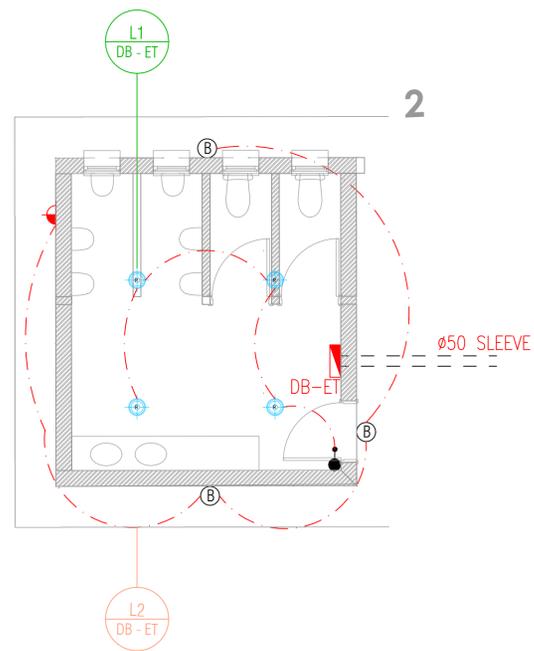
STATUS CODE	Group Codes BUILDINGS	DRAWING STATUS	No	Date	chkd	Details
0 - Pre - Feasibility study	BP - Building IT	FOR TENDER	A	14.08.2021	EM	FOR TENDER
1 - Feasibility study	BP - Building Public Address	PROJECT NUMBER				
A - Preliminary Design	BS - Building Service	LDPWRI-B/20109				
B - Design Review	BA - Building Architectural	Drawn By				
C - Tender Design	BE - Building Electrical	Designed By				
D - Detailed Design	BF - Building Fire Service	Reviewed/Approved By				
E - For Construction	BM - Building Mechanical	N NGCEMU A13204				
F - As Built	BT - Building Public Telecoms	K SECHOARO				
G - For Information Only	BU - Building Public Utilities	E MENSAB 20100414				
		Name S.A.J.D Number Name Pr Number Name Pr Number Signature				

CLIENT	CONSULTANT	PROJECT
<p>DEPARTMENT OF PUBLIC WORKS, ROADS &amp; INFRASTRUCTURE</p>	<p>FOURWAYS OFFICE PARK, BLOCK 5, GROUND FLOOR Cnr. CEDAR ROAD AND FOURWAYS BOULEVARD, FOURWAYS, FOURWAYS, 2191 Tel: (+27) 10 110 8724 Fax: (+27) 86 659 2099</p>	<p>INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E</p> <p><b>ST. PAUL SECONDARY SCHOOL</b></p>

PROJECT	DRAWING TITLE	Project code	Status	Doc Type	Seq No	Rev
<p>INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E</p> <p><b>ST. PAUL SECONDARY SCHOOL</b></p>	<p>ENVIROLOO 2x SEAT - MALE TOILETS FLOOR PLAN EARTHING &amp; LIGHTNING PROTECTION LAYOUT</p>	SPSS - C - BE - TCS - TDW - 004/14 - A				

SCALE	1:50
CHECKED	A
REV. No	
DATE	14.08.2021

Project code	Status	Doc Type	Seq No	Rev
SPSS - C - BE - TCS - TDW - 004/14 - A				



LIGHTING LEGEND		
ITEM	DESCRIPTION	QTY
1	16A SINGLE LEVER LIGHT SWITCH	01
2	2WAY 16A SINGLE LEVER LIGHT SWITCH	00
3	2WAY 16A DOUBLE LEVER LIGHT SWITCH	00
4	90 DEG. MOTION SENSOR	00
5	180 DEG. MOTION SENSOR	00
6	360 DEG. MOTION SENSOR	00
7	DAY/NIGHT SWITCH	01
8	8 INCH 15W LED DOWNLIGHT	00
9	TYPE B 8 INCH 15W LED DOWNLIGHT WITH DALI MODIFICATION	00
10	10W LED RONDO DOWNLIGHT WITH DALI MODIFICATION	04
11	15W LED ROUND BULKHEAD WITH DALI MODIFICATION	03
12	VISUAL LED IP40 - 18W 1200x50mm WITH DALI MODIFICATION	00
13	VISUAL LED IP40 - 18W 1500x50mm WITH DALI MODIFICATION	00
14	1200mm 34W LED IP66 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION - EMERGENCY	00
15	1200mm 34W LED IP66 CORROSION PROOF LIGHT FITTING WITH DALI MODIFICATION	00
16	1200mm x 149 LED OPEN CHANNEL FLUORESCENT LUMINAIRE	00
17	ELECTRICAL DISTRIBUTION BOARD	01
18	60W EMERGENCY 1200x400mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00
19	60W 1200x600mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00

STATUS CODE	Group Codes BUILDINGS
0 - Pre - Feasibility study	BP - Building IT
1 - Feasibility study	BP - Building Public Address
A - Preliminary Design	BS - Building Service
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C - Tender Design	BE - Building Electrical
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DRAWING STATUS	
<b>FOR TENDER</b>	
PROJECT NUMBER	
<b>LDPWRI-B/20109</b>	
Drawn By	Designed By
N NGCEMU A13204	K SECHOARO
Reviewed/Approved By	
E MENSAB 20100414	
Name	S.A.J.D Number
Name	Pr Number
Name	Pr Number
Signature	

No	Date	chkd	Details
A	14.08.2021	EM	FOR TENDER

CLIENT



**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

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

CONSULTANT



**TAKUSA**  
CONSULTING SERVICES

FOURWAYS OFFICE PARK,  
BLOCK 5, GROUND FLOOR  
Cnr. CEDAR ROAD AND  
FOURWAYS BOULEVARD,  
FOURWAYS,  
2191  
Tel: (+27) 10 110 8724  
Fax: (+27) 86 659 2099

PROJECT

INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E  
**ST. PAUL SECONDARY SCHOOL**

DRAWING TITLE

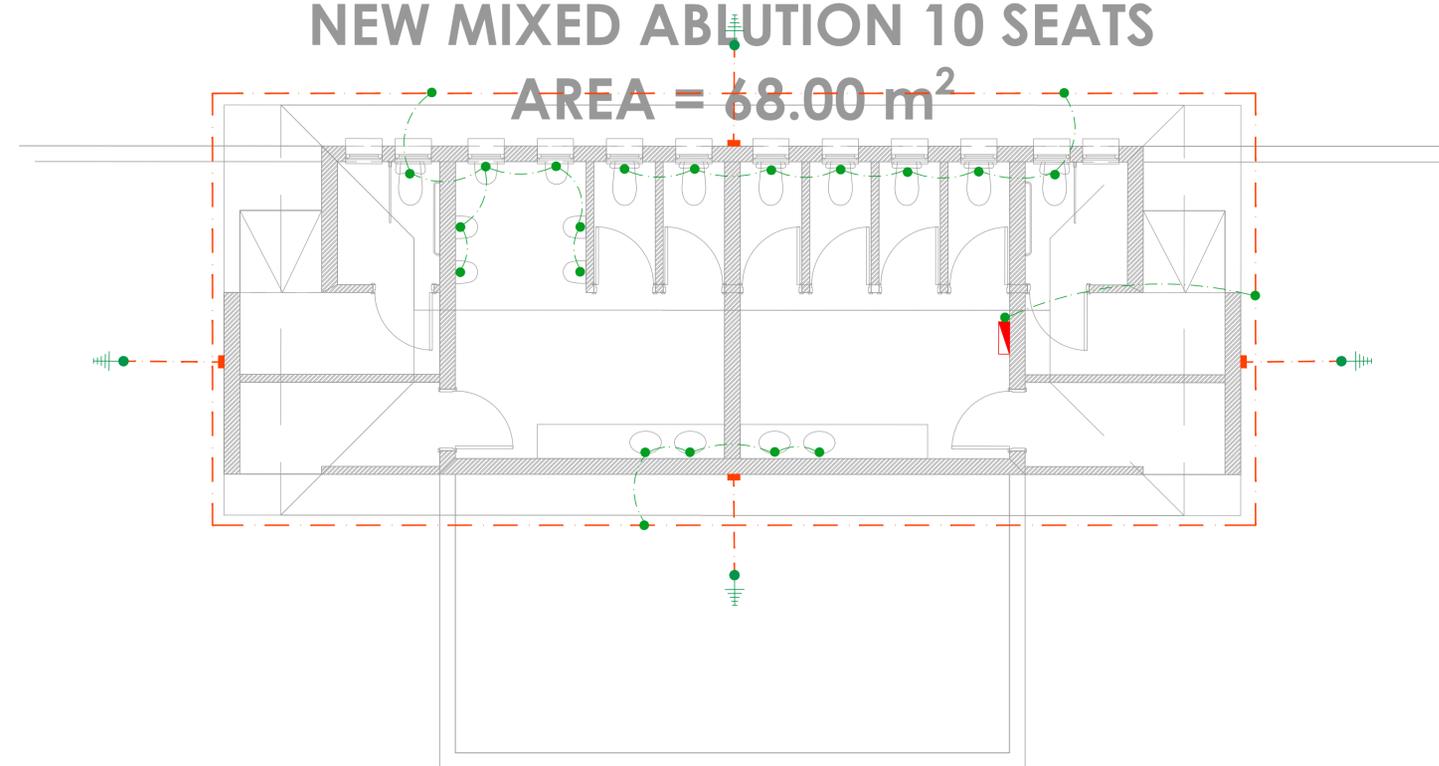
**ENVIROLOO 2x SEAT - MALE TOILETS FLOOR PLAN LIGHTING LAYOUT**

Project code	Studio	Client	Consultant	Doc Type	Seq No	Rev
Copyright Reserved						
<b>SPSS - C - BE - TCS - TDW - 002/14 - A</b>						
SCALE						1:50
CHECKED						<b>A</b>
REV. No						
DATE						14.08.2021

- GENERAL NOTES:
1. EARTH TERMINATION CONDUCTOR TO BE 50mm<sup>2</sup> BCEW.
  2. BONDING CONDUCTOR TO BE 16mm<sup>2</sup> BCEW.
  3. EARTH ELECTRODE (SPIKE) TO BE #15mm x 1.5m LONG COPPER SOLID ROUND BAR AND MUST BE 0.5m BURIED BELOW GROUND LEVEL.
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# NEW MIXED ABLUTION 10 SEATS

AREA = 68.00 m<sup>2</sup>

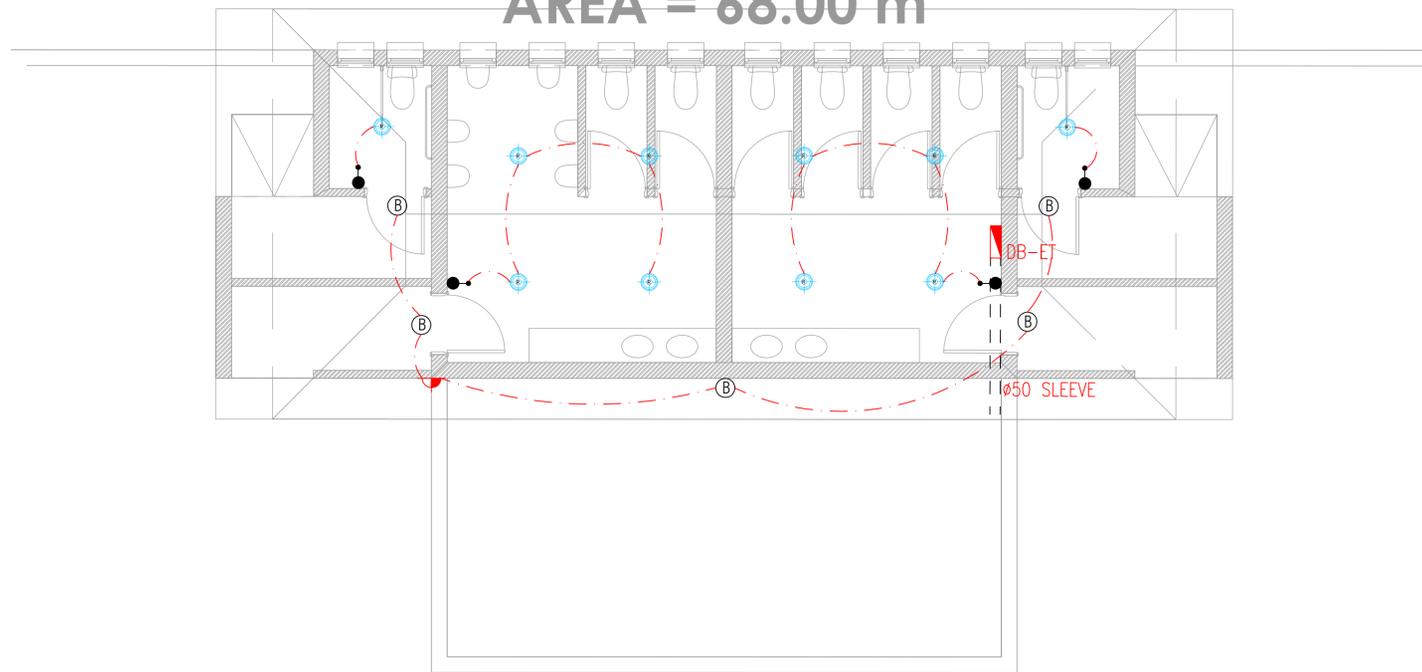


SYMBOL	DESCRIPTION
---	EARTH CONDUCTOR
---	DOWN CONDUCTOR
●	EARTH ELECTRODE (SPIKE)
●	BONDING TERMINATION
■	EARTHING TEST POINT

STATUS CODE 0 - Pre - Feasibility study 1 - Feasibility study A - Preliminary Design B - Design Review C - Tender Design D - Detailed Design E - For Construction F - As Built G - For Information Only	Group Codes BUILDINGS BP - Building IT BP - Building Public Address BS - Building Service BA - Building Architectural BE - Building Electrical BF - Building Fire Service BM - Building Mechanical BT - Building Public Telecoms BU - Building Public Utilities	DRAWING STATUS <b>FOR TENDER</b> PROJECT NUMBER <b>LDPWRI-B/20109</b>	No	Date	chkd	Details	CLIENT  DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE	CONSULTANT  FOURWAYS OFFICE PARK, BLOCK 5, GROUND FLOOR Cnr. CEDAR ROAD AND FOURWAYS BOULEVARD, FOURWAYS, FOURWAYS, 2191 Tel: (+27) 10 110 8724 Fax: (+27) 86 659 2099	PROJECT INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E <b>ST. PAUL SECONDARY SCHOOL</b>	Project code Status Group Consultant Doc Type Seq No Rev <b>SPSS - C - BE - TCS - TDW - 004/15 - A</b>	SCALE 1:50 CHECKED REV. No <b>A</b> DATE 18.08.2021
			Drawn By N NGCEMU A13204 Name S.A.J.D Number	Designed By K SECHOARO Name Pr Number	Reviewed/Approved By E MENSAB 20100414 Name Pr Number Signature	No A Date 18.08.2021 chkd EM Details FOR TENDER					

# NEW MIXED ABLUTION 10 SEATS

## AREA = 68.00 m<sup>2</sup>



VE

### LIGHTING LEGEND

ITEM	DESCRIPTION	QTY
1	16A SINGLE LEVER LIGHT SWITCH	04
2	2WAY 16A SINGLE LEVER LIGHT SWITCH	00
3	2WAY 16A DOUBLE LEVER LIGHT SWITCH	00
4	90 DEG. MOTION SENSOR	00
5	180 DEG. MOTION SENSOR	00
6	360 DEG. MOTION SENSOR	00
7	DAY/NIGHT SWITCH	01
8	8 INCH 15W LED DOWNLIGHT	00
9	TYPE B 8 INCH 15W LED DOWNLIGHT WITH DALI MODIFICATION	00
10	10W LED RINGO DOWNLIGHT WITH DALI MODIFICATION	10
11	15W LED ROUND BULKHEAD WITH DALI MODIFICATION	05
12	VISUAL LED IP40 - 18W 120x50mm WITH DALI MODIFICATION	00
13	VISUAL LED IP40 - 18W 150x50mm WITH DALI MODIFICATION	00
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18	60W EMERGENCY 120x400mm LED PANEL RECESSED LIGHT FITTING WITH DALI MODIFICATION	00
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STATUS CODE	Group Codes BUILDINGS	DRAWING STATUS	No	Date	chkd	Details
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F - As Built	BT - Building Public Telecoms	K SECHOARO				
G - For Information Only	BU - Building Public Utilities	E MENSAB 20100414				
		Name S.A.J.D Number Name Pr Number Name Pr Number Signature				

CLIENT



**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

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

CONSULTANT



**TAKUSA**  
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PROJECT

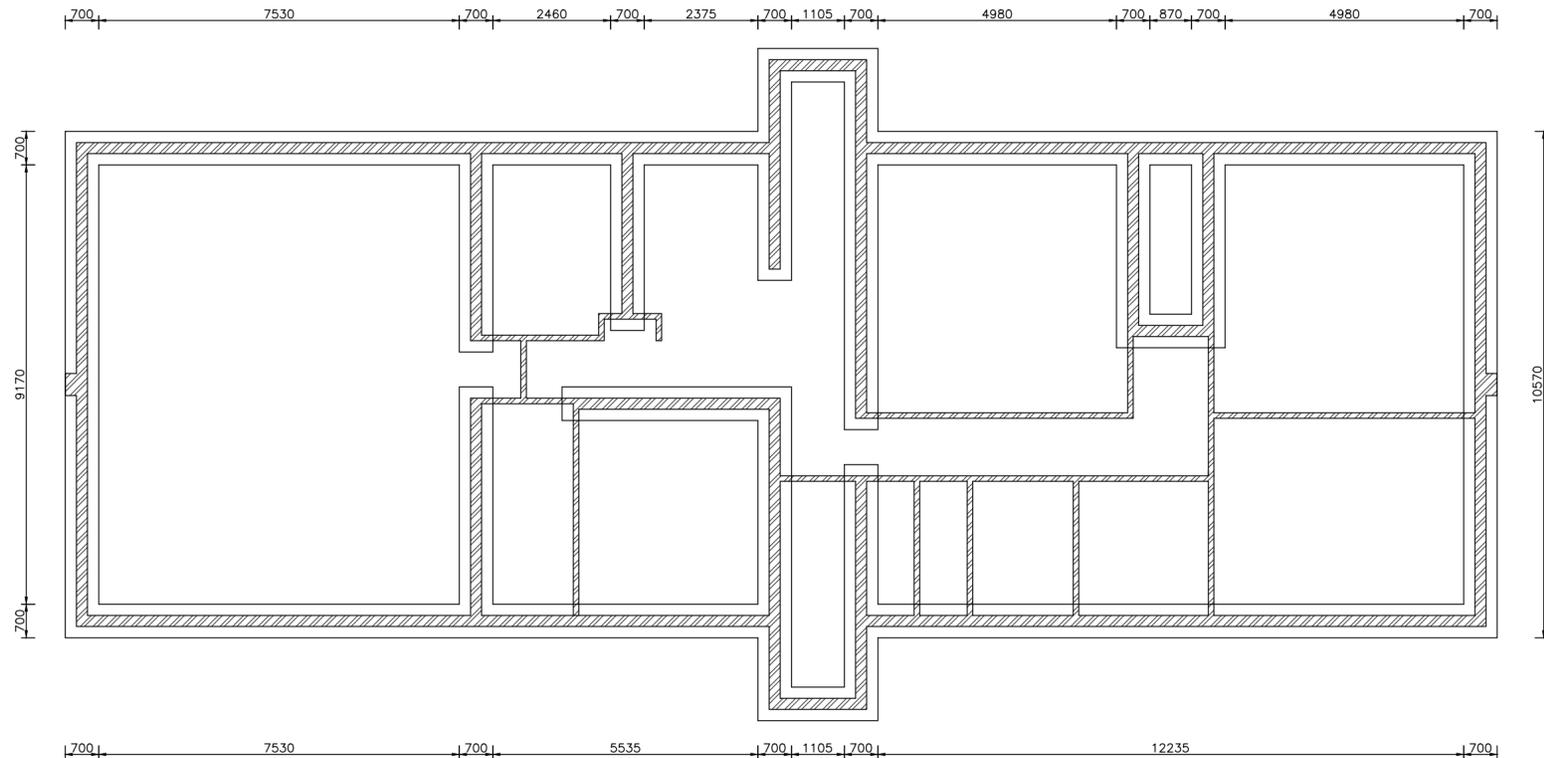
INFRASTRUCTURE PROVISIONING TO SCHOOLS WITH ACUTE INFRASTRUCTURE CHALLENGES, INCLUDING STORM DAMAGED SCHOOLS IN THE LIMPOPO PROVINCE CLUSTER E  
**ST. PAUL SECONDARY SCHOOL**

DRAWING TITLE

**ENVIROLOO 10x SEAT - MIXED TOILETS FLOOR PLAN LIGHTING LAYOUT**

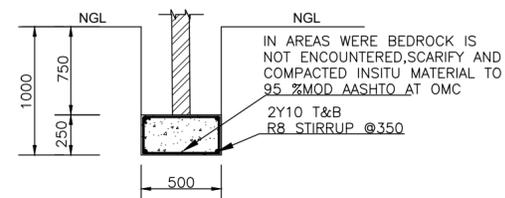
Project code	Studio	Client	Consultant	Doc Type	Seq No	Rev
Copyright Reserved						
<b>SPSS - C - BE - TCS - TDW - 002/15 - A</b>						
SCALE						1:50
CHECKED						<b>A</b>
REV. No						
DATE						18.08.2021

## **STRUCTURAL DRAWINGS**



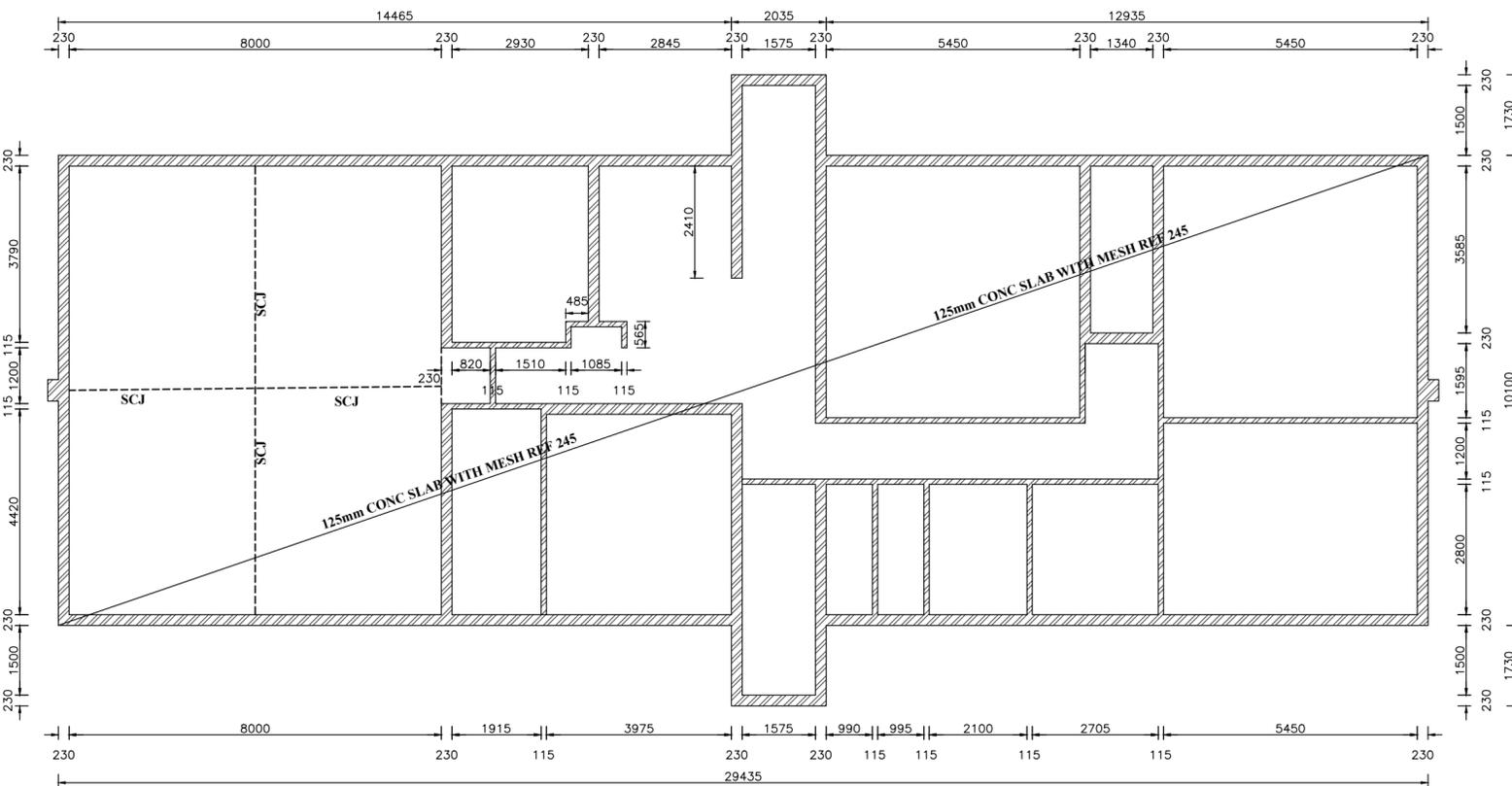
**FOUNDATION LAYOUT**

Scale 1:100



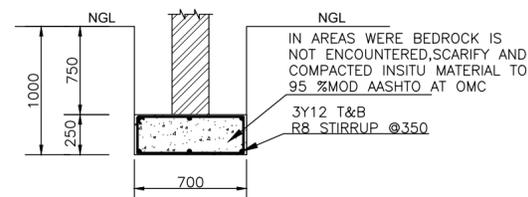
**110 WALL FOUNDATION DETAIL**

Scale 1:20



**GROUND LAYOUT**

Scale 1:100



**220 FOUNDATION DETAIL**

Scale 1:20

- GENERAL NOTES.**
- THE ENGINEERING DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS AND ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER.
  - ALL LEVELS AND DIMENSIONS TO BE VERIFIED ON SITE PRIOR COMMENCEMENT OF ANY WORK, AND THE ENGINEER TO BE NOTIFIED IN CASE OF DISCREPANCIES.
  - ALL CIVIL WORK TO BE DONE ACCORDING TO SABS 1200 STANDARDS.
  - ANY APPROVAL, CHECK, CERTIFICATE, CONSENT, EXAMINATION, REQUEST, TEST OF SIMILAR ACT BY THE ENGINEER (INCLUDING ABSENCE OF DISAPPROVAL) SHALL NOT RELIEVE THE CONTRACTOR FROM ANY RESPONSIBILITY HE HAS UNDER THE CONTRACT, INCLUDING RESPONSIBILITY FOR ERRORS, OMISSIONS, DISCREPANCIES AND NON-COMPLIANCE.
  - CONCRETE:**
    - ALL REINFORCED CONCRETE DESIGNED ACCORDING TO SABS 0100: PART 1-1980
    - ALL CONCRETE WORK TO BE DONE ACCORDING TO SABS 0100: PART 2-1980
    - CONCRETE STRENGTH @ 28 DAYS:
      - STRIP FOUNDATION :30MPa
      - SURFACE BED :25MPa
      - SLABS AND BEAMS :30MPa
      - COLUMNS & BASES :30MPa
    - ALL REINFORCED CONCRETE WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE LATEST ISSUES OF SABS-0100 AND SABS-1200G WITH DEGREE OF ACCURACY II, WITH SPECIAL ATTENTION TO THE FOLLOWING:
      - A CONCRETE MIX DESIGN FOR EACH CLASS SHALL BE SUBMITTED TO THE ENGINEER BEFORE ANY CONCRETE IS CAST
      - CONCRETE TEST CUBES SHALL BE MADE IN SETS OF FOUR, WITH ONE CUBE TESTED AT THE AGE OF 7 DAYS FOR EARLY STRENGTH INDUCTION. THE OTHER THREE CUBES TESTED AT THE AGE OF 28 DAYS. ALL TEST RESULTS SHALL BE MADE AVAILABLE TO THE ENGINEER AS SOON AS THEY BECOME AVAILABLE.
      - PRIOR TO CONSTRUCTION OF EACH PHASE OF CONCRETE, THE CONTRACTOR SHALL GIVE WRITTEN NOTICE AND OBSERVE THE ENGINEER TO OBSERVE THE ALIGNMENT AND LEVEL OF ALL FORMWORK, REINFORCING STEEL AND WORKS TO BE CAST IN.
  - REINFORCEMENT:**
    - ALL HIGH TENSILE STEEL TO BE TYPE C, CLASS 2, GRADE 1 ACCORDING TO SABS 920, WITH A CHARACTERISTIC STRENGTH OF 450 MPA.
    - ALL REINFORCEMENT STEEL SHALL BE WIRE-BRUSHED AND KEPT CLEAN AND FREE OF ANY MILL-SCALE, RUST, OIL OR ANY OTHER DELETERIOUS COMPOUNDS.
    - WELDING OF REINFORCEMENT STEEL WILL NOT BE PERMITTED OTHER THAN SPECIFIED MESH.
    - LEGEND FOR POSITIONS OF REINFORCEMENT:
      - T1 HIGHEST OF THE TOP LAYERS
      - T2 SECOND HIGHEST OF THE TOP LAYERS
      - B1 LOWEST OF THE BOTTOM LAYERS
      - B2 SECOND LOWEST OF THE BOTTOM LAYER.
  - FINISHES:**
    - ALL VISIBLE CORNERS ON FLOORS, RINGBEAMS, ETC. TO BE CHAMFERED 20X20MM UNLESS OTHERWISE SPECIFIED.
    - ALL VISIBLE CONCRETE SURFACES TO BE EXTRA SMOOTH AND SHUTTER JOINTS RUBBED WITH CARBORUNDUM BLOCKS.
  - CONCRETE CURING:**
    - ALL CONCRETE TO BE CURED BY KEEPING MOIST FOR AT LEAST 14 DAYS AFTER CASTING.
  - FOUNDATION:**
    - DEPTHS OF ALL BASES AND STRIP FOOTINGS SHALL BE DETERMINED AND OBSERVED ON SITE BY ENGINEER PRIOR CONCRETING.
    - ALL COLUMN BASES SHALL BE CAST ON A BLINDING LAYER OF AT LEAST 50MM AND NOT MORE THAN 100MM THICK.
    - TOP LEVEL OF BLINDING TO BE MADE AVAILABLE TO THE ENGINEER IN ORDER TO AMEND REINFORCEMENT TO ACTUAL LEVELS IF NECESSARY.
  - STRUCTURAL STEELWORK:**
    - ALL STRUCTURAL STEEL WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200 (1983).
    - ALL DETAILING AND CONNECTIONS TO COMPLY WITH THE REQUIREMENTS OF SABS 0162 (1984 AS AMENDED 1986 & 1987)
    - ALL STRUCTURAL STEEL TO BE 350W ACCORDING TO SABS 1431.
    - ALL BOLTS, THREADED BAR AND HD BOLTS TO BE M16 GRADE 8.8 ACCORDING TO SABS 135.
    - COMPLETE WORKSHOP DRAWINGS OF ALL STEEL ELEMENTS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE MANUFACTURING COMMENCES.
  - CORROSION PROTECTION(STRUCTURAL STEEL)**
    - ALL SURFACES TO BE PAINTED MUST BE FREE OF MILL SCALE, CORROSION, GREASE, DUST ETC.
    - ALL STRUCTURAL STEELWORK TO BE CLEANED TO SA2.5 ACCORDING TO SIS 055900. ALL CLEANED SURFACES OF STRUCTURAL STEEL TO BE COATED WITH TWO LAYERS OF RED OXIDE ACCORDING TO SABS 312.
  - ASSEMBLY AND ALIGNMENT( STRUCTURAL STEEL)**
    - ALL STRUCTURAL MEMBERS MUST BE TEMPORARILY BRACED OR PROPPED DURING ERECTION, SUFFICIENT TO ENSURE TO ENSURE THE STABILITY OF THE STRUCTURE AT ALL TIME.
    - ALL STRUCTURAL MEMBERS MUST BE ALIGNED INTO FINAL POSITION BEFORE ANY BOLTS ARE TIGHTENED. NO STRUCTURAL ELEMENTS MUST BE HEATED, BEND OR DISTORTED TO ACCOMPLISH ASSEMBLY OR ALIGNMENT.
    - ALL STEEL STRUCTURES MUST BE APPROVED IN WRITING BY ENGINEER BEFORE ANY CLADDING IS FIXED.

R  
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No	DATE	REVISION	CONSULT	DIR

DESIGNED BY	NTB
CHECKED BY	TM
DRAWN BY	NTB
CHECKED BY	TM
APPROVED & ADOPTED BY	NTB

**DEPARTMENT OF PUBLIC WORKS**

The Head of department  
Limpopo Provincial Government  
Department of Public Works  
Private Bag X9490  
Polokwane, 0700

Tel: +27 (0)15 284 7000  
Fax: +27 (0)15 284 7030

**LOWFLOW CONSTRUCTION & ENGINEERING**

Head Office  
26 Peace Street  
Tzaneen  
0850

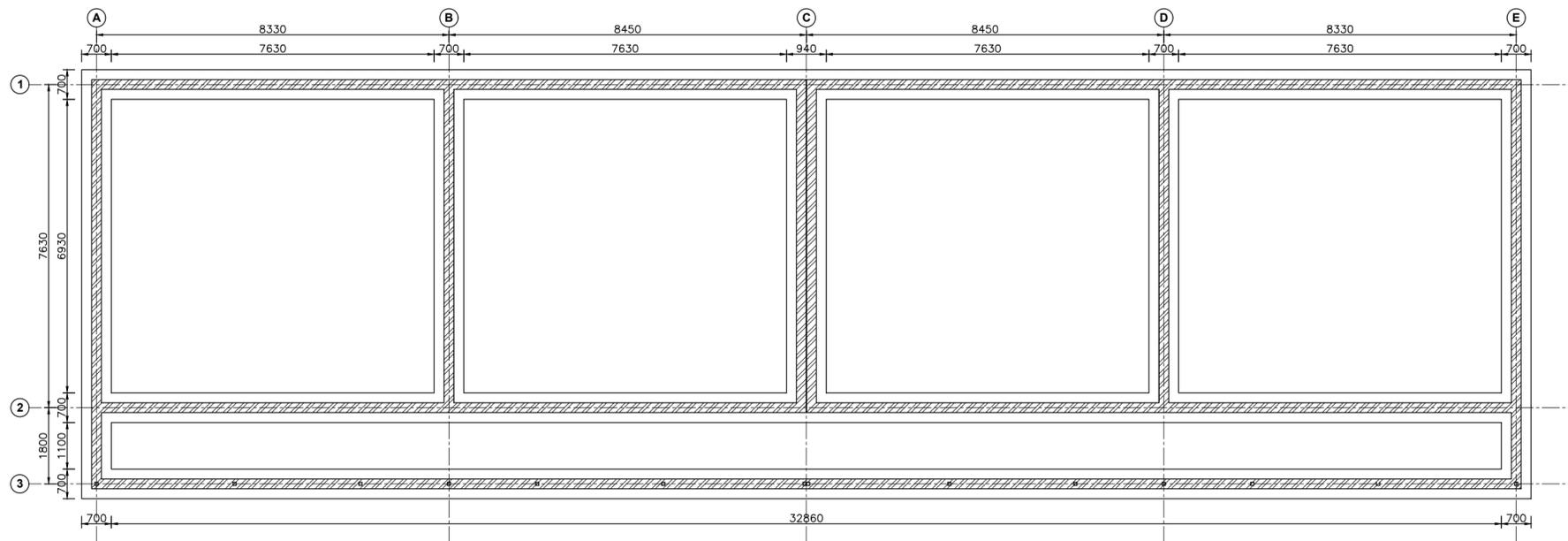
Tel: 060 311 2170  
Fax: 086 541 0992  
E-mail: lowflowsa@gmail.com

CHIEF ENGINEER (LDPW)	DATE
CONSULTING ENGINEER	DATE

CONTRACT NO.: LDPW.PROF/11026
ST PAULS SECONDARY SCHOOL
ADMINISTRATION BLOCK STRUCTURAL DETAIL

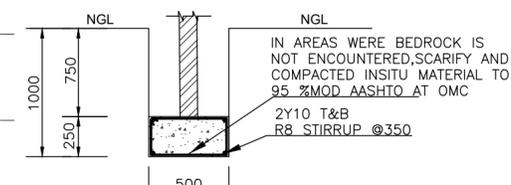
ISSUED FOR TENDER (Full Signature)	2016 / /	SHEET 1 OF 1
For Department of Public Works	2016 / /	SCALE: AS SHOWN
For Consultant	2016 / /	DRAWING NUMBER: STR-001-BOS-201/1
CONSULTANT DRAWING NUMBER: STR-001-BOS-201/1		STR-005-BOS-201/1





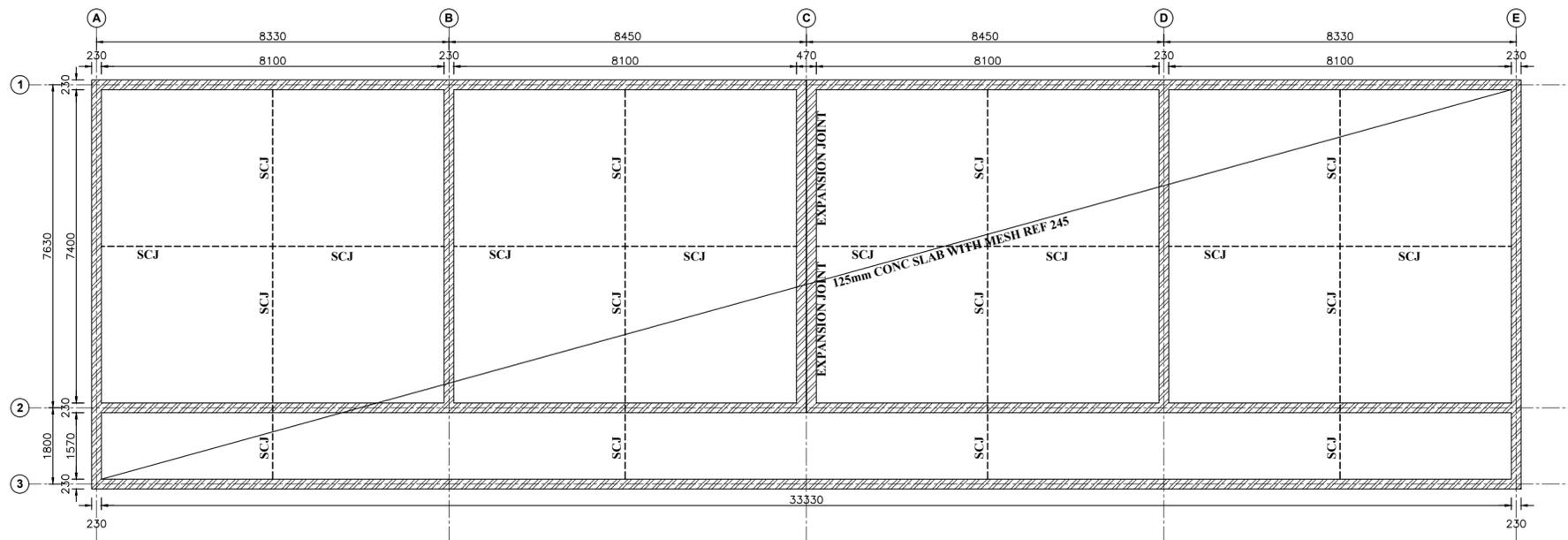
**FOUNDATION LAYOUT**

Scale 1:100



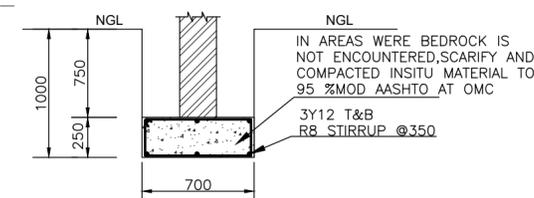
**110 WALL FOUNDATION DETAIL**

Scale 1:20



**GROUND LAYOUT**

Scale 1:100



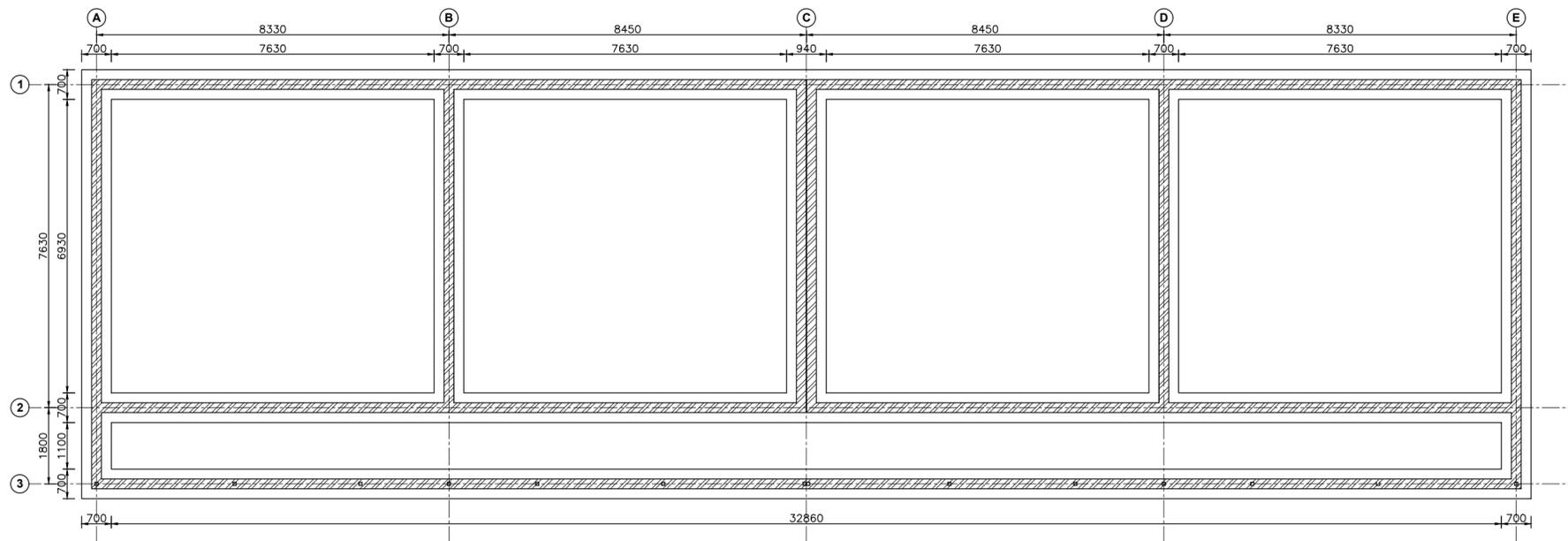
**220 FOUNDATION DETAIL**

Scale 1:20

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    - CONCRETE STRENGTH @ 28 DAYS:
      - STRIP FOUNDATION :30MPa
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      - SLABS AND BEAMS :30MPa
      - COLUMNS & BASES :30MPa
    - ALL REINFORCED CONCRETE WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE LATEST ISSUES OF SABS-0100 AND SABS-1200G WITH DEGREE OF ACCURACY II, WITH SPECIAL ATTENTION TO THE FOLLOWING:
      - A CONCRETE MIX DESIGN FOR EACH CLASS SHALL BE SUBMITTED TO THE ENGINEER BEFORE ANY CONCRETE IS CAST
      - CONCRETE TEST CUBES SHALL BE MADE IN SETS OF FOUR, WITH ONE CUBE TESTED AT THE AGE OF 7 DAYS FOR EARLY STRENGTH INDUCTION. THE OTHER THREE CUBES TESTED AT THE AGE OF 28 DAYS. ALL TEST RESULTS SHALL BE MADE AVAILABLE TO THE ENGINEER AS SOON AS THEY BECOME AVAILABLE.
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  - REINFORCEMENT:**
    - ALL HIGH TENSILE STEEL TO BE TYPE C, CLASS 2, GRADE 1 ACCORDING TO SABS 920, WITH A CHARACTERISTIC STRENGTH OF 450 MPa.
    - ALL REINFORCEMENT STEEL SHALL BE WIRE-BRUSHED AND KEPT CLEAN AND FREE OF ANY MILL-SCALE, RUST, OIL OR ANY OTHER DELETERIOUS COMPOUNDS.
    - WELDING OF REINFORCEMENT STEEL WILL NOT BE PERMITTED OTHER THAN SPECIFIED MESH.
    - LEGEND FOR POSITIONS OF REINFORCEMENT:
      - T1 HIGHEST OF THE TOP LAYERS
      - T2 SECOND HIGHEST OF THE TOP LAYERS
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    - ALL VISIBLE CORNERS ON FLOORS, RINGBEAMS, ETC. TO BE CHAMFERED 20X20MM UNLESS OTHERWISE SPECIFIED.
    - ALL VISIBLE CONCRETE SURFACES TO BE EXTRA SMOOTH AND SHUTTER JOINTS RUBBED WITH CARBORUNDUM BLOCKS.
  - CONCRETE CURING:**
    - ALL CONCRETE TO BE CURED BY KEEPING MOIST FOR AT LEAST 14 DAYS AFTER CASTING.
  - FOUNDATION:**
    - DEPTH OF ALL BASES AND STRIP FOOTINGS SHALL BE DETERMINED AND OBSERVED ON SITE BY ENGINEER PRIOR CONCRETING.
    - ALL COLUMN BASES SHALL BE CAST ON A BLINDING LAYER OF AT LEAST 50MM AND NOT MORE THAN 100MM THICK.
    - TOP LEVEL OF BLINDING TO BE MADE AVAILABLE TO THE ENGINEER IN ORDER TO AMEND REINFORCEMENT TO ACTUAL LEVELS IF NECESSARY.
  - STRUCTURAL STEELWORK:**
    - ALL STRUCTURAL STEEL WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200 (1983)
    - ALL DETAILING AND CONNECTIONS TO COMPLY WITH THE REQUIREMENTS OF SABS 0162 (1984 AS AMENDED 1986 & 1987)
    - ALL STRUCTURAL STEEL TO BE 350W ACCORDING TO SABS 1431.
    - ALL BOLTS, THREADED BAR AND HD BOLTS TO BE M16 GRADE 8.8 ACCORDING TO SABS 135.
    - COMPLETE WORKSHOP DRAWINGS OF ALL STEEL ELEMENTS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE MANUFACTURING COMMENCES.
  - CORROSION PROTECTION(STRUCTURAL STEEL)**
    - ALL SURFACES TO BE PAINTED MUST BE FREE OF MILL SCALE, CORROSION, GREASE, DUST ETC.
    - ALL STRUCTURAL STEELWORK TO BE CLEANED TO SA2.5 ACCORDING TO SIS 055900. ALL CLEANED SURFACES OF STRUCTURAL STEEL TO BE COATED WITH TWO LAYERS OF RED OXIDE ACCORDING TO SABS 312.
  - ASSEMBLY AND ALIGNMENT( STRUCTURAL STEEL)**
    - ALL STRUCTURAL MEMBERS MUST BE TEMPORARILY BRACED OR PROPPED DURING ERECTION, SUFFICIENT TO ENSURE TO ENSURE THE STABILITY OF THE STRUCTURE AT ALL TIME.
    - ALL STRUCTURAL MEMBERS MUST BE ALIGNED INTO FINAL POSITION BEFORE ANY BOLTS ARE TIGHTENED. NO STRUCTURAL ELEMENTS MUST BE HEATED, BEND OR DISTORTED TO ACCOMPLISH ASSEMBLY OR ALIGNMENT.
    - ALL STEEL STRUCTURES MUST BE APPROVED IN WRITING BY ENGINEER BEFORE ANY CLADDING IS FIXED.

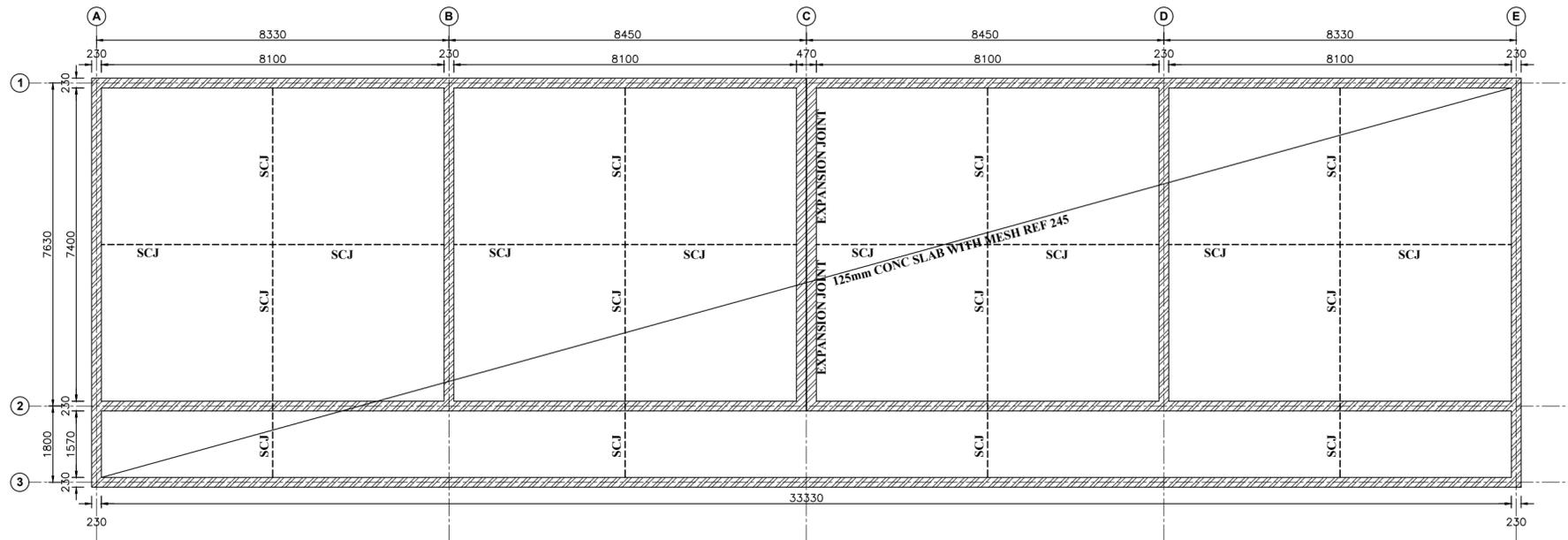
				DESIGNED BY	NTB			DEPARTMENT OF PUBLIC WORKS		CONTRACT NO.: LDPW.PROF/11026		ISSUED FOR TENDER	SHEET 1 OF 1	
				CHECKED BY	TM			The Head of department Limpopo Provincial Government Department of Public Works Private Bag X9490 Polokwane, 0700		ST PAULS SECONDARY SCHOOL		For Department of Public Works	SCALE:	
				DRAWN BY	NTB			Tel: 060 311 2170 Fax: 086 541 0992 E-mail: lowflowwsa@gmail.com		4 CLASSROOM BLOCK (3) STRUCTURAL DETAIL		For Consultant	AS SHOWN	
				CHECKED BY	TM							CONSULTANT DRAWING NUMBER:	DRAWING NUMBER:	
				APPROVED & ADOPTED BY	NTB							STR-002-BOS-201/1	STR-005-BOS-201/1	
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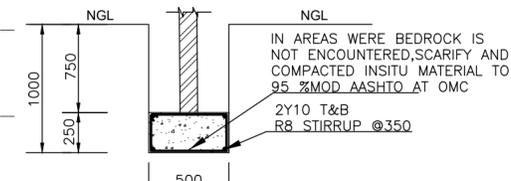
**FOUNDATION LAYOUT**

Scale 1:100



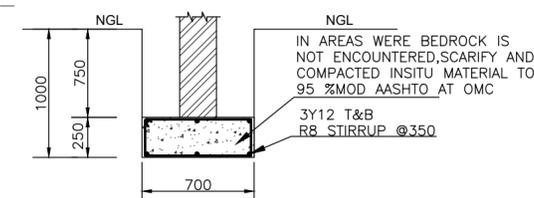
**GROUND LAYOUT**

Scale 1:100



**110 WALL FOUNDATION DETAIL**

Scale 1:20



**220 FOUNDATION DETAIL**

Scale 1:20

**GENERAL NOTES.**

1. THE ENGINEERING DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS AND ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER.
2. ALL LEVELS AND DIMENSIONS TO BE VERIFIED ON SITE PRIOR COMMENCEMENT OF ANY WORK, AND THE ENGINEER TO BE NOTIFIED IN CASE OF DISCREPANCIES.
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5. **CONCRETE:**
  - 5.1 ALL REINFORCED CONCRETE DESIGNED ACCORDING TO SABS 0100: PART 1-1980
  - 5.2 ALL CONCRETE WORK TO BE DONE ACCORDING TO SABS 0100: PART 2-1980
  - 5.3 CONCRETE STRENGTH @ 28 DAYS:
    - STRIP FOUNDATION :30MPa
    - SURFACE BED :25MPa
    - SLABS AND BEAMS :30MPa
    - COLUMNS & BASES :30MPa
  - 5.4 ALL REINFORCED CONCRETE WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE LATEST ISSUES OF SABS-0100 AND SABS-1200G WITH DEGREE OF ACCURACY II, WITH SPECIAL ATTENTION TO THE FOLLOWING:
    - i) A CONCRETE MIX DESIGN FOR EACH CLASS SHALL BE SUBMITTED TO THE ENGINEER BEFORE ANY CONCRETE IS CAST
    - ii) CONCRETE TEST CUBES SHALL BE MADE IN SETS OF FOUR, WITH ONE CUBE TESTED AT THE AGE OF 7 DAYS FOR EARLY STRENGTH INDUCTION. THE OTHER THREE CUBES TESTED AT THE AGE OF 28 DAYS. ALL TEST RESULTS SHALL BE MADE AVAILABLE TO THE ENGINEER AS SOON AS THEY BECOME AVAILABLE.
    - 5.5 PRIOR TO CONSTRUCTION OF EACH PHASE OF CONCRETE, THE CONTRACTOR SHALL GIVE WRITTEN NOTICE AND OBSERVE THE ENGINEER TO OBSERVE THE ALIGNMENT AND LEVEL OF ALL FORMWORK, REINFORCING STEEL AND WORKS TO BE CAST IN.
6. **REINFORCEMENT:**
  - 6.1 ALL HIGH TENSILE STEEL TO BE TYPE C, CLASS 2, GRADE 1 ACCORDING TO SABS 920, WITH A CHARACTERISTIC STRENGTH OF 450 MPa.
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  - 6.3 WELDING OF REINFORCEMENT STEEL WILL NOT BE PERMITTED OTHER THAN SPECIFIED MESH.
  - 6.4 LEGEND FOR POSITIONS OF REINFORCEMENT:
    - T1 HIGHEST OF THE TOP LAYERS
    - T2 SECOND HIGHEST OF THE TOP LAYERS
    - B1 LOWEST OF THE BOTTOM LAYERS
    - B2 SECOND LOWEST OF THE BOTTOM LAYER.
7. **FINISHES:**
  - 7.1 ALL VISIBLE CORNERS ON FLOORS, RINGBEAMS, ETC. TO BE CHAMFERED 20X20MM UNLESS OTHERWISE SPECIFIED.
  - 7.2 ALL VISIBLE CONCRETE SURFACES TO BE EXTRA SMOOTH AND SHUTTER JOINTS RUBBED WITH CARBORUNDUM BLOCKS.
8. **CONCRETE CURING:**
  - 8.1 ALL CONCRETE TO BE CURED BY KEEPING MOIST FOR AT LEAST 14 DAYS AFTER CASTING.
9. **FOUNDATION:**
  - 9.1 DEPTHS OF ALL BASES AND STRIP FOOTINGS SHALL BE DETERMINED AND OBSERVED ON SITE BY ENGINEER PRIOR CONCRETING.
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No	DATE	REVISION	CONSULT	DIR

DESIGNED BY	NTB
CHECKED BY	TM
DRAWN BY	NTB
CHECKED BY	TM
APPROVED & ADOPTED BY	NTB

**DEPARTMENT OF PUBLIC WORKS**

The Head of department  
Limpopo Provincial Government  
Department of Public Works  
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**LOWFLOW CONSTRUCTION & ENGINEERING**

Head Office  
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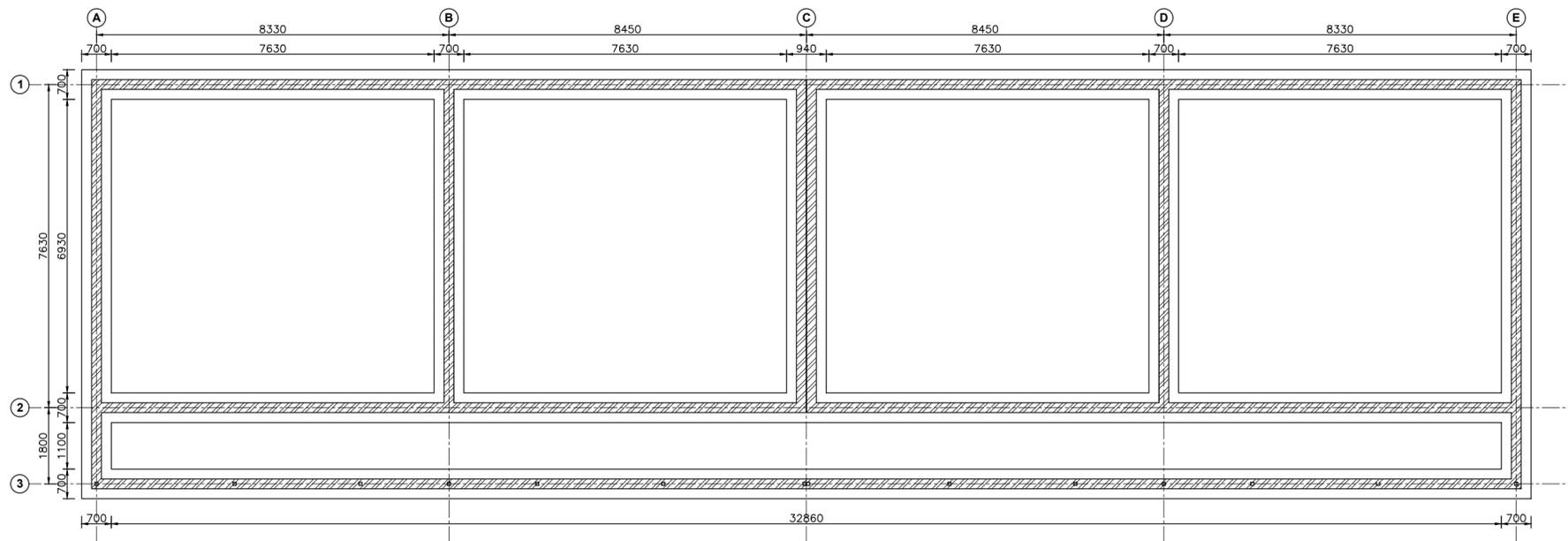
CHIEF ENGINEER (LDPW/EL)	DATE
CONSULTING ENGINEER	DATE

CONTRACT NO.: LDPW.PROF/11026

ST PAULS SECONDARY SCHOOL

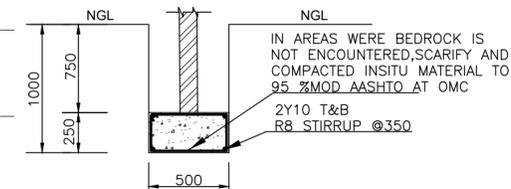
4 CLASSROOM BLOCK (5) STRUCTURAL DETAIL

ISSUED FOR TENDER (Full Signature)	2016 / /	SHEET 1 OF 1
For Department of Public Works	2016 / /	SCALE: AS SHOWN
For Consultant	2016 / /	DRAWING NUMBER: STR-002-BOS-201/1
CONSULTANT DRAWING NUMBER: STR-002-BOS-201/1	2016 / /	STR-005-BOS-201/1



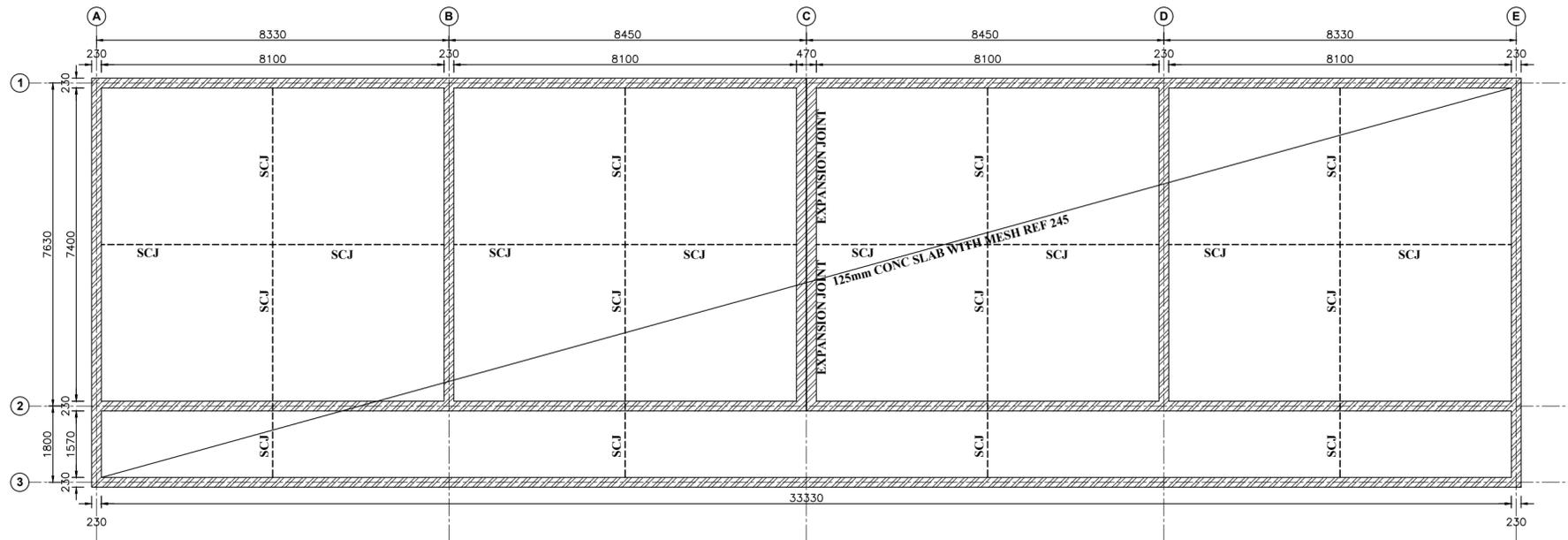
**FOUNDATION LAYOUT**

Scale 1:100



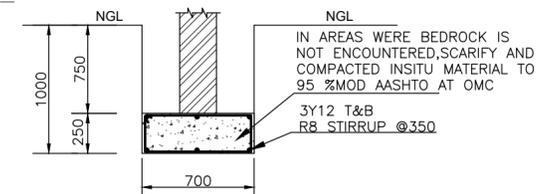
**110 WALL FOUNDATION DETAIL**

Scale 1:20



**GROUND LAYOUT**

Scale 1:100



**220 FOUNDATION DETAIL**

Scale 1:20

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				DESIGNED BY	NTB			DEPARTMENT OF PUBLIC WORKS		CONTRACT NO.: LDPW.PROF/11026		ISSUED FOR TENDER	SHEET 1 OF 1	
				CHECKED BY	TM			The Head of department Limpopo Provincial Government Department of Public Works Private Bag X9490 Polokwane, 0700		ST PAULS SECONDARY SCHOOL		For Department of Public Works	SCALE:	
				DRAWN BY	NTB			Tel: 060 311 2170 Fax: +27 (0)15 284 7030		4 CLASSROOM BLOCK (6) STRUCTURAL DETAIL		For Consultant	AS SHOWN	
				CHECKED BY	TM			E-mail: lowflowwsa@gmail.com				CONSULTANT DRAWING NUMBER:	DRAWING NUMBER:	
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No	DATE	REVISION	CONSULT	DIR					CHIEF ENGINEER (LDPW)	DATE				
								CONSULTING ENGINEER		DATE				

