



**LIMPOPO**

PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

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

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

**BID NUMBER: LDPWRI-B/20091**

**PROVISIONAL  
BILL OF QUANTITIES**

For the

**DEMOLITION OF 2 X 5 CLASSROOM BLOCKS, RENOVATIONS OF 2 X 4  
CLASSROOM BLOCKS, CONSTRUCTION OF LARGE ADMINI  
STRATION BLOCK, 2 X 2 CLASSROOM BLOCKS, 2 X 4-SEATS WATER-  
BORNE TOILET BLOCKS, MULTIPURPOSE CLASSROOM BLOCK AND  
EXTERNAL WORKS (SEPTIC TANK, WALKWAYS, PARKING BAYS AND  
FENCE) AT DIPHUTI PRIMARY SCHOOL IN THE OAKS, MARULENG IN  
MOPANI DISTRICT.**

For the

**DEPARTMENT OF EDUCATION,  
LIMPOPO PROVINCE**

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



**CIDB CLASS GRADING 7GB OR HIGHER**

**BID NUMBER: LDPWRI-B/20091**

**DEMOLITION OF 2 X 5 CLASSROOM BLOCKS, RENOVATIONS OF 2 X 4 CLASSROOM BLOCKS, CONSTRUCTION OF LARGE ADMINISTRATION BLOCK, 2 X 2 CLASSROOM BLOCKS, 2 X 4-SEATS WATERBORNE TOILET BLOCKS, MULTIPURPOSE CLASSROOM BLOCK AND EXTERNAL WORKS (SEPTIC TANK, WALKWAYS, PARKING BAYS AND FENCE) AT DIPHUTI PRIMARY SCHOOL IN THE OAKS, MARULENG IN MOPANI DISTRICT.**

**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**

# CONTENTS

PART A: SPECIAL NOTES TO BIDDERS .....	1
PART T1: TENDERING PROCEDURE.....	14
<b>T1.1 TENDER NOTICE AND INVITATION TO TENDER</b> .....	14
<b>T1.2 TENDER DATA</b> .....	15
<b>A. BID EVALUATION STAGE 3 - FUNCTIONALITY</b> .....	21
PART T2: RETURNABLE DOCUMENTS.....	29
<b>T2.1: LIST OF RETURNABLE DOCUMENTS</b> .....	30
<b>T2.2: RETURNABLE SCHEDULE</b> .....	32
SBD1: INVITATION TO BID.....	33
CERTIFICATE OF AUTHORITY .....	36
<b>A. CERTIFICATE FOR COMPANY</b> .....	36
<b>B. CERTIFICATE OF PARTNERSHIP</b> .....	36
<b>C. CERTIFICATE FOR JOINT VENTURE</b> .....	37
<b>D. CERTIFICATE FOR THE SOLE PROPRIETOR</b> .....	37
<b>E. CERTIFICATE FOR CLOSE CORPORATION</b> .....	37
<b>F. BROAD-BASED BLACK ECONOMIC EMPOWERMENT</b> .....	43
SBD 4: DECLARATION OF INTEREST .....	46
SBD 6.1: REFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017.....	49
SBD 6.2: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT .....	55
<b>LOCAL CONTENT DECLARATION</b> .....	58
<b>GUIDANCE DOCUMENT FOR THE CALCULATION OF LOCAL CONTENT</b> .....	60
<b>TREASURY DESIGNATED SECTOR</b> .....	64
<b>ANNEX C: LOCAL CONTENT DECLARATION – SUMMARY SCHEDULE</b> .....	77
SBD 8: DECLARATION OF BIDDER’S PAST SUPPLY CHAIN MANAGEMENT PRACTICES ....	80
SBD 9: CERTIFICATE OF INDEPENDENT BID DETERMINATION.....	82
DECLARATION OF SUBCONTRACTING ARRANGEMENTS.....	85

TABLE OF CONTENT

---

1.	SUBCONTRACTING AS A CONDITION OF TENDER .....	86
2.	SUBCONTRACTING AFTER AWARD OF TENDER .....	87
3.	SCHEDULE OF PROPOSED SUBCONTRACTING WORK .....	88
SAFCEC JOINT VENTURE AGREEMENT .....		89
1.	FORMATION OF JOINT VENTURE .....	90
2.	OBJECT AND MOTIVATION .....	90
3.	PROFITS AND LOSSES .....	90
4.	DURATION .....	90
5.	EXCLUSIVITY .....	91
6.	PRE-CONTRACT COSTS .....	91
7.	MANAGEMENT COMMITTEE .....	91
8.	POWERS OF THE MANAGEMENT COMMITTEE AND DIRECTION OF THE PROJECT MANAGER.....	92
9.	THE EXECUTIVE BOARD .....	93
10.	PERSONNEL .....	93
11.	FINANCING .....	94
12.	ACCOUNTS .....	95
14.	BREACH .....	96
15.	DISPUTES .....	97
16.	ARBITRATION .....	97
17.	CONFIDENTIALITY .....	98
18.	ASSIGNMENT .....	98
19.	GENERAL .....	98
THE CONTRACT .....		101
PART C1: AGREEMENT AND CONTRACT DATA .....		102
C1.1. FORM OF OFFER AND ACCEPTANCE .....		103
C2    CONTRACT DATA .....		106
PART C3: PRICING DATA .....		107
C3.1 PRICING INSTRUCTION .....		108
PART C4: PROVISIONAL BILLS OF QUANTITIES .....		109
C4.1 PRELIMINARIES .....		110

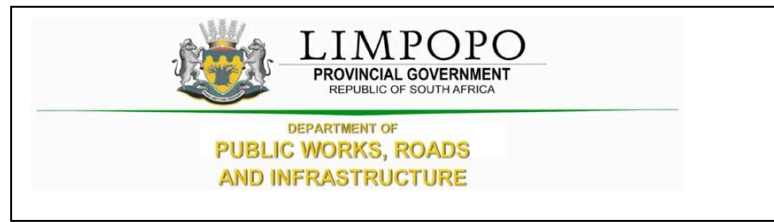
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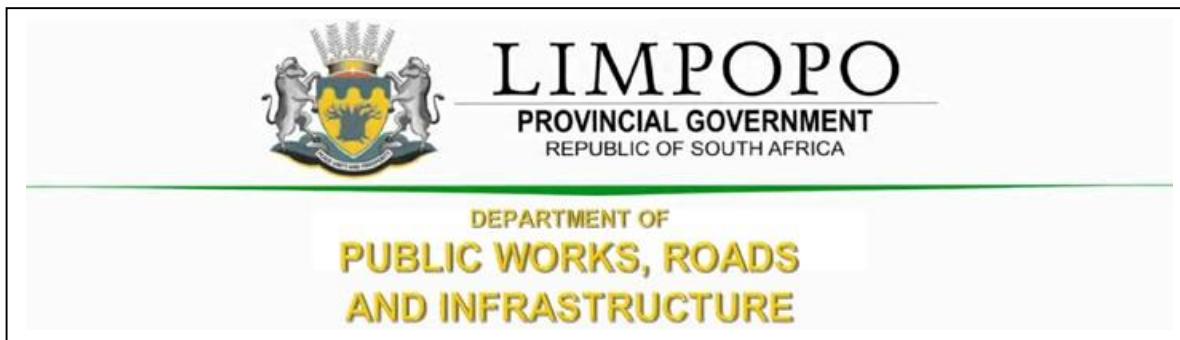
**TABLE OF CONTENT**

---

C4.2 BUILDING WORKS .....	151
C4.3 CIVIL WORKS .....	413
C4.4 ELECTRICAL WORKS.....	361
PART C5: SCOPE OF WORKS .....	438
C5.1 SCOPE OF WORKS.....	455
PART C6: EPWP INFRASTRUCTURE GUIDELINE 2015 .....	456
PART C6: EPWP INFRASTRUCTURE GUIDELINE 2015.....	456
PART C6.1: DATA COLLECTION TOOL.....	536
PART C7: SITE INFORMATION AND DRAWINGS .....	537
PART C7.1: SITE INFORMATION.....	538
PART C7.2: DRAWINGS.....	539



**PART A: SPECIAL NOTES TO BIDDERS**



**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:**

**IDC Architects**

10<sup>th</sup> Floor, Suite 1002  
Sandton Eye, Cnr. Rivonia Road & West Street  
Sandton, Johannesburg, 2196  
Tel: 011 234 8141 Fax: 086 515 2854

**Contact:**

Name: Mr. Bunmi Ilori– 082 900 8288  
Email: [ilor1@icloud.com](mailto:ilor1@icloud.com)

**Quantity Surveyor:**

**NDIDALI Quantity Surveyors**

Address: 79 Voortrekker Street, Polokwane, 0699  
Tel: 015 297 0301 Fax: 015 297 0341

**Contact:**

Name: Mr. Emmanuel Nemamilwe– 082 458 9680  
Email: [manu@ndidaliqs.co.za](mailto:manu@ndidaliqs.co.za)

**SPECIAL NOTES TO TENDERERS**

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**Civil Engineers:**

**Muteo Consulting Engineers**

39 Grobler Street

Polokwane

0699

Tel: 015 291 4065 Fax: 015 4043

**Contact:**

Name: Mr. Richard Thubakgale – 060 793 7514

Email: [richardT@muteo.co.za](mailto:richardT@muteo.co.za)

**Electrical Engineers:**

**MED-TECH Engineers**

1283 De VilleboisMareuil Drive

Morelela Park, Pretoria

0181

Tel: 012 997 3676 Fax: 086 403 3719

**Contact:**

Name: Gift Mphefu – 083 358 6522

Email: [giftm@med-techengineers.com](mailto:giftm@med-techengineers.com)

**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.

**SPECIAL NOTES TO TENDERERS**

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- 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 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.

**SPECIAL NOTES TO TENDERERS**

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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 the as well as related services 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 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**

The project is located at The Oaks, Maruleng in Mopani District.

**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.

**SPECIAL NOTES TO TENDERERS**

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**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 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.

**SPECIAL NOTES TO TENDERERS**

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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
- 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.



**SPECIAL NOTES TO TENDERERS**

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**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;

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.

**SPECIAL NOTES TO TENDERERS**

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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 not be conducted due to COVID-19 regulations.** 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 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.

**SPECIAL NOTES TO TENDERERS**

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**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 18 months (exclusive of builder's holiday) from the date of site handover.

**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.

**SPECIAL NOTES TO TENDERERS**

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- Cleaning of surfaces and shared Equipment's.
- Shift arrangements.
- Managing sick employees.
- Monitoring systems must be in place to ensure compliance with safety protocols.
- Contactor 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.

**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.

**SPECIAL NOTES TO TENDERERS**

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**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 Demolition of 2 x 5 Classroom Blocks, Renovations of 2 x 4 Classroom Blocks, Construction of Large Administration Block, 2 x 2 Classroom Blocks, 2 x 4-Seats Water-Borne Toilet Blocks, Multipurpose Classroom Block and External Works (Septic Tank, Walkways, Parking Bays and Fence) At Diphuti Primary School in The Oaks, Maruleng in Mopani District.

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 Diphuti Primary School in the Oaks, Maruleng in Mopani District.

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



**T1.2TENDER 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 PartC1: Agreements and contract data</b> C1.1 Form of offer and acceptance C1.2 Contract data</p> <p><b>The Contract PartC3: Pricing data</b> C3.1 Pricing instructions</p> <p><b>The Contract PartC4: Provisional Bills of Quantities</b> C4.1 Preliminaries C4.2 Building Works C4.3 Civil Works C4.5 Electrical Installation</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 Diphuti Primary School in the Oaks, Maruleng in Mopani District.</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)</li> <li>(iii) Functionality</li> <li>(iv) Price and Preference (BBBEE)</li> </ul>

T1.2TENDER 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)**

1.2 A bid will be disqualified if the Local Content Declaration Certificate and the Annexure C (Local Content Declaration: Summary Schedule) are not submitted or fully completed and signed as part of the bid documentation.

1.3 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)

1.3.1 Evaluation in terms of the stipulated minimum threshold for local production and content. LDPWRI-B/20091 will be evaluated in terms of minimum thresholds for local content stipulated in the LDPWRI-B/20091 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.

1.3.2 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.

1.3.3 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.

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/20091**.

**TENDER EVALUATION CRITERIA AND WEIGHTINGS**

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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%underfunctionality to qualify for final evaluation.**

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). Organogram, CVs, certified copies of professional registration 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>Relevant experience in general building projects</p> <ul style="list-style-type: none"> <li>• More than 5 years' experience = 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>Relevant experience in general building projects</p> <ul style="list-style-type: none"> <li>• More than 5 years' experience = 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 the South African Council for Project and Construction Management Professions (SACPCMP) as a Construction Health and Safety Officer / Construction Health and Safety Manager= 5</li> <li>• Degree in built environment = 3</li> <li>• National Diploma in Built environment=1</li> </ul> <p>Relevant experience in general building projects</p> <ul style="list-style-type: none"> <li>• More than 5 years' experience = 5</li> <li>• Between 2 and 5 years' experience = 3</li> <li>• Less than 2 years = 1</li> </ul>	<p style="text-align: center;">30</p>



**TENDER EVALUATION CRITERIA AND WEIGHTINGS**

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**Table 2 Details of key staff.**

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

TENDER EVALUATION CRITERIA AND WEIGHTINGS

Experience in similar projects in the last 10 years	Weighting
<p>Number of projects completed within CIDB grade 7 GB 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 CIDB grade 7 GB or higher= 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>• <b>Project Proposal/Method Statement</b>                      The Bidder does not cover any aspect of the scope of work or no information submitted/attached = 0                       The bidder does not deal with the critical aspects of the project associated with the scope of work =5                       The bidder addresses the scope of work, provides a methodology to deal with the critical aspects of the project associated with the works =10</li> <li>• <b>Project Schedule/programme</b> (acceptable scheduling software)                       Programme not submitted =0                       Programme not aligned to Bill of Quantities (BOQ) = 2                       Programme is aligned to the Bill of Quantities (BOQ) =5</li> <li>• <b>Cashflow projections</b>                       Cashflow not submitted =0                       The cash flow projections not aligned to the programme and BOQ=2                       The cash flow projections, programme and BOQ are aligned=5</li> </ul>	<p>20</p>

**TENDER EVALUATION CRITERIA AND WEIGHTINGS**

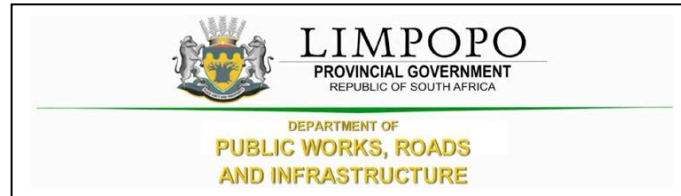
Safety, Health and Environmental Plan (SHEQ)	Weighting
<p>The Bidder does not cover any aspect of the scope of work or no information submitted/attached =0</p>	
<p>The bidder does not address safety and health issues related to the works – i.e. there is no cognisance to the safety of the learners, teachers and workers and the impact of their work on the environment=5</p>	10
<p>The safety, health and environment approach provided deals with the critical aspects of the project. 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>	
<p><b>Total</b></p>	<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 and mandatory requirements 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/20091**

**PART T2: RETURNABLE DOCUMENTS**

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**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>.....</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 B: TERMS AND CONDITIONS FOR BIDDING**

<b>1. BID SUBMISSION:</b>	
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.	
<b>2. TAX COMPLIANCE REQUIREMENTS</b>	
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.	
<b>3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS</b>	
3.1. IS THE BIDDER A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	<input type="checkbox"/> YES <input type="checkbox"/> NO
3.2. DOES THE BIDDER HAVE A BRANCH IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
3.3. DOES THE BIDDER HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
3.4. DOES THE BIDDER HAVE ANY SOURCE OF INCOME IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN, IT IS NOT A REQUIREMENT TO 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.

**Section 1: Enterprise Details**

<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>	

**Section 2: Particulars of companies and close corporations**

<b>Company / Close Corporation registration number</b>	
--	--

**Section 3: SARS Information**

<b>Tax reference number</b>	
<b>VAT registration number:</b>	<i>State Not Registered if not registered for VAT</i>

**Section 4: CIDB registration number**

**Section 5: National Treasury Central Supplier Database**

<b>Supplier number</b>	
<b>Unique registration reference number</b>	

**Section 6: Particulars of principals**

**principal:** 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).

Full name of the principal	Identity number	Personal tax reference number

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 months

\*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:

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

**3 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, 2017.**

### 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
PRICE	
B-BBEE STATUS LEVEL OF CONTRIBUTOR	
<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-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
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:

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

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		NO	
-----	--	----	--

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.

**BID NUMBER: LDPWRI-B/20091**

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.

## LOCAL CONTENT DECLARATION

(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:



**BID NUMBER: LDPWRI-B/20091**

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						
Item	Section	Bill No	Description	Unit	Qty	Local Content Threshold
<b>Reinforcement (Foundations)</b>						
25	3	1	Ref. S395 fabric reinforcement	m <sup>2</sup>	564	100%
14	4	1	Ref. S395 fabric reinforcement	m <sup>2</sup>	258	100%
21	5	1	Ref. S395 fabric reinforcement	m <sup>2</sup>	1 349	100%
18	6	1	Ref. S395 fabric Reinforcement	m <sup>2</sup>	83	100%
21	7	1	Ref. S395 fabric Reinforcement	m <sup>2</sup>	150	100%
<b>Reinforcement (C, F&amp;R)</b>						
24	3	1	16mm Diameter Bars High-Tensile steel	t	0.58	100%
11	3	1	Ref. S245 fabric reinforcement	m <sup>2</sup>	431	100%
20	4	1	16mm Diameter Bars Mild steel	t	0.58	100%
8	4	2	Ref. S245 fabric Reinforcement	m <sup>2</sup>	631	100%
20	5	1	16mm Diameter Bars High-Tensile steel	t	1.59	100%
8	5	2	Ref. S245 fabric Reinforcement	m <sup>2</sup>	1 349	100%
6	6	2	Ref. S245 fabric Reinforcement	m <sup>2</sup>	24	100%
20	7	1	16mm Diameter Bars High-Tensile steel	t	0.42	100%
7	7	2	Ref. S245 fabric Reinforcement	m <sup>2</sup>	210	100%
<b>Brick Reinforcement (Foundations)</b>						
30	3	1	150mm Brick Reinforcement	m	3 814	100%
25	4	1	150mm Brick Reinforcement	m	1 910	100%
25	5	1	150mm Brick Reinforcement	m	6 299	100%
21	6	1	150mm Brick Reinforcement	m	562	100%
24	7	1	150mm Brick Reinforcement	m	82	100%
<b>Brick Reinforcement (Masonry)</b>						
6	3	3	75mm Brick Reinforcement	m	1 572	100%
7	3	3	150mm Brick Reinforcement	m	2638	100%
4	4	3	75mm Brick Reinforcement	m	788	100%

5	4	3	150mm Brick Reinforcement	m	2 669	100%
4	5	3	75mm Brick Reinforcement	m	459	100%
5	5	3	150mm Brick Reinforcement	m	6 938	100%
4	6	3	75mm Brick Reinforcement	m	286	100%
5	6	3	150mm Brick Reinforcement	m	487	100%
3	7	3	75mm Brick Reinforcement	m	123	100%
4	7	3	150mm Brick Reinforcement	m	2 138	100%

Item	Section	Bill No	Description	Unit	Qty	Local Content Threshold
<b>Fabricated Structural Steel (Ironmongery)</b>						
31	3	1	Code 630 Padlock	No	11	100%
2	5	8	Code 630 Padlock	No	4	100%
33	3	1	Door Stopper	No	11	100%
2	4	8	Door Stopper	No	14	100%
4	5	8	Door Stopper	No	4	100%
5	5	8	19mm Chromium Plated towel rail	No	4	100%
35	3	1	Pinning Boards	No	22	100%
4	4	8	Pinning Boards	No	5	100%
<b>Door Frames</b>						
1	4	9	Door Frames size 813 x 2032	No	14	100%
3	4	9	Door Frames size 1613 x 2032	No	1	100%
1	5	9	Door Frames size 813 x 2032	No	6	100%
2	3	9	Door Frames size 914 x 2032	No	11	100%
2	5	9	Door Frame size 914 x 2032	No	3	100%
<b>Gutters, Downpipe and Lauders</b>						
1	4	12	125 x 100mm seamless eaves gutters	m	75	70%
2	4	12	Extra over eaves gutter for stopped ends	No	4	70%
3	4	12	Extra over eaves gutter for angle	No	4	70%
4	4	12	Extra over eave gutter for outlet for 100mm pipe	No	5	70%
5	4	12	100mm Diameter downpipe	m	12	70%
6	4	12	Extra over downpipe for eaves or plinths offset	No	5	70%
7	4	12	Extra over downpipe for Shoe	No	5	70%
1	5	12	125 x 100mm seamless eaves gutters	No	75	70%
2	5	12	Extra over eaves gutter for stopped ends	No	4	70%
3	5	12	Extra over eaves gutter for angle	No	4	70%
4	5	12	Extra over eave gutter for outlet for 100mm pipe	No	5	70%
5	5	12	100mm Diameter downpipe	No	12	70%

6	5	12	Extra over downpipe for eaves or plinths offset	No	5	70%
7	5	12	Extra over downpipe for Shoe	No	5	70%
<b>Valves Products and Acutors</b>						
<b>PVC Pipes, etc</b>						
8	4	12	110mm uPVC pipe	m	21	70%
9	4	12	110mm uPVC pipe	m	26	70%
10	4	12	Extra over uPVC pipe for 110mm bend	No	5	70%
11	4	12	Extra over uPVC pipe for 110mm junction	No	2	70%
12	4	12	Extra over uPVC pipe for 110mm Pan connector	No	2	70%
13	4	12	Extra over uPVC pipe for 110mm double junction	No	2	70%
8	5	12	110mm uPVC pipe	m	8	70%
9	5	12	50mm uPVC pipe	m	1	70%
<b>Taps, Valves</b>						
28	4	12	110mm "GI Two way" vent valve	No	25	70%
44	3	1	30m Plastic Hose reel	No	3	70%
45	3	1	9kg DCP Fire Extinguisher	No	11	70%
31	4	12	Bib tap	No	1	70%
15	5	12	Angle regulating Valve	No	10	70%
59	4	12	30m Plastic Hose reel	No	1	70%
60	4	12	9kg DCP Fire Extinguisher	No	3	70%
<b>Electrical Cables</b>						
<b>PVC Cables</b>						
2.1		2	6mm <sup>2</sup> x 4 Core Cu Cables	m	100	90%
2.2		2	16mm <sup>2</sup> x 4 Core Cu Cables	m	50	90%
2.3		2	70mm x 4 Core Cu Cables	m	150	90%
4.3		2	2,5mm <sup>2</sup> x 4 Core Cu Cables	m	300	90%
		2	4mm <sup>2</sup> x 4 Core Cu Cables	m	300	90%
4.4		2	2.5mm <sup>2</sup> x 4 Core Cu Cables	m	150	90%
		2	4mm <sup>2</sup> x 4 Core Cu Cables	m	200	90%
2.1		3	6mm <sup>2</sup> x 4 Core Cu Cables	m	85	90%
2.3		3	70mm x 4 Core Cu Cables	m	85	90%
4.3		3	2,5mm <sup>2</sup> x 4 Core Cu Cables	m	600	90%
		3	4mm <sup>2</sup> x 4 Core Cu Cables	m	700	90%
4.4		3	2,5mm <sup>2</sup> x 4 Core Cu Cables	m	300	90%
		3	4mm <sup>2</sup> x 4 Core Cu Cables	m	350	90%
2.1		4	6mm <sup>2</sup> x 4 Core Cu Cables	m	315	90%
2.3		4	70mm x 4 Core Cu Cables	m	315	90%
4.3		4	2,5mm <sup>2</sup> x 4 Core Cu Cables	m	1500	90%

**BID NUMBER: LDPWRI-B/20091**

		4	4mm <sup>2</sup> x 4 Core Cu Cables	m	2000	90%
4.4		4	2,5mm <sup>2</sup> x 4 Core Cu Cables	m	750	90%
		4	4mm <sup>2</sup> x 4 Core Cu Cables	m	1000	90%
4.3		5	2,5mm <sup>2</sup> x 4 Core Cu Cables	m	600	90%
		5	4mm <sup>2</sup> x 4 Core Cu Cables	m	800	90%
4.4		5	2,5mm <sup>2</sup> x 4 Core Cu Cables	m	300	90%
		5	4mm <sup>2</sup> x 4 Core Cu Cables	m	400	90%
<b>Cement (Building and Civil)</b>						
			Cement	ton	84	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 columnC18. 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 SATS1286:2011.

**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 precommercial 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.



**ANNEX C: LOCAL CONTENT DECLARATION – SUMMARY SCHEDULE**

## Annex C: Local Content Declaration - Summary Schedule

### Local Content Declaration - Summary Schedule

(C1)	<b>Tender No.</b>	LDPWRIT-B20091			
(C2)	<b>Tender description:</b>	Diphuti Primary School			
(C3)	<b>Designated product(s)</b>				
(C4)	<b>Tender Authority:</b>				
(C5)	<b>Tendering Entity name:</b>	Diphuti Primary School			
(C6)	<b>Tender Exchange Rate:</b>	Pula <input style="width: 50px;" type="text"/>	EU <input style="width: 50px;" type="text"/>	GBP <input style="width: 50px;" type="text"/>	
(C7)	<b>Specified local content %</b>				

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

		Calculation of local content					Tender summary					
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)	Unit	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C16)	(C17)	(C18)	(C19)
25-3-1	Ref. S395 Fabric Reinforcement							m2	564			
14-4-1	Ref. S395 Fabric Reinforcement							m2	258			
21-5-1	Ref. S395 Fabric Reinforcement							m2	1 349			
18-6-1	Ref. S395 Fabric Reinforcement							m2	83			
21-7-1	Ref. S395 Fabric Reinforcement							m2	150			
24-3-1	16mm Diameter Bars High Tensile Steel							t	0,58			
11-3-1	Ref. S245 Fabric Reinforcement							m2	431,00			
20-4-1	16mm Diameter Bars High Tensile Steel							t	0,58			
8-4-2	Ref. S245 Fabric Reinforcement							m2	631,00			
20-5-1	16mm Diameter Bars High Tensile Steel							t	1,59			
8-5-2	Ref. S245 Fabric Reinforcement							m2	1 349,00			
6-6-2	Ref. S245 Fabric Reinforcement							m2	24,00			
20-7-1	16mm Diameter Bars High Tensile Steel							t	0,42			
7-7-2	Ref. S245 Fabric Reinforcement							m2	210,00			
30-3-1	150mm Bick Reinforcement							m	3 814			
25-4-1	150mm Bick Reinforcement							m	1 910			
25-5-1	150mm Bick Reinforcement							m	6 299			
21-6-1	150mm Bick Reinforcement							m	562			
24-7-1	150mm Bick Reinforcement							m	82			
<b>(C20) Total tender value</b>												
<b>(C21) Total Exempt imported content</b>												
<b>(C22) Total Tender value net of exempt imported content</b>												
<b>(C23) Total Imported content</b>												
<b>(C24) Total local content</b>												
<b>(C25) Average local content % of tender</b>												

**Signature of tenderer from Annex B**

\_\_\_\_\_

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

## Annex C: Local Content Declaration - Summary Schedule

### Local Content Declaration - Summary Schedule

(C1) **Tender No.** LDPWRIT-B20091  
 (C2) **Tender description:** Diphuti Primary School  
 (C3) **Designated product(s)**  
 (C4) **Tender Authority:**  
 (C5) **Tendering Entity name:** Diphuti Primary School  
 (C6) **Tender Exchange Rate:** Pula  EU  GBP   
 (C7) **Specified local content %**

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

		Calculation of local content					Tender summary					
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)	Unit	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C16)	(C17)	(C18)	(C19)
6-3-3	75mm Brick Reinforcement							m	1 572			
7-3-3	150mm Brick Reinforcement							m	2 638			
4-4-3	75mm Brick Reinforcement							m	788			
5-4-3	150mm Brick Reinforcement							m	2 669			
4-5-3	75mm Brick Reinforcement							m	459			
5-5-3	150mm Brick Reinforcement							m	6 938			
4-6-3	75mm Brick Reinforcement							m	286			
5-6-3	150mm Brick Reinforcement							m	487			
3-7-3	75mm Brick Reinforcement							m	123			
4-7-3	150mm Brick Reinforcement							m	2 138			
22-3-8	Door Stopper							No	23			
3-3-8	19mm Chromim plated towel rail							No	7			
4-3-8	Pinning Boards							No	11			
2-4-8	Code 630 Padlock							No	8			
22-4-8	Door Stopper							No	40			
3-4-8	19mm Chromim plated towel rail							No	8			
4-4-8	Pinning Boards							No	8			
2-5-8	Code 630 Padlock							No	16			
4-5-8	Door Stopper							No	32			
5-5-8	Pinning Boards							No	16			
2-6-8	Code 630 Padlock							No	2			
4-6-8	Door Stopper							No	11			
5-6-8	19mm Chromim plated towel rail							No	5			
2-7-8	Code 630 Padlock							No	1			
4-7-8	Door Stopper							No	1			
5-7-8	Pinning Boards							No	2			

**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

**Annex C: Local Content Declaration - Summary Schedule**

**Local Content Declaration - Summary Schedule**

(C1) **Tender No.** LDPWRIT-B20091  
 (C2) **Tender description:** Diphuti Primary School  
 (C3) **Designated product(s)**  
 (C4) **Tender Authority:**  
 (C5) **Tendering Entity name:** Diphuti Primary School  
 (C6) **Tender Exchange Rate:** Pula  EU  GBP   
 (C7) **Specified local content %**

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

Tender item no's	List of items	Calculation of local content					Tender summary					
		Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Unit	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C16)	(C17)	(C18)	(C19)
1-3-9	Door Frames size 813 x 2032							No	23			
1-4-9	Door Frames size 813 x 2032							No	16			
7-5-9	Door Frames size 813 x 2032							No	16			
1-6-9	Door Frames size 813 x 2032							No	9			
1-7-9	Door Frames size 813 x 2032							No	1			
1-3-12	125 x 100mm seamless eaves gutters							m	125			
2-3-12	Extra over gutter for stopped end							No	6			
3-3-12	Extra over eaves gutter for angle							No	6			
4-3-12	Extra over eaves gutter for outlet for 100mm pipe							No	8			
5-3-12	100mm Diameter downpipe							m	21			
6-3-12	Extra over downpipe for stopped ends							No	8			
7-3-12	Extra over downpipe for shoe							No	8			
1-4-12	125 x 100mm seamless eaves gutters							m	148			
2-4-12	Extra over gutter for stopped end							No	12			
3-4-12	Extra over eaves gutter for angle							No	12			
4-4-12	Extra over eaves gutter for outlet for 100mm pipe							No	20			
5-4-12	100mm Diameter downpipe							m	52			
6-4-12	Extra over downpipe for stopped ends							No	20			
7-4-12	Extra over downpipe for shoe							No	8			
1-5-12	125 x 100mm seamless eaves gutters							m	500			
2-5-12	Extra over gutter for stopped end							No	24			
3-5-12	Extra over eaves gutter for angle							No	24			
4-5-12	Extra over eaves gutter for outlet for 100mm pipe							No	32			
5-5-12	100mm Diameter downpipe							m	83			
6-5-12	Extra over downpipe for stopped ends							No	32			
7-5-12	Extra over downpipe for shoe							No	32			

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 \_\_\_\_\_

### Annex C: Local Content Declaration - Summary Schedule

#### Local Content Declaration - Summary Schedule

(C1) **Tender No.** LDPWRIT-B20091  
 (C2) **Tender description:** Diphuti Primary School  
 (C3) **Designated product(s)**  
 (C4) **Tender Authority:**  
 (C5) **Tendering Entity name:** Diphuti Primary School  
 (C6) **Tender Exchange Rate:** Pula  EU  GBP   
 (C7) **Specified local content %**

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

Tender item no's	List of items	Calculation of local content				Tender summary						
		Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Unit	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C16)	(C17)	(C18)	(C19)
1-6-12	125 x 100mm seamless eaves gutters							m	51			
2-6-12	Extra over gutter for stopped end							No	4			
3-6-12	Extra over eaves gutter for angle							No	4			
4-6-12	Extra over eaves gutter for outlet for 100mm pipe							No	5			
5-6-12	100mm Diameter downpipe							m	10			
6-6-12	Extra over downpipe for stopped ends							No	3			
7-6-12	Extra over downpipe for shoe							No	3			
1-7-12	125 x 100mm seamless eaves gutters							m	44			
2-7-12	Extra over gutter for stopped end							No	4			
3-7-12	Extra over eaves gutter for angle							No	4			
4-7-12	Extra over eaves gutter for outlet for 100mm pipe							No	8			
5-7-12	100mm Diameter downpipe							m	21			
6-7-12	Extra over downpipe for stopped ends							No	8			
7-7-12	Extra over downpipe for shoe							No	8			
39-3-12	50mm uPVC pipe							m	5			
41-3-12	Extra over uPVC pipe for 50mm bend							No	16			
42-3-12	Extra over uPVC pipe for 110mm bend							No	5			
43-3-12	Extra over uPVC pipe for 50mm junction							No	16			
44-3-12	Extra over uPVC pipe for 110mm junction							No	5			
46-3-12	Extra over uPVC pipe for 110mm pan connector							No	7			
47-3-12	Extra over uPVC pipefor 110mm double junction							No	5			
20-6-12	110mm uPVC pipe							m	18			
21-6-12	50mm uPVC pipe							m	3			
22-6-12	Extra over uPVC pipe for 50mm bend							No	6			

(C20) Total tender value

Signature of tenderer from Annex B

(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

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

### Annex C: Local Content Declaration - Summary Schedule

#### Local Content Declaration - Summary Schedule

(C1) **Tender No.** LDPWRIT-B20091  
 (C2) **Tender description:** Diphuti Primary School  
 (C3) **Designated product(s)**  
 (C4) **Tender Authority:**  
 (C5) **Tendering Entity name:** Diphuti Primary School  
 (C6) **Tender Exchange Rate:** Pula  EU  GBP   
 (C7) **Specified local content %**

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

Tender item no's	List of items	Calculation of local content				Tender summary						
		Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Unit	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C16)	(C17)	(C18)	(C19)
48-3-12	110mm "GI Two-way" vent valve							No	3			
59-3-12	30m Plastic hose reel							No	2			
60-3-12	9kg DCP fire extinguisher							No	1			
17-4-12	110mm uPVC pipe							m	50			
18-4-12	50mm uPVC pipe							m	100			
19-4-12	Extra over uPVC pie for 110mm pan connector							No	70			
28-4-12	30m Plastic hose reel							No	2			
29-4-12	9kg DCP fire extinguisher							No	4			
8-5-12	30m Plastic hose reel							No	4			
9-5-12	9kg DCP fire extinguisher							No	16			
9-7-12	30m Plastic hose reel							No	1			
10-7-12	9kg DCP fire extinguisher							No	1			
2.1 - Bill 2	6mm2 x 4 Core Cu cables							m	100			
2.2 - Bill 2	16mm2 x 4 Core Cu cables							m	50			
2.3 - Bill 2	70mm x 4 Core Cu cables							m	150			
4.3 - Bill 2	2,5mm2 x 4 Core Cables							m	300			
4.3 - Bill 2	4mm2 x 4 Core Cables							m	300			
4.4 - Bill 2	2,5mm2 x 4 Core Cables							m	150			
4.4 - Bill 2	4mm2 x 4 Core Cables							m	200			

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

## Annex C: Local Content Declaration - Summary Schedule

### Local Content Declaration - Summary Schedule

(C1) **Tender No.** LDPWRIT-B20091  
 (C2) **Tender description:** Diphuti Primary School  
 (C3) **Designated product(s)**  
 (C4) **Tender Authority:**  
 (C5) **Tendering Entity name:** Diphuti Primary School  
 (C6) **Tender Exchange Rate:** Pula  EU  GBP   
 (C7) **Specified local content %**

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

Tender item no's	List of items	Calculation of local content				Tender summary						
		Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)	Unit	Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C16)	(C17)	(C18)	(C19)
2.1 - Bill 3	6mm2 x 4 Core Cu cables							m	85			
2.3 - Bill 3	70mm x 4 Core Cu cables							m	85			
4.3 - Bill 3	2,5mm2 x 4 Core Cables							m	600			
4.3 - Bill 3	4mm2 x 4 Core Cables							m	700			
4.4 - Bill 3	2,5mm2 x 4 Core Cables							m	300			
4.4 - Bill 3	4mm2 x 4 Core Cables							m	350			
2.1 - Bill 4	6mm2 x 4 Core Cu cables							m	315			
2.3 - Bill 4	70mm x 4 Core Cu cables							m	315			
4.3 - Bill 4	2,5mm2 x 4 Core Cables							m	1 500			
4.3 - Bill 4	4mm2 x 4 Core Cables							m	2 000			
4.4 - Bill 4	2,5mm2 x 4 Core Cables							m	750			
4.4 - Bill 4	4mm2 x 4 Core Cables							m	1 000			
4.3 - Bill 5	2,5mm2 x 4 Core Cables							m	600			
4.3 - Bill 5	4mm2 x 4 Core Cables							m	800			
4.4 - Bill 5	2,5mm2 x 4 Core Cables							m	300			
4.4 - Bill 5	4mm2 x 4 Core Cables							m	400			
	Cement							t	84			

**Signature of tenderer from Annex B**

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

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





SBD 6.2: DECLARATION OF LOCAL CONTENT

SATS 1286.2011

**Annex E**

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

(E1)	Tender No.	
(E2)	Tender description:	
(E3)	Designated products:	
(E4)	Tender Authority:	
(E5)	Tendering Entity name:	

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

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

(E10)	<b>Manpower costs</b>	(Tenderer's manpower cost)	
(E11)	<b>Factory overheads</b>	(Rental, depreciation & amortisation, utility costs, consumables etc.)	
(E12)	<b>Administration overheads and mark-up</b>	(Marketing, insurance, financing, interest etc.)	
	<b><i>(E13)</i> Total local content</b>		
			<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 PPR2017:**

- 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 PPR2017;
- 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 LEADTO 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.

**SAFCEC JOINT VENTURE AGREEMENT**

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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.

**SAFCEC JOINT VENTURE AGREEMENT**

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8.9.3 The insurance to be taken out by the Joint Venture.

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

**SAFCEC JOINT VENTURE AGREEMENT**

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emoluments to be paid and allowed by the Joint Venture to the Project Manager shall be 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



**SAFCEC JOINT VENTURE AGREEMENT**

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Specified Proportions or in proportion to their participation of the time being in 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

**SAFCEC JOINT VENTURE AGREEMENT**

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prohibiting the interim distribution of profits or contribution towards losses in the discretion of the Management Committee.

**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.

**SAFCEC JOINT VENTURE AGREEMENT**

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**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.
- 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.

**SAFCEC JOINT VENTURE AGREEMENT**

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- 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 -
- 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

**SAFCEC JOINT VENTURE AGREEMENT**

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effective only in the specific instance and for the purpose and to the extent for which made or given.

**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 domiciliumcitandi 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.

**SAFCEC JOINT VENTURE 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 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. ....

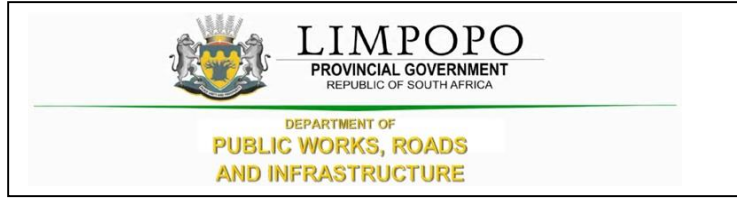


## THE CONTRACT

**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:

**Demolition of 2 x 5 Classroom Blocks, Renovations of 2 x 4 Classroom Blocks, Construction of Large Administration Block, 2 x 2 Classroom Blocks, 2 x 4-Seats Water-Borne Toilet Blocks, Multipurpose Classroom Block and External Works (Septic Tank, Walkways, Parking Bays and Fence) At Diphuti Primary School in The Oaks, Maruleng in Mopani District.**

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

.....

(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 .....

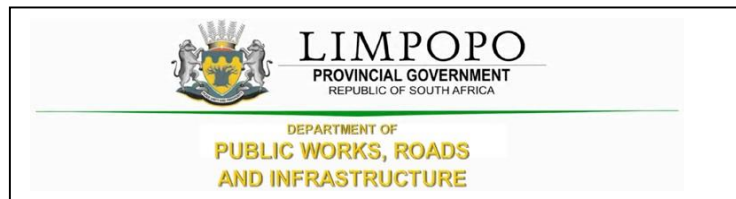
**Schedule of Deviations**

- 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.

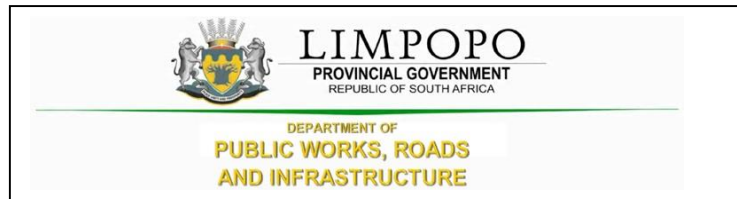


**PART C3: PRICING DATA**



### 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.

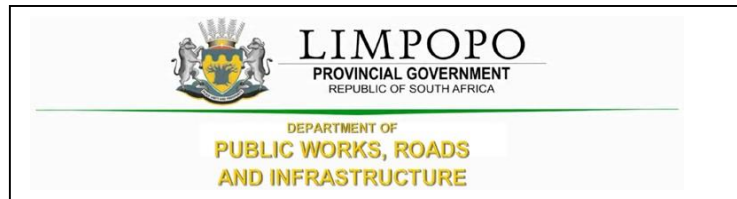


**PART C4: PROVISIONAL BILLS OF QUANTITIES**



## C4.1 PRELIMINARIES





## C4.2 BUILDING WORKS

Item No	Quantity	Rate	Amount
<b><u>SECTION NO. 1</u></b>			
<b><u>BILL NO. 1</u></b>			
<b><u>PRELIMINARIES</u></b>			
<b><u>NOTE</u></b>			
All prices/rates to be net, excluding Value Added Tax			
<b><u>General</u></b>			
i) The agreement is to be the JBCC Series 2000 Principal Building Agreement (Edition 5.0) prepared by the Joint Building Contracts Committee, July 2007			
ii) The preliminaries are to be the JBCC Series 2000 Preliminaries prepared by the Joint Building Contracts Committee, March 2005 edition and shall be deemed to be incorporated herein			
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			
iv) Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading			
v) Where any item is not relevant to this specific contract such item is marked N/A (signifying "not applicable")			
vi) If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories, where "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value and "T" denotes an amount in proportion to time			
<b>SECTION A: PRINCIPAL BUILDING AGREEMENT</b>			
<b>Carried to Collection</b>			R
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES			



6	Contractor's site representative (clause 6)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
7	Compliance with regulations (clause 7)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
8	Works risk (clause 8)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
9	Indemnities (clause 9)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
10	General insurances (clause 10)	<b>All insurances are to be taken by the Contractor</b>		
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
11	Special insurances (clause 11)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
<b>Carried to Collection</b>				
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES				R

12	Effecting insurance (clause 12)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
13	Assignment (clause 13)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
14	Security (clause 14)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
<b><u>Execution (A15-A23)</u></b>				
15	Preparation for and execution of the works (clause 15)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
16	Site and Access (clause 16)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
17	Contract instructions (clause 17)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
<b>Carried to Collection</b>				
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES			R	

18	Setting out of the works (clause 18)			
	<i>The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc. exist in order that the necessary arrangements may be made for the rectification of any such encroachments</i>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
19	Temporary Works and Plant (clause 19)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
20	Nominated sub-contractors (clause 20)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
21	Selected sub-contractors (clause 21)			
	<i>Notwithstanding the content of this clause, the contractor's attention is drawn to the fact that all the work provided for by means of the inclusion of provisional amounts elsewhere in these bills of quantities, is to be executed and installed in the works during the construction period by selected sub-contractors</i>			
	<i>The selected sub-contractors shall be chosen, as far as possible, by the principal agent together with the contractor</i>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b>Carried to Collection</b>		R	
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES			

22	Employer's direct contractors (clause 22)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
23	Contractor's domestic sub-contractors (Clause 23)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
<b><u>Completion (A24-A30)</u></b>				
24	Practical completion (clause 24)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
25	Works completion (clause 25)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
26	Final completion (clause 26)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
27	Latent defects liability period (clause 27)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
<b>Carried to Collection</b>				
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES			R	

28	Sectional completion (clause 28)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
29	Revision of date of practical completion (clause 29)			
	<b>Clause 29.1.1 shall be deemed to be omitted and replaced by the following:</b>			
	<b><i>Inclement weather shall be defined as weather in excess of the average rainfall (volume and period) for each calender month over the past ten (10) years as recorded by the nearest commonly recognised weather bureau in the region of the project</i></b>			
	<b><i>It shall be deemed that the contractor has adequately allowed in his programme and tendered rates for expenses which might result from delays due to average or below rainfall as described above</i></b>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
30	Penalty for non-completion (clause 30)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b>Carried to Collection</b>			
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES		R	









42.1.6 Agent (4):Med-Tech Engineers

Agents service: **Electrical Engineers**

42.1.6 Agent (5):**Not applicable**

Agents service: **Mechanical Engineers**

42.1.8 Agent (6):

**Not applicable**

42.1.9 Agent (7):

**Not applicable**

**42.2 CONTRACT DETAILS**

42.2.1 Works Description:

**The works shall be as described in the "Notes to Tenderers"**

42.2.2 Site Description:

**The site shall be as described in the "Notes to Tenderers"**

42.2.3 Work or installations by direct contractors:

**Refer to notes to tenders: Item 2 Scope of contract**

42.2.4 Specific options that are applicable to a State organ only:

(1) Interest rate legislation: **N/A**

the (2) Lateral support insurance to be effected by contractor: **N/A**

goods: (3) Payment will be made for materials and **N/A**

**Carried to Collection**

R

Section No. 1  
PRELIMINARIES  
Bill No. 1  
PRELIMINARIES

(4) Dispute resolution by litigation: **N/A**

(5) Extended defects liability period applicable to the following elements: **N/A**

42.2.5 Possession of the site is be given on:

**Date to be determined**

42.2.6 Period for the commencement of the works after the contractor takes possession of the site:

**Within seven (7) working days**

42.2.7 The date for practical completion and the penalty per calendar day for the works as a whole:

Date:  
**Within eighteen (18) calendar months, inclusive of builders' holidays, after the date of site handover**

Penalty:  
**0,05% of the tendered amount, inclusive of value added tax**

42.2.8 The date for practical completion and the penalty per calendar day for the works in sections:

**N/A**

Section 1: Date: N/A Penalty: R  
 ..... Section 2: Date: N/A  
 Penalty: R ..... Section 3: Date:  
 N/A Penalty: R ..... Section 4: Date:  
 N/A Penalty: R ..... Section 5: Date:  
 N/A Penalty: R ..... Section 6: Date:  
 N/A Penalty: R .....

42.2.9 The law applicable to this agreement shall be that of:

**Republic of south Africa**

**Carried to Collection**

R

Section No. 1  
 PRELIMINARIES  
 Bill No. 1  
 PRELIMINARIES

**42.3 INSURANCES**

42.3.1 Contract works insurance:

To be effected by: **Contractor**  
 For the sum of: **Tendered amount plus 20%**  
 With a deductible of: **to be determined by the contractor**

42.3.2 Supplementary insurance is required: **No**

42.3.3 Public liability insurance: **Yes**

To be effected by: **Contractor**  
 For the sum of: **R 5 000 000-00**  
 With a deductible of: **to be determined by the contractor**

42.3.4 Support insurance to be effected by the employer: **No**

**42.4 DOCUMENTS**

41.4.1 Waivers of contractor's lien or right of continuing possession is required: **Yes**

42.4.2 Construction document copies to be supplied to the contractor free of charge:  
**Three (3) copies of each**

42.4.3 Bills of quantities drawn up in accordance with:  
**Standard System of Measuring Building Work**

42.4.4 On acceptance of the tender the bills of quantities is to be submitted:  
**Within seven (7) working days**

**Carried to Collection**

R

Section No. 1  
 PRELIMINARIES  
 Bill No. 1  
 PRELIMINARIES

42.4.5 JBCC Engineering General Conditions are to be included in the documents:  
**No**

42.4.6 The contract value is to be adjusted using CPAP:  
**Yes**

Base month of indexes: **Tender closing date**

42.4.7 Details of changes made to the provision of JBCC standard documentation:

- Clause 3 : See item 3, page 2**
- Clause 10 : See item 10, page 3**
- Clause 18 : See item 18, page 5**
- Clause 21 : See item 21, page 6**
- Clause 29 : See item 29, page 7**
- Clause 31 : See item 31, page 8**

**42.5 CONTRACT DETAILS**

*All post-tender information for this section will be determined once tender is awarded*

**42.6 DOCUMENTS**

*All post-tender information for this section will be determined once tender is awarded*

**42.7 DISPUTE RESOLUTION**

*All post-tender information for this section will be determined once tender is awarded*

**42.8 SIGNATURES OF THE CONTRACTING PARTIES**

*All post-tender information for this section will be determined once tender is awarded*

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**SECTION B: PRELIMINARIES**

**Definition and interpretation (B1)**

42 Definition and interpretation (B1.1 - B1.6.5)

Fixed

Item

**Carried to Collection**

R

Section No. 1  
PRELIMINARIES  
Bill No. 1  
PRELIMINARIES

	Value Related	Item	
	Time Related	Item	
	<b>Documents (B2)</b>		
43	Checking of documents (B2.1)		
	<i>These bills of quantities:</i>		
	<i>(1) contain pages and annexes as indexed, and;</i>		
	<i>(2) are in multiple procurement format, i.e. all trades are fully measured with minor budgetary allowances</i>		
	<i>Items in these bills of quantities are to be read and priced in conjunction with and the descriptions regarded as amplified by the Model Preambles for Trades, 1999 edition, as recommended and published by the Association of South African Quantity Surveyors and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained</i>		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
44	Provisional bills of quantities (B2.2)		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
45	Availability of construction documentation (B2.3)		
	<i>The minor budgetary allowances included in this document will be separately procured, based on multiple procurement of selected sub-contractors during the construction period</i>		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
	<b>Carried to Collection</b>		
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES		R



46	Interests of agents (B2.4)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
47	Priced documents (B2.5)	Fixed	Item	
		Value Related	Item	
		Time Related	Item	
48	Tender submission (B2.6)	<b><i>Notwithstanding anything contained in this clause tenders shall be valid for a period of ninety (90) days from the closing date of tenders</i></b>		
		Fixed	Item	
		Value Related	Item	
49	Defined works area (B3.1)	Time Related	Item	
		<b><u>The site (B3)</u></b>		
		Fixed	Item	
50	Geotechnical investigation (B3.2)	Value Related	Item	
		Time Related	Item	
		Fixed	Item	
<b>Carried to Collection</b>				
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES				R



		Value Related	Item	
		Time Related	Item	
57	Protection of trees, etc (B3.9)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
58	Articles of value (B3.10)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
59	Inspection of adjoining properties, etc (B3.11)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
		<b><u>Management of contract (B4)</u></b>		
60	Management of the works (B4.1)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
61	Programming for the works (B4.2)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
62	Progress meetings (B4.3)			
		Fixed	Item	
		<b>Carried to Collection</b>		
				R

Section No. 1  
PRELIMINARIES  
Bill No. 1  
PRELIMINARIES

		Value Related	Item	
		Time Related	Item	
63	Technical meetings (B4.4)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
64	Labour and plant records (B4.5)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
		<b><u>Samples and shop drawings (B5)</u></b>		
65	Samples of materials (B5.1)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
66	Workmanship samples (B5.2)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
67	Shop drawings (B5.3)			
		Fixed	Item	
		Value Related	Item	
		Time Related	Item	
68	Compliance with manufacturer's instructions (B5.4)			
		Fixed	Item	
		<b>Carried to Collection</b>		
				R

Section No. 1  
 PRELIMINARIES  
 Bill No. 1  
 PRELIMINARIES





<b><u>Prime cost amounts (B8)</u></b>				
80	Responsibility for prime cost amounts (B8.1)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
<b><u>Attendance on nominated and selected subcontractors (B9)</u></b>				
81	General attendance (B9.1)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
82	Special attendance (B9.2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
83	Commissioning - Fuel, water and power (B9.3)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
<b><u>Financial aspects (B10)</u></b>				
84	Statutory taxes, duties and levies (B10.1)			
	<i>Provision is made in the summary of these bills of quantities for the inclusion of Value Added Tax (VAT)</i>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b>Carried to Collection</b>			
			R	
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES				





91	Notice before covering work (B11.4)	Fixed	Item
		Value Related	Item
		Time Related	Item
92	Disturbance (B11.5)	Fixed	Item
		Value Related	Item
		Time Related	Item
93	Enviromental disturbance (B11.6)	Fixed	Item
		Time Related	Item
		Value Related	Item
94	Works cleaning and clearing (B11.7)	Fixed	Item
		Value Related	Item
		Time Related	Item
95	Vermin (B11.8)	Fixed	Item
		Value Related	Item
		Time Related	Item
96	Overhand work (B11.9)	Fixed	Item
		Value Related	Item
		Time Related	Item

**Carried to Collection**

R

Section No. 1  
 PRELIMINARIES  
 Bill No. 1  
 PRELIMINARIES



12.1.4	Defined works area (B3.1)	<b><i>The area of the works to be occupied by the contractor, any restriction on the area and the limit of access or exit will be pointed out to the contractor by the principal agent on handing over of the site</i></b>	N/A	R
12.1.5	Geotechnical investigation (B3.2)		N/A	
12.1.6	Existing premises occupied (B3.4)		No	
12.1.7	Previous work - Dimensional accuracy (B3.5)		No	
12.1.8	Previous work - Defects (B3.6)		No	
12.1.9	Services - known (B3.7)	<b><i>Existing services and points of connection are shown on the site plan and/or will be pointed out on site by the principal agent</i></b>		
12.1.10	Protection of trees (B3.9)		N/A	
12.1.11 (B3.11)	Inspection of adjoining properties		N/A	
12.1.12	Enclosure of the works (B6.2) (See notes to tenders)			
<b>Carried to Collection</b>				
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES				

12.1.13 Offices (B6.4.3)

*The contractor shall provide, maintain and remove on completion of the works an office for the exclusive use for meetings to be held on site. The minimum size of the office shall be 8 x 4 x 2,40m high internally with concrete floor, insulated ceiling and roof. The office shall be suitably ventilated, equipped with electric lighting and fitted with table, twelve (12) chairs, one (1) pinning board 2,40 x 1,20m high, one (1) writing board 2,40 x 1,20m high and a set of ten (10) aluminium "Ozafile" drawing hangers complete with stand. The office shall be kept clean and fit for use at all times*

12.1.14 Main notice board (B6.5)

*The contractor shall provide, erect where directed, maintain and remove on completion of the works a notice board size 3 x 3m high. The exact extent of the details, colour scheme and wording will be provided by the principal agent on the day of the site handover. The board shall be securely fixed to and including a suitable supporting structure of timber or tubular posts and braces*

12.1.15 Sub-contractors notice board (B6.6)

A notice board is required:

**No**

12.1.16 Water (B7.2)

Alternative selected: **A**

12.1.17 Electricity (B7.3)

Alternative selected: **A**

12.1.18 Telecommunications (B7.4)

Alternative selected: **A**

12.1.19 Ablution facilities (B7.5)

Alternative selected: **A**

12.1.20 Protection of existing/sectionally occupied works (B11.2)

**No**

**Carried to Collection**

R

Section No. 1  
PRELIMINARIES  
Bill No. 1  
PRELIMINARIES

12.1.22 Protection of the works

*No*

12.1.23 Disturbance (B11.5)

*No*

12.1.24 Enviromental disturbance (B11.6)

*No*

**Carried to Collection**

R

Section No. 1  
 PRELIMINARIES  
 Bill No. 1  
 PRELIMINARIES

101 Post-tender information (B12.2)

*All post-tender information for this section will be determined once tender is awarded*

Fixed Item

Value Related Item

Time Related Item

**SECTION C: SPECIFIC PRELIMINARIES**

102 **Clause C1 - Proprietary branded products**

The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instructions after consultation with the manufacturer's authorized representative

Fixed Item

Value Related Item

Time Related Item

103 **Clause C2 - Overtime**

Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorized and indicated in writing, prior to the execution thereof, that costs for such overtime will to be borne by the employer

Fixed Item

Value Related Item

Time Related Item

**Carried to Collection**

R

Section No. 1  
 PRELIMINARIES  
 Bill No. 1  
 PRELIMINARIES

<p>104</p>	<p><b>Clause C3 - 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 style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>	
<p>105</p>	<p><b>Clause C4 - Site instructions</b></p> <p>All site instructions issued on site shall be recorded in writing within seven (7) calendar days in site instruction book (A4 size and triplicate carbon format), which is to be provided and maintained by the contractor. The said site instruction book shall be kept on site at all times for the exclusive use of recording site instructions only</p> <p>Site instructions may be issued by the architect or any of the consultants only. Copies of the site instructions are to be submitted to the architect and quantity surveyor within seven (7) calendar days of such recording in the site instruction book</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>	
<p>106</p>	<p><b>Clause C5 - Labour record</b></p> <p>At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day</p> <p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>	
<p style="text-align: center;"><b>Carried to Collection</b></p> <p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES</p>			<p style="text-align: center;">R</p>

<p>107</p> <p><b>Clause C6 - Plant record</b></p> <p>At the end of each calendar week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works</p>	<p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>	
<p>108</p> <p><b>Clause C7 - Non-cession of monies</b></p> <p>The contractor shall not cede nor assign his rights or claims to any monies due or to become due to him under this contract</p>	<p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>	
<p>109</p> <p><b>Clause C8 - Occupational Health and Safety Act</b></p> <p>In terms of the Occupational Health and Safety Regulations promulgated on 18 July 2003, 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 style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p> <p style="text-align: right;">Time Related</p>	<p>Item</p> <p>Item</p> <p>Item</p>	
<p>110</p> <p><b>Clause C9 - Compliance with Covid 19 Regulations</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 regulations pertaining to this project as no claims in this regard will be entertained</p>	<p style="text-align: right;">Fixed</p> <p style="text-align: right;">Value Related</p>	<p>Item</p> <p>Item</p>	
<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES</p>	<p style="text-align: center;"><b>Carried to Collection</b></p>		<p style="text-align: center;">R</p>



Time Related	Item		
<b>Carried to Collection</b>		R	

Section No. 1  
PRELIMINARIES  
Bill No. 1  
PRELIMINARIES

Section No. 1

PRELIMINARIES

Bill No. 1

PRELIMINARIES

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

**Carried Forward**

R

Section No. 1  
PRELIMINARIES  
Bill No. 1  
PRELIMINARIES

Section No. 1

PRELIMINARIES

Bill No. 1

PRELIMINARIES

**COLLECTION**

**Page  
No**

**Amount**

**Brought Forward**

R

Total Brought Forward from Page No.

138

139

140

141

142

143

144

145

146

147

148

**Carried to Final Summary**

R

Section No. 1  
PRELIMINARIES  
Bill No. 1  
PRELIMINARIES

Item No	<b><u>SECTION NO.2</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.1</u></b>			
	<b><u>ALTERATIONS</u></b>			
	<b><u>REMOVAL OF EXISTING WORK</u></b>			
	<u>Note:</u>			
	Unless otherwise stated, all materials from the alterations and demolitions will belong to the builder.			
	The builder should allow for the removal of all debris from site and keep the site clean at all times			
	<b><u>DEMOLITIONS, ETC.</u></b>			
1	Break down and demolish existing building size approximately 39.2m long x 9.10m wide x 2,66m high, incl. cutting the foundation wall, strip footings, windows, roof covering, etc, removal of surface beds, backfilling, cart away etc. of all rubble and leaving no visible sign of the building (5 Classroom block)	No	2	
	<u>Removal of existing concrete</u>			
2	Surface beds	m3	61	
	<u>Breaking down and removing brickwork etc</u>			
3	Half brick wall	m2	277	
	<u>Taking out and removing doors, windows, etc</u>			
4	Timber single door 813 x 2032mm high	No	10	
5	Door frames.	No	10	
	<b>Carried to Collection</b>			
	Section No. 2			
	RENOVATION OF 2 X 4 CLASSROOM BLOCK			
	Bill No. 1			
	Sectional summary for RENOVATIONS OF 2 X 4 CLASS			
				R

	<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>		
6	Corrugated iron roof including roof covering, timber trusses and purlins, ceilings and cornices, eaves soffit covering, fascias, barge boards, gutters and rainwater pipes	m2	760
	<u>Taking out and removing ironmongery</u>		
7	Writing boards	No	16
8	Pinning boards	No	8
	<u>Taking out and removing piping, sanitary fittings, etc including disconnecting piping from fittings and preparing pipes for new fittings (e/m) making good floor and wall finishes (making good good and wall finishes elsewhere)</u>		
	<u>Taking out and removal glass and mirrors</u>		
9	Glass from steel window including cleaning out rebates and preparing for new glass	m2	80
	<u>Hacking up/off and removing granolithic , screed , plaster . ect from concrete or brickwork and preparing surface for new screed plaster</u>		
	<u>Cleaning of Face brickwall with approved face brick cleaner</u>		
10	Internal wall	m2	464
11	External wall	m2	426

**CONCRETE, FORMWORK AND REINFORCEMENT**

**SUPPLEMENTARY PREAMBLES**

Carried to Collection

R

Section No. 2  
 RENOVATION OF 2 X 4 CLASSROOM BLOCK  
 Bill No. 1  
 Sectional summary for RENOVATIONS OF 2 X 4 CLASS

Cost of tests

The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)

Breeze concrete

Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated

Formwork

Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use

The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself

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

Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described

**Carried to Collection**

Section No. 2  
 RENOVATION OF 2 X 4 CLASSROOM BLOCK  
 Bill No. 1  
 Sectional summary for RENOVATIONS OF 2 X 4 CLASS

R

Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"

**REINFORCED CONCRETE**

25MPa/19mm concrete

12	Surface beds	m3	61
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**TEST CUBES**

13	Making and testing 150 x 150 x 150mm concrete strength test cube (Provisional)	No	10
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**CONCRETE SUNDRIES**

Finishing top surfaces of concrete smooth with a wood float/steel trowel

14	Surface beds, slabs, etc	m2	608
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**MOVEMENT JOINTS ETC (PROVISIONAL)**

Expansion joints with bitumen impregnated softboard between concrete and brickwork

15	10mm Joints not exceeding 300mm high along edges of surface beds	m	608
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Saw cut joints

16	3 x 30mm Saw cut joints in top of concrete	m	608
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Frebric reinforcement

17	Ref. S245 fabric reinforcement in concrete surface bed etc	m2	608.00
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**MASONRY**

**SUPPLEMENTARY PREAMBLES**

**BRICKWORK**

Carried to Collection

R

Section No. 2  
 RENOVATION OF 2 X 4 CLASSROOM BLOCK  
 Bill No. 1  
 Sectional summary for RENOVATIONS OF 2 X 4 CLASS

Sizes in descriptions

Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick

Reinforced brick lintels

Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous

**SUPERSTRUCTURE**

Brickwork of NFP bricks in class II mortar

18	Half brick walls in beamfilling.	m2	160
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**ROOF COVERINGS (PROVISIONAL)**

**SUPPLEMENTARY PREAMBLES**

Straight cutting

Descriptions of roof coverings are deemed to include for straight cutting

**PROFILED METAL SHEETING AND ACCESSORIES**

0,6mm Thick galvanised corrugated sheet steel sheeting fixed to timber purlins all in accordance with materials supplied and methods employed by the manufacturer

19	Roof coverings with pitches not exceeding 25 degrees	m2	760
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20	Ridge capping 550mm girth	m	50
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Sundries

21	12" Thermal resistance sisalation laid on purlins	m2	760
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**CARPENTRY AND JOINERY**

**SUPPLEMENTARY PREAMBLES**

**ROOFS ETC**

**Carried to Collection**

Section No. 2  
 RENOVATION OF 2 X 4 CLASSROOM BLOCK  
 Bill No. 1  
 Sectional summary for RENOVATIONS OF 2 X 4 CLASS

R



Plate nailed timber roof truss construction

The following is applicable in respect of roof trusses:

Trusses are at maximum 1100mm centres  
 Roof covering is 0,6mm corrugated iron sheeting on purlins  
 Ceilings are 4mm sheeting on 38 x 38mm brandering .The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on the site before design or fabrication commences

Sawn softwood

22 Roof construction to double pitched roof with two hipped ends 31.5 x 10.2m and 1.66m high overall including wall plates, trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 1200mm centres for roof covering (Four Classroom Block)

No 2

**EAVES, VERGES, ETC**

"Everite FC77" pressed fibre-cement

23 225mm x 12mm Fascias and barge boards including galvanised steel H-profile jointing strips

m 166

**DOORS, ETC**

44mm Wrought meranti framed, ledged, braced and battened door of 44 x 150mm top rails and stiles, 22 x 150mm middle legde and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding

24 Door 914 x 2032mm high

No 8

Semi-solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame

**SCHOOL FURNITURE, ETC**

Double combination school desk

25 Sealed and varnished supawood top, mounted on a frame manufactured using powdercoated round tubing. Supplied in Knock Down Form 1200mm x 400mm x 750mm

No 160

**Carried to Collection**

R

Section No. 2  
 RENOVATION OF 2 X 4 CLASSROOM BLOCK  
 Bill No. 1  
 Sectional summary for RENOVATIONS OF 2 X 4 CLASS

**CEILING , ETC.**

**SUPPLEMENTARY PREAMBLES**

Descriptions:

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

Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere

**CEILING CONSTRUCTION, CORNICES, ETC.**

**Insulation**

26	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	608
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Sawn softwood

27	38 x 114mm Ceiling joists	m	517
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Wrought softwood

28	19 x 76mm Cornices nailed	m	374
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**NAILED UP AND SCREWED UP CEILINGS**

6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints

29	Ceilings including 38 x 38mm brander at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	608
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30	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	8
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**IRONMONGERY**

**LOCKS**

**Carried to Collection**

Section No. 2  
 RENOVATION OF 2 X 4 CLASSROOM BLOCK  
 Bill No. 1  
 Sectional summary for RENOVATIONS OF 2 X 4 CLASS

R

	<u>"Approved"</u>				
31	Four lever lockset	No	8		
	<b><u>SUNDRIES</u></b>				
32	25mm Diameter wall mouted door stop plugged	No	8		
	<b><u>STEEL CUPBOARDS</u></b>				
	<u>Aproved steel lockers with standard baked enamel finish</u>				
33	Double door steel cupboard 914 x 457 x 1828mm high with five shelves on a one brick course platform and bolted to brickwork	No	8		
	<b><u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u></b>				
	<u>"Vitrex"</u>				
34	Pinning boards 2400 x 1200mm high fixed to brickwork	No	16		
35	Vitrex system 1 000 folding type white writing board, with wall mounted centre board 4800 x 1140mm high with one centre board 2400 x 1140m high, two side boards 1200 x 1140mm high and two swing leaves each 1200 x 1140mm high plugged	No	8		
	<b><u>METALWORK</u></b>				
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
	<u>Descriptions</u>				
	Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described				
	<u>Drawings</u>				
	Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc				
	<b>Carried to Collection</b>				
	Section No. 2 RENOVATION OF 2 X 4 CLASSROOM BLOCK Bill No. 1 Sectional summary for RENOVATIONS OF 2 X 4 CLASS				R

**ALUMINIUM WINDOWS, DOORS, ETC**

AAAMSA guide

All windows, doors, etc shall comply with and meet the minimum recommended performance requirements as set out in the General Specification for Architectural Aluminium and Glass Products (Third Edition) as published by the Association of Architectural Aluminium Manufacturers of South Africa (AAAMSA)

Finish

The windows, doors, etc shall be natural anodised to a thickness of 25 micron and shall comply with SABS 999 and 1407

Glass

Glazing to be with patent rubber gaskets with glazing beads and comply with BS 952. Thickness of glass shall be in accordance with table 1 (Part N : Glazing ). Safety glass shall comply with SABS 1263. The National Building Regulations shall be observed with regard to the specification of safety glass

Design indemnity

The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed

Drawings

Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc

Pricing.

All window prices should include alluminium louvres as shown

General

Workshop drawings to be approved by the architect before manufacture

**PRESSED STEEL COMBINATION DOORS AND FRAMES**

**Carried to Collection**

Section No. 2  
 RENOVATION OF 2 X 4 CLASSROOM BLOCK  
 Bill No. 1  
 Sectional summary for RENOVATIONS OF 2 X 4 CLASS

R

	<u>"Nty" doors or equally approved</u>			
36	"Code 914" door frame size 914 x 2032mm high fitted with three (3) parliament hinges, complete with single security gate size 914 x 2032mm high overall formed of 25 x 25 x 2mm tubular section frame mitred and welded at angles and two 25 x 25 x 2mm tubular section horizontal middle rails, gate filled in with 12 x 12 x 12mm square section vertical rails at 100mm centres and fitted with locking bolt for padlock, frame formed of 25 x 38 x 2mm tubular section stiles and top rail mitred and welded at angles and fitted with three hinges welded to gate and frame, frame factory welded at maximum 250mm centres to door frame	No	8	
	<b><u>PLASTERING</u></b>			
	<b><u>SCREEDS</u></b>			
	<u>Screeds on concrete</u>			
37	20mm Thick on floors	m2	608	
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	<b><u>FLOOR TILING</u></b>			
	<u>420 x420 11.5mm kilimanjaro floor tiles or similar approved by architects, fixed with adhesive, painted with tinted waterproof jointing compound. Grouting to be grey, tiles should have expansion joint and aluminium edging strip.</u>			
38	On floors and landings	m2	512	
39	Skirting formed of ceramic tile cut to 420 x 75mm high	m	240	
	<b><u>PLUMBING AND DRAINAGE</u></b>			
	<b><u>EXISTING ABLUTION</u></b>			
	<b>Carried to Collection</b>			
	Section No. 2 RENOVATION OF 2 X 4 CLASSROOM BLOCK Bill No. 1 Sectional summary for RENOVATIONS OF 2 X 4 CLASS			R

Money Provision:

40	Provision of refurbishment of existing enviro loo toilets not clearly defined at the time of tender		Item	120,000.00
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**FIRE APPLIANCES ETC**

"Chubb"

41	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	2	
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42	9kg Dry chemical powder fire extinguisher, including standard hard wood backing plugged and backing finished with one coat dark stain and two coats clear suede polyurethane varnish	No	8	
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**RAINWATER HARVEST TANKS**

"Jojo or similar"

43	JoJo tank or similar approved. 1900mm diameter, 2040mm high, 2500 litre water storage tank green one, 340mm high brick base with compacted fill. Complete with plumbing accessories	No	8	
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**GLAZING**

**GLAZING TO STEEL WITH PUTTY**

4mm Clear float glass

44	Panes not exceeding 0,1 m2	m2	55	
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4mm Rough cast glass

45	Panes not exceeding 0,1m2	m2	25	
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**PAINTWORK**

**PREPARATORY WORK TO EXISTING WORK**

**Carried to Collection**

R

Section No. 2  
 RENOVATION OF 2 X 4 CLASSROOM BLOCK  
 Bill No. 1  
 Sectional summary for RENOVATIONS OF 2 X 4 CLASS

Previously painted wood surfaces

Surfaces shall be thoroughly cleaned down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth

Previously painted metal surfaces

Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal

Previously painted plastered surfaces

Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth

**ON WOOD**

Sand down and apply to coats of "WOODOC 30" varnish

46	On doors	m2	30	
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**ON METAL**

Spot priming defects in pre-primed surfaces, apply one coat "Dulux Duraphos Primer" one coat Dulux Undercoat" and two coats "Dulux Dura 100 Gloss Enamel Paint DWI006" or similar approved on previously painted steel in good condition

47	On windows with burglar bars	m2	159	
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**PAINTWORK ETC TO PREVIOUSLY PAINTED WORK**

**ON METAL**

Spot priming defects in pre-primed surfaces, apply one coat "Dulux Duraphos Primer" one coat Dulux Undercoat" and two coats "Dulux Dura 100 Gloss Enamel Paint DWI006" or similar approved on previously painted steel in good condition

48	On door frames	m2	9	
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**Carried to Collection**

Section No. 2  
 RENOVATION OF 2 X 4 CLASSROOM BLOCK  
 Bill No. 1  
 Sectional summary for RENOVATIONS OF 2 X 4 CLASS

R

**APRONS AROUND BUILDINGS**

Compaction of surfaces

49	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	166
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15 MPa/20 mm concrete

50	Aprons cast in panels to falls	m3	17
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Finishing top surfaces of concrete smooth with a wood float

51	Aprons to falls	m2	166
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Smooth formwork to sides

52	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	166
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**Carried to Collection**

Section No. 2  
 RENOVATION OF 2 X 4 CLASSROOM BLOCK  
 Bill No. 1  
 Sectional summary for RENOVATIONS OF 2 X 4 CLASS

R



Section No. 2

RENOVATION OF 2 X 4 CLASSROOM BLOCK

Bill No. 1

Sectional summary for RENOVATIONS OF 2 X 4 CLASSROOM BLOCKS

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

151

152

153

154

155

156

157

158

159

160

161

162

163

**Carried to Final Summary**

R

Section No. 2

RENOVATION OF 2 X 4 CLASSROOM BLOCK

Bill No. 1

Sectional summary for RENOVATIONS OF 2 X 4 CLASS

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>FOUNDATIONS</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Nature of ground</u></p>			
<p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p>			
<p><u>Excavation for working space in rock</u></p>			
<p>Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over" bulk excavation or trench and hole excavation as the case may be</p>			
<p><u>Carting away of excavated material</u></p>			
<p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p>			
<p><u>Filling</u></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><u>Soil poisoning</u></p>			
<p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a ten (10) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p>			
<p><b><u>SITE CLEARANCE ETC</u></b></p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 1 FOUNDATIONS</p>			
		R	

<u>Site clearance</u>		
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2 828
2	Stripping average 150mm thick layer of top and depositing material in prescribed stock piles on site	m2 828
<b><u>EARTHWORKS</u></b>		
<b><u>EXCAVATION, FILLING, ETC</u></b>		
<u>Excavation in earth not exceeding 2m deep</u>		
3	Trenches	m3 660
4	Holes	m3 4
<u>Extra over trench and hole excavations in earth for excavation in</u>		
5	Soft rock	m3 24
6	Hard rock	m3 29
<u>Extra over all excavations for carting away</u>		
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3 121
<u>Risk of collapse of excavations</u>		
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2 1,123
<u>Keeping excavations free of water</u>		
9	Keeping excavations free of water	Item
<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>		
10	Under floors, steps, paving, etc	m3 122
11	Backfilling to trenches, holes, etc	m3 107

**Carried to Collection**

R

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 1  
 FOUNDATIONS

	<u>G6 earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u>		
12	Under floors, steps, paving etc.	m3	139
13	Trenches	m3	196
	<u>Compaction of surfaces</u>		
14	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	431
	<u>Prescribed density tests on filling</u>		
15	"Modified AASHTO Density" test	No	6
	<b><u>SOIL POISONING</u></b>		
	<u>Weedkiller mixed in accordance to supplier's specifications</u>		
16	Under paving etc	m2	431
17	To bottoms and sides of trenches, etc.	m2	1,688
	<u>Soil insecticide</u>		
18	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	431
19	To bottoms and sides of trenches etc	m2	1,688
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>		
	<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>		
	<u>25MPa/19mm concrete</u>		
20	Strip footings	m3	159
	<u>30Mpa/19mm concrete</u>		
21	Bases	m3	2

Carried to Collection

R

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 1  
 FOUNDATIONS





Section No. 3

CONSTRUCTION OF LARGE ADMINISTRATION BLOCK

Bill No. 1

FOUNDATIONS

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

165

166

167

168

169

**Carried Forward to Summary of Section No. 3**

Section No. 3  
CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
Bill No. 1  
FOUNDATIONS

R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.3</u></b></p>			
<p><b><u>BILL NO.2</u></b></p>			
<p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Cost of tests</u></p>			
<p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)</p>			
<p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p>			
<p><u>Formwork</u></p>			
<p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p>			
<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 2 CONCRETE, FORMWORK &amp; REINFORCEMENT</p>			
		R	



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

Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described

Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"

**UNREINFORCED CONCRETE**

25MPa/19mm concrete

1	Surface beds cast in panels	m3	2
2	Surface beds cast in panels on waterproofing.	m3	41
3	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	204

**REINFORCED CONCRETE**

25MPa/19mm concrete

4	Columns	m3	1
5	Slabs including beams and inverted beams	m3	1

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

Smooth formwork to soffits

6	Slabs	m2	3
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Smooth formwork to circular columns

7	300mm Diameter column 2,125m high	No	4
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**CONCRETE SUNDRIES**

**Carried to Collection**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 2  
 CONCRETE, FORMWORK & REINFORCEMENT

R



Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK

Bill No. 2

CONCRETE, FORMWORK & REINFORCEMENT

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

171

172

173

**Carried Forward to Summary of Section No. 3**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 2  
 CONCRETE, FORMWORK & REINFORCEMENT

R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.3</u></b></p>			
<p><b><u>BILL NO. 3</u></b></p>			
<p><b><u>MASONRY</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><b><u>BRICKWORK</u></b></p>			
<p><u>Sizes in descriptions</u></p>			
<p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p>			
<p><u>Linings to concrete</u></p>			
<p>Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties</p>			
<p><u>Hollow walls etc</u></p>			
<p>Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p>			
<p><u>Reinforced brick lintels</u></p>			
<p>Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous</p>			
<p><u>Face bricks</u></p>			
<p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p>			
<p><u>Pointing</u></p>			
<p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 3 MASONRY</p>			
		R	

**SUPERSTRUCTURE**Brickwork of NFP bricks in class II mortar

1	Half brick walls	m2	588
2	Half brick walls in beamfilling.	m2	30
3	One brick walls	m2	577

**BRICKWORK SUNDRIES**Joint forming material in movement joints:

4	12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2	3
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Steel bar reinforcement

5	8mm Diameter mild steel bars built in horizontally	t	0.02
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Brickwork reinforcement

6	75mm Wide reinforcement built in horizontally	m	2,619
7	150mm Wide reinforcement built in horizontally	m	2,638

Turning pieces

8	110mm Wide turning piece to lintels etc	m	124
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Galvanised wire ties etc**FACE BRICKWORK**Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints

9	Extra over brickwork for face brickwork	m2	932
10	Fair raking cutting	m	81

Brick-on-edge header course copings, sills, etc of face bricks ( Purchase price R4 000,00/ 1000 VAT incl. delivered to site) pointed with recessed joints on all exposed faces

11	Extra over brickwork for brick-on-edge header course lintel	m	53
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**Carried to Collection**

R

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 3  
 MASONRY

Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces

12	110mm Wide sill set level and slightly projecting	m	53
13	220mm Wide sill set sloping and slightly protecting outside	m	53

**Carried to Collection**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 3  
 MASONRY

R

Section No. 3

CONSTRUCTION OF LARGE ADMINISTRATION BLOCK

Bill No. 3

MASONRY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

175

176

177

**Carried Forward to Summary of Section No. 3**

Section No. 3  
CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
Bill No. 3  
MASONRY

R

Item No	<b><u>SECTION NO.3</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Waterproofing</u>			
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			
	<b><u>DAMP-PROOFING OF WALLS AND FLOORS</u></b>			
	<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	81	
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
2	Under surface beds	m2	410	
	<b><u>JOINT SEALANTS ETC</u></b>			
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>			
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	216	
	<b>Carried Forward to Summary of Section No. 3</b>			
	Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 4 WATERPROOFING			R



Item No	<b><u>SECTION NO.3</u></b>	Quantity	Rate	Amount
	<p><b><u>BILL NO.5</u></b></p> <p><b><u>ROOF COVERINGS ETC</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>General</u></p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use</p> <p><u>Sizes</u></p> <p>All items are measured net unless otherwise described</p> <p><u>Flashings, trimming plates, etc.</u></p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable</p> <p>All items are unless otherwise described measured net</p> <p><b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b></p> <p><u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u></p>			
1	Roof covering with pitch not exceeding 50 degrees	m2	515	
	<b>Carried to Collection</b>			R
	<p>Section No. 3            CONSTRUCTION OF LARGE ADMINISTRATION BLOCK            Bill No. 5            ROOF COVERINGS, ETC</p>			

2	Ridge capping 550mm girth	m	45
3	Hip capping 550mm girth	m	34
	<u>Sundries</u>		
4	12" Thermal resistance sisalation laid on purlins	m2	515

**Carried to Collection**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 5  
 ROOF COVERINGS, ETC

R

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK

Bill No. 5

ROOF COVERINGS, ETC

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

180

181

**Amount**

**Carried Forward to Summary of Section No. 3**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 5  
 ROOF COVERINGS, ETC

R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.3</u></b></p>			
<p><b><u>BILL NO.6</u></b></p>			
<p><b><u>CARPENTRY AND JOINERY</u></b></p>			
<p><b><u>ROOFS ETC</u></b></p>			
<p><b><u>PRE-FABRICATED TIMBER ROOF TRUSSES</u></b></p>			
<p><u>Pre-fabricated metal connected timber roof trusses</u></p>			
<p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p>			
<p><u>Timber</u></p>			
<p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p>			
<p><u>Bolts</u></p>			
<p>Bolts shall be in accordance with BS 4190 or SABS 135</p>			
<p><u>Shear plates, tooth connectors and split rings</u></p>			
<p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p>			
<p><u>Washers</u></p>			
<p>Square or round washers of the following dimensions shall be used with all bolts:</p>			
<p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 6 CARPENTRY AND JOINERY</p>			
		R	

2 Bolts up to 12mm diameter:  
Washers shall be minimum 36mm wide of minimum 4,00mm thickness

3 Bolts up to 20mm diameter:  
Washers shall be minimum 60mm wide of minimum 5,00mm thickness

Metal connector plates

Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel

The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m<sup>2</sup> commercial class hot dipped galvanising as per SABS 934 before stamping

All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report

Truss construction

Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers

Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint

Truss design

All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")

Truss spacing

The truss centres shall be less than or equal to that as described in this bill for each respective truss

Truss pitch

The truss pitch shall be as described in this bill for each respective truss type

**Carried to Collection**

Section No. 3  
CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
Bill No. 6  
CARPENTRY AND JOINERY

R

Truss loading

Trusses shall be designed for a live load of 0,50kN/m<sup>2</sup> and dead load as specified under the sub-heading "Specific load specifications for roof trusses"

Shop drawings, design and erection guarantee certificates

It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified

Dimensions

All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences

Erection

All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer

Design system

The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system

However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent

Specific specifications for roof trusses

Unless otherwise described, the following specifications will apply:

- 1 All trusses to be with a 20° pitch

**Carried to Collection**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 6  
 CARPENTRY AND JOINERY

R

2 The dead load consists of 0,5mm "Klip-Lok Light Industrial" galvanised troughed sheet steel roof covering with "Chromadek" finish, purlins at approximately 1200mm centres, 6mm fibre-cement nailed-up ceilings and 50mm glass fibre insulation blanket laid on top of ceilings

Rates

Tendered rates to include for the complete roof construction, including the design of the roof construction, all timber of required grade and type shown on the design, all cutting and waste, cutting to the exact lengths and end angles to manufacture the respective truss type, supply of all connector plates, fabrication of trusses, checking the completed truss for quality, loading up, transporting to the site of the works and off loading, storing under cover and protecting from the weather, hoisting up in position and erection of the roof truss structure, necessary supervision, submission of all shop drawings, design and erection guarantee certificates, etc. as specified

**ROOFS, ETC.**

**The following in roof trusses to various buildings**

Allow for the preparation and submission of the following documents in respect of all buildings

The following is applicable in respect of roof trusses:

Trusses are at maximum 1100mm centres  
 Roof covering is 0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheet on timber purlins  
 Ceilings are 6mm sheeting on 38 x 38mm brandering  
 .The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on the site before design or fabrication commences

1 Roof construction to double pitched roof with two hipped ends 47.019 x 13.56m and 1.90m high overall including wall plates, trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 1200mm centres for roof covering (see drawing in the back of this bill of quantities) (administration block)

No 1

Sawn softwood

2 38 x 114mm Wall plates

m 229

**Carried to Collection**

R

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 6  
 CARPENTRY AND JOINERY





Section No. 3

CONSTRUCTION OF LARGE ADMINISTRATION BLOCK

Bill No. 6

CARPENTRY AND JOINERY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

183

184

185

186

187

**Carried Forward to Summary of Section No. 3**

Section No. 3  
CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
Bill No. 6  
CARPENTRY AND JOINERY

R

Item No	<b><u>SECTION NO.3</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.7</u></b>			
	<b><u>CEILING , ETC.</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions:</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere			
	<b><u>CEILING CONSTRUCTION, CORNICES, ETC.</u></b>			
	<b><u>Insulation</u></b>			
1	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	406	
	<u>Sawn softwood</u>			
2	38 x 114mm Ceiling joists	m	175	
	<u>Wrought softwood</u>			
3	19 x 76mm Cornices nailed	m	596	
	<b><u>NAILED UP AND SCREWED UP CEILINGS</u></b>			
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>			
4	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	427	
	<b>Carried to Collection</b>			
	Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 7 CEILINGS, ETC			R

5 Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening

No

3

**Carried to Collection**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 7  
 CEILINGS, ETC

R

Section No. 3

CONSTRUCTION OF LARGE ADMINISTRATION BLOCK

Bill No. 7

CEILINGS, ETC

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

189

190

**Amount**

**Carried Forward to Summary of Section No. 3**

Section No. 3  
CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
Bill No. 7  
CEILINGS, ETC

R

Item No	<b><u>SECTION NO.3</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.8</u></b>			
	<b><u>IRONMONGERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions</u>			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
	<u>Finishes to ironmongery</u>			
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded			
	<b><u>LOCKS</u></b>			
	<u>"Solid"</u>			
1	"Code 460/313" Blesbok four lever lockset	No	23	
	<b><u>SUNDRIES</u></b>			
	<u>"Solid"</u>			
2	CZ8730SC Door stop or similar approved; plugged and screwed for wall or floor	No	23	
	<u>"Solid"</u>			
3	19mm Diameter chromium plated towel rail 600mm long incl. end brackets	No	7	
	<b><u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u></b>			
	<b>Carried to Collection</b>			
	Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 8 IRONMONGERY			R

4	<p><u>"Vitrex" or equally approved</u></p> <p>Pinning boards 2400 x 1350mm high fixed to brickwork</p>	No	8		
	<p style="text-align: center;"><b>Carried to Collection</b></p> <p>Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 8 IRONMONGERY</p>				R

Section No. 3

CONSTRUCTION OF LARGE ADMINISTRATION BLOCK

Bill No. 8

IRONMONGERY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

192

193

**Amount**

**Carried Forward to Summary of Section No. 3**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 8  
 IRONMONGERY

R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.3</u></b></p>			
<p><b><u>BILL NO. 9</u></b></p>			
<p><b><u>METALWORK</u></b></p>			
<p><u>Descriptions</u></p>			
<p>Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p>			
<p><u>Drawings</u></p>			
<p>Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc</p>			
<p><b><u>ALUMINIUM WINDOWS, DOORS, ETC</u></b></p>			
<p><u>AAAMSA guide</u></p>			
<p>All windows, doors, etc shall comply with and meet the minimum recommended performance requirements as set out in the General Specification for Architectural Aluminium and Glass Products (Third Edition) as published by the Association of Architectural Aluminium Manufacturers of South Africa (AAAMSA)</p>			
<p><u>Finish</u></p>			
<p>The windows, doors, etc shall be natural anodised to a thickness of 25 micron and shall comply with SABS 999 and 1407</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 9 METALWORK</p>			
			R



Glass

Glazing to be with patent rubber gaskets with glazing beads and comply with BS 952. Thickness of glass shall be in accordance with table 1 (Part N : Glazing ). Safety glass shall comply with SABS 1263. The National Building Regulations shall be observed with regard to the specification of safety glass

Design indemnity

The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed

Drawings

Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc

Pricing.

All window prices should include aluminium louvres as shown

General

Workshop drawings to be approved by the architect before manufacture

**PRESSED STEEL DOOR FRAMES**

1,2mm Double rebated frames suitable for half brick walls

1	Frame for door 813 x 2032mm high	No	23	
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**STEEL STRONGROOM DOORS, VENTILATORS, ETC**

"Mutual" strongroom doors etc. suitable for 230mm walls fixed to brickwork or concrete

2	Door size 1860 x 750 x 100mm thick door frame complete	No	1	
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**STEEL WINDOWS, DOORS, ETC**

**Carried to Collection**

R

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 9  
 METALWORK

<u>Standard residential windows with burglar bars to all sashes</u>		
3	Window code SWE418, size 1022 x 1264mm high	No 26
4	Window code SWE37S, size 1022 x 949mm high	No 4
5	Window code SWE31S, size 949 x 533mm high	No 13
<u>Purpose made residential aluminium windows with type B2 burglar bars to opening sashes</u>		
6	Purpose made window size, 1575 x 1200mm high	No 1
7	Purpose made window size, 1525 x 1300mm high	No 1
8	Purpose made window 1625 x 1300mm high	No 1

**Carried to Collection**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 9  
 METALWORK

R

Section No. 3

CONSTRUCTION OF LARGE ADMINISTRATION BLOCK

Bill No. 9

METALWORK

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

195

196

197

**Carried Forward to Summary of Section No. 3**

Section No. 3  
CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
Bill No. 9  
METALWORK

R

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.3</u></b>			
	<b><u>BILL NO. 10</u></b>			
	<b><u>PLASTERING</u></b>			
	<b><u>SCREEDS</u></b>			
	<u>Screeds on concrete</u>			
1	30mm Thick on floors	m2	427	
	<b><u>GRANOLITHIC</u></b>			
	<u>Untinted granolithic on concrete</u>			
2	30mm Thick on floors and landings	m2	8	
	<b><u>INTERNAL PLASTER</u></b>			
	<u>Cement plaster on brickwork</u>			
3	On walls	m2	1,699	
4	On narrow widths	m2	50	
	<b>Carried Forward to Summary of Section No. 3</b>			
	Section No. 3			
	CONSTRUCTION OF LARGE ADMINISTRATION BLOCK			
	Bill No. 10			
	PLASTERING			
				R

Item No	<b><u>SECTION NO.3</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.11</u></b>			
	<b><u>TILING</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	<b><u>WALL TILING</u></b>			
	<u>200 x 200mm x 5mm White glazed ceramic wall tiles (or similar approved) to be laid with manufactures approved tiling adhesive and white tiling grout. CTM code: WS10SH100L</u>			
1	On walls	m2	46	
2	On narrow widths	m2	39	
	<b><u>FLOOR TILING</u></b>			
	<u>420 x420 11.5mm kilimanjaro floor tiles or similar approved by architects, fixed with adhesive, painted with tinted waterproof jointing compound. Grouting to be grey, tiles should have expansion joint and aluminium edging strip.</u>			
3	On floors and landings	m2	425	
4	Skirting formed of cut kilimanjaro floor tile - cut to 420 x 75mm high.	m	630	
	<b><u>TOILET PAPER HOLDERS ETC</u></b>			
	<u>"Vaal" white glazed ceramic</u>			
5	180 x 180 x 120mm Toilet paper holder (Ref. 653110)	No	7	
	<b>Carried Forward to Summary of Section No. 3</b>			
	Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 11 TILING			R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.3</u></b></p>			
<p><b><u>BILL NO.12</u></b></p>			
<p><b><u>PLUMBING AND DRAINAGE</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><b><u>"Polycop" polypropylene pipes:</u></b></p>			
<p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p>			
<p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p>			
<p>All pipe diameters are nominal external</p>			
<p><b><u>"Polylink" polypropylene pipes:</u></b></p>			
<p>Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints</p>			
<p>Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured</p>			
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p>			
<p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p>			
<p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p>			
<p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 12 PLUMBING AND DRAINAGE</p>			
		R	

All pipe diameters are nominal external

**Concrete pipes:**

Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings

**Vitrified clay pipes:**

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

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

**uPVC pipes and fittings:**

Soil, waste and vent pipes and fittings shall be solvent weld jointed

**uPVC pressure pipes and fittings:**

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

**Copper pipes:**

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

**Carried to Collection**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

**Fixing of pipes**

Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level

**Lead pipes and fittings**

All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel

**Reducing fittings**

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

**Wire gratings**

Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings

**Septic tanks**

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

**Exposed concrete surfaces**

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster

**Excavations**

No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling

"Soft rock" and "hard rock" shall be as defined in "Earthworks"

**Carried to Collection**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R



**Laying, backfilling, bedding, etc. of pipes**

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

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding

**Flush pans**

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

**Stainless steelbasins, sinks, wash troughs, urinals, etc.**

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable

**Waste unions**

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings

**Steel sectional water tanks**

Tanks shall comply with SABS CKS 114

**"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.**

Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described

Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc

**RAINWATER DISPOSAL**

**Carried to Collection**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

	<u>0.8mm Galvanised sheet iron with "Chromadek" finish on one side</u>			
1	125 x 100mm Seamless eaves gutters with beaded front edge	m	125	
2	Extra over eaves gutter for stopped end	No	6	
3	Extra over eaves gutter for angle	No	6	
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	8	
5	100mm Diameter rainwater pipes	m	21	
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	8	
7	Extra over rainwater pipe for shoe	No	8	
	<b><u>SOIL DRAINAGE</u></b>			
	<u>uPVC pipes</u>			
8	110mm Pipes laid in and including trenches not exceeding 1m deep	m	35	
9	110mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	44	
	<u>Extra over uPVC pipes for fittings</u>			
10	110mm Bend	No	8	
11	110mm Junction	No	4	
12	110 x 50mm Reducing junction	No	4	
13	110mm Double junction	No	4	
	<u>Pre-cast concrete gulleys</u>			
14	110mm Dished gully not exceeding 1m deep with 150mm steel grate and standard concrete gully surround	No	2	
	<u>Sundries</u>			
15	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	2	
	<b>Carried to Collection</b>			R
	Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 12 PLUMBING AND DRAINAGE			

16	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock	m3	2	
17	100mm Cast iron "ABC" cleaning eye	No	3	
18	Testing drainage pipe system		Item	
<b><u>SANITARY FITTINGS</u></b>				
<u>"Concor"</u>				
<u>"Citimetal" stainless steel</u>				
19	Series 300 single end bowl overlay sink, size 1200 x 535mm fitted to top of cabinet (cabinet e/m)	No	1	
<u>"Vaal"</u>				
20	Vaal Sanitaryware vitreous china 510 x 405mm rounded "Hibiscus" (or similar approved) basin with three semi-punched tap holes (i.e. available in zero, one, two or three tap hole configurations), integrated overflow, and chain stay hole through the centre semi-punched tap hole. Available in standard colour range.	No	7	
21	Vaal Sanitaryware vitreous china wall hung "Lavatera" urinal with top inlet (code 705426) or back inlet (code 705427). Overall size 600 x 385 x 380 mm. Top inlet fittings (code 7054Z1) and back inlet fittings (code 7054Z2) include a 38 mm c.p. domical grating, a spreader (with a 20 mm diameter thread), and two hanger brackets.	No	2	
22	Vaal Sanitaryware vitreous china "Daisy" (or similar approved) semi-close coupled 90° outlet open rim wash-down pan (code 751400) and matching 9 litre cistern (code 7116SC) complete with lid, fitments and flush pipe elbow	No	7	
<b><u>WASTE UNIONS ETC</u></b>				
<u>"Cobra Watertech"</u>				
23	38mm "Cobra 316" unslotted waste and plug with chain	No	1	
<b><u>TRAPS ETC</u></b>				
<b>Carried to Collection</b>				
Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 12 PLUMBING AND DRAINAGE				R

	<u>"Marley"</u>				
24	40mm Flexi butyl rubber trap with reseal "P" trap	No	1		
	<u>"Cobra Watertech"</u>				
25	Ref. 323 shower trap with CP grating	No	2		
	<u>"Cobra Watertech"</u>				
26	"Cobra Ref. 365/40" CP bottle trap	No	9		
	<b><u>TAPS, VALVES, ETC</u></b>				
	<u>"Cobra Watertech"</u>				
27	WALCRO metering under tile stopcock with 150 n.h.s vandal proof shower rose	No	2		
28	15mm Code KP265 CP Shower rose including 027CP overhead shower arm	No	2		
29	15mm CP connectors	No	10		
30	25mm 1001/125RB fullway gate valve	No	1		
31	"Cobra ref. 206-20" bib tap	No	4		
32	Ref. 232-10 Angle regulating valve with connection pipes etc.	No	4		
33	"Cobra Ref. 111-15" pillar tap	No	7		
34	"Cobra Ref. 232/350" Angle regulating valve	No	14		
35	Cobra Ref. 166/041 wall type "Star" sink mixer with overarm swivel outlet	No	3		
36	Cobra Ref. FJ6.000 "Flushmaster Junior" exposed top entry urinal flushvalve complete with Cobra Ref. FJT5.4 connector and spray rose	No	2		
	<b><u>SANITARY PLUMBING</u></b>				
	<u>uPVC pipes</u>				
37	50mm Pipes	m	17		
	<b>Carried to Collection</b>				
	Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 12 PLUMBING AND DRAINAGE				R

38	110mm Pipes	m	16
39	50mm Pipes laid in and including trenches n.e 1m deep	m	16
40	110mm Pipes laid in and including trenches not exceeding 1m deep	m	22
<u>Extra over uPVC pipes for fittings</u>			
41	50mm Bend	No	16
42	100mm Bend	No	5
43	50mm Junction	No	16
44	110mm Junction	No	5
45	110mm Reducing junction	No	5
46	110mm Pan connector	No	7
47	110mm Double junction	No	5
48	110mm "GI Two-way" vent valve	No	5

Sundries

49	Testing waste pipe system		Item
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**WATER SUPPLIES**D.P.I Plastics HDPE Poly piping with Plasson impression couplings

50	50mm Pipes	m	44
<u>Extra over piping for Plasson fittings</u>			
51	50mm Elbow	No	10
52	50mm Tee	No	6
<u>Class 0 copper pipes</u>			
53	15mm Pipes	m	22
54	22mm Pipes	m	38

**Carried to Collection**

R

Section No. 3  
CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
Bill No. 12  
PLUMBING AND DRAINAGE

	<u>Extra over class 0 copper pipes for capillary fittings</u>			
55	15mm Fittings	No	18	
56	22mm Fittings	No	12	
	<b><u>ELECTRIC WATER HEATERS</u></b>			
	<u>"Kwikot"</u>			
57	Kwikot 250 Litre Megaflo "i" Dual electric water heater (Code : MF150-D2-2A-I) complying with SABS 151-2002, overall size 1075 x 530 x 530mm high fitted with isolator switch, operating at 600kPa with temperature and pressure control valve including 20mm female draincock with inlet compression. Geyser to be installed horizontally in roof space with 1560 x 560mm polyethylene drip tray (Code : GSTP-1650) and 22mm pipe work including two 22mm vacuum breakers (Code : KH4.200CX) installed on hot and cold water supply. Installation to include a 22mm 600kPa Kwikot Mono pressure control valve (Code : KH3.116), all in accordance with SANS 10254, connected to single phase electrical power supply.	No	1	
	<b><u>TESTING</u></b>			
58	Testing water pipe system		Item	
	<b><u>FIRE APPLIANCES ETC</u></b>			
	<u>'Chubb'</u>			
59	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	2	
60	9kg DCP extinguisher with brackets screwed and including varnished hardwood backboard plugged.	No	3	
	<b><u>RAINWATER HARVEST TANKS</u></b>			
	<u>"Jojo or similar"</u>			
61	JoJo tank or similar approved. 1900mm diameter, 2040mm high, 2500 litre water storage tank green one, 340mm high brick base with compacted fill. Complete with plumbing accessories	No	2	
	<b>Carried to Collection</b>			
	Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 12 PLUMBING AND DRAINAGE			R

Section No. 3

CONSTRUCTION OF LARGE ADMINISTRATION BLOCK

Bill No. 12

PLUMBING AND DRAINAGE

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

201

202

203

204

205

206

207

208

209

**Carried Forward to Summary of Section No. 3**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.3</u></b>			
	<b><u>BILL NO. 13</u></b>			
	<b><u>GLAZING</u></b>			
	<b><u>GLAZING TO STEEL WITH PUTTY</u></b>			
	<u>4mm Clear float glass</u>			
1	Panes not exceeding 0,1 m2	m2	42	
	<u>4mm Rough cast glass</u>			
2	Panes not exceeding 0,1m2	m2	11	
	<b><u>MIRRORS, ETC</u></b>			
	<u>6mm Silvered float glass copper backed mirrors with bevelled edges, holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>			
3	600 x 400 x 6mm polished plate glass mirrors with square polished edges holed for and plugged with chrome plated detachable chrome plated screws. Above all WHB. CTM Code: BSMR4060R) or similar approved by the architects	No	7	
	<b>Carried Forward to Summary of Section No. 3</b>			
	Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 13 GLAZING			R



Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.3</u></b>			
	<b><u>BILL NO. 14</u></b>			
	<b><u>PAINTWORK</u></b>			
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>			
	<b><u>ON FLOATED PLASTER</u></b>			
	<u>One coat universal undercoat and three coats super acrylic PVA paint</u>			
1	On internal walls	m2	1,749	
2	On ceilings and beams	m2	3	
	<b><u>ON SMOOTH CONCRETE</u></b>			
	<u>One coat universal undercoat and three coats super acrylic PVA paint</u>			
3	On concrete columns	m2	8	
	<b><u>ON FIBRE-CEMENT</u></b>			
	<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
4	On ceilings	m2	427	
	<u>Prepare and apply one universal undercoat and two coats gloss enamel paint</u>			
5	On fascias and barge boards	m2	30	
	<b><u>ON METAL</u></b>			
	<u>Spot priming defects in pre-primed surfaces, apply one coat "Dulux Duraphos Primer" one coat "Dulux Duragrip Undercoat" and two coats "Dulux Dura 100 Gloss Enamel Paint" or similar approved on steel</u>			
6	On door frames	m2	38	
	<b>Carried to Collection</b>			
	Section No. 3			
	CONSTRUCTION OF LARGE ADMINISTRATION BLOCK			
	Bill No. 14			
	PAINTWORK			
				R

7	On windows with burglar bars	m2	113
<b><u>ON WOOD</u></b>			
<u>One coat "Dulux" wood primer, one coat "Dulux" undercoat for all surfaces and two coats "Dulux Silthane Silk" enamel paint or similar approved</u>			
8	On doors	m2	3

**Carried to Collection**

Section No. 3  
 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
 Bill No. 14  
 PAINTWORK

R

Section No. 3

CONSTRUCTION OF LARGE ADMINISTRATION BLOCK

Bill No. 14

PAINTWORK

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

212

213

**Amount**

**Carried Forward to Summary of Section No. 3**

Section No. 3  
CONSTRUCTION OF LARGE ADMINISTRATION BLOCK  
Bill No. 14  
PAINTWORK

R

Item No	<b><u>SECTION NO.3</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.15</u></b>			
	<b><u>APRONS AROUND BUILDINGS</u></b>			
	<u>Compaction of surfaces</u>			
1	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	126	
	<u>15 MPa/20 mm concrete</u>			
2	Aprons cast in panels to falls	m3	13	
3	Thickening down apron on edge 110mm x 200mm wide, incl. excavation, backfilling, cart away, etc.	m	126	
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
4	Aprons to falls	m2	126	
	<u>Smooth formwork to sides</u>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	126	
	<b>Carried Forward to Summary of Section No. 3</b>			
	Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 15 CONCRETE APRONS			R

Item No	<b><u>SECTION NO.3</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO .16</u></b>			
	<b><u>PROVISIONAL AMOUNTS ETC</u></b>			
	<b><u>PROVISIONAL SUMS FOR SELECTED SUB-CONTRACT WORKS</u></b>			
	<b><u>HOLES THROUGH WALLS</u></b>			
	<u>Holes</u>			
1	Leave or form opening through one brickwall for pipe n.e 100mm diameter	No	6	
2	Leave or form opening through one brickwall for pipe exceeding 100mm and n.e 200mm diameter	No	12	
	<b><u>SLEEVES</u></b>			
	<u>Plastic sleeves for pipes not exceeding 100mm diameter</u>			
3	Sleeve not exceeding 250mm long	No	8	
4	Sleeve exceeding 250mm and not exceeding 500mm long	No	8	
	<u>Plastic sleeves for pipes exceeding 100mm and not exceeding 200mm diameter</u>			
5	Sleeve not exceeding 250mm long	No	6	
6	Sleeve exceeding 250mm and not exceeding 500mm long	No	6	
	<b>Carried Forward to Summary of Section No. 3</b>			R
	Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK Bill No. 16 BUILDER'S WORK			

Section No. 3

CONSTRUCTION OF LARGE ADMINISTRATION BLOCK

**SECTION SUMMARY - CONSTRUCTION OF LARGE ADMINISTRATION BLO**

Bill No		Page No	Amount
1	FOUNDATIONS	170	
2	CONCRETE, FORMWORK & REINFORCEMENT	174	
3	MASONRY	178	
4	WATERPROOFING	179	
5	ROOF COVERINGS, ETC	182	
6	CARPENTRY AND JOINERY	188	
7	CEILINGS, ETC	191	
8	IRONMONGERY	194	
9	METALWORK	198	
10	PLASTERING	199	
11	TILING	200	
12	PLUMBING AND DRAINAGE	210	
13	GLAZING	211	
14	PAINTWORK	214	
15	CONCRETE APRONS	215	
16	BUILDER'S WORK	216	
<b>Carried to Final Summary</b>			R
Section No. 3 CONSTRUCTION OF LARGE ADMINISTRATION BLOCK			

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>FOUNDATIONS</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Nature of ground</u></p>			
<p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p>			
<p><u>Excavation for working space in rock</u></p>			
<p>Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over" bulk excavation or trench and hole excavation as the case may be</p>			
<p><u>Carting away of excavated material</u></p>			
<p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p>			
<p><u>Filling</u></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><u>Soil poisoning</u></p>			
<p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a ten (10) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p>			
<p><b><u>SITE CLEARANCE ETC</u></b></p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 1 FOUNDATIONS</p>			
		R	

	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	753	
2	Stripping average 150mm thick layer of top and depositing material in prescribed stock piles on site	m2	753	
	<b><u>EARTHWORKS</u></b>			
	<b><u>EXCAVATION, FILLING, ETC</u></b>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	341	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
4	Soft rock	m3	8	
5	Hard rock	m3	14	
	<u>Extra over all excavations for carting away</u>			
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	82	
	<u>Risk of collapse of excavations</u>			
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	359	
	<u>Keeping excavations free of water</u>			
8	Keeping excavations free of water		Item	
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
9	Under floors, steps, paving, etc	m3	82	
10	Backfilling to trenches, holes, etc	m3	62	
	<u>G6 Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u>			
11	Under floors, steps, paving etc.	m3	177	
	<b>Carried to Collection</b>			
	Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 1 FOUNDATIONS			R



12	Trenches	m3	60
	<u>Compaction of surfaces</u>		
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	631
	<u>Prescribed density tests on filling</u>		
14	"Modified AASHTO Density" test	No	16
	<b><u>SOIL POISONING</u></b>		
	<u>Weedkiller mixed in accordance to supplier's specifications</u>		
15	Under paving etc	m2	631
16	To bottoms and sides of trenches, etc.	m2	685
	<u>Soil insecticide</u>		
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	631
18	To bottoms and sides of trenches etc	m2	685
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>		
	<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>		
	<u>25MPa/19mm concrete</u>		
19	Strip footings	m3	82
	<b><u>REINFORCEMENT</u></b>		
	<u>High tensile steel reinforcement to structural concrete work</u>		
20	16mm Diameter bars	t	0.58

Carried to Collection

R

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 1  
 FOUNDATIONS

<u>Fabric reinforcement</u>			
21	Ref. S395 fabric reinforcement in concrete footings etc	m2	282
<b><u>TEST CUBES</u></b>			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	8.0
<b><u>BRICKWORK</u></b>			
<u>Brickwork of NFP bricks in class II mortar</u>			
23	One brick walls	m2	163
24	Half brick walls	m2	39
<b><u>BRICKWORK SUNDRIES</u></b>			
<u>Joint forming material in movement joints:</u>			
<u>Brickwork reinforcement</u>			
25	150mm Wide reinforcement built in horizontally	m	1,910
<b><u>FACE BRICKWORK</u></b>			
<u>Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints</u>			
26	Extra over brickwork for face brickwork	m2	87
<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces</u>			
27	Coping on top of one brick wall	m	60

Carried to Collection

R

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 1  
 FOUNDATIONS

Section No. 4

CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BLOCKS

Bill No. 1

FOUNDATIONS

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

218

219

220

221

**Carried Forward to Summary of Section No. 4**

Section No. 4  
CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
Bill No. 1  
FOUNDATIONS

R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.4</u></b></p>			
<p><b><u>BILL NO.2</u></b></p>			
<p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Cost of tests</u></p>			
<p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)</p>			
<p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p>			
<p><u>Formwork</u></p>			
<p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p>			
<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 2 CONCRETE, FORMWORK &amp; REINFORCEMENT</p>			
		R	

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

Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described

Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"

### **UNREINFORCED CONCRETE**

25MPa/19mm concrete

1	Surface beds cast in panels	m3	11
2	Surface beds cast in panels on waterproofing.	m3	52
3	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	48

### **CONCRETE SUNDRIES**

Finishing top surfaces of concrete smooth with a steel trowel

4	Surface beds, slabs, etc	m2	631
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### **TEST CUBES**

5	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	8.0
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### **MOVEMENT JOINTS ETC**

Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces

6	15mm Joints exceeding 300mm high	m	365
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**Carried to Collection**

Section No. 4  
CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
Bill No. 2  
CONCRETE, FORMWORK & REINFORCEMENT

R

Saw cut joints

Horizontal joggle construction joints through concrete including thick cement slurry to one face

**DIVIDING STRIPS, ETC.**

7	6 x 38mm Angle iron step guard cast into concrete with 3 x 6mm anchors	m	6
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**REINFORCEMENT**

Fabric reinforcement

8	Ref. S245 fabric reinforcement in concrete surface bed etc	m2	631
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**Carried to Collection**

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 2  
 CONCRETE, FORMWORK & REINFORCEMENT

R

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BLOCKS

Bill No. 2

CONCRETE, FORMWORK & REINFORCEMENT

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

223

224

225

**Carried Forward to Summary of Section No. 4**

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 2  
 CONCRETE, FORMWORK & REINFORCEMENT

R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.4</u></b></p>			
<p><b><u>BILL NO. 3</u></b></p>			
<p><b><u>MASONRY</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><b><u>BRICKWORK</u></b></p>			
<p><u>Sizes in descriptions</u></p>			
<p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p>			
<p><u>Linings to concrete</u></p>			
<p>Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties</p>			
<p><u>Hollow walls etc</u></p>			
<p>Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p>			
<p><u>Reinforced brick lintels</u></p>			
<p>Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous</p>			
<p><u>Face bricks</u></p>			
<p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p>			
<p><u>Pointing</u></p>			
<p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 3 MASONRY</p>			R



**SUPERSTRUCTURE**Brickwork of NFP bricks in class II mortar

1	Half brick walls	m2	112
2	Half brick walls in beamfilling.	m2	37
3	One brick walls	m2	567

**BRICKWORK SUNDRIES**Joint forming material in movement joints:Steel bar reinforcementBrickwork reinforcement

4	75mm Wide reinforcement built in horizontally	m	788
5	150mm Wide reinforcement built in horizontally	m	2,669

Turning pieces

6	110mm Wide turning piece to lintels etc	m	147
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Galvanised wire ties etc

7	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork (Provisional)	No	172
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**FACE BRICKWORK**Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints

8	Extra over brickwork for face brickwork	m2	1,155
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Brick-on-edge header course copings, sills, etc of face bricks ( Purchase price R4 000,00 / 1000 VAT incl. delivered to site) pointed with recessed joints on all exposed faces

9	Extra over brickwork for brick-on-edge header course lintel	m	63
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**Carried to Collection**

R

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 3  
 MASONRY

Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces

10	110mm Wide sill set level and slightly projecting	m	57
11	220mm Wide sill set sloping and slightly protecting outside	m	57

**Carried to Collection**

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 3  
 MASONRY

R

Section No. 4

CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BLOCKS

Bill No. 3

MASONRY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

227

228

229

**Carried Forward to Summary of Section No. 4**

Section No. 4  
CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
Bill No. 3  
MASONRY

R

Item No	<b><u>SECTION NO.4</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Waterproofing</u>			
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			
	<b><u>DAMP-PROOFING OF WALLS AND FLOORS</u></b>			
	<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	67	
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
2	Under surface beds	m2	520	
	<b><u>JOINT SEALANTS ETC</u></b>			
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>			
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	269	
	<b>Carried Forward to Summary of Section No. 4</b>			
	Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 4 WATERPROOFING			R

Item No	<b><u>SECTION NO.4</u></b>	Quantity	Rate	Amount
	<p><b><u>BILL NO.5</u></b></p> <p><b><u>ROOF COVERINGS ETC</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>General</u></p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use</p> <p><u>Sizes</u></p> <p>All items are measured net unless otherwise described</p> <p><u>Flashings, trimming plates, etc.</u></p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable</p> <p>All items are unless otherwise described measured net</p> <p><b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b></p> <p><u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u></p>			
1	Roof covering with pitch not exceeding 50 degrees	m2	722	
	<b>Carried to Collection</b>			R
	<p>Section No. 4            CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL            Bill No. 5            ROOF COVERINGS, ETC</p>			

2	Ridge capping 550mm girth	m	22
3	Hip capping 550mm girth	m	11
4	Valley flashing 800mm girth	m	20
	<u>Sundries</u>		
5	12" Thermal resistance sisalition laid on purlins	m2	722

**Carried to Collection**

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 5  
 ROOF COVERINGS, ETC

R

Section No. 4

CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BLOCKS

Bill No. 5

ROOF COVERINGS, ETC

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

232

233

**Amount**

**Carried Forward to Summary of Section No. 4**

Section No. 4

CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL

Bill No. 5

ROOF COVERINGS, ETC

R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.4</u></b></p>			
<p><b><u>BILL NO.6</u></b></p>			
<p><b><u>CARPENTRY AND JOINERY</u></b></p>			
<p><b><u>ROOFS ETC</u></b></p>			
<p><b><u>PRE-FABRICATED TIMBER ROOF TRUSSES</u></b></p>			
<p><u>Pre-fabricated metal connected timber roof trusses</u></p>			
<p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p>			
<p><u>Timber</u></p>			
<p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p>			
<p><u>Bolts</u></p>			
<p>Bolts shall be in accordance with BS 4190 or SABS 135</p>			
<p><u>Shear plates, tooth connectors and split rings</u></p>			
<p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p>			
<p><u>Washers</u></p>			
<p>Square or round washers of the following dimensions shall be used with all bolts:</p>			
<p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 6 CARPENTRY AND JOINERY</p>			
		R	



2 Bolts up to 12mm diameter:  
Washers shall be minimum 36mm wide of minimum 4,00mm thickness

3 Bolts up to 20mm diameter:  
Washers shall be minimum 60mm wide of minimum 5,00mm thickness

Metal connector plates

Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel

The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m<sup>2</sup> commercial class hot dipped galvanising as per SABS 934 before stamping

All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report

Truss construction

Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers

Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint

Truss design

All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")

Truss spacing

The truss centres shall be less than or equal to that as described in this bill for each respective truss

Truss pitch

The truss pitch shall be as described in this bill for each respective truss type

**Carried to Collection**

Section No. 4  
CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
Bill No. 6  
CARPENTRY AND JOINERY

R

Truss loading

Trusses shall be designed for a live load of 0,50kN/m<sup>2</sup> and dead load as specified under the sub-heading "Specific load specifications for roof trusses"

Shop drawings, design and erection guarantee certificates

It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified

Dimensions

All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences

Erection

All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer

Design system

The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system

However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent

Specific specifications for roof trusses

Unless otherwise described, the following specifications will apply:

- 1 All trusses to be with a 20° pitch

**Carried to Collection**

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 6  
 CARPENTRY AND JOINERY

R

2 The dead load consists of 0,5mm "Klip-Lok Light Industrial" galvanised troughed sheet steel roof covering with "Chromadek" finish, purlins at approximately 1200mm centres, 6mm fibre-cement nailed-up ceilings and 50mm glass fibre insulation blanket laid on top of ceilings

Rates

Tendered rates to include for the complete roof construction, including the design of the roof construction, all timber of required grade and type shown on the design, all cutting and waste, cutting to the exact lengths and end angles to manufacture the respective truss type, supply of all connector plates, fabrication of trusses, checking the completed truss for quality, loading up, transporting to the site of the works and off loading, storing under cover and protecting from the weather, hoisting up in position and erection of the roof truss structure, necessary supervision, submission of all shop drawings, design and erection guarantee certificates, etc. as specified

**ROOFS, ETC.**

**The following in roof trusses to various buildings**

Allow for the preparation and submission of the following documents in respect of all buildings

The following is applicable in respect of roof trusses:

Trusses are at maximum 1100mm centres  
 Roof covering is 0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheet on timber purlins  
 Ceilings are 6mm sheeting on 38 x 38mm brandering  
 .The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on the site before design or fabrication commences

1 Roof construction to double pitched roof with two hipped ends 25.75 x 11.22m and 0.839m high overall including wall plates, trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 1200mm centres for roof covering (see drawing in the back of this bill of quantities) (Grade R Block)

No 2

Sawn softwood

2 38 x 114mm Wall plates

m 287

**Carried to Collection**

R

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 6  
 CARPENTRY AND JOINERY

	<u>Wrought laminated timber</u>			
3	50 x 228mm Bearers bolted	m	52	
	<u>Sundries</u>			
4	Two coats creosote on sawn timbers	m2	99	
	<b><u>EAVES, VERGES, ETC</u></b>			
	<u>"Everite FC77" pressed fibre-cement</u>			
5	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	151	
	<b><u>DOORS, ETC</u></b>			
	<u>44mm Wrought meranti framed, ledged, braced and battened door of 44 x 150mm top rails and stiles, 22 x 150mm middle legde and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding</u>			
6	Door size 914 x 2032mm high including weatherboard	No	8	
	<u>Semi-solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame</u>			
7	44mm Door 813 x 2032mm high	No	16	
	<b><u>KIDDIES TABLE WITH PENCIL GROOVE AND HOLDER</u></b>			
8	Injection Moulded Plastic Table using 100% virgin polypropylene with added master batch for colour with a pencil groove on each side.	No	40	
9	Injection Moulded Plastic Chair using 100% virgin polypropylene with added master batch for colour.	No	160	
	<b>Carried to Collection</b>			
	Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 6 CARPENTRY AND JOINERY			R

Section No. 4

CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BLOCKS

Bill No. 6

CARPENTRY AND JOINERY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

235

236

237

238

239

**Carried Forward to Summary of Section No. 4**

Section No. 4

CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL

Bill No. 6

CARPENTRY AND JOINERY

R

Item No	<b><u>SECTION NO.4</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.7</u></b>			
	<b><u>CEILING , ETC.</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions:</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere			
	<b><u>CEILING CONSTRUCTION, CORNICES, ETC.</u></b>			
	<b><u>Insulation</u></b>			
1	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	520	
	<u>Sawn softwood</u>			
	<u>Wrought softwood</u>			
2	19 x 76mm Cornices nailed	m	365	
	<b><u>NAILED UP AND SCREWED UP CEILINGS</u></b>			
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>			
3	Ceilings including 38 x 38mm brander at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	631	
4	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	4	
	<b>Carried Forward to Summary of Section No. 4</b>			R
	Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 7 CEILINGS, ETC			

Item No	<b><u>SECTION NO.4</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.8</u></b>			
	<b><u>IRONMONGERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions</u>			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
	<u>Finishes to ironmongery</u>			
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded			
	<b><u>CATCHES, CABIN HOOKS, ETC</u></b>			
	<u>"Approved"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	8	
	<b><u>LOCKS</u></b>			
	<u>"Solid"</u>			
2	"Code 630" padlock	No	8	
3	"Code 460/313" Blesbok four lever lockset	No	40	
	<b><u>SUNDRIES</u></b>			
	<b>Carried to Collection</b>			
	Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 8 IRONMONGERY			R





Section No. 4

CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BLOCKS

Bill No. 8

IRONMONGERY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

242

243

**Amount**

**Carried Forward to Summary of Section No. 4**

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 8  
 IRONMONGERY

R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.4</u></b></p>			
<p><b><u>BILL NO. 9</u></b></p>			
<p><b><u>METALWORK</u></b></p>			
<p><u>Descriptions</u></p>			
<p>Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p>			
<p><u>Drawings</u></p>			
<p>Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc</p>			
<p><b><u>ALUMINIUM WINDOWS, DOORS, ETC</u></b></p>			
<p><u>AAAMSA guide</u></p>			
<p>All windows, doors, etc shall comply with and meet the minimum recommended performance requirements as set out in the General Specification for Architectural Aluminium and Glass Products (Third Edition) as published by the Association of Architectural Aluminium Manufacturers of South Africa (AAAMSA)</p>			
<p><u>Finish</u></p>			
<p>The windows, doors, etc shall be natural anodised to a thickness of 25 micron and shall comply with SABS 999 and 1407</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 9 METALWORK</p>			
			R

Glass

Glazing to be with patent rubber gaskets with glazing beads and comply with BS 952. Thickness of glass shall be in accordance with table 1 (Part N : Glazing ). Safety glass shall comply with SABS 1263. The National Building Regulations shall be observed with regard to the specification of safety glass

Design indemnity

The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed

Drawings

Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc

Pricing.

All window prices should include aluminium louvres as shown

General

Workshop drawings to be approved by the architect before manufacture

**PRESSED STEEL DOOR FRAMES**

1,2mm Double rebated frames suitable for half brick walls

1	Frame for door 813 x 2032mm high	No	16	
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1,2mm Double rebated frames suitable for one brick walls

**PRESSED STEEL COMBINATION DOORS AND FRAMES**

**Carried to Collection**

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 9  
 METALWORK

R

	<u>"Nty" doors or equally approved</u>		
2	"Code 914" door frame size 914 x 2032mm high fitted with three (3) parliament hinges, complete with single security gate size 914 x 2032mm high overall formed of 25 x 25 x 2mm tubular section frame mitred and welded at angles and two 25 x 25 x 2mm tubular section horizontal middle rails, gate filled in with 12 x 12 x 12mm square section vertical rails at 100mm centres and fitted with locking bolt for padlock, frame formed of 25 x 38 x 2mm tubular section stiles and top rail mitred and welded at angles and fitted with three hinges welded to gate and frame, frame factory welded at maximum 250mm centres to door frame	No	16

**STEEL WINDOWS, DOORS, ETC**

Standard residential windows with burglar bars to all sashes

3	Window code 6/3/9, size 1143 x 972mm high	No	28
4	Window code NE1, size 533 x 651mm high	No	12
5	Window code NCTX7S, size 1022 x 949mm high	No	12
6	Window code NCTX7S5, size 1511 x 949mm high	No	4

**Carried to Collection**

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 9  
 METALWORK

R

Section No. 4

CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BLOCKS

Bill No. 9

METALWORK

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

245

246

247

**Carried Forward to Summary of Section No. 4**

Section No. 4  
CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
Bill No. 9  
METALWORK

R

Item No	<b><u>SECTION NO.4</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO. 10</u></b>			
	<b><u>PLASTERING</u></b>			
	<b><u>SCREEDS</u></b>			
	<u>Screeds on concrete</u>			
1	30mm Thick on floors	m2	639	
	<b><u>INTERNAL PLASTER</u></b>			
	<u>Cement plaster on brickwork</u>			
2	On walls	m2	1,039	
3	On narrow widths	m2	70	
	<b>Carried Forward to Summary of Section No. 4</b>			
	Section No. 4			
	CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL			
	Bill No. 10			
	PLASTERING			
				R

Item No	<b><u>SECTION NO.4</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.11</u></b>			
	<b><u>TILING</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	<b><u>WALL TILING</u></b>			
	<u>200 x 200mm x 5mm White glazed ceramic wall tiles (or similar approved) to be laid with manufactures approved tiling adhesive and white tiling grout. CTM code: WS10SH100L</u>			
1	On walls in isolated panels, splashbacks, etc	m2	6	
	<b><u>FLOOR TILING</u></b>			
	<u>420 x420 11.5mm kilimanjaro floor tiles or similar approved by architects, fixed with adhesive, painted with tinted waterproof jointing compound. Grouting to be grey, tiles should have expansion joint and aluminium edging strip.</u>			
2	On floors and landings	m2	633	
3	Skirting formed of cut kilimanjaro floor tile - cut to 420 x 75mm high.	m	265	
	<b><u>TOILET PAPER HOLDERS ETC</u></b>			
	<u>"Vaal" white glazed ceramic</u>			
4	180 x 180 x 120mm Toilet paper holder (Ref. 653110)	No	16	
	<b>Carried Forward to Summary of Section No. 4</b>			
	Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 11 TILING			R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.4</u></b></p>			
<p><b><u>BILL NO.12</u></b></p>			
<p><b><u>PLUMBING AND DRAINAGE</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><b><u>"Polycop" polypropylene pipes:</u></b></p>			
<p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p>			
<p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p>			
<p>All pipe diameters are nominal external</p>			
<p><b><u>"Polylink" polypropylene pipes:</u></b></p>			
<p>Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints</p>			
<p>Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured</p>			
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p>			
<p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p>			
<p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p>			
<p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 12 PLUMBING AND DRAINAGE</p>			
		R	



All pipe diameters are nominal external

**Concrete pipes:**

Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings

**Vitrified clay pipes:**

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

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

**uPVC pipes and fittings:**

Soil, waste and vent pipes and fittings shall be solvent weld jointed

**uPVC pressure pipes and fittings:**

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

**Copper pipes:**

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

**Carried to Collection**

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

**Fixing of pipes**

Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level

**Lead pipes and fittings**

All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel

**Reducing fittings**

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

**Wire gratings**

Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings

**Septic tanks**

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

**Exposed concrete surfaces**

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster

**Excavations**

No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling

"Soft rock" and "hard rock" shall be as defined in "Earthworks"

**Carried to Collection**

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

**Laying, backfilling, bedding, etc. of pipes**

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

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding

**Flush pans**

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

**Stainless steelbasins, sinks, wash troughs, urinals, etc.**

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable

**Waste unions**

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings

**Steel sectional water tanks**

Tanks shall comply with SABS CKS 114

**"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.**

Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described

Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc

**RAINWATER DISPOSAL**

**Carried to Collection**

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

0.8mm Galvanised sheet iron with "Chromadek" finish on one side

1	125 x 100mm Seamless eaves gutters with beaded front edge	m	148
2	Extra over eaves gutter for stopped end	No	12
3	Extra over eaves gutter for angle	No	12
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	20
5	100mm Diameter rainwater pipes	m	52
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	20
7	Extra over rainwater pipe for shoe	No	20

**SANITARY FITTINGS**

"Citimetal" stainless steel

8	Series 300 Double centre bowl overlay sink, size 1800 x 535mm fitted to top of cabinet (cabinet e/m)	No	4
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"Vaal"

9	Vaal Sanitaryware vitreous china 510 x 405mm rounded "Hibiscus" (or similar approved) basin with three semi-punched tap holes (i.e. available in zero, one, two or three tap hole configurations), integrated overflow, and chain stay hole through the centre semi-punched tap hole. Available in standard colour range.	No	12
10	Vaal Sanitaryware vitreous china "Daisy" (or similar approved) semi-close coupled 90° outlet open rim wash-down pan (code 751400) and matching 9 litre cistern (code 7116SC) complete with lid, fitments and flush pipe elbow	No	12

**WASTE UNIONS ETC**

"Cobra Watertech"

11	38mm "Cobra 316" unslotted waste and plug with chain	No	4
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**TRAPS ETC**

**Carried to Collection**

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

	<u>"Marley"</u>			
12	40 x 50mm Deep seal combination "P" or "S" trap	No	4	
	<u>"Cobra Watertech"</u>			
	<u>"Cobra Watertech"</u>			
13	"Cobra Ref. 365/40" CP bottle trap	No	12	
	<b><u>TAPS, VALVES, ETC</u></b>			
	<u>"Cobra Watertech"</u>			
14	"Cobra Ref. 111-15" pillar tap	No	12	
15	"Cobra Ref. 232/350" Angle regulating valve	No	20	
16	Cobra Ref. 166/041 wall type "Star" sink mixer with overarm swivel outlet	No	4	
	<b><u>SANITARY PLUMBING</u></b>			
	<u>uPVC pipes</u>			
17	50mm Pipes laid in and including trenches n.e 1m deep	m	50	
18	110mm Pipes laid in and including trenches not exceeding 1m deep	m	100	
	<u>Extra over uPVC pipes for fittings</u>			
19	110mm Pan connector	No	16	
	<u>Sundries</u>			
20	Testing waste pipe system		Item	
	<b><u>WATER SUPPLIES</u></b>			
	<u>D.P.I Plastics HDPE Poly piping with Plasson impression couplings</u>			
	<u>Extra over piping for Plasson fittings</u>			
21	50mm Elbow	No	12	
22	50mm Tee	No	12	
	<b>Carried to Collection</b>			
	Section No. 4			
	CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL			
	Bill No. 12			
	PLUMBING AND DRAINAGE			

R

	<u>Class 0 copper pipes</u>			
23	15mm Pipes	m	40	
24	22mm Pipes	m	50	
	<u>Extra over class 0 copper pipes for capillary fittings</u>			
25	15mm Fittings	No	20	
26	22mm Fittings	No	20	
	<b><u>ELECTRIC WATER HEATERS</u></b>			
	<u>"Kwikot"</u>			
27	Kwikot 250 Litre Megaflo "i" Dual electric water heater (Code : MF150-D2-2A-I) complying with SABS 151-2002, overall size 1075 x 530 x 530mm high fitted with isolator switch, operating at 600kPa with temperature and pressure control valve including 20mm female draincock with inlet compression. Geyser to be installed horizontally in roof space with 1560 x 560mm polyethylene drip tray (Code : GSTP-1650) and 22mm pipe work including two 22mm vacuum breakers (Code : KH4.200CX) installed on hot and cold water supply. Installation to include a 22mm 600kPa Kwikot Mono pressure control valve (Code : KH3.116), all in accordance with SANS 10254, connected to single phase electrical power supply.	No	2	
	<b><u>TESTING</u></b>			
	<b><u>FIRE APPLIANCES ETC</u></b>			
	<u>'Chubb'</u>			
28	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	2	
29	4,5kg DCP extinguisher with brackets screwed and including varnished hardwood backboard plugged.	No	4	
	<b><u>RAINWATER HARVEST TANKS</u></b>			
	<b>Carried to Collection</b>			
	Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 12 PLUMBING AND DRAINAGE			R

30	<p><u>"Jojo or similar"</u></p> <p>JoJo tank or similar approved. 1900mm diameter, 2040mm high, 2500 litre water storage tank green one, 340mm high brick base with compacted fill. Complete with plumbing accessories</p>	No	4	
<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 12 PLUMBING AND DRAINAGE</p>		<p style="text-align: right;">R</p>		

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BLOCKS

Bill No. 12

PLUMBING AND DRAINAGE

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

251

252

253

254

255

256

257

258

**Carried Forward to Summary of Section No. 4**

Section No. 4  
 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R



Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.4</u></b>			
	<b><u>BILL NO. 13</u></b>			
	<b><u>GLAZING</u></b>			
	<b><u>GLAZING TO STEEL WITH PUTTY</u></b>			
	<u>4mm Clear float glass</u>			
1	Panes not exceeding 0,1 m2	m2	36	
	<u>4mm Rough cast glass</u>			
2	Panes not exceeding 0,1m2	m2	10	
	<b><u>MIRRORS, ETC</u></b>			
	<u>6mm Silvered float glass copper backed mirrors with bevelled edges, holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>			
3	600 x 400 x 6mm polished plate glass mirrors with square polished edges holed for and plugged with chrome plated detachable chrome plated screws. Above all WHB. CTM Code: BSMR4060R) or similar approved by the architects	No	12	
	<b>Carried Forward to Summary of Section No. 4</b>			
	Section No. 4			
	CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL			
	Bill No. 13			
	GLAZING			
				R

Item No	<b><u>SECTION NO.4</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO. 14</u></b>			
	<b><u>PAINTWORK</u></b>			
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>			
	<b><u>ON FLOATED PLASTER</u></b>			
	<u>One coat universal undercoat and three coats super acrylic PVA paint</u>			
1	On internal walls	m2	846	
	<b><u>ON FIBRE-CEMENT</u></b>			
	<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
2	On ceilings	m2	631	
	<u>Prepare and apply one universal undercoat and two coats gloss enamel paint</u>			
	<b><u>ON METAL</u></b>			
	<u>Spot priming defects in pre-primed surfaces, apply one coat "Dulux Duraphos Primer" one coat "Dulux Duragrip Undercoat" and two coats "Dulux Dura 100 Gloss Enamel Paint" or similar approved on steel</u>			
3	On door frames	m2	67	
4	On windows with burglar bars	m2	96	
5	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area )	m2	26	
	<b><u>ON WOOD</u></b>			
	<b>Carried to Collection</b>			
	Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 14 PAINTWORK			R

	<u>One coat "Dulux" wood primer, one coat "Dulux" undercoat for all surfaces and two coats "Dulux Silthane Silk" enamel paint or similar approved</u>			
6	On doors	m2	5	
	<u>Three coats matt varnish</u>			
7	On doors	m2	29	
8	On roof timbers (laminated beam)	m2	26	
<b>Carried to Collection</b>				
Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 14 PAINTWORK				R

Section No. 4

CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BLOCKS

Bill No. 14

PAINTWORK

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

261

262

**Amount**

**Carried Forward to Summary of Section No. 4**

Section No. 4  
CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL  
Bill No. 14  
PAINTWORK

R

Item No	<b><u>SECTION NO.4</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.15</u></b>			
	<b><u>APRONS AROUND BUILDINGS</u></b>			
	<u>Compaction of surfaces</u>			
1	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	143	
	<u>15 MPa/20 mm concrete</u>			
2	Aprons cast in panels to falls	m3	14	
3	Thickening down apron on edge 110mm x 200mm wide, incl. excavation, backfilling, cart away, etc.	m	143	
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
4	Aprons to falls	m2	143	
	<u>Smooth formwork to sides</u>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	143	
	<b>Carried Forward to Summary of Section No. 4</b>			
	Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL Bill No. 15 CONCRETE APRONS			R

Section No. 4

CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BLOCKS

**SECTION SUMMARY - CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM B**

Bill No		Page No	Amount
1	FOUNDATIONS	222	
2	CONCRETE, FORMWORK & REINFORCEMENT	226	
3	MASONRY	230	
4	WATERPROOFING	231	
5	ROOF COVERINGS, ETC	234	
6	CARPENTRY AND JOINERY	240	
7	CEILINGS, ETC	241	
8	IRONMONGERY	244	
9	METALWORK	248	
10	PLASTERING	249	
11	TILING	250	
12	PLUMBING AND DRAINAGE	259	
13	GLAZING	260	
14	PAINTWORK	263	
15	CONCRETE APRONS	264	
	<b>Carried to Final Summary</b>		R
	Section No. 4 CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BL		

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>FOUNDATIONS</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Nature of ground</u></p>			
<p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p>			
<p><u>Excavation for working space in rock</u></p>			
<p>Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over" bulk excavation or trench and hole excavation as the case may be</p>			
<p><u>Carting away of excavated material</u></p>			
<p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p>			
<p><u>Filling</u></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><u>Soil poisoning</u></p>			
<p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a ten (10) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p>			
<p><b><u>SITE CLEARANCE ETC</u></b></p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 1 FOUNDATIONS</p>			
		R	

	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	1,865	
2	Stripping average 150mm thick layer of top and depositing material in prescribed stock piles on site	m2	1,865	
	<b><u>EARTHWORKS</u></b>			
	<b><u>EXCAVATION, FILLING, ETC</u></b>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	723	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
4	Soft rock	m3	21	
5	Hard rock	m3	37	
	<u>Extra over all excavations for carting away</u>			
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	200	
	<u>Risk of collapse of excavations</u>			
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	931	
	<u>Keeping excavations free of water</u>			
8	Keeping excavations free of water		Item	
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
9	Under floors, steps, paving, etc	m3	200	
10	Backfilling to trenches, holes, etc	m3	172	
	<u>G6 Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u>			
11	Under floors, steps, paving etc.	m3	365	
	<b>Carried to Collection</b>			
	Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 1 FOUNDATIONS			R



12	Trenches	m3	150
	<u>Compaction of surfaces</u>		
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	1,349
	<u>Prescribed density tests on filling</u>		
14	"Modified AASHTO Density" test	No	48
	<b><u>SOIL POISONING</u></b>		
	<u>Weedkiller mixed in accordance to supplier's specifications</u>		
15	Under paving etc	m2	1,349
16	To bottoms and sides of trenches, etc.	m2	1,829
	<u>Soil insecticide</u>		
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	1,349
18	To bottoms and sides of trenches etc	m2	1,829
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>		
	<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>		
	<u>25MPa/19mm concrete</u>		
19	Strip footings	m3	175
	<b><u>REINFORCEMENT</u></b>		
	<u>High tensile steel reinforcement to structural concrete work</u>		
20	16mm Diameter bars	t	1.59
<b>Carried to Collection</b>			
Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 1 FOUNDATIONS			

R

	<u>Fabric reinforcement</u>		
21	Ref. S395 fabric reinforcement in concrete footings etc	m2	931
	<b><u>TEST CUBES</u></b>		
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	16.0
	<b><u>BRICKWORK</u></b>		
	<u>Brickwork of NFP bricks in class II mortar</u>		
23	One brick walls	m2	539
	<b><u>BRICKWORK SUNDRIES</u></b>		
	<u>Joint forming material in movement joints:</u>		
24	12mm Fibre board built in vertically between brick skins.	m2	4
	<u>Brickwork reinforcement</u>		
25	150mm Wide reinforcement built in horizontally	m	6,299
	<b><u>FACE BRICKWORK</u></b>		
	<u>Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints</u>		
26	Extra over brickwork for face brickwork	m2	228
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces</u>		
27	Coping on top of one brick wall	m	166

**WATERPROOFING**

**JOINT SEALANTS ETC**

**Carried to Collection**

R

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 1  
 FOUNDATIONS

28	<p><u>Silicone sealing compound including backing cord, bond breaker, primer, etc:</u></p> <p>12 x 20mm In vertical expansion joints including raking out expansion joint filler as necessary</p>	m	34		
<p style="text-align: center;"><b>Carried to Collection</b></p>					R
<p>Section No. 5          CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS          Bill No. 1          FOUNDATIONS</p>					

Section No. 5

CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

Bill No. 1

FOUNDATIONS

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

266

267

268

269

270

**Carried Forward to Summary of Section No. 5**

R

Section No. 5

CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

Bill No. 1

FOUNDATIONS

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.5</u></b></p>			
<p><b><u>BILL NO.2</u></b></p>			
<p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Cost of tests</u></p>			
<p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)</p>			
<p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p>			
<p><u>Formwork</u></p>			
<p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p>			
<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 2 CONCRETE, FORMWORK &amp; REINFORCEMENT</p>			
		R	

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

Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described

Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"

**UNREINFORCED CONCRETE**

25MPa/19mm concrete

1	Surface beds cast in panels	m3	28
2	Surface beds cast in panels on waterproofing.	m3	107

**CONCRETE SUNDRIES**

Finishing top surfaces of concrete smooth with a steel trowel

3	Surface beds, slabs, etc	m2	1,349
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**TEST CUBES**

4	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	32.0
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**MOVEMENT JOINTS ETC**

Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces

5	15mm Joints exceeding 300mm high	m	500
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Saw cut joints

6	Saw cut joints in top of concrete	m	255
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**Carried to Collection**

R

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 2  
 CONCRETE, FORMWORK & REINFORCEMENT

Horizontal joggle construction joints through concrete including thick cement slurry to one face

**DIVIDING STRIPS, ETC.**

7	6 x 38mm Angle iron step guard cast into concrete with 3 x 6mm anchors	m	28
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**REINFORCEMENT**

Fabric reinforcement

8	Ref. S245 fabric reinforcement in concrete surface bed etc	m2	1,349
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**Carried to Collection**

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 2  
 CONCRETE, FORMWORK & REINFORCEMENT

R

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

Bill No. 2

CONCRETE, FORMWORK & REINFORCEMENT

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

272

273

274

**Carried Forward to Summary of Section No. 5**

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 2  
 CONCRETE, FORMWORK & REINFORCEMENT

R



Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.5</u></b></p>			
<p><b><u>BILL NO. 3</u></b></p>			
<p><b><u>MASONRY</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><b><u>BRICKWORK</u></b></p>			
<p><u>Sizes in descriptions</u></p>			
<p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p>			
<p><u>Linings to concrete</u></p>			
<p>Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties</p>			
<p><u>Hollow walls etc</u></p>			
<p>Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p>			
<p><u>Reinforced brick lintels</u></p>			
<p>Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous</p>			
<p><u>Face bricks</u></p>			
<p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p>			
<p><u>Pointing</u></p>			
<p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 3 MASONRY</p>			
		R	

**SUPERSTRUCTURE**Brickwork of NFP bricks in class II mortar

1	Half brick walls in beamfilling.	m2	80
2	One brick walls	m2	1,416

**BRICKWORK SUNDRIES**Joint forming material in movement joints:

3	12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2	19
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Steel bar reinforcementBrickwork reinforcement

4	75mm Wide reinforcement built in horizontally	m	459
5	150mm Wide reinforcement built in horizontally	m	6,938

Turning pieces

6	110mm Wide turning piece to lintels etc	m	418
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Galvanised wire ties etc

7	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork (Provisional)	No	256
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**FACE BRICKWORK**Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints

8	Extra over brickwork for face brickwork	m2	2,238
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Brick-on-edge header course copings, sills, etc of face bricks ( Purchase price R4 000,00 / 1000 VAT incl. delivered to site) pointed with recessed joints on all exposed faces

9	Extra over brickwork for brick-on-edge header course lintel	m	210
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**Carried to Collection**

R

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 3  
 MASONRY

Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces

10	110mm Wide sill set level and slightly projecting	m	182
11	220mm Wide sill set sloping and slightly protecting outside	m	182

**Carried to Collection**

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 3  
 MASONRY

R

Section No. 5

CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

Bill No. 3

MASONRY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

276

277

278

**Carried Forward to Summary of Section No. 5**

Section No. 5  
CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
Bill No. 3  
MASONRY

R

Item No	<b><u>SECTION NO.5</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Waterproofing</u>			
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			
	<b><u>DAMP-PROOFING OF WALLS AND FLOORS</u></b>			
	<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	167	
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
2	Under surface beds	m2	1,074	
	<b><u>JOINT SEALANTS ETC</u></b>			
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>			
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	668	
	<b>Carried Forward to Summary of Section No. 5</b>			
	Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 4 WATERPROOFING			R

Item No	<b><u>SECTION NO.5</u></b>	Quantity	Rate	Amount
	<p><b><u>BILL NO.5</u></b></p> <p><b><u>ROOF COVERINGS ETC</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>General</u></p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use</p> <p><u>Sizes</u></p> <p>All items are measured net unless otherwise described</p> <p><u>Flashings, trimming plates, etc.</u></p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable</p> <p>All items are unless otherwise described measured net</p> <p><b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b></p> <p><u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u></p>			
1	Roof covering with pitch not exceeding 50 degrees	m2	1,700	
	<b>Carried to Collection</b>			R
	<p>Section No. 5            CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS            Bill No. 5            ROOF COVERINGS, ETC</p>			

2	Ridge capping 550mm girth	m	210
3	Hip capping 550mm girth	m	48
4	Valley flashing 800mm girth	m	29
	<u>Sundries</u>		
5	12" Thermal resistance sisalition laid on purlins	m2	1,700

**Carried to Collection**

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 5  
 ROOF COVERINGS, ETC

R

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 5  
 ROOF COVERINGS, ETC

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

281

282

**Amount**

**Carried Forward to Summary of Section No. 5**

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 5  
 ROOF COVERINGS, ETC

R



Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.5</u></b></p>			
<p><b><u>BILL NO.6</u></b></p>			
<p><b><u>CARPENTRY AND JOINERY</u></b></p>			
<p><b><u>ROOFS ETC</u></b></p>			
<p><b><u>PRE-FABRICATED TIMBER ROOF TRUSSES</u></b></p>			
<p><u>Pre-fabricated metal connected timber roof trusses</u></p>			
<p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p>			
<p><u>Timber</u></p>			
<p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p>			
<p><u>Bolts</u></p>			
<p>Bolts shall be in accordance with BS 4190 or SABS 135</p>			
<p><u>Shear plates, tooth connectors and split rings</u></p>			
<p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p>			
<p><u>Washers</u></p>			
<p>Square or round washers of the following dimensions shall be used with all bolts:</p>			
<p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 6 CARPENTRY AND JOINERY</p>			
		R	

2 Bolts up to 12mm diameter:  
Washers shall be minimum 36mm wide of minimum 4,00mm thickness

3 Bolts up to 20mm diameter:  
Washers shall be minimum 60mm wide of minimum 5,00mm thickness

Metal connector plates

Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel

The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m<sup>2</sup> commercial class hot dipped galvanising as per SABS 934 before stamping

All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report

Truss construction

Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers

Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint

Truss design

All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")

Truss spacing

The truss centres shall be less than or equal to that as described in this bill for each respective truss

Truss pitch

The truss pitch shall be as described in this bill for each respective truss type

**Carried to Collection**

Section No. 5  
CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
Bill No. 6  
CARPENTRY AND JOINERY

R

Truss loading

Trusses shall be designed for a live load of 0,50kN/m<sup>2</sup> and dead load as specified under the sub-heading "Specific load specifications for roof trusses"

Shop drawings, design and erection guarantee certificates

It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified

Dimensions

All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences

Erection

All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer

Design system

The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system

However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent

Specific specifications for roof trusses

Unless otherwise described, the following specifications will apply:

- 1 All trusses to be with a 20° pitch

**Carried to Collection**

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 6  
 CARPENTRY AND JOINERY

R

2 The dead load consists of 0,5mm "Klip-Lok Light Industrial" galvanised troughed sheet steel roof covering with "Chromadek" finish, purlins at approximately 1200mm centres, 6mm fibre-cement nailed-up ceilings and 50mm glass fibre insulation blanket laid on top of ceilings

Rates

Tendered rates to include for the complete roof construction, including the design of the roof construction, all timber of required grade and type shown on the design, all cutting and waste, cutting to the exact lengths and end angles to manufacture the respective truss type, supply of all connector plates, fabrication of trusses, checking the completed truss for quality, loading up, transporting to the site of the works and off loading, storing under cover and protecting from the weather, hoisting up in position and erection of the roof truss structure, necessary supervision, submission of all shop drawings, design and erection guarantee certificates, etc. as specified

**ROOFS, ETC.**

**The following in roof trusses to various buildings**

Allow for the preparation and submission of the following documents in respect of all buildings

- |   |  |      |
|---|--|------|
| 1 | Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication   | Item |
| 2 | Design certificate indicating the licensed programme used, SABS specifications adhered to, general procedures and loadings adopted, sizes and grading of timber components, details, etc.                          | Item |
| 3 | Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Representative/Agent | Item |

The following is applicable in respect of roof trusses:

**Carried to Collection**

R

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 6  
 CARPENTRY AND JOINERY

	Trusses are at maximum 1100mm centres Roof covering is 0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheet on timber purlins Ceilings are 6mm sheeting on 38 x 38mm brandering .The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on the site before design or fabrication commences			
4	Roof construction to double pitched roof with two hipped ends 38.25 x 10.66m and 1.90m high overall including wall plates, trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 1200mm centres for roof covering (see drawing in the back of this bill of quantities) (Classrooms)	No	4	
	<u>Sawn softwood</u>			
5	38 x 114mm Wall plates	m	612	
	<u>Wrought laminated timber</u>			
6	50 x 228mm Bearers bolted	m	153	
	<u>Sundries</u>			
7	Two coats creosote on sawn timbers	m2	668	
	<b><u>EAVES, VERGES, ETC</u></b>			
	<u>"Everite FC77" pressed fibre-cement</u>			
8	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	226	
	<b><u>DOORS, ETC</u></b>			
	<u>44mm Wrought meranti framed, ledged, braced and battened door of 44 x 150mm top rails and stiles, 22 x 150mm middle legde and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding</u>			
9	Door size 914 x 2032mm high including weatherboard	No	16	
	<u>Solid hardwood doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame</u>			
10	44mm Door 813 x 2032mm high	No	16	
	<b><u>SCHOOL FURNITURE, ETC</u></b>			
	<b>Carried to Collection</b>			
	Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 6 CARPENTRY AND JOINERY			R

11	<p><u>Double combination school desk</u></p> <p>Sealed and varnished supawood top, mounted on a frame manufactured using powdercoated round tubing. Supplied in Knock Down Form 1200mm x 400mm x 750mm</p>	No	320	
<p style="text-align: right;"><b>Carried to Collection</b></p> <p>Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 6 CARPENTRY AND JOINERY</p>				<p>R</p>

Section No. 5

CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

Bill No. 6

CARPENTRY AND JOINERY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

284

285

286

287

288

289

**Carried Forward to Summary of Section No. 5**

R

Section No. 5

CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

Bill No. 6

CARPENTRY AND JOINERY

Item No	<b><u>SECTION NO.5</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.7</u></b>			
	<b><u>CEILING , ETC.</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions:</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere			
	<b><u>CEILING CONSTRUCTION, CORNICES, ETC.</u></b>			
	<b><u>Insulation</u></b>			
1	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	1,074	
	<u>Sawn softwood</u>			
2	38 x 114mm Ceiling joists	m	352	
	<u>Wrought softwood</u>			
3	19 x 76mm Cornices nailed	m	500	
	<b><u>NAILED UP AND SCREWED UP CEILINGS</u></b>			
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>			
4	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	1,349	
	<b>Carried to Collection</b>			R
	Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 7 CEILINGS, ETC			



5 Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening

No

32

**Carried to Collection**

R

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 7  
 CEILINGS, ETC

Section No. 5

CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

Bill No. 7

CEILINGS, ETC

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

291

292

**Amount**

**Carried Forward to Summary of Section No. 5**

Section No. 5  
CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
Bill No. 7  
CEILINGS, ETC

R

Item No	SECTION NO.5	Quantity	Rate	Amount
	<b><u>BILL NO.8</u></b>			
	<b><u>IRONMONGERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions</u>			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
	<u>Finishes to ironmongery</u>			
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded			
	<b><u>CATCHES, CABIN HOOKS, ETC</u></b>			
	<u>"Approved"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	16	
	<b><u>LOCKS</u></b>			
	<u>"Solid"</u>			
2	"Code 630" padlock	No	16	
3	"Code 460/313" Blesbok four lever lockset	No	32	
	<b><u>SUNDRIES</u></b>			
	<b>Carried to Collection</b>			R
	Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 8 IRONMONGERY			



Section No. 5

CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

Bill No. 8

IRONMONGERY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

294

295

**Amount**

**Carried Forward to Summary of Section No. 5**

Section No. 5

CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

Bill No. 8

IRONMONGERY

R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.5</u></b></p>			
<p><b><u>BILL NO. 9</u></b></p>			
<p><b><u>METALWORK</u></b></p>			
<p><u>Descriptions</u></p>			
<p>Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p>			
<p><u>Drawings</u></p>			
<p>Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc</p>			
<p><b><u>ALUMINIUM WINDOWS, DOORS, ETC</u></b></p>			
<p><u>AAAMSA guide</u></p>			
<p>All windows, doors, etc shall comply with and meet the minimum recommended performance requirements as set out in the General Specification for Architectural Aluminium and Glass Products (Third Edition) as published by the Association of Architectural Aluminium Manufacturers of South Africa (AAAMSA)</p>			
<p><u>Finish</u></p>			
<p>The windows, doors, etc shall be natural anodised to a thickness of 25 micron and shall comply with SABS 999 and 1407</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 9 METALWORK</p>			
		R	

Glass

Glazing to be with patent rubber gaskets with glazing beads and comply with BS 952. Thickness of glass shall be in accordance with table 1 (Part N : Glazing ). Safety glass shall comply with SABS 1263. The National Building Regulations shall be observed with regard to the specification of safety glass

Design indemnity

The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed

Drawings

Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc

Pricing.

All window prices should include aluminium louvres as shown

General

Workshop drawings to be approved by the architect before manufacture

**SUNDRY METALWORK**

The following in identical steel support columns

1	Bolts	kg	100
2	10mm Diameter rawl bolts	No	208
3	76 x 76 x 3mm Tubular section columns 2975mm high	No	52
4	U-shaped bracket formed of 3mm flat section 300mm girth, twice holed for bolts and welded on	No	52
5	200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section column	No	52

**WELDED SCREENS, GATES, ETC**

**Carried to Collection**

R

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 9  
 METALWORK

<u>Gates to external doors</u>			
6	Single gate and frame 813 x 2032mm high complete as per attached drawing	No	16
<b><u>PRESSED STEEL DOOR FRAMES</u></b>			
<u>1,2mm Double rebated frames suitable for half brick walls</u>			
7	Frame for door 813 x 2032mm high	No	16
<u>1,2mm Double rebated frames suitable for one brick walls</u>			
<b><u>PRESSED STEEL COMBINATION DOORS AND FRAMES</u></b>			
<u>"Nty" doors</u>			
8	"Code 914" door frame size 914 x 2032mm high fitted with three (3) parliament hinges, complete with single security gate size 914 x 2032mm high overall formed of 25 x 25 x 2mm tubular section frame mitred and welded at angles and two 25 x 25 x 2mm tubular section horizontal middle rails, gate filled in with 12 x 12 x 12mm square section vertical rails at 100mm centres and fitted with locking bolt for padlock, frame formed of 25 x 38 x 2mm tubular section stiles and top rail mitred and welded at angles and fitted with three hinges welded to gate and frame, frame factory welded at maximum 250mm centres to door frame	No	16
<b><u>STEEL WINDOWS, DOORS, ETC</u></b>			
<u>Standard residential windows with burglar bars to all sashes</u>			
9	Window code 6/3/9, size 1143 x 972mm high	No	144
10	Window code 6, size 1143 x 972mm high	No	16

Carried to Collection

R

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 9  
 METALWORK



Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 9  
 METALWORK  
COLLECTION

Total Brought Forward from Page No.

**Page  
No**

**Amount**

297

298

299

**Carried Forward to Summary of Section No. 5**

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 9  
 METALWORK

R

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.5</u></b>			
	<b><u>BILL NO. 10</u></b>			
	<b><u>PLASTERING</u></b>			
	<b><u>SCREEDS</u></b>			
	<u>Screeds on concrete</u>			
1	30mm Thick on floors	m2	1,362	
	<b><u>GRANOLITHIC</u></b>			
	<u>Untinted granolithic on concrete</u>			
	<b><u>INTERNAL PLASTER</u></b>			
	<u>Cement plaster on brickwork</u>			
2	On walls	m2	1,425	
3	On narrow widths	m2	18	
	<b>Carried Forward to Summary of Section No. 5</b>			
	Section No. 5			
	CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS			
	Bill No. 10			
	PLASTERING			
				R

Item No	<b><u>SECTION NO.2</u></b>	Quantity	Rate	Amount
	<b><u>SECTION NO.5</u></b>			
	<b><u>TILING</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	<b><u>FLOOR TILING</u></b>			
	<u>420 x420 11.5mm kilimanjaro floor tiles or similar approved by architects, fixed with adhesive, painted with tinted waterproof jointing compound. Grouting to be grey, tiles should have expansion joint and aluminium edging strip.</u>			
1	On floors and landings	m2	1,351	
2	Skirting formed of cut kilimanjaro floor tile - cut to 420 x 75mm high.	m	500	
	<b>Carried Forward to Summary of Section No. 5</b>			R
	Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 11 TILING			

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.5</u></b></p>			
<p><b><u>BILL NO.12</u></b></p>			
<p><b><u>PLUMBING AND DRAINAGE</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><b><u>"Polycop" polypropylene pipes:</u></b></p>			
<p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p>			
<p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p>			
<p>All pipe diameters are nominal external</p>			
<p><b><u>"Polylink" polypropylene pipes:</u></b></p>			
<p>Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints</p>			
<p>Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured</p>			
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p>			
<p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p>			
<p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p>			
<p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 12 PLUMBING AND DRAINAGE</p>			
		R	

All pipe diameters are nominal external

**Concrete pipes:**

Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings

**Vitrified clay pipes:**

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

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

**uPVC pipes and fittings:**

Soil, waste and vent pipes and fittings shall be solvent weld jointed

**uPVC pressure pipes and fittings:**

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

**Copper pipes:**

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

**Carried to Collection**

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

**Fixing of pipes**

Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level

**Lead pipes and fittings**

All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel

**Reducing fittings**

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

**Wire gratings**

Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings

**Septic tanks**

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

**Exposed concrete surfaces**

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster

**Excavations**

No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling

"Soft rock" and "hard rock" shall be as defined in "Earthworks"

**Carried to Collection**

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

**Laying, backfilling, bedding, etc. of pipes**

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

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding

**Flush pans**

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

**Stainless steelbasins, sinks, wash troughs, urinals, etc.**

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable

**Waste unions**

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings

**Steel sectional water tanks**

Tanks shall comply with SABS CKS 114

**"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.**

Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described

Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc

**RAINWATER DISPOSAL**

**Carried to Collection**

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

0,8mm Galvanised sheet iron with "Chromadek" finish on one side

1	125 x 100mm Seamless eaves gutters with beaded front edge	m	500
2	Extra over eaves gutter for stopped end	No	24
3	Extra over eaves gutter for angle	No	24
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	32
5	100mm Diameter rainwater pipes	m	83
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	32
7	Extra over rainwater pipe for shoe	No	32

**FIRE APPLIANCES ETC**

'Chubb'

8	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	4
9	9kg DCP extinguisher with brackets screwed and including varnished hardwood backboard plugged.	No	16

**RAINWATER HARVEST TANKS**

"Jojo or similar"

10	JoJo tank or similar approved. 1900mm diameter, 2040mm high, 2500 litre water storage tank green one, 340mm high brick base with compacted fill. Complete with plumbing accessories	No	
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**Carried to Collection**

R

Section No. 5  
 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS  
 Bill No. 12  
 PLUMBING AND DRAINAGE



Section No. 5

CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

Bill No. 12

PLUMBING AND DRAINAGE

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

303

304

305

306

307

**Carried Forward to Summary of Section No. 5**

R

Section No. 5

CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

Bill No. 12

PLUMBING AND DRAINAGE



Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.5</u></b>			
	<b><u>BILL NO. 14</u></b>			
	<b><u>PAINTWORK</u></b>			
	<b><u>PAINTWORK ETC TO NEW WORK</u></b>			
	<b><u>ON FLOATED PLASTER</u></b>			
	<u>One coat universal undercoat and three coats super acrylic PVA paint</u>			
1	On internal walls	m2	1,521	
	<b><u>ON FIBRE-CEMENT</u></b>			
	<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>			
2	On ceilings	m2	1,349	
	<u>Prepare and apply one universal undercoat and two coats gloss enamel paint</u>			
3	On fascias and barge boards	m2	98	
	<b><u>ON METAL</u></b>			
	<u>Spot priming defects in pre-primed surfaces, apply one coat "Dulux Duraphos Primer" one coat "Dulux Duragrip Undercoat" and two coats "Dulux Dura 100 Gloss Enamel Paint" or similar approved on steel</u>			
4	On door frames	m2	107	
5	On windows with burglar bars	m2	314	
6	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area )	m2	112	
7	On rails, bars, pipes, etc	m2	46	
	<b><u>ON WOOD</u></b>			
	<b>Carried to Collection</b>			R
	Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 14 PAINTWORK			

	<u>One coat "Dulux" wood primer, one coat "Dulux" undercoat for all surfaces and two coats "Dulux Silthane Silk" enamel paint or similar approved</u>			
8	On doors	m2	5	
	<u>Three coats matt varnish</u>			
9	On doors	m2	121	
10	On roof timbers (laminated beam)	m2	78	
<b>Carried to Collection</b>				
Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 14 PAINTWORK				R

Section No. 5

CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

Bill No. 14

PAINTWORK

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

310

311

**Carried Forward to Summary of Section No. 5**

Section No. 5

CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

Bill No. 14

PAINTWORK

R

Item No	<b><u>SECTION NO.5</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.15</u></b>			
	<b><u>APRONS AROUND BUILDINGS</u></b>			
	<u>Compaction of surfaces</u>			
1	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	369	
	<u>15 MPa/20 mm concrete</u>			
2	Aprons cast in panels to falls	m3	37	
3	Thickening down apron on edge 110mm x 200mm wide, incl. excavation, backfilling, cart away, etc.	m	369	
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
4	Aprons to falls	m2	369	
	<u>Smooth formwork to sides</u>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	369	
	<b>Carried Forward to Summary of Section No. 5</b>			
	Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS Bill No. 15 CONCRETE APRONS			R

Section No. 5

CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS

**SECTION SUMMARY - CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS**

Bill No		Page No	Amount
1	FOUNDATIONS	271	
2	CONCRETE, FORMWORK & REINFORCEMENT	275	
3	MASONRY	279	
4	WATERPROOFING	280	
5	ROOF COVERINGS, ETC	283	
6	CARPENTRY AND JOINERY	290	
7	CEILINGS, ETC	293	
8	IRONMONGERY	296	
9	METALWORK	300	
10	PLASTERING	301	
11	TILING	302	
12	PLUMBING AND DRAINAGE	308	
13	GLAZING	309	
14	PAINTWORK	312	
15	CONCRETE APRONS	313	
<b>Carried to Final Summary</b>			R
Section No. 5 CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS			

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>FOUNDATIONS</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Nature of ground</u></p>			
<p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p>			
<p><u>Excavation for working space in rock</u></p>			
<p>Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over" bulk excavation or trench and hole excavation as the case may be</p>			
<p><u>Carting away of excavated material</u></p>			
<p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p>			
<p><u>Filling</u></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><u>Soil poisoning</u></p>			
<p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a ten (10) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p>			
<p><b><u>SITE CLEARANCE ETC</u></b></p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 1 FOUNDATIONS</p>			
		R	



	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	141	
2	Stripping average 150mm thick layer of top and depositing material in prescribed stock piles on site	m2	141	
	<b><u>EARTHWORKS</u></b>			
	<b><u>EXCAVATION, FILLING, ETC</u></b>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	65	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
4	Soft rock	m3	2	
5	Hard rock	m3	3	
	<u>Extra over all excavations for carting away</u>			
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	18	
	<u>Risk of collapse of excavations</u>			
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	83	
	<u>Keeping excavations free of water</u>			
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
8	Under floors, steps, paving, etc	m3	18	
9	Backfilling to trenches, holes, etc	m3	15	
	<u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u>			
10	Under floors, steps, paving etc.	m3	8	
11	Trenches	m3	13	
	<b>Carried to Collection</b>			
	Section No. 6			
	CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL			
	Bill No. 1			
	FOUNDATIONS			

R

	<u>Compaction of surfaces</u>			
12	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	24	
	<u>Prescribed density tests on filling</u>			
	<b><u>SOIL POISONING</u></b>			
	<u>Weedkiller mixed in accordance to supplier's specifications</u>			
13	Under paving etc	m2	24	
14	To bottoms and sides of trenches, etc.	m2	136	
	<u>Soil insecticide</u>			
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	24	
16	To bottoms and sides of trenches etc	m2	136	
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>			
	<u>20MPa/19mm concrete</u>			
17	Strip footings	m3	16	
	<b><u>REINFORCEMENT</u></b>			
	<u>Fabric reinforcement</u>			
18	Ref. S395 fabric reinforcement in concrete footings etc	m2	83	
	<b><u>TEST CUBES</u></b>			
19	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	16.0	
	<b>Carried to Collection</b>			
	Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 1 FOUNDATIONS			R

**BRICKWORK**

Brickwork of NFP bricks in class II mortar

20	One brick walls	m2	48
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**BRICKWORK SUNDRIES**

Joint forming material in movement joints:

Brickwork reinforcement

21	150mm Wide reinforcement built in horizontally	m	562
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**FACE BRICKWORK**

Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints

22	Extra over brickwork for face brickwork	m2	15
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**Carried to Collection**

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
 Bill No. 1  
 FOUNDATIONS

R

Section No. 6

CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOILETS

Bill No. 1

FOUNDATIONS

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

315

316

317

318

**Carried Forward to Summary of Section No. 6**

R

Section No. 6  
CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
Bill No. 1  
FOUNDATIONS

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.6</u></b></p>			
<p><b><u>BILL NO.2</u></b></p>			
<p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Cost of tests</u></p>			
<p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)</p>			
<p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p>			
<p><u>Formwork</u></p>			
<p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p>			
<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 2 CONCRETE, FORMWORK &amp; REINFORCEMENT</p>			
		R	

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

Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described

Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"

**UNREINFORCED CONCRETE**

25MPa/19mm concrete

1	Surface beds cast in panels on waterproofing.	m3	2
2	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	21

**CONCRETE SUNDRIES**

Finishing top surfaces of concrete smooth with a steel trowel

3	Surface beds, slabs, etc	m2	24
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**TEST CUBES**

**MOVEMENT JOINTS ETC**

Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces

4	15mm Joints exceeding 300mm high	m	84
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Saw cut joints

Horizontal joggle construction joints through concrete including thick cement slurry to one face

**Carried to Collection**

R

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
 Bill No. 2  
 CONCRETE, FORMWORK & REINFORCEMENT

**DIVIDING STRIPS, ETC.**

5 6 x 38mm Angle iron step guard cast into concrete with  
3 x 6mm anchors

m

2

**REINFORCEMENT**

Fabric reinforcement

6 Ref. S245 fabric reinforcement in concrete surface bed  
etc

m2

24

**Carried to Collection**

Section No. 6  
CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
Bill No. 2  
CONCRETE, FORMWORK & REINFORCEMENT

R

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOILETS

Bill No. 2

CONCRETE, FORMWORK & REINFORCEMENT

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

320

321

322

**Carried Forward to Summary of Section No. 6**

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
 Bill No. 2  
 CONCRETE, FORMWORK & REINFORCEMENT

R



Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.6</u></b></p>			
<p><b><u>BILL NO. 3</u></b></p>			
<p><b><u>MASONRY</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><b><u>BRICKWORK</u></b></p>			
<p><u>Sizes in descriptions</u></p>			
<p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p>			
<p><u>Linings to concrete</u></p>			
<p>Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties</p>			
<p><u>Hollow walls etc</u></p>			
<p>Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p>			
<p><u>Reinforced brick lintels</u></p>			
<p>Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous</p>			
<p><u>Face bricks</u></p>			
<p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p>			
<p><u>Pointing</u></p>			
<p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 3 MASONRY</p>			
		R	

**SUPERSTRUCTURE**Brickwork of NFP bricks in class II mortar

1	Half brick walls	m2	66
2	Half brick walls in beamfilling.	m2	5
3	One brick walls	m2	91

**BRICKWORK SUNDRIES**Joint forming material in movement joints:Steel bar reinforcementBrickwork reinforcement

4	75mm Wide reinforcement built in horizontally	m	286
5	150mm Wide reinforcement built in horizontally	m	487

Turning pieces

6	110mm Wide turning piece to lintels etc	m	27
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Galvanised wire ties etc**FACE BRICKWORK**Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints

7	Extra over brickwork for face brickwork	m2	217
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Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000,00 / 1000 VAT incl. delivered to site) pointed with recessed joints on all exposed faces

8	Extra over brickwork for brick-on-edge header course lintel	m	11
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Brick-on-edge header course copings, sills, etc of face bricks (Purchase price of R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces

9	110mm Wide sill set level and slightly projecting	m	9
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**Carried to Collection**

R

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
 Bill No. 3  
 MASONRY

10 220mm Wide sill set sloping and slightly protecting outside

m

9

**Carried to Collection**

Section No. 6  
CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
Bill No. 3  
MASONRY

R

Section No. 6

CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOILETS

Bill No. 3

MASONRY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

324

325

326

**Carried Forward to Summary of Section No. 6**

R

Section No. 6

CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL

Bill No. 3

MASONRY

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.6</u></b>			
	<b><u>BILL NO.4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Waterproofing</u>			
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			
	<b><u>DAMP-PROOFING OF WALLS AND FLOORS</u></b>			
	<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	13	
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
2	Under surface beds	m2	24	
	<b><u>JOINT SEALANTS ETC</u></b>			
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>			
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	42	
	<b>Carried Forward to Summary of Section No. 6</b>			R
	Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 4 WATERPROOFING			

Item No	<b><u>SECTION NO.6</u></b>	Quantity	Rate	Amount
	<p><b><u>BILL NO.5</u></b></p> <p><b><u>ROOF COVERINGS ETC</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>General</u></p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use</p> <p><u>Sizes</u></p> <p>All items are measured net unless otherwise described</p> <p><u>Flashings, trimming plates, etc.</u></p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable</p> <p>All items are unless otherwise described measured net</p> <p><b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b></p> <p><u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u></p>			
1	Roof covering with pitch not exceeding 50 degrees	m2	63	
	<b>Carried to Collection</b>			R
	Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 5 ROOF COVERINGS, ETC			

2	Ridge capping 550mm girth	m	7
3	Hip capping 550mm girth	m	16
4	Valley flashing 800mm girth	m	16
	<u>Sundries</u>		
5	12" Thermal resistance sisalition laid on purlins	m2	72

**Carried to Collection**

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
 Bill No. 5  
 ROOF COVERINGS, ETC

R

Section No. 6

CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOILETS

Bill No. 5

ROOF COVERINGS, ETC

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

329

330

**Amount**

**Carried Forward to Summary of Section No. 6**

Section No. 6  
CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
Bill No. 5  
ROOF COVERINGS, ETC

R



Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.6</u></b></p>			
<p><b><u>BILL NO.6</u></b></p>			
<p><b><u>CARPENTRY AND JOINERY</u></b></p>			
<p><b><u>ROOFS ETC</u></b></p>			
<p><b><u>PRE-FABRICATED TIMBER ROOF TRUSSES</u></b></p>			
<p><u>Pre-fabricated metal connected timber roof trusses</u></p>			
<p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p>			
<p><u>Timber</u></p>			
<p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p>			
<p><u>Bolts</u></p>			
<p>Bolts shall be in accordance with BS 4190 or SABS 135</p>			
<p><u>Shear plates, tooth connectors and split rings</u></p>			
<p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p>			
<p><u>Washers</u></p>			
<p>Square or round washers of the following dimensions shall be used with all bolts:</p>			
<p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 6 CARPENTRY AND JOINERY</p>			
		R	

2 Bolts up to 12mm diameter:  
Washers shall be minimum 36mm wide of minimum 4,00mm thickness

3 Bolts up to 20mm diameter:  
Washers shall be minimum 60mm wide of minimum 5,00mm thickness

Metal connector plates

Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel

The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m<sup>2</sup> commercial class hot dipped galvanising as per SABS 934 before stamping

All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report

Truss construction

Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers

Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint

Truss design

All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")

Truss spacing

The truss centres shall be less than or equal to that as described in this bill for each respective truss

Truss pitch

The truss pitch shall be as described in this bill for each respective truss type

**Carried to Collection**

Section No. 6  
CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
Bill No. 6  
CARPENTRY AND JOINERY

R

Truss loading

Trusses shall be designed for a live load of 0,50kN/m<sup>2</sup> and dead load as specified under the sub-heading "Specific load specifications for roof trusses"

Shop drawings, design and erection guarantee certificates

It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified

Dimensions

All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences

Erection

All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer

Design system

The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system

However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent

Specific specifications for roof trusses

Unless otherwise described, the following specifications will apply:

- 1 All trusses to be with a 20° pitch

**Carried to Collection**

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
 Bill No. 6  
 CARPENTRY AND JOINERY

R

2 The dead load consists of 0,5mm "Klip-Lok Light Industrial" galvanised troughed sheet steel roof covering with "Chromadek" finish, purlins at approximately 1200mm centres, 6mm fibre-cement nailed-up ceilings and 50mm glass fibre insulation blanket laid on top of ceilings

Rates

Tendered rates to include for the complete roof construction, including the design of the roof construction, all timber of required grade and type shown on the design, all cutting and waste, cutting to the exact lengths and end angles to manufacture the respective truss type, supply of all connector plates, fabrication of trusses, checking the completed truss for quality, loading up, transporting to the site of the works and off loading, storing under cover and protecting from the weather, hoisting up in position and erection of the roof truss structure, necessary supervision, submission of all shop drawings, design and erection guarantee certificates, etc. as specified

**ROOFS, ETC.**

**The following in roof trusses to various buildings**

Allow for the preparation and submission of the following documents in respect of all buildings

The following is applicable in respect of roof trusses:

Trusses are at maximum 1100mm centres  
 Roof covering is 0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheet on timber purlins  
 Ceilings are 6mm sheeting on 38 x 38mm brandering  
 .The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on the site before design or fabrication commences

1 Roof construction to double pitched roof with two hipped ends 9.78 x 5.38m and 0.839m high overall including wall plates, trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 1200mm centres for roof covering (see drawing in the back of this bill of quantities) (Enviroloo)

No 1

Sawn softwood

2 38 x 114mm Wall plates

m 39

**Carried to Collection**

R

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
 Bill No. 6  
 CARPENTRY AND JOINERY



Section No. 6

CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOILETS

Bill No. 6

CARPENTRY AND JOINERY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

332

333

334

335

336

**Carried Forward to Summary of Section No. 6**

R

Section No. 6

CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL

Bill No. 6

CARPENTRY AND JOINERY

Item No	<b><u>SECTION NO.6</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.7</u></b>			
	<b><u>CEILING , ETC.</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions:</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere			
	<b><u>CEILING CONSTRUCTION, CORNICES, ETC.</u></b>			
	<b><u>Insulation</u></b>			
1	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	24	
	<u>Wrought softwood</u>			
2	19 x 76mm Cornices nailed	m	84	
	<b><u>NAILED UP AND SCREWED UP CEILINGS</u></b>			
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>			
3	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	24	
	<b>Carried Forward to Summary of Section No. 6</b>			
	Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 7 CEILINGS, ETC			R

Item No	<b><u>SECTION NO.6</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.8</u></b>			
	<b><u>IRONMONGERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions</u>			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
	<u>Finishes to ironmongery</u>			
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded			
	<b><u>CATCHES, CABIN HOOKS, ETC</u></b>			
	<u>"Approved"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
	<b><u>LOCKS</u></b>			
	<u>"Solid"</u>			
2	"Code 630" padlock	No	2	
3	"Code 460/313" Blesbok four lever lockset	No	11	
	<b><u>SUNDRIES</u></b>			
	<b>Carried to Collection</b>			
	Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 8 IRONMONGERY			R



	<u>"Solid"</u>				
4	CZ8730SC Door stop or similar approved; plugged and screwed for wall or floor	No	11		
	<u>"Solid"</u>				
5	19mm Diameter chromium plated towel rail 600mm long incl. end brackets	No	5		
	<p style="text-align: center;"><b>Carried to Collection</b></p> <p>Section No. 6  CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  Bill No. 8  IRONMONGERY</p>			R	

Section No. 6

CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOILETS

Bill No. 8

IRONMONGERY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

339

340

**Amount**

**Carried Forward to Summary of Section No. 6**

R

Section No. 6  
CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
Bill No. 8  
IRONMONGERY

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.6</u></b></p>			
<p><b><u>BILL NO. 9</u></b></p>			
<p><b><u>METALWORK</u></b></p>			
<p><u>Descriptions</u></p>			
<p>Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p>			
<p><u>Drawings</u></p>			
<p>Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc</p>			
<p><b><u>ALUMINIUM WINDOWS, DOORS, ETC</u></b></p>			
<p><u>AAAMSA guide</u></p>			
<p>All windows, doors, etc shall comply with and meet the minimum recommended performance requirements as set out in the General Specification for Architectural Aluminium and Glass Products (Third Edition) as published by the Association of Architectural Aluminium Manufacturers of South Africa (AAAMSA)</p>			
<p><u>Finish</u></p>			
<p>The windows, doors, etc shall be natural anodised to a thickness of 25 micron and shall comply with SABS 999 and 1407</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 9 METALWORK</p>			
		R	

Glass

Glazing to be with patent rubber gaskets with glazing beads and comply with BS 952. Thickness of glass shall be in accordance with table 1 (Part N : Glazing ). Safety glass shall comply with SABS 1263. The National Building Regulations shall be observed with regard to the specification of safety glass

Design indemnity

The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed

Drawings

Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc

Pricing.

All window prices should include alluminium louvres as shown

General

Workshop drawings to be approved by the architect before manufacture

**PRESSED STEEL DOOR FRAMES**

1,2mm Double rebated frames suitable for half brick walls

1	Frame for door 813 x 2032mm high	No	9	
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**PRESSED STEEL COMBINATION DOORS AND FRAMES**

**Carried to Collection**

R

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
 Bill No. 9  
 METALWORK

2	<p><u>"Nty" doors or equally approved</u></p> <p>"Code 914" door frame size 914 x 2032mm high fitted with three (3) parliament hinges, complete with single security gate size 914 x 2032mm high overall formed of 25 x 25 x 2mm tubular section frame mitred and welded at angles and two 25 x 25 x 2mm tubular section horizontal middle rails, gate filled in with 12 x 12 x 12mm square section vertical rails at 100mm centres and fitted with locking bolt for padlock, frame formed of 25 x 38 x 2mm tubular section stiles and top rail mitred and welded at angles and fitted with three hinges welded to gate and frame, frame factory welded at maximum 250mm centres to door frame</p>	No 5
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**STEEL WINDOWS, DOORS, ETC**

3	<p><u>Standard residential windows with burglar bars to all sashes</u></p> <p>Window code NCT1S, size 533 x 949mm high</p>	No 9
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**Carried to Collection**

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
 Bill No. 9  
 METALWORK

R

Section No. 6

CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOILETS

Bill No. 9

METALWORK

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

342

343

344

**Carried Forward to Summary of Section No. 6**

R

Section No. 6  
CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
Bill No. 9  
METALWORK

Item No	<u>SECTION NO.6</u>	Quantity	Rate	Amount
	<u>BILL NO. 10</u>			
	<u>PLASTERING</u>			
	<u>SCREEDS</u>			
	<u>Screeds on concrete</u>			
1	30mm Thick on floors	m2	26	
	<b>Carried Forward to Summary of Section No. 6</b>			R
	Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 10 PLASTERING			

Item No	<b><u>SECTION NO.6</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.11</u></b>			
	<b><u>TILING</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	<b><u>FLOOR TILING</u></b>			
	<u>420 x420 11.5mm kilimanjaro floor tiles or similar approved by architects, fixed with adhesive, painted with tinted waterproof jointing compound. Grouting to be grey, tiles should have expansion joint and aluminium edging strip.</u>			
1	On floors and landings	m2	25	
2	Skirting formed of cut kilimanjaro floor tile - cut to 420 x 75mm high.	m	91	
	<b><u>TOILET PAPER HOLDERS ETC</u></b>			
	<u>"Vaal" white glazed ceramic</u>			
3	180 x 180 x 120mm Toilet paper holder (Ref. 653110)	No	8	
	<b>Carried Forward to Summary of Section No. 6</b>			
	Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 11 TILING			R



Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.6</u></b></p>			
<p><b><u>BILL NO.12</u></b></p>			
<p><b><u>PLUMBING AND DRAINAGE</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><b><u>"Polycop" polypropylene pipes:</u></b></p>			
<p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p>			
<p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p>			
<p>All pipe diameters are nominal external</p>			
<p><b><u>"Polylink" polypropylene pipes:</u></b></p>			
<p>Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints</p>			
<p>Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured</p>			
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p>			
<p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p>			
<p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p>			
<p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 12 PLUMBING AND DRAINAGE</p>			
		R	

All pipe diameters are nominal external

**Concrete pipes:**

Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings

**Vitrified clay pipes:**

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

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

**uPVC pipes and fittings:**

Soil, waste and vent pipes and fittings shall be solvent weld jointed

**uPVC pressure pipes and fittings:**

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

**Copper pipes:**

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

**Carried to Collection**

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

**Fixing of pipes**

Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level

**Lead pipes and fittings**

All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel

**Reducing fittings**

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

**Wire gratings**

Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings

**Septic tanks**

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

**Exposed concrete surfaces**

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster

**Excavations**

No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling

"Soft rock" and "hard rock" shall be as defined in "Earthworks"

**Carried to Collection**

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

**Laying, backfilling, bedding, etc. of pipes**

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

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding

**Flush pans**

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

**Stainless steelbasins, sinks, wash troughs, urinals, etc.**

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable

**Waste unions**

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings

**Steel sectional water tanks**

Tanks shall comply with SABS CKS 114

**"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.**

Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described

Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc

**RAINWATER DISPOSAL**

**Carried to Collection**

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

	<u>0.8mm Galvanised sheet iron with "Chromadek" finish on one side</u>			
1	125 x 100mm Seamless eaves gutters with beaded front edge	m	51	
2	Extra over eaves gutter for stopped end	No	4	
3	Extra over eaves gutter for angle	No	4	
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	5	
5	100mm Diameter rainwater pipes	m	10	
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	3	
7	Extra over rainwater pipe for shoe	No	3	
	<b><u>SOIL DRAINAGE</u></b>			
	<u>uPVC pipes</u>			
	<u>Extra over uPVC pipes for fittings</u>			
8	110mm Junction	No	9	
9	110 x 50mm Reducing junction	No	1	
	<u>Pre-cast concrete gulleys</u>			
10	110mm Dished gully not exceeding 1m deep with 150mm steel grate and standard concrete gully surround	No	2	
	<u>Sundries</u>			
	<b><u>SANITARY FITTINGS</u></b>			
	<u>"Vaal"</u>			
11	Vaal Sanitaryware vitreous china 510 x 405mm rounded "Hibiscus" (or similar approved) basin with three semi-punched tap holes (i.e. available in zero, one, two or three tap hole configurations), integrated overflow, and chain stay hole through the centre semi-punched tap hole. Available in standard colour range.	No	5	
	<b>Carried to Collection</b>			
	Section No. 6			
	CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL			
	Bill No. 12			
	PLUMBING AND DRAINAGE			

R

12	Vaal Sanitaryware vitreous china wall hung "Lavatera" urinal with top inlet (code 705426) or back inlet (code 705427). Overall size 600 x 385 x 380 mm. Top inlet fittings (code 7054Z1) and back inlet fittings (code 7054Z2) include a 38 mm c.p. domical grating, a spreader (with a 20 mm diameter thread), and two hanger brackets.	No	3		
13	Vaal Sanitaryware vitreous china "Daisy" (or similar approved) semi-close coupled 90° outlet open rim wash-down pan (code 751400) and matching 9 litre cistern (code 7116SC) complete with lid, fitments and flush pipe elbow	No	8		
<b><u>WASTE UNIONS ETC</u></b>					
<u>"Cobra Watertech"</u>					
<b><u>TRAPS ETC</u></b>					
<u>"Cobra Watertech"</u>					
14	"Cobra Ref. 365/40" CP bottle trap	No	8		
<b><u>TAPS, VALVES, ETC</u></b>					
<u>"Cobra Watertech"</u>					
15	"Cobra ref. 206-20" bib tap	No	1		
16	Ref. 232-10 Angle regulating valve with connection pipes etc.	No	1		
17	"Cobra Ref. 111-15" pillar tap	No	5		
18	"Cobra Ref. 232/350" Angle regulating valve	No	9		
19	Cobra Ref. FJ6.000 "Flushmaster Junior" exposed top entry urinal flushvalve complete with Cobra Ref. FJT5.4 connector and spray rose	No	3		
<b><u>SANITARY PLUMBING</u></b>					
<u>uPVC pipes</u>					
20	50mm Pipes laid in and including trenches n.e 1m deep	m	6		
<b>Carried to Collection</b>					
Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 12 PLUMBING AND DRAINAGE					R

21	110mm Pipes laid in and including trenches not exceeding 1m deep	m	34
	<u>Extra over uPVC pipes for fittings</u>		
22	110mm Pan connector	No	8
	<u>Sundries</u>		
	<b><u>WATER SUPPLIES</u></b>		
	<u>Class 0 copper pipes</u>		
23	22mm Pipes	m	29
	<u>Extra over class 0 copper pipes for capillary fittings</u>		
24	15mm Fittings	No	14
25	22mm Fittings	No	9

**Carried to Collection**

R

Section No. 6  
 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
 Bill No. 12  
 PLUMBING AND DRAINAGE

Section No. 6

CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOILETS

Bill No. 12

PLUMBING AND DRAINAGE

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

348

349

350

351

352

353

354

**Carried Forward to Summary of Section No. 6**

R

Section No. 6

CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL

Bill No. 12

PLUMBING AND DRAINAGE



Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.6</u></b>			
	<b><u>BILL NO. 13</u></b>			
	<b><u>GLAZING</u></b>			
	<b><u>GLAZING TO STEEL WITH PUTTY</u></b>			
	<u>4mm Clear float glass</u>			
1	Panes not exceeding 0,1 m2	m2	4	
	<u>4mm Rough cast glass</u>			
2	Panes not exceeding 0,1m2	m2	1	
	<b><u>MIRRORS, ETC</u></b>			
	<u>6mm Silvered float glass copper backed mirrors with bevelled edges, holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete</u>			
3	600 x 400 x 6mm polished plate glass mirrors with square polished edges holed for and plugged with chrome plated detachable chrome plated screws. Above all WHB. CTM Code: BSMR4060R) or similar approved by the architects	No	5	
	<b>Carried Forward to Summary of Section No. 6</b>			
	Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 13 GLAZING			R



7	<u>One coat "Dulux" wood primer, one coat "Dulux" undercoat for all surfaces and two coats "Dulux Silthane Silk" enamel paint or similar approved</u> On doors	m2	1	
	<u>Three coats matt varnish</u> On doors	m2	8	
<b>Carried to Collection</b>				
Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 14 PAINTWORK				

R

Section No. 6

CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOILETS

Bill No. 14

PAINTWORK

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

357

358

**Amount**

**Carried Forward to Summary of Section No. 6**

Section No. 6  
CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL  
Bill No. 14  
PAINTWORK

R

Item No	<b><u>SECTION NO.6</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.15</u></b>			
	<b><u>APRONS AROUND BUILDINGS</u></b>			
	<u>Compaction of surfaces</u>			
1	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	34	
	<u>15 MPa/20 mm concrete</u>			
2	Aprons cast in panels to falls	m3	3	
3	Thickening down apron on edge 110mm x 200mm wide, incl. excavation, backfilling, cart away, etc.	m	34	
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
4	Aprons to falls	m2	34	
	<u>Smooth formwork to sides</u>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	34	
	<b>Carried Forward to Summary of Section No. 6</b>			
	Section No. 6 CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL Bill No. 15 CONCRETE APRONS			R

Section No. 6

CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOILETS

**SECTION SUMMARY - CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL**

Bill No		Page No	Amount
1	FOUNDATIONS	319	
2	CONCRETE, FORMWORK & REINFORCEMENT	323	
3	MASONRY	327	
4	WATERPROOFING	328	
5	ROOF COVERINGS, ETC	331	
6	CARPENTRY AND JOINERY	337	
7	CEILINGS, ETC	338	
8	IRONMONGERY	341	
9	METALWORK	345	
10	PLASTERING	346	
11	TILING	347	
12	PLUMBING AND DRAINAGE	355	
13	GLAZING	356	
14	PAINTWORK	359	
15	CONCRETE APRONS	360	
	<b>Carried to Final Summary</b>		R
	Section No. 6		
	CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOIL		

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>FOUNDATIONS</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Nature of ground</u></p>			
<p>The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"</p>			
<p><u>Excavation for working space in rock</u></p>			
<p>Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over" bulk excavation or trench and hole excavation as the case may be</p>			
<p><u>Carting away of excavated material</u></p>			
<p>Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site</p>			
<p><u>Filling</u></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><u>Soil poisoning</u></p>			
<p>Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a ten (10) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent</p>			
<p><b><u>SITE CLEARANCE ETC</u></b></p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 1 FOUNDATIONS</p>			
		R	

	<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	276	
2	Stripping average 150mm thick layer of top and depositing material in prescribed stock piles on site	m2	276	
	<b><u>EARTHWORKS</u></b>			
	<b><u>EXCAVATION, FILLING, ETC</u></b>			
	<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	116	
	<u>Extra over trench and hole excavations in earth for excavation in</u>			
4	Soft rock	m3	3	
5	Hard rock	m3	6	
	<u>Extra over all excavations for carting away</u>			
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	32	
	<u>Risk of collapse of excavations</u>			
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	150	
	<u>Keeping excavations free of water</u>			
8	Keeping excavations free of water			Item
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
9	Under floors, steps, paving, etc	m3	32	
10	Backfilling to trenches, holes, etc	m3	28	
	<u>Earth filling supplied by the contractor compacted to 93% Mod AASHTO density</u>			
11	Under floors, steps, paving etc.	m3	62	
	<b>Carried to Collection</b>			R
	Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 1 FOUNDATIONS			



12	Trenches	m3	24
	<u>Compaction of surfaces</u>		
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	210
	<u>Prescribed density tests on filling</u>		
14	"Modified AASHTO Density" test	No	8
	<b><u>SOIL POISONING</u></b>		
	<u>Weedkiller mixed in accordance to supplier's specifications</u>		
15	Under paving etc	m2	210
16	To bottoms and sides of trenches, etc.	m2	246
	<u>Soil insecticide</u>		
17	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	210
18	To bottoms and sides of trenches etc	m2	246
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>		
	<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>		
	<u>25MPa/19mm concrete</u>		
19	Strip footings	m3	28
	<b><u>REINFORCEMENT</u></b>		
	<u>High tensile steel reinforcement to structural concrete work</u>		
20	16mm Diameter bars	t	0.42

Carried to Collection

R

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 1  
 FOUNDATIONS

	<u>Fabric reinforcement</u>			
21	Ref. S395 fabric reinforcement in concrete footings etc	m2	150	
	<b><u>TEST CUBES</u></b>			
22	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	8.0	
	<b><u>BRICKWORK</u></b>			
	<u>Brickwork of NFP bricks in class II mortar</u>			
23	One brick walls	m2	87	
	<b><u>BRICKWORK SUNDRIES</u></b>			
	<u>Joint forming material in movement joints:</u>			
	<u>Brickwork reinforcement</u>			
24	150mm Wide reinforcement built in horizontally	m	1,012	
	<b><u>FACE BRICKWORK</u></b>			
	<u>Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints</u>			
25	Extra over brickwork for face brickwork	m2	46	
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces</u>			
26	Coping on top of one brick wall	m	25	
	<b>Carried to Collection</b>			
	Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 1 FOUNDATIONS			R

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 1

FOUNDATIONS

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

362

363

364

365

**Carried Forward to Summary of Section No. 7**

R

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 1

FOUNDATIONS

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.7</u></b></p>			
<p><b><u>BILL NO.2</u></b></p>			
<p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><u>Cost of tests</u></p>			
<p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)</p>			
<p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p>			
<p><u>Formwork</u></p>			
<p>Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use</p>			
<p>The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 2 CONCRETE, FORMWORK &amp; REINFORCEMENT</p>			
		R	

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

Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described

Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"

**UNREINFORCED CONCRETE**

25MPa/19mm concrete

1	Surface beds cast in panels	m3	3
2	Surface beds cast in panels on waterproofing.	m3	18

**CONCRETE SUNDRIES**

Finishing top surfaces of concrete smooth with a steel trowel

3	Surface beds, slabs, etc	m2	210
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**TEST CUBES**

4	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	16.0
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**MOVEMENT JOINTS ETC**

Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces

5	15mm Joints exceeding 300mm high	m	164
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Saw cut joints

6	Saw cut joints in top of concrete	m	41
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**Carried to Collection**

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 2  
 CONCRETE, FORMWORK & REINFORCEMENT

R

**REINFORCEMENT**

Fabric reinforcement

7	Ref. S245 fabric reinforcement in concrete surface bed etc	m2	210
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**Carried to Collection**

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 2  
 CONCRETE, FORMWORK & REINFORCEMENT

R

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 2

CONCRETE, FORMWORK & REINFORCEMENT

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

367

368

369

**Carried Forward to Summary of Section No. 7**

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 2

CONCRETE, FORMWORK & REINFORCEMENT

R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.7</u></b></p>			
<p><b><u>BILL NO. 3</u></b></p>			
<p><b><u>MASONRY</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><b><u>BRICKWORK</u></b></p>			
<p><u>Sizes in descriptions</u></p>			
<p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p>			
<p><u>Linings to concrete</u></p>			
<p>Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties</p>			
<p><u>Hollow walls etc</u></p>			
<p>Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p>			
<p><u>Reinforced brick lintels</u></p>			
<p>Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous</p>			
<p><u>Face bricks</u></p>			
<p>Bricks shall be ordered timeously to obtain uniformity in size and colour</p>			
<p><u>Pointing</u></p>			
<p>Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 3 MASONRY</p>			
		R	



**SUPERSTRUCTURE**

Brickwork of NFP bricks in class II mortar

1	Half brick walls in beamfilling.	m2	21
2	One brick walls	m2	486

**BRICKWORK SUNDRIES**

Joint forming material in movement joints:

Brickwork reinforcement

3	75mm Wide reinforcement built in horizontally	m	123
4	150mm Wide reinforcement built in horizontally	m	2,138

Turning pieces

5	110mm Wide turning piece to lintels etc	m	43
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Galvanised wire ties etc

**FACE BRICKWORK**

Face bricks (Purchase price of R4 000,00/1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints

6	Extra over brickwork for face brickwork	m2	720
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Brick-on-edge header course copings, sills, etc of face bricks ( Purchase price R4 000,00 / 1000 VAT incl. delivered to site) pointed with recessed joints on all exposed faces

7	Extra over brickwork for brick-on-edge header course lintel	m	21
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Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 000,00/1000 excluding VAT delivered to site) pointed with recessed joints on all exposed faces

8	110mm Wide sill set level and slightly projecting	m	21
9	220mm Wide sill set sloping and slightly protecting outside	m	21

**Carried to Collection**

R

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 3  
 MASONRY

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 3

MASONRY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

371

372

**Carried Forward to Summary of Section No. 7**

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 3

MASONRY

R

Item No	<b><u>SECTION NO.7</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.4</u></b>			
	<b><u>WATERPROOFING</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Waterproofing</u>			
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs			
	<b><u>DAMP-PROOFING OF WALLS AND FLOORS</u></b>			
	<u>One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	44	
	<u>One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
2	Under surface beds	m2	183	
	<b><u>JOINT SEALANTS ETC</u></b>			
	<u>Silicone sealing compound including backing cord, bond breaker, primer, etc</u>			
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	164	
	<b>Carried Forward to Summary of Section No. 7</b>			
	Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 4 WATERPROOFING			R

Item No	<b><u>SECTION NO.7</u></b>	Quantity	Rate	Amount
	<p><b><u>BILL NO.5</u></b></p> <p><b><u>ROOF COVERINGS ETC</u></b></p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>General</u></p> <p>All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched</p> <p>Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use</p> <p><u>Sizes</u></p> <p>All items are measured net unless otherwise described</p> <p><u>Flashings, trimming plates, etc.</u></p> <p>Prices to include for all cutting and waste and relevant fixing material, unless otherwise described</p> <p>All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable</p> <p>All items are unless otherwise described measured net</p> <p><b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b></p> <p><u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u></p>			
1	Roof covering with pitch not exceeding 50 degrees	m2	262	
	<b>Carried to Collection</b>			R
	<p>Section No. 7            CONSTRUCTION OF MULTI PURPOSE CLASSROOM            Bill No. 5            ROOF COVERINGS, ETC</p>			

2	Ridge capping 550mm girth	m	2
3	Hip capping 550mm girth	m	9
4	Valley flashing 800mm girth	m	24
<u>Sundries</u>			
5	12" Thermal resistance sisalition laid on purlins	m2	262

**Carried to Collection**

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 5  
 ROOF COVERINGS, ETC

R

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 5

ROOF COVERINGS, ETC

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

375

376

**Amount**

**Carried Forward to Summary of Section No. 7**

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 5

ROOF COVERINGS, ETC

R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.7</u></b></p>			
<p><b><u>BILL NO.6</u></b></p>			
<p><b><u>CARPENTRY AND JOINERY</u></b></p>			
<p><b><u>ROOFS ETC</u></b></p>			
<p><b><u>PRE-FABRICATED TIMBER ROOF TRUSSES</u></b></p>			
<p><u>Pre-fabricated metal connected timber roof trusses</u></p>			
<p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p>			
<p><u>Timber</u></p>			
<p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p>			
<p><u>Bolts</u></p>			
<p>Bolts shall be in accordance with BS 4190 or SABS 135</p>			
<p><u>Shear plates, tooth connectors and split rings</u></p>			
<p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p>			
<p><u>Washers</u></p>			
<p>Square or round washers of the following dimensions shall be used with all bolts:</p>			
<p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 6 CARPENTRY AND JOINERY</p>			
		R	

2 Bolts up to 12mm diameter:  
Washers shall be minimum 36mm wide of minimum 4,00mm thickness

3 Bolts up to 20mm diameter:  
Washers shall be minimum 60mm wide of minimum 5,00mm thickness

Metal connector plates

Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel

The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m<sup>2</sup> commercial class hot dipped galvanising as per SABS 934 before stamping

All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report

Truss construction

Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers

Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint

Truss design

All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")

Truss spacing

The truss centres shall be less than or equal to that as described in this bill for each respective truss

Truss pitch

The truss pitch shall be as described in this bill for each respective truss type

**Carried to Collection**

Section No. 7  
CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
Bill No. 6  
CARPENTRY AND JOINERY

R



Truss loading

Trusses shall be designed for a live load of 0,50kN/m<sup>2</sup> and dead load as specified under the sub-heading "Specific load specifications for roof trusses"

Shop drawings, design and erection guarantee certificates

It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified

Dimensions

All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences

Erection

All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer

Design system

The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system

However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent

Specific specifications for roof trusses

Unless otherwise described, the following specifications will apply:

- 1 All trusses to be with a 20° pitch

**Carried to Collection**

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 6  
 CARPENTRY AND JOINERY

R

2 The dead load consists of 0,5mm "Klip-Lok Light Industrial" galvanised troughed sheet steel roof covering with "Chromadek" finish, purlins at approximately 1200mm centres, 6mm fibre-cement nailed-up ceilings and 50mm glass fibre insulation blanket laid on top of ceilings

Rates

Tendered rates to include for the complete roof construction, including the design of the roof construction, all timber of required grade and type shown on the design, all cutting and waste, cutting to the exact lengths and end angles to manufacture the respective truss type, supply of all connector plates, fabrication of trusses, checking the completed truss for quality, loading up, transporting to the site of the works and off loading, storing under cover and protecting from the weather, hoisting up in position and erection of the roof truss structure, necessary supervision, submission of all shop drawings, design and erection guarantee certificates, etc. as specified

**ROOFS, ETC.**

**The following in roof trusses to various buildings**

Allow for the preparation and submission of the following documents in respect of all buildings

- |   |  |      |
|---|--|------|
| 1 | Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication   | Item |
| 2 | Design certificate indicating the licensed programme used, SABS specifications adhered to, general procedures and loadings adopted, sizes and grading of timber components, details, etc.                          | Item |
| 3 | Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Representative/Agent | Item |

The following is applicable in respect of roof trusses:

**Carried to Collection**

R

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 6  
 CARPENTRY AND JOINERY

	Trusses are at maximum 1100mm centres Roof covering is 0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheet on timber purlins Ceilings are 6mm sheeting on 38 x 38mm brandering .The dimensions in the descriptions of the trusses are nominal and actual measurements are to be obtained on the site before design or fabrication commences			
4	Roof construction to double pitched roof with two hipped ends 11.78 x 10.66m and 1.90m high overall including wall plates, trusses, jack rafters, permanent bracing and 50 x 76mm purlins at 1200mm centres for roof covering (see drawing in the back of this bill of quantities) (Multi-Purpose Classroom)	No	2	
	<u>Sawn softwood</u>			
5	38 x 114mm Wall plates	m	164	
	<u>Wrought laminated timber</u>			
	<u>Sundries</u>			
6	Two coats creosote on sawn timbers	m2	54	
	<b><u>EAVES, VERGES, ETC</u></b>			
	<u>"Everite FC77" pressed fibre-cement</u>			
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	87	
	<b><u>DOORS, ETC</u></b>			
	<u>44mm Wrought meranti framed, ledged, braced and battened door of 44 x 150mm top rails and stiles, 22 x 150mm middle legde and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding</u>			
8	44mm Door 914 x 2032mm high	No	2	
	<b>Carried to Collection</b>			
	Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 6 CARPENTRY AND JOINERY			R

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 6

CARPENTRY AND JOINERY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

378

379

380

381

382

**Carried Forward to Summary of Section No. 7**

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 6

CARPENTRY AND JOINERY

R

Item No	<b><u>SECTION NO.7</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.7</u></b>			
	<b><u>CEILING , ETC.</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions:</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere			
	<b><u>CEILING CONSTRUCTION, CORNICES, ETC.</u></b>			
	<b><u>Insulation</u></b>			
1	50mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	183	
	<u>Sawn softwood</u>			
2	38 x 114mm Ceiling joists	m	120	
	<u>Wrought softwood</u>			
3	19 x 76mm Cornices nailed	m	164	
	<b><u>NAILED UP AND SCREWED UP CEILINGS</u></b>			
	<u>6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints</u>			
4	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	210	
	<b>Carried to Collection</b>			
	Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 7 CEILINGS, ETC			R

5 Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening

No

2

**Carried to Collection**

R

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 7  
 CEILINGS, ETC

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 7

CEILINGS, ETC

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

384

385

**Carried Forward to Summary of Section No. 7**

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 7

CEILINGS, ETC

R

Item No	SECTION NO.7	Quantity	Rate	Amount
	<b><u>BILL NO.8</u></b>			
	<b><u>IRONMONGERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions</u>			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
	<u>Finishes to ironmongery</u>			
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded			
	<b><u>CATCHES, CABIN HOOKS, ETC</u></b>			
	<u>"Approved"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	2	
	<b><u>LOCKS</u></b>			
	<u>"Solid"</u>			
2	"Code 630" padlock	No	2	
3	"Code 460/313" Blesbok four lever lockset	No	2	
	<b><u>SUNDRIES</u></b>			
	<u>"Solid"</u>			
4	"Code 255" door stop plugged	No	2	
	<b>Carried to Collection</b>			R
	Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 8 IRONMONGERY			



"Vaal Paragon"

"Solid"

**LETTERS, NAMEPLATES, ETC**

"Union"

**PINNING BOARDS, WRITING BOARDS,  
PROJECTION SCREENS, ETC**

"Vitrex"

5	Pinning boards 2400 x 1200mm high fixed to brickwork	No	4
6	Vitrex system 1 000 folding type white writing board, with wall mounted centre board 4800 x 1140mm high with one centre board 2400 x 1140m high, two side boards 1200 x 1140mm high and two swing leaves each 1200 x 1140mm high plugged	No	2

**Carried to Collection**

R

Section No. 7  
CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
Bill No. 8  
IRONMONGERY

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 8

IRONMONGERY

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

387

388

**Carried Forward to Summary of Section No. 7**

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 8

IRONMONGERY

R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.7</u></b></p>			
<p><b><u>BILL NO. 9</u></b></p>			
<p><b><u>METALWORK</u></b></p>			
<p><u>Descriptions</u></p>			
<p>Descriptions of bolts shall be deemed to include nuts and washers Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p>			
<p><u>Drawings</u></p>			
<p>Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc</p>			
<p><b><u>ALUMINIUM WINDOWS, DOORS, ETC</u></b></p>			
<p><u>AAAMSA guide</u></p>			
<p>All windows, doors, etc shall comply with and meet the minimum recommended performance requirements as set out in the General Specification for Architectural Aluminium and Glass Products (Third Edition) as published by the Association of Architectural Aluminium Manufacturers of South Africa (AAAMSA)</p>			
<p><u>Finish</u></p>			
<p>The windows, doors, etc shall be natural anodised to a thickness of 25 micron and shall comply with SABS 999 and 1407</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 9 METALWORK</p>			
			R

Glass

Glazing to be with patent rubber gaskets with glazing beads and comply with BS 952. Thickness of glass shall be in accordance with table 1 (Part N : Glazing ). Safety glass shall comply with SABS 1263. The National Building Regulations shall be observed with regard to the specification of safety glass

Design indemnity

The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed

Drawings

Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc

Pricing.

All window prices should include aluminium louvres as shown

General

Workshop drawings to be approved by the architect before manufacture

**PRESSED STEEL COMBINATION DOORS AND FRAMES**

"Nty" doors

- 1 "Code 914" door frame size 914 x 2032mm high fitted with three (3) parliament hinges, complete with single security gate size 914 x 2032mm high overall formed of 25 x 25 x 2mm tubular section frame mitred and welded at angles and two 25 x 25 x 2mm tubular section horizontal middle rails, gate filled in with 12 x 12 x 12mm square section vertical rails at 100mm centres and fitted with locking bolt for padlock, frame formed of 25 x 38 x 2mm tubular section stiles and top rail mitred and welded at angles and fitted with three hinges welded to gate and frame, frame factory welded at maximum 250mm centres to door frame

No

2

**STEEL WINDOWS, DOORS, ETC**

**Carried to Collection**

R

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 9  
 METALWORK

Standard residential windows with burglar bars to all sashes

2	Window code 6/3/9, size 1143 x 972mm high	No	18
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**Carried to Collection**

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 9  
 METALWORK

R

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 9

METALWORK

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

390

391

392

**Carried Forward to Summary of Section No. 7**

Section No. 7  
CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
Bill No. 9  
METALWORK

R



Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.7</u></b>			
	<b><u>BILL NO.11</u></b>			
	<b><u>TILING</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	<b><u>FLOOR TILING</u></b>			
	<u>420 x420 11.5mm kilimanjaro floor tiles or similar approved by architects, fixed with adhesive, painted with tinted waterproof jointing compound. Grouting to be grey, tiles should have expansion joint and aluminium edging strip.</u>			
1	On floors and landings	m2	210	
2	Skirting formed of ceramic tile cut to 420 x 75mm high	m	164	
	<b>Carried Forward to Summary of Section No. 7</b>			
	Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 11 TILING		R	



Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.7</u></b></p>			
<p><b><u>BILL NO.12</u></b></p>			
<p><b><u>PLUMBING AND DRAINAGE</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><b><u>"Polycop" polypropylene pipes:</u></b></p>			
<p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p>			
<p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p>			
<p>All pipe diameters are nominal external</p>			
<p><b><u>"Polylink" polypropylene pipes:</u></b></p>			
<p>Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints</p>			
<p>Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured</p>			
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p>			
<p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p>			
<p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p>			
<p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p>			
<p><b>Carried to Collection</b></p>			
<p>Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 12 PLUMBING AND DRAINAGE</p>			
		R	

All pipe diameters are nominal external

**Concrete pipes:**

Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings

**Vitrified clay pipes:**

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

Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings

**uPVC pipes and fittings:**

Soil, waste and vent pipes and fittings shall be solvent weld jointed

**uPVC pressure pipes and fittings:**

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

**Copper pipes:**

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

**Carried to Collection**

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

**Fixing of pipes**

Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level

**Lead pipes and fittings**

All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel

**Reducing fittings**

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

**Wire gratings**

Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings

**Septic tanks**

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

**Exposed concrete surfaces**

Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster

**Excavations**

No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling

"Soft rock" and "hard rock" shall be as defined in "Earthworks"

**Carried to Collection**

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R

**Laying, backfilling, bedding, etc. of pipes**

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

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding

**Flush pans**

Flush pans shall have straight or side outlets and "P" or "S" traps as necessary

**Stainless steelbasins, sinks, wash troughs, urinals, etc.**

Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable

**Waste unions**

Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings

**Steel sectional water tanks**

Tanks shall comply with SABS CKS 114

**"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.**

Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described

Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc

**RAINWATER DISPOSAL**

**Carried to Collection**

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 12  
 PLUMBING AND DRAINAGE

R



Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 12

PLUMBING AND DRAINAGE

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

396

397

398

399

400

**Carried Forward to Summary of Section No. 7**

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 12

PLUMBING AND DRAINAGE

R







6	<p><u>Three coats matt varnish</u></p> <p>On doors</p>	m2	4		
<b>Carried to Collection</b>					R

Section No. 7  
 CONSTRUCTION OF MULTI PURPOSE CLASSROOM  
 Bill No. 14  
 PAINTWORK

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 14

PAINTWORK

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

403

404

**Amount**

**Carried Forward to Summary of Section No. 7**

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

Bill No. 14

PAINTWORK

R

Item No	<b><u>SECTION NO.7</u></b>	Quantity	Rate	Amount
	<b><u>BILL NO.15</u></b>			
	<b><u>APRONS AROUND BUILDINGS</u></b>			
	<u>Compaction of surfaces</u>			
1	Compaction of ground surface under aprons including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90% Mod AASHTO density	m2	82	
	<u>15 MPa/20 mm concrete</u>			
2	Aprons cast in panels to falls	m3	8	
3	Thickening down apron on edge 110mm x 200mm wide, incl. excavation, backfilling, cart away, etc.	m	82	
	<u>Finishing top surfaces of concrete smooth with a wood float</u>			
4	Aprons to falls	m2	82	
	<u>Smooth formwork to sides</u>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	82	
	<b>Carried Forward to Summary of Section No. 7</b>			
	Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM Bill No. 15 CONCRETE APRONS			R

Section No. 7

CONSTRUCTION OF MULTI PURPOSE CLASSROOM

**SECTION SUMMARY - CONSTRUCTION OF MULTI PURPOSE CLASSROOM**

Bill No		Page No	Amount
1	FOUNDATIONS	366	
2	CONCRETE, FORMWORK & REINFORCEMENT	370	
3	MASONRY	373	
4	WATERPROOFING	374	
5	ROOF COVERINGS, ETC	377	
6	CARPENTRY AND JOINERY	383	
7	CEILINGS, ETC	386	
8	IRONMONGERY	389	
9	METALWORK	393	
10	PLASTERING	394	
11	TILING	395	
12	PLUMBING AND DRAINAGE	401	
13	GLAZING	402	
14	PAINTWORK	405	
15	CONCRETE APRONS	406	
<b>Carried to Final Summary</b>			R
Section No. 7 CONSTRUCTION OF MULTI PURPOSE CLASSROOM			

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.8</u></b></p>			
<p><b><u>BILL NO.1</u></b></p>			
<p><b><u>PROVISIONAL SUMS</u></b></p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p>NOTE: Tenderers are referred to the definition of general attendance on nominated sub-contractors given in Clause 9 of the Preliminaries</p>			
<p>NOTE: Under no circumstances may any Prime Cost - Provisional Amount, etc be extended at an amount lower than the amount given in the Bill</p>			
<p><b>Carried to Collection</b></p>			R
<p>Section No. 8 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS</p>			

THE FOLLOWING PROVISIONAL SUMS ARE FOR WORK TO BE EXECUTED BY SELECTED SUBCONTRACTORS

The following Provisional Sums are for specialists work to be executed by a selected Sub-contractor who upon appointment in terms of the Conditions of Contract shall be deemed to be a Domestic Sub-Contractor to the Contractor

A Selected Sub-Contractor shall be a Sub-contractor executing work for which a sum of money is provided for in the Bills of Quantities or a Sub-contractor executing additional specialist work which arises as a result of an instruction by the Principal Agent/Engineer

Tender documents for such work shall be prepared by the Principal Agent/Engineer in consultation with and to the approval of the Contractor and such tender document shall be issued by the Principal Agent/Engineer to a list of tenderers agreed upon between the Principal Agent/Engineer and Contractor. Tenders shall be submitted to the Principal Agent/Engineer

The Selected Sub-contractor shall be chosen by the Principal Agent/Engineer and the Contractor, and the Contractor shall satisfy himself that such selected sub-contractor can meet the requirements of the Sub-Contract agreement and the Contractor shall inform the Principal Agent/Engineer accordingly

The procedure relating to the method of selection, obtaining of tenders, adjudication thereof and the appointment of the Selected Sub-contractor shall not create any contractual relationship between the Client and the Selected Sub-contractor

Joinery Fittings (Fixed).

1 Provide the amount of R500 000.00 (Five hundred thousand rands) for joinery fittings by Specialists

Item 500,000.00

2 Profit

Item

3 Attendance

Item

Joinery Fittings (Movable).

4 Provide the amount of R300 000.00 (Three hundred thousand rands) for joinery fittings by Specialists

Item 300,000.00

**Carried to Collection**

R

Section No. 8  
PROVISIONAL SUMS  
Bill No. 1  
PROVISIONAL SUMS



Occupational Health and Safety Consultant

22 Provide the sum of R500 000,00 (Five hundred thousand rand) for Occupational Health and Safety Consultant

Item

500,000.00

23 Profit

Item

24 Attendance

Item

**Carried to Collection**

R

Section No. 8  
 PROVISIONAL SUMS  
 Bill No. 1  
 PROVISIONAL SUMS



Section No. 8

PROVISIONAL SUMS

Bill No. 1

PROVISIONAL SUMS

**COLLECTION**

Total Brought Forward from Page No.

**Page  
No**

**Amount**

408

409

410

411

**Carried to Final Summary**

R

Section No. 8  
PROVISIONAL SUMS  
Bill No. 1  
PROVISIONAL SUMS

Section No	<u>FINAL SUMMARY</u>	Page No	Amount
1	PRELIMINARIES	150	
2	RENOVATION OF 2 X 4 CLASSROOM BLOCK	164	
3	CONSTRUCTION OF LARGE ADMINISTRATION BLOCK	217	
4	CONSTRUCTION OF 2 X 2 GRADE R CLASSROOM BLOCKS	265	
5	CONSTRUCTION OF 4 X 4 CLASSROOM BLOCKS	314	
6	CONSTRUCTION OF 2 X 4 SEAT WATERBORNE TOILETS	361	
7	CONSTRUCTION OF MULTI PURPOSE CLASSROOM	407	
8	PROVISIONAL SUMS	412	
	Sub -Total (PART A - MAIN BUILDING WORKS)		R
	<b><u>PART B - CIVIL WORKS</u></b>		
	TENDER AMOUNT CARRIED OVER FROM PART B (CIVIL WORKS)	Item	
	<b><u>PART C - ELECTRICAL WORKS</u></b>		
	TENDER AMOUNT CARRIED OVER FROM PART C (ELECTRICAL WORKS)	Item	
	Sub Total - BUILDING COSTS		R
	<b><u>SPECIAL CONDITIONS</u></b>		
	Provide the sum of R1 400 000.00 (One million four hundred thousand rands) for fluctuations in cost	Item	1,400,000.00
	<b><u>CONTINGENCIES</u></b>		
	<u>Contingencies:</u>		
	Provide the sum of R1 400 000.00 (One million four hundred thousand rands) for contingencies to be used at the discretion of the Representative / Agent and deducted in whole or in part if not required.	Item	1,400,000.00
	<b>Carried Forward</b>		R

Section No	FINAL SUMMARY	Page No	Amount
	<b>Brought Forward</b>		R
	Sub Total before VAT		R
	Value Added Tax		R
	<b>Carried to Form of Tender</b>		R



## C4.3 CIVIL WORKS

## SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<b>SCHEDULE 1: EARTHWORKS (ROADS AND SUBGRADE)</b>				
1	SANS	<b>EARTHWORKS</b>				
1,1		<b>CLEARING AND GRUBBING</b>				
1.1.1	1200 D 8.3.3	<b>Clear and grub</b> to 100mm depth over the area. stockpile as <b>topsoil</b> berm as directed by the Engineer.	m <sup>2</sup>	875,00		
1.1.2	1200 D 8.3.3	Excavate to the line and level as shown on the drawings and place stockpile materials as directed by the Engineer.	m <sup>3</sup>	394,00		
1,2		<b>TREATMENT OF ROAD-BED</b>				
1.2.1	8.3.3(a)	Road-bed preparation and compaction of material compacted to 93% MOD AASHTO maximum density	m <sup>3</sup>	132,00		
1.2.2	8.3.3(b)	In-place treatment of road-bed in intermediate or hard material				
		Ripping	m <sup>3</sup>	132,00		
1,3		<b>EARTHWORKS</b>				
1.3.1	8.3.4	Cut to fill				
		Compact to 90 % mod. AASHTO maximum density	m <sup>3</sup>	132,00		
		Selected layer compacted to 93 % mod. AASHTO maximum density	m <sup>3</sup>	132,00		
1.3.2	8.3.6	Extra-over items 1.3.1 inclusive for excavating and breaking down material in:				
		Intermediate excavation	m <sup>3</sup>	100,00		
		Hard excavation	m <sup>3</sup>	50,00		
<b>TOTAL CARRIED FORWARD</b>						

## SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>TOTAL BROUGHT FORWARD</b>						
1.3.3	8.3.7	Cut to spoil from				
		Soft excavation	m <sup>3</sup>	200,00		
		Intermediate excavation	m <sup>3</sup>	50,00		
		Hard excavation	m <sup>3</sup>	50,00		
1.3.4	8.3.8	<b>Removal of oversize material</b>	m <sup>3</sup>	10,00		
1,4	<b>SABS 1200 DM</b>	<b>SUNDRIES</b>				
	8.3.10	Materials bladed to windrow	m <sup>3</sup>	263,00		
	8.3.11	Extra-over items 3.7 and 3.8 for temporary stockpiling of material	m <sup>3</sup>	30,00		
		Construction of storm water berm along the outside perimeter fence on the South Eastern side of the site	m <sup>3</sup>	0,00		
1,5	<b>SABS 1200 ME</b>	<b>SECTION : SUBBASE</b>				
	8.3.1	Construct gravel wearing course with material from borrow pits in all materials				
		150mm to main carriageways	m <sup>3</sup>	0,00		
		150mm to perimeter roads	m <sup>3</sup>	0,00		
	8.3.4	Extra over items .1 to .2 inclusive for class of excavation				
		Intermediate excavation	m <sup>3</sup>	0,00		
		Hard rock excavation	m <sup>3</sup>	0,00		
	8.3.5	Process material by means of:				
		Heavy grid rolling	m <sup>3</sup>	0,00		
		Mechanical modification	m <sup>3</sup>	0,00		
<b>TOTAL CARRIED FORWARD</b>						

## SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>TOTAL BROUGHT FORWARD</b>						
1,6	SANS 1200 MFL	<b>BASE</b>				
	8.3.1	<b>Construct base with material from borrow pit</b>				
		Stabilized base using material from borrow 150mm to 95% mod AASHTO	m <sup>3</sup>	0,00		
1,7	8.3.4	<b>Stabilizing Agent</b>				
		(b) Portland Cement	t	0,00		
1,8	SANS 1200 MJ	<b>SEGMENTED BLOCK PAVING TO THE ACCESS ROAD</b>				
	8.2.2	80mm Type S-A 35mPa for roadway (Grey Colouring)	m <sup>2</sup>	0,00		
	8.2.2	60mm Type S-A 35mPa for roadway (Grey Colouring)	m <sup>2</sup>	875,00		
	8.2.1	The construction of edge restraints	m	0,00		
1,8	SANS 1200 MK	<b>KERBING AND CHANNELLING</b>				
	8.2.2	<b>Supply, bed, lay, &amp; joint concrete sections:</b>				
1.8.1		<b>400X200 Concrete edge strip (Class 20/19 Concrete Strength).</b>				
		a) 1m Length on straight	m	10,00		
		b) 330mm Length on curves	m	10,00		
1.8.2		<b>300X150 Barrier Kerb (SABS 927 Fig 3).</b>	m	140,00		
1.8.3		<b>Mountable Kerb (SABS 927 Fig 3).</b>	m	10,00		
<b>TOTAL CARRIED FORWARD</b>						

## SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>TOTAL BROUGHT FORWARD</b>						
1,9		<b>EROSION PROTECTION (PROVISIONAL)</b>				
		Top soiling from stockpile to a depth of 75mm	m	0,00		
		Planting of grass runners including spreading of	m	0,00		
1.20	SABS 1200	<b>SECTION : ANCILLARY ROADWORKS</b>				
1.20.1		Permanent road signs				
	8.3.1	<u>Sign faces with painted or galvanized (as stated) background. Symbols, characters, legend and borders in engineering grade, retroreflective material with signboards constructed from :</u>				
		c) Sheet steel (1.6 mm thick) of area Over Up to:				
		up to 2m <sup>2</sup>	m <sup>2</sup>	0,00		
		2m <sup>2</sup> to 10m <sup>2</sup>	m <sup>2</sup>	0,00		
1.20.2	8.3.2	Extra-Over Item .2 for using				
		a) Engineering grade retroreflective background (Dwg ...) (Prov.)	m <sup>2</sup>	0,00		
1.20.3	8.3.3	Sign Supports				
		c) Timber diameter 145 mm - 175 mm pine	m	0,00		
	8.1.1 & 8.3.4	Excavation for sign supports and backfilling with in-situ material	m <sup>3</sup>	0,00		
	8.3.7	Statutory signs, street names, and the like, supplied and erected completely	No.	0,00		
1,21		<b>SUBSOIL DRAINS</b>				
1.21.1	1200 DK 8.2	Supply and install A4 <b>Bidim</b> Geosynthetic materials to the <b>subsoil drains</b> , as per drawings.	m <sup>2</sup>	Rate Only		
<b>TOTAL CARRIED FORWARD</b>						



## SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
<b>TOTAL BROUGHT FORWARD</b>						
1.21.2	1200 DK 8.2	Supply and install 110mm Class 6 HDPE perforated pipe to the <b>subsoil drains</b> outlet, as per drawings.	m	-		
1.21.4	1200 DK 8.2	Supply and install 1,5mm smooth <b>HDPE</b> Geomembrane as the liner to the channel, as per drawings.	m <sup>2</sup>	-		
1.21.5	1200 DK 8.2	Supply and install A7 <b>Bidim</b> Geosynthetic <b>proetction</b> layer to channel liner, as per drawings.	m <sup>2</sup>	-		
<b>CONCRETE</b>						
1.21.7	SANS 1200 AH 8.4.3	Supply, place and shape 25MPa <b>concrete in hyson cells</b> on the A10 <b>Bidim</b> Geosynthetic proetction layer , as per drawings.	m <sup>3</sup>	-		
1.21.8	8.4.3	Supply, place and shape 25MPa <b>concrete in hyson cells</b> in the <b>leachate outlet channel</b> , as per drawings.	m <sup>3</sup>	-		
1,22	<b>STORMWATER MANAGEMENT</b>					
1.22.1	SANS	<b>EARTHWORKS</b>				
1.22.2	<b>EXCAVATIONS</b>					
	1200 D 8.3.2	Excavate and prepare all cut off trenches and berms around the site as shown on the drawings and as directed by the Engineer.	m <sup>3</sup>	280,00		
		Disposal of unsuitable or surplus material off site	m <sup>3</sup>	280,00		
		Restricted excavation in all materials and use for backfill or dispose of unsuitable/ surplus material off site for:	m <sup>3</sup>	55,00		
<b>TOTAL CARRIED FORWARD</b>						

## SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		<b>TOTAL BROUGHT FORWARD</b>				
	<b>SANS 1200 G</b>	<b>Concrete</b>				
	8.4.1	Mass concrete backfilling to replace unsuitable material, prescribed mix, Grade 10MPa/20 mm	m <sup>3</sup>			
	8.4.2	Blinding layer, 50 mm minimum, prescribed mix, Grade 15MPa/20 mm to side channels, 1.5m x 1.2m below scour channel and pipe work	m <sup>2</sup>	39,00		
	8.4.3	Strength concrete Grade 25 MPa/20 mm for:				
		<b>Concrete Channels</b>	m <sup>3</sup>	103,00		
	<b>8.1.1</b>	<b>Formwork</b>				
	8.2.5	Rough, vertical, circular, maximum height 300 mm.	m	1 550,00		
	8.2.5	Smooth, circular, vertical, 175 mm high to outer edge of base footing, (including forming of drainage lips with 110 mm dia drips)	m	0,00 0,00		
	PSA8-11	Forming of drainage lips with 110 mm dia drips as per detail, Drawing	No	0,00		
	8.4.4	Unformed surface finishes				
		Steel float finish	m <sup>2</sup>	0,00		
	8,3	Reinforcement				
		High tensile steel bars for bars of diameter:				
		10 mm to 16 mm	t	0,00		
		Mild steel bars for bars of diameter:				
		8 mm to 16 mm	t	0,00		
		Welded mesh:				
		Ref 617	m <sup>2</sup>	950,00		
<b>TOTAL CARRIED FORWARD</b>						

SECTION 1 : EARTHWORKS (ROADS AND SUBGRADE)

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		<b>TOTAL BROUGHT FORWARD</b>				
	8,5	Joints				
	SPEC RC 8.2.3.1	a) Vertical construction joints in walls complete with 10mm softboard to protect water proofing as per detail	m			
	8.2.5	Supply, Lay, Bed, and Backfill Stormwater Pipes				
		300mm diam. concrete stormwater pipes	m			
		450mm diam. concrete stormwater pipes	m			
	8.2.7	Draw Pit/Manholes Complete with TYPE 4 cover and frame				
		Draw pit 1500 mm x 1500 mm	No.			
		Covered Steel canopy	No			
<b>TOTAL CARRIED TO SUMMARY</b>						

SCHEDULE3: FENCING

Item No.	Payment Refers	Short Description	Unit	Quantity	Rate	Amount
2	SABS 1200A	<b>SCHEDULE 2 -STEEL PALISADE FENCING</b>				
2,1	PCC-4.1	Steel palisade fencingn 2,4m high according to specification including excavations, foundation concreting, posts, pales and ground beams. All as per drawing.	m	608,00		
2,2	PCC-4.1	Supply and install according to specification a 6m wide vehicular gate	No	1,00		
2,3	PCC-4.1	Supply and install according to specification 1.5m wide pedestrian gate as per drawing	No	1,00		
2,4	PCC-4.1	Repainting of the existing fence	m <sup>2</sup>	0,00		
<b>SUB - TOTAL CARRIED TO SUMMARY</b>						

## SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
		<b>SCHEDULE 3 : WATER SUPPLY PIPELINES AND WATER SOURCE</b>				
	<b>SABS 1200DB</b>	<b>EARTHWORKS : PIPE TRENCHES</b>				
<b>3,1</b>		<b>SITE CLEARANCE</b>				
3.1.1	8.3.1(a)	Clear 3m wide vegetation and trees of girth up to 1m	m	195,60		
3.1.2	8.3.1(b)	Remove trees over 1 m and up to 2 m girth	No.	10,00		
<b>3,2</b>	<b>PSDB12</b>	<b>EXCAVATION</b>				
3.2.1		Excavate in all materials for trenches for pipes with a diameter between 20 mm and 200 mm, backfill compact and dispose of surplus/unsuitable material				
		Up to 1,5m in depth	m <sup>3</sup>	86,00		
3.2.1.1	8.3.2(b)	Extra-over item 3.2.1 incl. for excavation (provisional) in :				
		a) Intermediate material	m <sup>3</sup>	40,00		
		b) Hard rock material	m <sup>3</sup>	10,00		
3.2.1.2		Extra over Item 3.2.1				
		a) Backfill and compact by means of labour intensive construction methods in layers of 200mm compacted to 90% mod	m <sup>3</sup>	29,00		
3.2.1.3	8.3.2(c)	Excavate unsuitable material from trench bottom and dispose thereof within the freehaul distance (Provisional)	m <sup>3</sup>	0,00		
<b>TOTAL CARRIED FORWARD</b>						

## SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
<b>3.2.2</b>		<b>EXCAVATION ANCILLARIES</b>				
3.2.2.1	8.3.3.1(a)	Imported backfill materials from designated borrow pits (Only if approved by Engineer)	m <sup>3</sup>	0,00		
3.2.2.2	8.3.3.2	Opening up and closing down of designated borrow pit	No.	-		
3.2.2.3	8.3.3.3	Compaction in road reserves	m <sup>3</sup>	0,00		
3.2.2.4	8.3.3.4	Overhaul :				
		a) Short haul	m <sup>3</sup>	-		
		b) Truck haul	m <sup>3</sup> /km	-		
3.2.3		<b>FINISHING</b>				
	8.3.6.1	Reinstate road surfaces complete with:				
		a) Gravel	m <sup>2</sup>	-		
		b) 30mm premix	m <sup>2</sup>	-		
<b>3.2.4</b>	<b>SABS1200L B</b>	<b>PROVISION OF BEDDING (PIPES)</b>				
3.2.4.1	8.2.1	Provision of bedding material from trench excavations				
		a) Selected granular material	m <sup>3</sup>	36,00		
		b) Selected fill material	m <sup>3</sup>	29,00		
3.2.4.2		Provision of bedding material by importation from other necessary excavations (freehaul within the village)				
		a) Selected granular material	m <sup>3</sup>	36,00		
		b) Selected fill material	m <sup>3</sup>	29,00		
<b>TOTAL CARRIED FORWARD</b>						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
3.2.4.4	8.2.3	Concrete bedding	m <sup>3</sup>	0,00		
3.2.4.5	8.2.4	Encasing of pipes in Class 19/20 concrete	m <sup>3</sup>	0,00		
3.2.4.6	8.2.5	Overhaul of material for bedding cradle and selected fill blanket	m <sup>3</sup> km	0,00		
3.2.5	1200L	PIPEWORK				
	8.2.1	Supply, lay, joint, bed, test and disinfect the following pipes complete with couplings to the relevant SABS standards including short lengths (all uPVC pipes to comply with DWS1160)				
3.2.5.1		uPVC pipes				
		a) 75 Class 12	m	-		
		b) 75 Class 9	m	-		
3.2.5.2		HDPE pipes Type IV				
		a) 50 mm class 4	m	220,00		
		b) 50 mm class 6	m	-		
		c) 50 mm class 10	m	-		
3.2.5.3		GMS pipes (medium duty)				
		a) 15 mm Ø	m	-		
		b) 20 mm Ø	m	-		
		c) 25 mm Ø	m	-		
<b>TOTAL CARRIED FORWARD</b>						

## SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
3.2.6		<b>VALVES</b>				
3.2.6.1		<b>Line valve assemblies.</b>  Extra over item F.6 for supplying, installing, bedding and testing line valve assemblies as per Drawing complete cutting of pipes and couplings included (all valves to comply with DWS 2510)				
		a) 50 mm	No.	0,00		
		b) 75 mm	No.	0,00		
3.2.6.2		Scour valve assemblies  Extra over item F.6 for supplying, installing, bedding and testing scour valve assemblies as per Drawing complete. Scour tee cutting of pipes and couplings				
		a) On 50 mm dia main	No.	5,00		
3.2.6.3		Ditto for 40 Ø and smaller pipes as detailed in Drawing for the following				
		a) 25 Ø	No.	-		
		b) 32 Ø	No.	-		
		c) 40 Ø	No.	-		
3.2.6.4		Air valve assemblies  Extra over item D.6 for supplying, installing and testing air valve assemblies as per Drawing complete				
		a) On 50 mm and 64 mm Ø main	No.	1,00		
<b>TOTAL CARRIED FORWARD</b>						



## SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
<b>3.2.7</b>		<b>DRAW-OFFS</b>				
3.2.7.1		Complete supply, install and test single rudimentary domestic drawoff standard type as detailed in Drawing with :				
		i) 2 Taps	No.	4,00		
		ii) 4 Taps	No.	0,00		
3.2.7.2		Complete supply, install and test multiple domestic draw off : standard type as detailed in Drawing	No.	1,00		
3.2.7.3		Complete supply, install and test garden standpipe as detailed in Drawing	No.	1,00		
<b>3.2.8</b>		<b>FITTINGS AND SPECIALS</b>				
		Extra over item F.6 for supplying, installing, bedding and testing in PVC mains the following fittings and specials complete. Cutting of pipes and couplings				
3.2.8.1		Fittings of $\mu$ PVC, cast iron or aluminium				
		Bends 90 °				
		a) 75 Ø	No.	-		
		Bends 45 °				
		b) 75 Ø	No.	-		
		Bends 22 °				
		c) 75 Ø	No.	-		
<b>TOTAL CARRIED FORWARD</b>						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
		<b>Tees</b>				
		e) 75 x 75 mm	No.	-		
		<b>Reducers</b>				
		f) 90 x 75 mm	No.	-		
		g) 110 x 75 mm	No.	-		
		<b>End caps</b>				
		h) 63 mm Ø	No.	-		
		i) 75 mm Ø	No.	-		
		<b>Double Socket</b>				
		j) 75 mm Ø	No.	-		
		<b>Repair Coupling</b>				
		k) 63 mm Ø	No.	-		
		l) 75 mm Ø	No.	-		
		<b>Adaptor for steel (BSP) pipes</b>				
		m) 75 x 50 mm BSP	No.	-		
		n) 75 x 80 mm BSP	No.	-		
		<b>Flanged adaptor</b>				
		o) 75 mm Ø	No.	-		
		<b>Saddle drilled 32 BSP</b>				
		p) 75 mm Ø	No.	-		
<b>TOTAL CARRIED FORWARD</b>						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT	
3.2.9		<b>FITTINGS FOR THREADED STEEL, MALLEABLE STEEL/IRON PIPE SPECIALS AND FITTINGS</b>  Screwed flanges  a) 32 ND b) 40 ND  Nipple  a) 15 ND b) 20 ND c) 25 ND  Tee  a) 15 x 15 ND b) 20 x 20 ND c) 25 x 25 ND d) 32 x 32 ND  Socket Union  a) 15 ND b) 20 ND c) 25 ND d) 32 ND  Reducing Bush  a) 20 x 15 ND b) 25 x 15 ND c) 25 x 20 ND  Bend  a) 90° M/F : 15 Ø b) 90° M : 15 Ø c) 90° M/F : 20 Ø	TOTAL BROUGHT FORWARD				
<b>TOTAL CARRIED FORWARD</b>							

## SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
		d) 90° M : 20 Ø	No.	-		
		e) 90° M/F : 25 Ø	No.	-		
		f) 90° M : 25 Ø	No.	-		
		g) 90° M/F : 32 Ø	No.	-		
		h) 90° M : 32 Ø	No.	-		
		Cross, Flanged				
		a) 15 Ø	No.	1,00		
		Cross screwed				
		a) 15 Ø	No.	-		
		b) 20 Ø	No.	-		
		c) 25 Ø	No.	-		
		d) 32 Ø	No.	-		
		Sockets				
		a) 25 ND	No.	1,00		
		b) 32 ND	No.	1,00		
3.2.10		<b>FITTINGS FOR HDPE PIPES</b>				
		Plasson compression fittings to the relevant SANS specifications, or similar				
		Elbow for :				
		a) 50 mm Ø	No.	12,00		
		Equal Tees				
		a) 50 mm Ø	No.	10,00		
		Unequal tees				
		a) 32 x 25 ND	No.	1,00		
<b>TOTAL CARRIED FORWARD</b>						

## SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
		a) 50 x 32 ND	No.	1,00		
		<b>Plugs</b>				
		a) 32 mm Ø	No.	0,00		
		b) 50 mm Ø	No.	1,00		
		<b>HDPE/BSP adaptor</b>				
		a) 32 mm Ø	No.	0,00		
		b) 50 mm Ø	No.	1,00		
		<b>Socket Adaptors</b>				
		a) 20 ND	No.	1,00		
		b) 25 ND	No.	1,00		
		c) 32 ND	No.	1,00		
		d) 50 ND	No.	1,00		
3.2.11		<b>SUNDRIES</b>				
3.2.11.1		Encasing in Class 15/19 concrete	m <sup>3</sup>	2,00		
3.2.11.2		Position markers as per specification Drawing and white washed each	No.	0,00		
3.2.11.3		Thrust blocks as per typical details on specification Drawing				
		a) Concrete Class 15/19	m <sup>3</sup>	2,00		
		b) Rough formwork	m <sup>2</sup>	2,00		
3.2.11.4		Stone pitching including supply and placina of stone and gravel backing				
		a) Grouted, minimum thickness 300mm	m <sup>2</sup>	0,00		
		b) UngROUTED, minimum thickness 300mm	m <sup>2</sup>	0,00		
<b>TOTAL CARRIED FORWARD</b>						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT	
			TOTAL BROUGHT FORWARD				
3.2.13	8.3.8.1	Excavate by hand in soft material to expose such as electrical cables, GPO cables. water. sewer and stormwater pipes	m³	0,00			
		<b>MANHOLES</b>					
		Construction of manholes as per drawing	No.	0,00			
3.2.14		<b>BOREHOLE DEVELOPMENT</b>					
		<b>Geohydrological Servies</b>					
		Sitting of drilling sites. Allowance to be made for desk study, site assessment, drilling supervision, testing supervision, and reporting.	No	0,00			
		<b>Borehole Drilling</b>					
		Site Establishment/De-establishment					
		Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site of the drilling batch.	No	-			
		<b>Drilling</b>					
		Drilling of 165mm diameter borehole in non-collapsible material.	m	-			
		Odex drilling in collapsible material and where ordered by the Geohydrologist of 254mm diameter borehole. Rate to include supply, delivery and installation of at least 6mm sidewall Odex casing.	No	120,00			
<b>TOTAL CARRIED FORWARD</b>							

## SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
		Steel casing (plain), 165 mm (state wall thickness here as 3 mm)	m	0,00		
		Steel casing (slotted), 165 mm (state wall thickness here as 4 mm)	m	0,00		
		<b>Site finishing</b>				
		Borehole finishing, rate to include borehole disinfection, concrete collar in Grade 20Mpa concrete, normal saintary seal, borehole making.	No	0,00		
3.2.15		<b>BOREHOLE REHABILITATION - (PROVISIONAL)</b>				
		<b>Site Establishment/De-establishment</b>				
		Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site	No	1,00		
		<b>Removal of existing pumphouse</b>	No	1,00		
		<b>Removal of existing pump</b>	No	1,00		
		<b>Positive displacement pump</b>				
		Removal using cable-tool (jumper) drilling rig of columns instalations diameter, 25mm-100mm upto 120m. Rate to include all pipe work and fittings	No	1,00		
<b>TOTAL CARRIED FORWARD</b>						

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
		<p><b>Site Establishment/De-establishment</b></p> <p>Mobilisation and set up of plant to/at first borehole. Rate to including inter-borehole moves and de-establishment from Site, of the given drilling batch</p>	No	1,00		
		<p><b>Pump testing of borehole.</b></p> <p>Rate to include the following:installation of pump testing equipment and remove after, calibration testing, 24hr constant testing, recovery measurements, data recording and reporting.</p>	No	1,00		
		<p>Sampling for water quality testing</p>	No	1,00		
		<p><b>BOREHOLE PUMPS AND APPURTENANCES</b></p>				
		<p><b>NEW BOREHOLE INSTALLATION</b></p> <p>Allow an amount of R25,000.00 for complete erection of concrete pump house.</p>	No	1,00		
		<p><b>Electric Motor Control Panel</b></p> <p>Supply and install control panel with all fittings required to operate pumps and motors efficiently, including 0-20 second delay timer and 0-24 hour timer.</p>	No	1,00		
3.2.16						



SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

TOTAL CARRIED FORWARD						
ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
			TOTAL BROUGHT FORWARD			
		Supply and install borehole discharge pipework complete with flow meter, non return and pressure valves on the following pipework.				
		50mm dia pipework	No	1,00		
		65mm dia pipework	No	-		
		80mm dia pipework	No	-		
		100mm dia pipework	No	-		
		Supply and install new positive displacement pump Mono pump or similar approved complete with columns (shafts, bobbins, spacers, sockets etc), discharge head (pulleys, V-belts guard, base plates,), motor mount bracket, bolts and nuts to run @ 922 RPM.				
		Head = 60 m & Flow = 1,0-3,6 m <sup>3</sup> /h for 30 m pump installation	No	1,00		
		Head = 60 m & Flow = 1,0-3,6 m <sup>3</sup> /h for 50 m pump installation	No	-		
		Head = 90 m & Flow = 1,0-3,6 m <sup>3</sup> /h for 30 m pump installation	No	-		
		Head = 90 m & Flow = 1,0-3,6 m <sup>3</sup> /h for 50 m pump installation	No	-		
		Head = 90 m & Flow = 1,0-3,6 m <sup>3</sup> /h for 80 m pump installation	No	-		

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

	Head = 110 m & Flow = 1,0-3,6 m <sup>3</sup> /h for 30 m pump installation	No	-		
<b>TOTAL CARRIED FORWARD</b>					

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT	
3.2.17		<p><b>TESTING AND COMMISSIONING</b></p> <p>Testing and commission borehole installation including pumps, motors, control system and verify discharge and head characteristics</p> <p><b>Submersible Pumps</b></p> <p>Supply and delivery of stainless steel centrifugal submersible borehole pumps and motors complete for the following duty points</p> <p>Head = 60 m &amp; Flow = 1,0-3,6 m<sup>3</sup>/h for 30 m pump installation</p> <p>Head = 60 m &amp; Flow = 1,0-3,6 m<sup>3</sup>/h for 50 m pump installation</p> <p>Head = 90 m &amp; Flow = 1,0-3,6 m<sup>3</sup>/h for 30 m pump installation</p> <p>Head = 90 m &amp; Flow = 1,0-3,6 m<sup>3</sup>/h for 50 m pump installation</p> <p>Head = 90 m &amp; Flow = 1,0-3,6 m<sup>3</sup>/h for 80 m pump installation</p>	TOTAL BROUGHT FORWARD				
			7,5 kW	No	-		
			11 kW	No	1,00		
			15 kW	No	-		
			18,5 kW	No	-		
			22 kW	No	-		
			Head = 60 m & Flow = 1,0-3,6 m <sup>3</sup> /h for 30 m pump installation	No	0,00		
			Head = 60 m & Flow = 1,0-3,6 m <sup>3</sup> /h for 50 m pump installation	No	-		
			Head = 90 m & Flow = 1,0-3,6 m <sup>3</sup> /h for 30 m pump installation	No	-		
			Head = 90 m & Flow = 1,0-3,6 m <sup>3</sup> /h for 80 m pump installation	No	1,00		
<b>TOTAL CARRIED FORWARD</b>							

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT	
3.2.18		TOTAL BROUGHT FORWARD					
		<b>Submersible pump steel cage</b>					
		Allow an amount of R15,000.00 for supply and installation of new steel pump cage	No	1,00			
		<b>TESTING AND COMMISSIONING</b>					
		Testing and commission borehole installation including pumps, motors, control system and verify discharge and head characteristics	No	1,00			
		<b>Electricity Supply</b>					
		Supply material and erect a three phase electricity power line to the new borehole	No	0,00			
		Mark-up on item 4.2.1					
Supply all material and install a 25kVa transformer	No	-					
<b>SUPPLY DELIVER AND INSTALL</b>							
10 000 Litre polyethylene water tank (Jo Jo make or equivalent). (2980mm high x 2200mm diameter). Tank complete with 50 x 40 DN nylon bushes sealed into all inlets and outlets. Include for anchorage onto tank stand platform with 4mm diameter galvanized steel wire (bloudraad). (2 Strands/Anchor)	No	3					
Fabricated steel tank stand with 4,2m long legs, constructed complete as per details on drawing LDE01_DW_03_201, LDE01_DW_03_202 and LDE01_DW_03_203. (incl. excavations and concrete footings).	No	4					
Tankstand Refurbishment including, modification to concrete foundations, pipe work, brackets, surface preparation and re-painting	No	-					

SECTION 3 : WATER SUPPLY PIPELINES AND WATER SOURCE

<b>TOTAL CARRIED TO SUMMARY</b>						

SCHEDULE 4 : EXTERNAL SEWER RETICULATION

Item	Description	Unit	Qty	Rate	Amount
	<b>SCHEDULE 4 : EXTERNAL SEWER RETICULATION - (PROVISIONAL)</b>				
4,1	<b>EARTHWORKS (PIPE TRENCHES)</b>				
4.1.1	<b>Excavation</b>				
	Excavate in all material for trenches, backfill, compact and dispose of surplus material for pipes over 25mm dia up to 400mm dia for depths:				
	a) Exceeding 0,0m but not more than 1,0m	m <sup>3</sup>	140,00		
	b) Exceeding 1,0m but not exceeding 2.0m	m <sup>3</sup>	0,00		
4,2	<b>Extra-over all excavations in pickable material irrespective of depth, for excavating in:-</b>				
4.2.1	Intermediate excavation	m <sup>3</sup>	40,00		
4.2.2	Hard rock excavation	m <sup>3</sup>	10,00		
4,3	<b>Excavation Ancilliaries</b>				
4.3.1	Excavate and dispose of unsuitable material from trench bottom (provisional)	m <sup>3</sup>	0,00		
4.3.2	Make deficiency in backfill material (Provisional)				
	a) from other necessary excavation on Site	m <sup>3</sup>	0,00		
	b) by importation designated borrow pits	m <sup>3</sup>	0,00		
	c) Compaction in platform reserves	m <sup>3</sup>	0,00		
4,4	<b>Existing services</b>				
	a) Services that adjoin a trench	m	0,00		
	b) Services that intersect a trench	No	0,00		
Amount Carried Forward					

SCHEDULE 4 : EXTERNAL SEWER RETICULATION

Item	Description	Unit	Qty	Rate	Amount
Amount Brought Forward					
4,5	<b>BEDDING (PIPES)</b>				
4.5.1	Provision of Bedding from Trench Excavation				
	a) Selected granular material	m <sup>3</sup>	55,00		
	b) Selected fill material	m <sup>3</sup>	43,00		
4.5.2	Supply only of Bedding by Importation From Commercial Sources (provisional)				
	a) Selected granular material	m <sup>3</sup>			
	b) Selected fill material	m <sup>3</sup>			
4,6	<b>SEWERS PIPELINES</b>				
4.6.1	Supply, Lay, Joint and Bed PVC Heavy Duty Class 34 solid wall pipe (conforming to SABS 891). complete with fittings				
	a) 110mm dia	m	300,00		
	b) 150mm diameter	m	-		
	c) 225mm diameter	m	-		
	d) 375mm diameter	m	-		
4.6.2	Extra over items 11.3.1 for specials				
	a) 110mm Access bends	No	10,00		
	b) 110mm Access junctions	No	10,00		
	c) 160mm Bends	No			
	d) 160mm Access bends	No	-		
	e) 160mm Access Junctions	No	-		
Amount Carried Forward					

SCHEDULE 4 : EXTERNAL SEWER RETICULATION

Item	Description	Unit	Qty	Rate	Amount
Amount Brought Forward					
4,7	<b>Sundries</b>				
4.7.1	Breaking into and connecting into existing manhole	No			
4,8	<b>MANHOLES</b>				
4.8.1	Supply and install manholes & slabs (SABS 1294)				
4.8.1.1	Precast concrete manholes 1200mm diameter, exceeding 750mm and not exceeding 1m deep, complete with precast concrete heavy duty cover and frame TYPE 4A	No	3,00		
4.8.1.1	Precast concrete manholes 1200mm diameter, exceeding 1000mm and not exceeding 1250m deep, complete with precast concrete heavy duty cover and frame TYPE 4A	No			
4.8.1.1	Precast concrete manholes 1200mm diameter, exceeding 1250mm and not exceeding 1500m deep, complete with precast concrete heavy duty cover and frame TYPE 4A	No			
4,9	<b>PIPE ANCILLARIES</b>				
4.9.1	Encasing around pipe				
4.9.1.1	Anchor blocks in strength concrete 25Mpa /19mm including all formwork. reinforcement. reinforcement. etc.	No			
4.9.1.2	Anchor block size 600 x 600mm	No			
<b>4.10</b>	<b>EXISTING SERVICES</b>				
4.10.1	Connection to existing sewer				
4.10.1.1	200mm Diameter pipe to existing manhole	No			
4.10.2	Raising or lowering of existing manholes				
4.10.2.1	Remove cover and frame then lower the manhole to required level, complete with all necessary accessories.	No			
Amount Carried Forward					



SCHEDULE 4 : EXTERNAL SEWER RETICULATION

Item	Description	Unit	Qty	Rate	Amount
Amount Brought Forward					
4,11	<b>SEPTIC TANK</b>				
4.11.1	Construct Septic tank with all connections as per Engineers deign	No	1,00		
Amount Carried to Final Summary					

SCHEDULE 5 : WALKWAYS

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	Estimated QTY	RATE	AMOUNT
1,8	SANS 1200 MJ	<b>SEGMENTED BLOCK PAVING TO THE ACCESS ROAD</b>				
	8.2.2	80mm Type S-A 35mPa for roadway (Grey Colouring)	m <sup>2</sup>	0,00		Rate Only
	8.2.2	60mm Type S-A 35mPa for roadway (Grey Colouring)	m <sup>2</sup>	800,00		
	8.2.1	Installation of precast of edge restraints	m	1 000,00		
		<b>CLEARING AND GRUBBING</b>				
		<b>Clear and grub</b> to 100mm depth over the area. stockpile as <b>topsoil</b> berm as	m <sup>2</sup>	800,00		
		Excavate to the line and level as shown on the drawings and place stockpile materials as directed by the Engineer.	m <sup>3</sup>	240,00		
		<b>Compacted to 93% MOD AASHTO</b>				
		a) Selected granular material	m <sup>3</sup>	120,00		
		b) Selected fill material	m <sup>3</sup>	120,00		
		c) 20mm Thick bedding sand vibrated to	m <sup>3</sup>	16,00		
<b>TOTAL CARRIED TO SUMMARY</b>						

**DEPARTMENT OF EDUCATION : LIMPOPO**

**STORM DAMAGED SCHOOL: DIPHUTI PRIMARY**

**BOQ FOR CIVIL ENGINEERINGS SERVICES**

**SUMMARY OF BILL OF QUANTITIES**

SCHEDULE 1: EARTHWORKS (ROADS AND SUBGRADE)

SCHEDULE 2: STEEL PALISADE FENCE

SCHEDULE 3: WATER SUPPLY PIPELINES AND WATER SOURCE

SCHEDULE 4: EXTERNAL SEWER RETICULATION

SCHEDULE 5: WALKWAYS

**TENDER (CONTRACT) SUM (CIVIL AND STRUCTURAL WORKS)**



## C4.4 ELECTRICAL WORKS

**PROJECT** Limpopo Storm Damaged Schools  
**SCHOOL** Diphuthi Primary School  
**DISCIPLINE** Electrical Works

Item	Description	Unit	Qty	Rate	Total
1.0	<b>P&amp;G's for Electrical Installation:</b>				
	<i>All overhead costs, for a contract period as per Main Contractor's programme and appointed as a Selected Sub-Contractor ; i.e.:</i>				
	Site Establishment	Sum	1		
	Travelling	Sum	1		
	Transport and Off-loading	Sum	1		
	Insurances	Sum	1		
	Safety Requirements	Sum	1		
	Site Supervision	Sum	1		
<b>Total for Bill 1- P&amp;G'S.../ carried forward to Summary</b>					

**PROJECT** Limpopo Storm Damaged Schools  
**SCHOOL** Diphuthi Primary School  
**DISCIPLINE** Electrical Works-Admin Block

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>1.0</b>	<b>Power Supplies</b>				
1.1	Supply and installation for 25KVA pole top transformer, 11KV/230V, Single phase				
	Supply	No	1		
	Install	No	1		
1.2	Allow for modifications to the main distribution board for new connections. Allow for the following:				
	• New switchgear, 100A 1PH 230V, low voltage circuit breaker				
	• Cleaning				
	• Tightening all connections				
	• Neaten existing wiring				
	• Blank off spare spaces				
	• Legend card				
	• Close off unused spaces				
	Supply	Sum	1		
	Install	Sum	1		
1.2.1	Issue CoC for DB	Sum	1		
1.2	Surface mounted electrical <b>Main Distribution Board</b> complete with weatherproof enclosure and lockable doors ( <i>Refer to SLD</i> )				
	Distribution Panel Low Voltage				
	Supply	Sum	1		
	Install	Sum	1		
1.3	<b>Admin Block DB</b> ( <i>Refer to SLD</i> )				
	Supply	Sum	1		
	Install	Sum	1		
1.4	Issue Cocs	No	2		
<b>2</b>	<b>Power Low Voltage Cables</b>				
	Supply and install multi-core PVC/PVC/SWA/PVC (600/1000V), cables to SANS 1507 laid in trenches and/or sleeves				
2.1	25mm <sup>2</sup> PVC 2 core + ECC				
	Supply	m	100		
	Install	m	100		
2.2	16mm <sup>2</sup> PVC 2 core + ECC				
	Supply	m	50		
	Install	m	50		
2.3	Excavate 450 mm wide x 600 mm deep cable trench, bedding of 70mm plus sand cover over cables to a depth of 75mm, backfilling and compact in accordance with the specifications per linear meter.				
	Install	m	150		
2.4	<b>Terminations</b>				
	Supply gland shroud and lugs terminate 600V/1000V PVC/SWA/PVC				
2.4.1	Supply and Install				
	25mm <sup>2</sup> PVC 2 core + ECC	No	2		
	16mm <sup>2</sup> PVC 3 core + ECC	No	2		

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<b>3</b>	<b>Lighting</b>				
	Supply, deliver, install, test and commission SABS approved light fittings complete with lamps.				
	<i>Install" items shall include all work for a complete working installation, switch with cover, conduits conduits, wall box, etc.</i>				
3.1	43W LED Surface Mount Light Fitting 1500mm				
	Supply	No	45		
	Install	No	45		
3.2	2X18W LED Round Bulkhead, Weatherproof.				
	Supply	No	10		
	Install	No	10		
3.3	100W LED linear surface mounted low bay light fitting				
	Supply	No	0		RATE ONLY
	Install	No	0		RATE ONLY
3.4	26W LED Surface mount light fitting (Indoor Bulkhead)				
	Supply	No	4		
	Install	No	4		
3.5	Supply and install light switches complete with screwed metal cover plates				
	1way Switch				
	Supply	No	20		
	Install	No	20		
3.6	2 way Switch				
	Supply	No	2		
	Install	No	2		
3.7	Daylight Switch, 220V-240V single phase				
	Supply	No	1		
	Install	No	1		
3.8	6A Plugs for light fittings				
	Supply & Install	No	45		
<b>4</b>	<b>Socket Outlets and Isolators</b>				
	<i>Note: "Install" items shall include <u>all</u> work for a complete working installation, outlet boxes with cover plates, outlet, conduit, chasing (unless otherwise stated) Power plugs to comply with latest SANS: 164-2</i>				
4.1	16A 3pin Single Socket Outlet complete 3 Pin Outlet (New SA Combination Plug)				
	Supply	No	10		
	Install	No	10		
4.2	16A 3pin Double Socket Outlet complete with cover				
	Supply	No	20		
	Install	No	20		
	PVC Conductors				
4.3	Supply and installation copper PVC insulated conductors in wire ways, including all necessary accessories.				
	2,5mm <sup>2</sup> 2 core				
	Supply	m	300		
	Install	m	300		
	4mm <sup>2</sup> 2 core				



	Supply	m	400		
	Install	m	400		
4.4	Supply and install bare copper earth conductors in wireways, including all necessary accessories				
	2,5mm <sup>2</sup>				
	Supply	m	150		
	Install	m	150		
	4mm <sup>2</sup>				
	Supply	No	200		
	Install	m	200		
4.5	P9000 Trunking				
	Supply	m	20		
	Install	m	20		
Sub-Total carried forward to next page.../					



**PROJECT** Limpopo Storm Damaged Schools  
**SCHOOL** Diphuthi Primary School  
**DISCIPLINE** Electrical Works\_Grade R

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>1.0</b>	<b>Power Supplies</b>				
1.1	Recessed mounted electrical distribution board complete with lockable doors				
	<b>DB-01 &amp; DB-02 (REFER TO SLD)</b>				
	Supply	Sum	2		
	Install	Sum	2		
1.2	Issue Cocs	No	1		
<b>2</b>	<b>Power Low Voltage Cables</b>				
	Supply and install multi-core PVC/PVC/SWA/PVC (600/1000V), cables to SANS 1507 laid in trenches and/or sleeves				
2.1	6mm <sup>2</sup> PVC 2 core + ECC				
	Supply	m	85		
	Install	m	85		
2.3	Excavate 450 mm wide x 600 mm deep cable trench, bedding of 70mm plus sand cover over cables to a depth of 75mm, backfilling and compact in accordance with the specifications per linear meter.				
	Supply and Install	m	85		
2.4	<b>Terminations</b>				
	Supply gland shroud and lugs terminate 600V/1000V PVC/SWA/PVC				
2.4.1	6mm <sup>2</sup> PVC 2 core + ECC				
	Supply & Install	No	6		
<b>3</b>	<b>Lighting</b>				
	Supply, deliver, install, test and commission SABS approved light fittings complete with lamps.				
	<i>Install" items shall include all work for a complete working installation, switch with cover, conduits conduits, wall box, etc.</i>				
3.1	43W LED Surface Mount Light Fitting 1500mm, as described in the BoQ and signle line diagrams				
	Supply	No	60		
	Install	No	60		
3.2	2X18W LED Round Bulkhead, Weatherproof, as described in the BoQ and signle line diagrams				
	Supply	No	10		
	Install	No	10		
3.3	100W LED linear surface mounted low bay light fitting, as described in the BoQ and signle line diagrams				
	Supply	No	0		RATE ONLY
	Install	No	0		RATE ONLY
3.4	26W LED Surface mount light fitting (Indoor Bulkhead), as described in the BoQ and signle line diagrams				
	Supply	No	6		
	Install	No	6		

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3.5	Supply and install light switches complete with screwed metal cover plates			
	1way Switch			
	Supply	No	20	
	Install	No	20	
3.6	2 way Switch			
	Supply	No	4	
	Install	No	4	
3.7	Daylight Switch, 220V-240V single phase			
	Supply	No	2	
	Install	No	2	
3.8	6A Plugs for light fittings			
	Supply & Install	No	60	
<b>4</b>	<b>Socket Outlets and Isolators</b>			
	<i>Note: "Install" items shall include all work for a complete working installation, outlet boxes with cover plates, outlet, conduit, chasing (unless otherwise stated) Power plugs to comply with latest SANS: 164-2</i>			
4.1	16A 3pin Single Socket Outlet complete 3 Pin Outlet (New SA Combination Plug)			
	Supply	No	12	
	Install	No	12	
4.2	16A 3pin Double Socket Outlet complete with cover			
	Supply	No	12	
	Install	No	12	
4.3	PVC Conductors Supply and installation copper PVC insulated conductors in wire ways, including all necessary accessories.			
	2,5mm <sup>2</sup> 2 core			
	Supply	m	600	
	Install	m	600	
	4mm <sup>2</sup> 2 core			
	Supply	m	700	
	Install	m	700	
4.4	Supply and install bare copper earth conductors in wireways, including all necessary accessories			
	2,5mm <sup>2</sup>			
	Supply	m	300	
	Install	m	300	
	4mm <sup>2</sup>			
	Supply	No	350	
	Install	m	350	
4.5	P9000 Trunking			
	Supply	m	20	
	Install	m	20	
4.6	2 Compartmental Power Skirting			
	Supply	m	40	
	Install	m	40	
<b>5</b>	<b>General Items</b>			
5.1	20mm PVC Conduit			
	Supply and Install	m	150	

5.2	25mm Galvanised Steel Conduit, provision for external electrical installations				
	Supply and Install	m	100		
<b>6</b>	<b>Earthing and Lightning Protection</b>	Sum	2		
<b>7</b>	<b>Test Commission and Issue COC for Site</b>	Sum	2		
Sub-Total carried forward to Summary.../					

**PROJECT** Limpopo Storm Damaged Schools  
**SCHOOL** Diphuthi Primary Schoo  
**DISCIPLINE** Electrical Works\_Classrooms (New)

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>1.0</b>	<b>Power Supplies</b>				
1.1	Recessed mounted electrical distribution board complete with lockable doors				
	<i>DB-03 to DB-07 (REFER TO SLD)</i>				
	Supply	Sum	5		
	Install	Sum	5		
1.2	Issue Cocs	No	1		
<b>2</b>	<b>Power Low Voltage Cables</b>				
	Supply and install multi-core PVC/PVC/SWA/PVC (600/1000V), cables to SANS 1507 laid in trenches and/or sleeves				
2.1	6mm <sup>2</sup> PVC 2 core + ECC				
	Supply	m	315		
	Install	m	315		
2.3	Excavate 450 mm wide x 600 mm deep cable trench, bedding of 70mm plus sand cover over cables to a depth of 75mm, backfilling and compact in accordance with the specifications per linear meter.				
	Supply and Install	m	315		
2.4	<b>Terminations</b>				
	Supply gland shroud and lugs terminate 600V/1000V PVC/SWA/PVC				
2.4.1	6mm <sup>2</sup> PVC 2 core + ECC				
	Supply & Install	No	16		
<b>3</b>	<b>Lighting</b>				
	Supply, deliver, install, test and commission SABS approved light fittings complete with lamps.				
	<i>Install" items shall include all work for a complete working installation, switch with cover, conduits conduits, wall box, etc.</i>				
3.1	43W LED Surface Mount Light Fitting 1500mm, as described in the BoQ and signle line diagrams				
	Supply	No	120		
	Install	No	120		
3.2	2X18W LED Round Bulkhead, Weatherproof, as described in the BoQ and signle line diagrams				
	Supply	No	26		
	Install	No	26		
3.3	100W LED linear surface mounted low bay light fitting, as described in the BoQ and signle line diagrams				
	Supply	No	0		RATE ONLY
	Install	No	0		RATE ONLY
3.4	26W LED Surface mount light fitting (Indoor Bulkhead), as described in the BoQ and signle line diagrams				
	Supply	No	20		
	Install	No	20		

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.../Sub-Total brought forward from previous page				
3.5	Supply and install light switches complete with screwed metal cover plates			
	1way Switch			
	Supply	No	36	
	Install	No	36	
3.6	2 way Switch			
	Supply	No	4	
	Install	No	4	
3.7	Daylight Switch, 220V-240V single phase			
	Supply	No	6	
	Install	No	6	
3.8	6A Plugs for light fittings			
	Supply & Install	No	120	
<b>4</b>	<b>Socket Outlets and Isolators</b>			
	<i>Note: "Install" items shall include all work for a complete working installation, outlet boxes with cover plates, outlet, conduit, chasing (unless otherwise stated) Power plugs to comply with latest SANS: 164-2</i>			
4.1	16A 3pin Single Socket Outlet complete 3 Pin Outlet (New SA Combination Plug)			
	Supply	No	54	
	Install	No	54	
4.2	16A 3pin Double Socket Outlet complete with cover			
	Supply	No	10	
	Install	No	10	
4.3	PVC Conductors Supply and installation copper PVC insulated conductors in wire ways, including all necessary accessories.			
	2,5mm <sup>2</sup> 2 core			
	Supply	m	1500	
	Install	m	1500	
	4mm <sup>2</sup> 2 core			
	Supply	m	2000	
	Install	m	2000	
4.4	Supply and install bare copper earth conductors in wireways, including all necessary accessories			
	2,5mm <sup>2</sup>			
	Supply	m	750	
	Install	m	750	
	4mm <sup>2</sup>			
	Supply	No	1000	
	Install	m	1000	
4.5	P9000 Trunking			
	Supply	m	25	
	Install	m	25	
4.6	2 Compartmental Power Skirting			
	Supply	m	40	
	Install	m	40	
<b>5</b>	<b>General Items</b>			
5.1	20mm PVC Conduit			
	Supply and Install	m	1100	

5.2	25mm Galvanised Steel Conduit, provision for external electrical installations				
	Supply and Install	m	250		
<b>6</b>	<b>Earthing and Lightning Protection</b>	Sum	5		
<b>7</b>	<b>Test Commission and Issue COC for Site</b>	Sum	5		
Sub-Total carried forward to Summary.../					

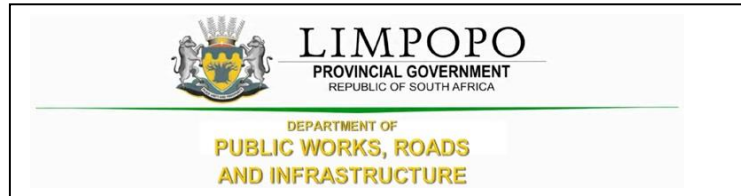
**PROJECT** Limpopo Storm Damaged Schools  
**SCHOOL** Diphuthi Primary School  
**DISCIPLINE** Electrical Works\_Classrooms (Rennovated)

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
<b>1.0</b>	<b>Power Supplies</b>				
1.1	Allow for modifications to the main distribution board for new connections. Allow for the following:				
	• New switchgear				
	• Cleaning				
	• Tightening all connections				
	• Neaten existing wiring				
	• Blank off spare spaces				
	• Legend card				
	• Close off unused spaces				
	Supply	Sum	2		
	Install	Sum	2		
1.1.1	Issue CoC for DB	Sum	2		
<b>2</b>	<b>Power Low Voltage Cables</b>				
	Supply and install multi-core PVC/PVC/SWA/PVC (600/1000V), cables to SANS 1507 laid in trenches and/or sleeves				
2.1	Check and make good				
	Install	Sum	1		
<b>3</b>	<b>Lighting</b>				
	Supply, deliver, install, test and commission SABS approved light fittings complete with lamps.				
	<i>Install" items shall include all work for a complete working installation, switch with cover, conduits conduits, wall box, etc.</i>				
3.1	43W LED Surface Mount Light Fitting 1500mm, as described in the BoQ and signle line diagrams				
	Supply	No	48		
	Install	No	48		
3.2	2X18W LED Round Bulkhead, Weatherproof, as described in the BoQ and signle line diagrams				
	Supply	No	10		
	Install	No	10		
3.3	100W LED linear surface mounted low bay light fitting, as described in the BoQ and signle line diagrams				
	Supply	No	0		RATE ONLY
	Install	No	0		RATE ONLY
3.4	26W LED Surface mount light fitting (Indoor Bulkhead), as described in the BoQ and signle line diagrams				
	Supply	No	8		
	Install	No	8		
3.5	Supply and install light switches complete with screwed metal cover plates				
	1way Switch				
	Supply	No	16		
	Install	No	16		
Sub-Total carried forward to next page.../					

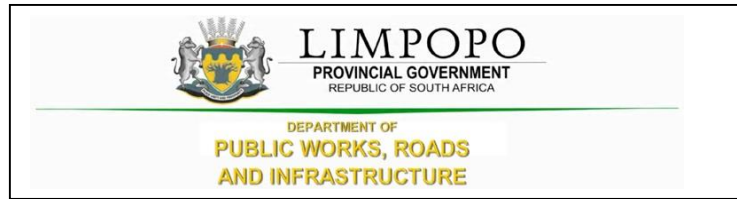
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3.6	2 way Switch			
	Supply	No	2	
	Install	No	2	
3.7	Daylight Switch, 220V-240V single phase			
	Supply	No	2	
	Install	No	2	
3.8	6A Plugs for light fittings			
	Supply & Install	No	48	
<b>4</b>	<b>Socket Outlets and Isolators</b>			
	<i>Note: "Install" items shall include all work for a complete working installation, outlet boxes with cover plates, outlet, conduit, chasing (unless otherwise stated)</i>			
	<i>Power plugs to comply with latest SANS: 164-2</i>			
4.1	16A 3pin Single Socket Outlet complete 3 Pin Outlet (New SA Plug)			
	Supply	No	24	
	Install	No	24	
4.2	16A 3pin Double Socket Outlet complete with cover			
	Supply	No	8	
	Install	No	8	
	PVC Conductors			
4.3	Supply and installation copper PVC insulated conductors in wire ways, including all necessary accessories.			
	2,5mm <sup>2</sup> 2 core			
	Supply	m	600	
	Install	m	600	
	4mm <sup>2</sup> 2 core			
	Supply	m	800	
	Install	m	800	
4.4	Supply and install bare copper earth conductors in wireways, including all necessary accessories			
	2,5mm <sup>2</sup>			
	Supply	m	300	
	Install	m	300	
	4mm <sup>2</sup>			
	Supply	No	400	
	Install	m	400	
4.5	P9000 Trunking			
	Supply	m	10	
	Install	m	10	
4.6	2 Compartmental Power Skirting			
	Supply	m	40	
	Install	m	40	
<b>5</b>	<b>General Items</b>			
5.1	20mm PVC Conduit			
	Supply and Install	m	210	
5.2	25mm Galvanised Steel Conduit, provision for external electrical installations			
	Supply and Install	m	100	
<b>6</b>	<b><u>Renovations</u></b>			
6.1	Gut, strip and make safe	Sum	1	



<b>PROJECT</b>	Limpopo Storm Damaged Schools	
<b>SCHOOL</b>	Diphuthi Primary School: Summary	
<b>DISCIPLINE</b>	Electrical Works	
<b>BILL</b>	<b>DESCRIPTION</b>	<b>AMOUNT</b>
1	PRELIMINARIES AND GENERAL	
1.1	LIAISON WITH MUNICIPALITY	50,000.00
2	ADMIN BLOCK	
3	GRADE R CLASSROOMS	
4	CLASSROOMS ( <i>NEW</i> )	
5	CLASSROOMS ( <i>RENOVATED</i> )	
6	SUPPLY AND INSTALLATION OF CCTV	80,000.00
<b>Total Excluding VAT ( Carried to Final Summary)</b>		



## PART C5: SCOPE OF WORKS



## C5.1 SCOPE OF WORKS

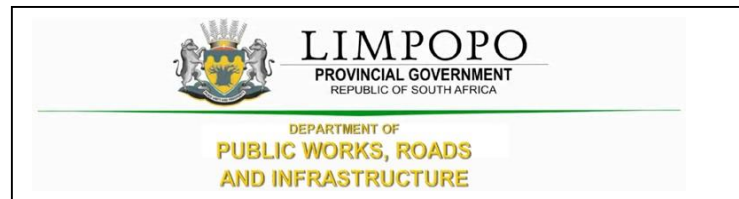
### Overview of the works

The project comprises the construction of the following:

Demolition of 2 x 5 Classroom Blocks, Renovations of 2 x 4 Classroom Blocks, Construction of Large Administration Block, 2 x 2 Classroom Blocks, 2 x 4-Seats Water-Borne Toilet Blocks, Multipurpose Classroom Block and External Works (Septic Tank, Walkways, Parking Bays and Fence) At Diphuti Primary School in The Oaks, Maruleng in Mopani District, 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: 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\*\*\* Infrastructure  
EPWP Program \*\*\*  
EPWP Sub programme \*\*\*

**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



<b>Project Location</b>	
<b>Column A</b>	<b>Column B</b>
<b>Locality Name ***</b>	
<b>Municipality***</b>	
<b>Ward ***</b>	
<b>Subplace***</b>	
<b>Government Facility***</b>	
<b>Project Location ***</b>	





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



DIPHUTI PRIMARY SCHOOL - ENROLMENT INFORMATION 2019				
GRADE	BOYS	GIRLS	TOTAL	GRAND TOTAL
GRADE RA	22	21	43	95
GRADE RB	25	27	52	
GRADE 1A	26	33	59	152
GRADE 1B	45	48	93	
GRADE 2A	30	36	66	131
GRADE 2B	32	33	65	
GRADE 3A	30	37	67	130
GRADE 3B	35	28	63	
GRADE 4A	30	33	63	128
GRADE 4B	29	36	65	
GRADE 5A	39	27	66	140
GRADE 5B	43	31	74	
GRADE 6A	31	37	68	130
GRADE 6B	31	31	62	
GRADE 7A	27	33	60	124
GRADE 7B				
TOTAL PUPILS				1030
TEACHERS				14

SCHEDULE INDICATING EXISTING FACILITIES		
DESCRIPTION	NUMBER	TOTAL
BLOCK A	5 CLASSROOM BLOCK	5
BLOCK B	5 CLASSROOM BLOCK	5
BLOCK C	4 CLASSROOM BLOCK	4
BLOCK D	4 CLASSROOM BLOCK	4=18 CLASSROOMS
BLOCK E	NUTRITION SHADE	
BLOCK F	WATERBORNE TOILTS	9 SEATS
BLOCK G	1 COMMUNITY INFORMATION CENTRE	
BLOCK H	PIT TOILETS BLOCK	8 SEATS
BLOCK I	ENVIROLOO TOILETS BLOCK	8 SEATS
BLOCK J	STORAGE	

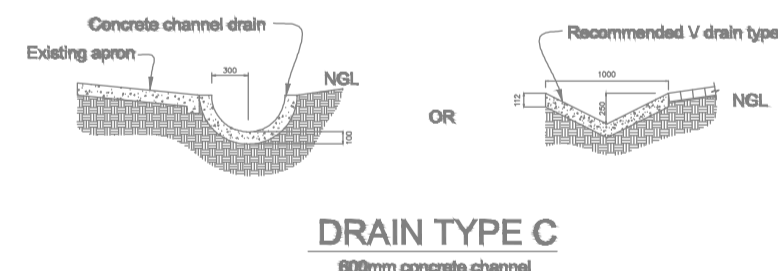
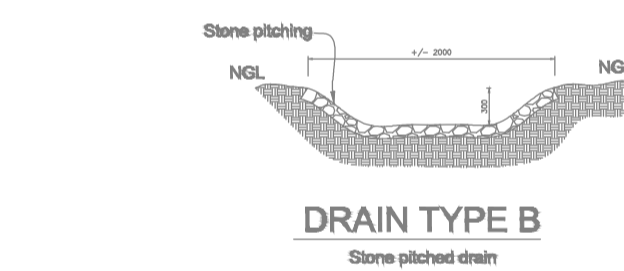
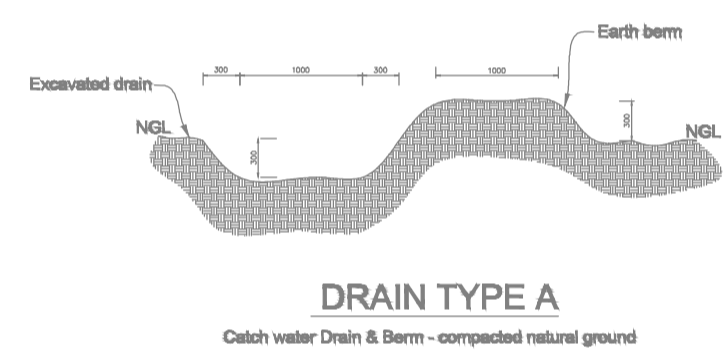
SCHEDULE INDICATING DEMOLITION		
UNIT	DESCRIPTION	TOTAL
BLOCK A	5 CLASSROOM BLOCK	5
BLOCK B	5 CLASSROOM BLOCK	5=10 CLASSROOMS
BLOCK E	NUTRITION BLOCK	
BLOCK F	WATERBORNE TOILETS	9 SEATS
BLOCK H	PIT TOILETS BLOCK	8 SEATS
BLOCK J	STORAGE	

SCHEDULE INDICATING RENOVATIONS		
UNIT	DESCRIPTION	TOTAL
BLOCK C	4 CLASSROOM BLOCK	
BLOCK D	4 CLASSROOM BLOCK	
BLOCK G	1 COMMUNITY INFORMATION CENTRE	
BLOCK I	ENVIROLOO TOILET BLOCK	8 SEATS

SCHEDULE INDICATING CURRENT PROPOSAL		
DESCRIPTION	NUMBER	TOTAL
LARGE ADMINISTRATION BLOCK	1	1
NUTRITION CENTRE	1	1
COMPUTER & LIBRARY COMBO	1	1
GRADE R CLASSROOM BLOCK	4	4 CLASSROOMS
4 CLASSROOM BLOCK	4 x 4 CLASSROOM BLOCKS	16 CLASSROOMS
GUARD HOUSE AND FENCING	1	1
ASSEMBLY AREA	1300sqm	1
PARKING BAYS	13 OPEN BAYS + 13 COVERED BAYS	26 PARKING BAYS

VARIATIONS	REASON

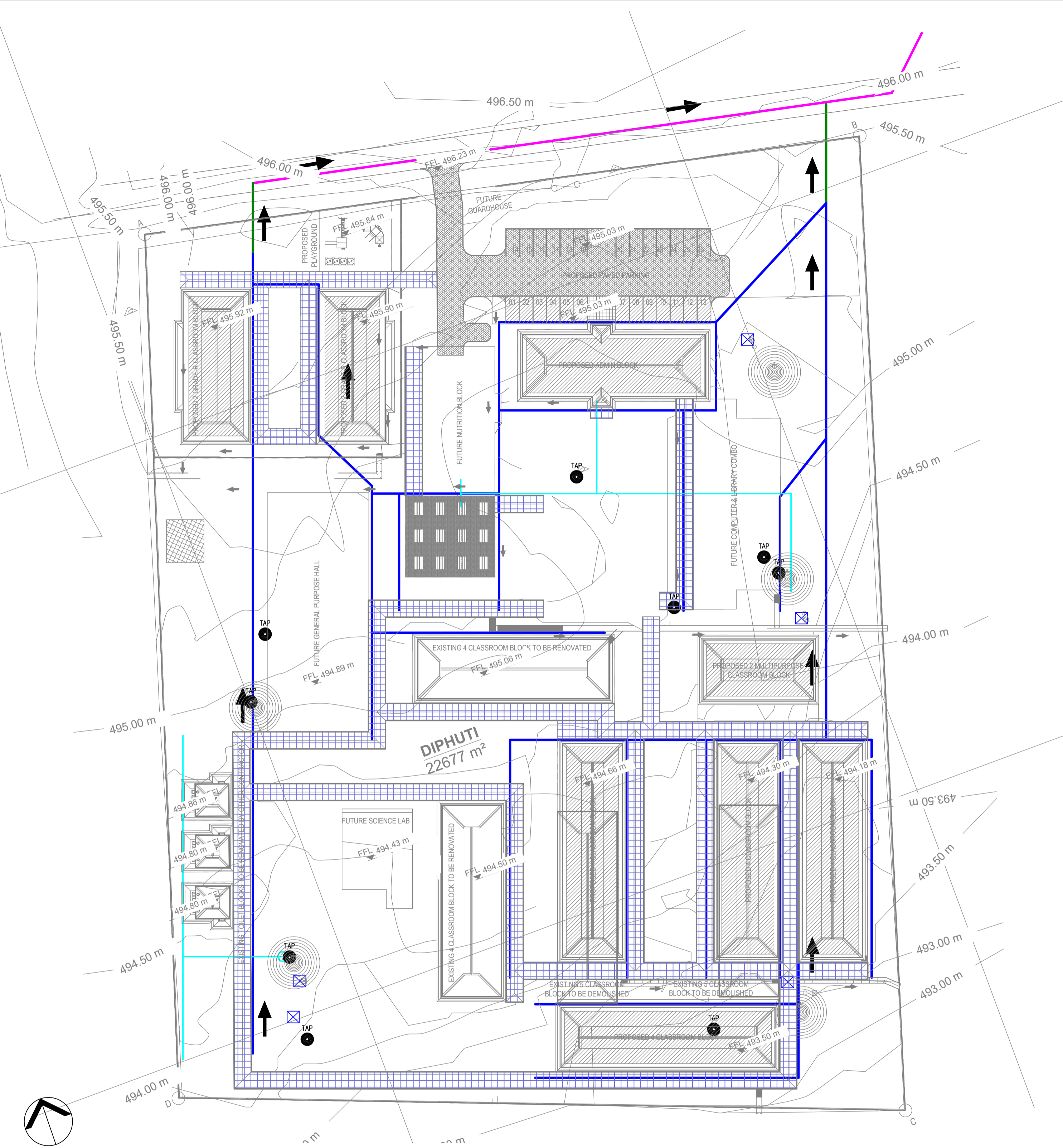
SOIL CONDITIONS	DESIGN IMPLICATIONS



**LEGEND:**

- Tree
- Tap
- Borehole
- Benchmark
- Existing Jojo Water Tank
- New Jojo Water Tank
- MH
- Manhole
- Gate
- Proposed water supply main
- Fence
- Elec pole
- Drain Type A
- Drain Type B
- Drain Type C
- Walkway

**SITE PLAN**  
SCALE 1:500



NO.	DATE	REVISION	DRAWN
A	16/10/19	Issued For Information	T.Leboho
B	14/11/19	Issued For Information	T.Leboho
C	27/03/20	Issued For Information	T.Leboho
D	04/03/20	Issued For Information	T.Leboho

**CONSULTANTS**

**MUTEO CONSULTING**

LIMPOPO PROVINCE  
39 Grobler Street  
Polokwane 0699  
0699

P.O. Box 6196  
Polokwane North  
0750

Tel : (015) 291 4065  
Fax : (015) 291 4043

website: www.muteo.co.za  
email: mail@muteo.co.za

**ARCHITECT**

**IDC ARCHITECTS**

ARCHITECT NAME: ILORI PrArch 21133

**IMPLEMENTED BY**

**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA  
DEPARTMENT OF  
PUBLIC WORKS, ROADS & INFRASTRUCTURE

LIMPOPO PROVINCE  
43 Church Street  
Polokwane  
0699

Tel : (015) 284 7001  
Fax : (015) 284 7030

SIGNATURE	DATE	SHEET SIZE
Richard Thubakgale	09/10/19	<b>A1</b>
Thabang Leboho	09/10/19	SCALE
Jonathan Magabata	09/10/19	<b>1:500</b>
Jonathan Magabata	09/10/19	STATUS: 1 = INFORMATION, 2 = DESIGN, 3 = CONSTRUCTION, 4 = AS-BUILT

**SPONSOR**

basic education  
REPUBLIC OF SOUTH AFRICA  
Every child is a national asset.

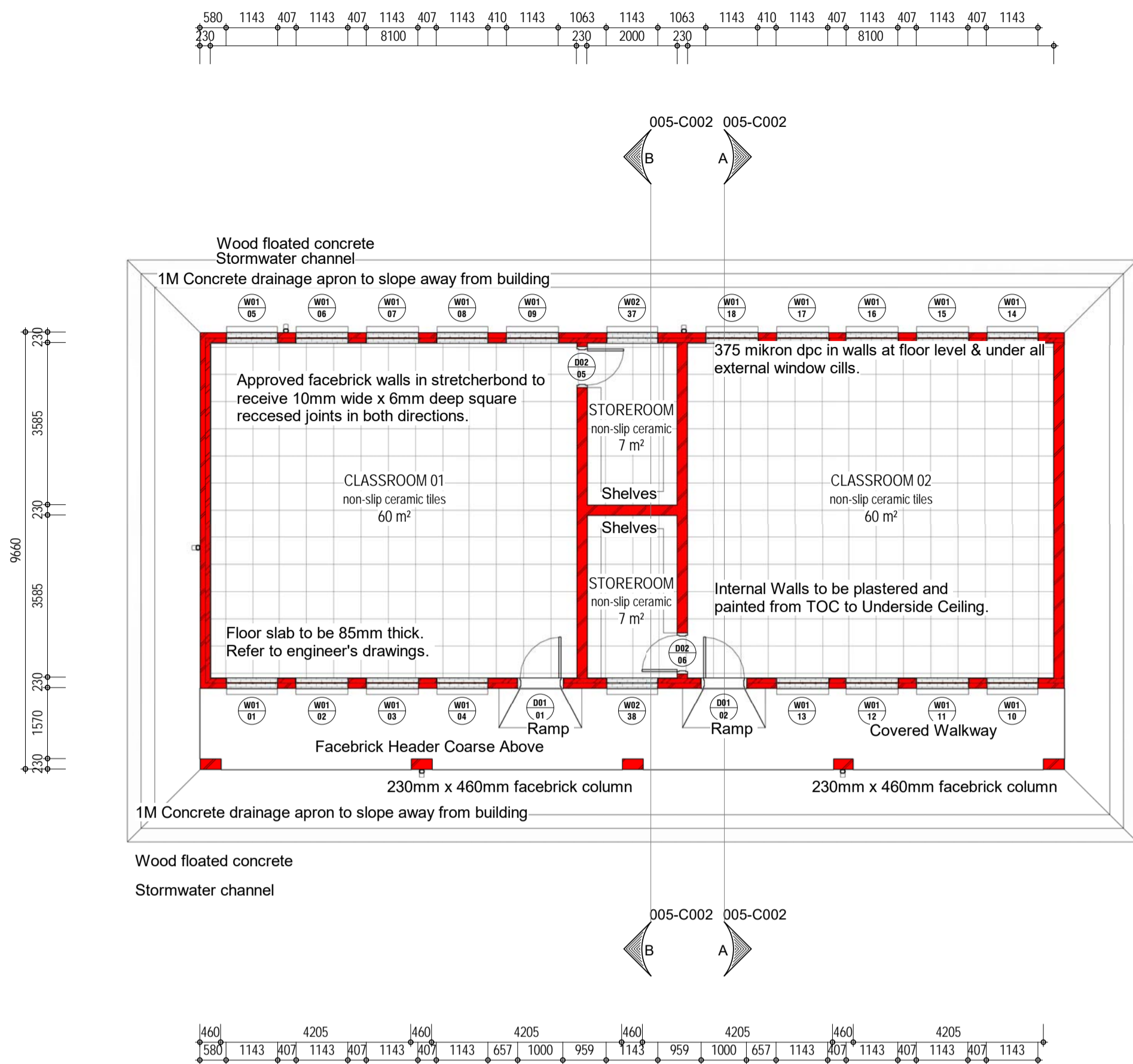
**PROJECT**  
PROPOSED RENOVATIONS AND ALTERATIONS AT DIPHUTI PRIMARY SCHOOL IN THE OAKS, LIMPOPO

DISTRICT: MOPANI DISTRICT MUNICIPALITY  
PROVINCE: LIMPOPO

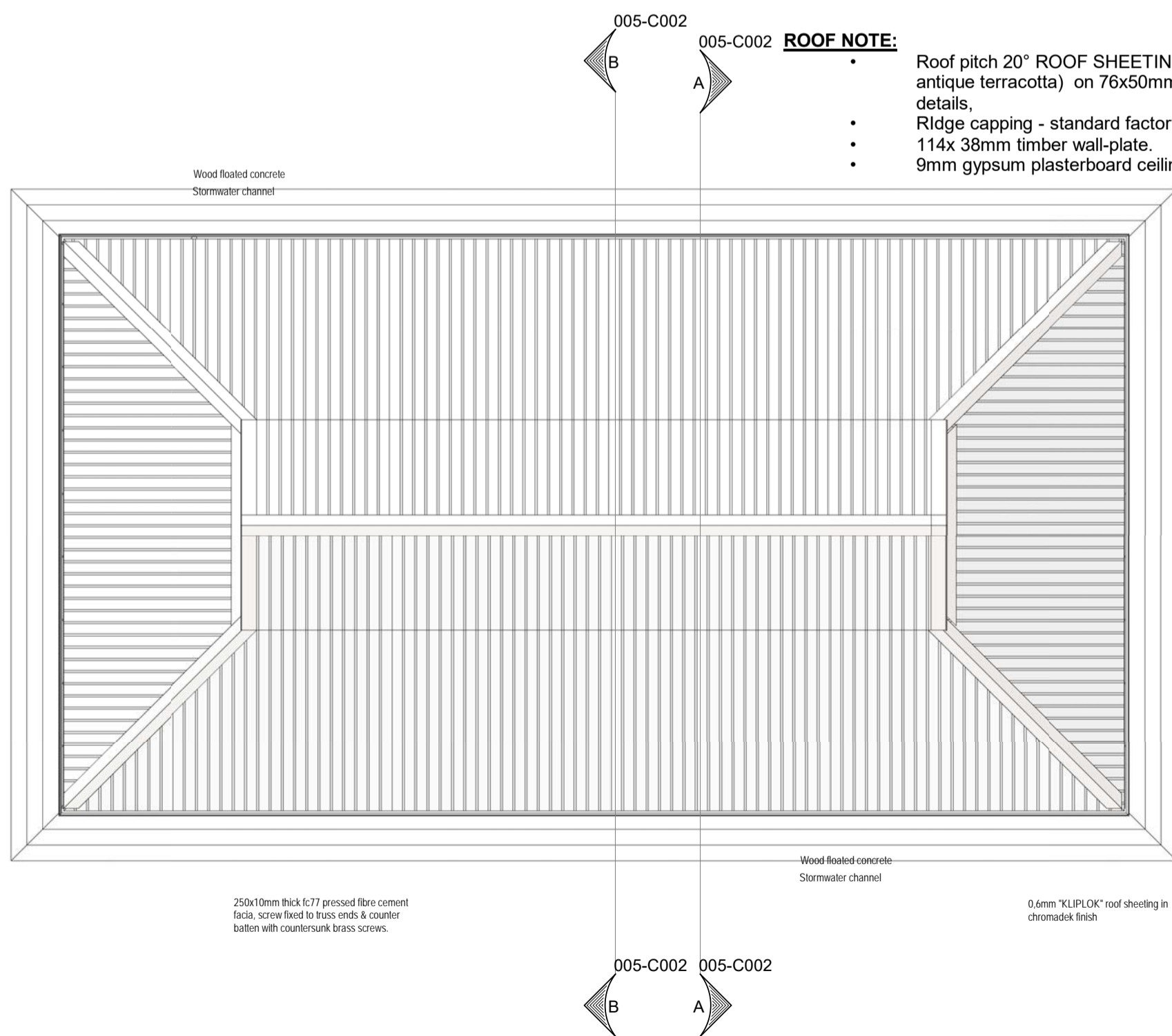
**DRAWING TITLE**  
DIPHUTI PRIMARY SCHOOL  
SITE DEVELOPMENT PLAN

DISCIPLINE	DRAWING NUMBER	STATUS	REVISION
ENGINEERING	2019-07	I	C





**00 GROUND STOREY**  
1 : 100



**Site**  
1 : 100

Window Schedule						
Type Mark	Mark	Width	Height	Level	From Room:	To Room:
					Name	Name
W01	01	1143	1311	00 GROUND STOREY	CLASSROOM 01	
W01	02	1143	1311	00 GROUND STOREY	CLASSROOM 01	
W01	03	1143	1311	00 GROUND STOREY	CLASSROOM 01	
W01	04	1143	1311	00 GROUND STOREY	CLASSROOM 01	
W01	05	1143	1311	00 GROUND STOREY	CLASSROOM 01	
W01	06	1143	1311	00 GROUND STOREY	CLASSROOM 01	
W01	07	1143	1311	00 GROUND STOREY	CLASSROOM 01	
W01	08	1143	1311	00 GROUND STOREY	CLASSROOM 01	
W01	09	1143	1311	00 GROUND STOREY	CLASSROOM 01	
W01	10	1143	1311	00 GROUND STOREY	CLASSROOM 02	
W01	11	1143	1311	00 GROUND STOREY	CLASSROOM 02	
W01	12	1143	1311	00 GROUND STOREY	CLASSROOM 02	
W01	13	1143	1311	00 GROUND STOREY	CLASSROOM 02	
W01	14	1143	1311	00 GROUND STOREY	CLASSROOM 02	
W01	15	1143	1311	00 GROUND STOREY	CLASSROOM 02	
W01	16	1143	1311	00 GROUND STOREY	CLASSROOM 02	
W01	17	1143	1311	00 GROUND STOREY	CLASSROOM 02	
W01	18	1143	1311	00 GROUND STOREY	CLASSROOM 02	
W02	37	1143	854	00 GROUND STOREY	STOREROOM	
W02	38	1143	854	00 GROUND STOREY	STOREROOM	
Grand total: 20						

Door Schedule						
Type Mark	Mark	Width	Height	Level	From Room:	To Room:
					Name	Name
D01	01	1000	2125	00 GROUND STOREY	CLASSROOM 01	
D01	02	1000	2125	00 GROUND STOREY	CLASSROOM 02	
D02	05	900	2125	00 GROUND STOREY	STOREROOM	CLASSROOM 01
D02	06	900	2125	00 GROUND STOREY	CLASSROOM 02	STOREROOM
Grand total: 4						

**GENERAL NOTES**  
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

**DIMENSIONS**  
To comply with SANS 10400-C  
Figured dimensions to be taken in preference to scaling  
Overall dimensions (external) to take precedence.  
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works.

**FOUNDATIONS**  
To comply with SANS 10400-B  
Detailed requirements of SANS 10400-H  
All concrete foundations to be a minimum of 600mm x 250mm.  
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

**FLOORS**  
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wc)  
Suspended floors to comply with SANS 10400-B, SANS 10400-T, SANS 10082  
Detailed requirements to comply with SANS 10400-J.  
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.  
Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.  
Fire walls to be taken to up to underside of roof covering, provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to house.  
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

**WALLS**  
Structural strength and stability to comply with SANS 10400-B, SANS 10400-T and detailed requirements to comply with SANS 10400-K.  
Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K.  
Water penetration through walls detailed requirements to comply with SANS 10400-K.

**ROOFS**  
Roof covering and waterproofing to comply with SANS 10400-L.  
Flat roofs or related gable to comply with SANS 10400-L or rational design/ rational assessment or both.  
Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L.  
Where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L.  
Cutters and downpipes to comply with SANS 10400-R.  
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

**STAIRWAYS**  
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.  
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

**FIRE INSTALLATION**  
The fire installations to comply with national fire regulations.  
The supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

**FIRE PROTECTION**  
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-T.  
The fire protection measure to be subject of a rational design or rational assessment.

**ENERGY EFFICIENCY**  
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XX or be subject of a rational design or rational assessment.

**PEOPLE WITH DISABILITY**  
The fire installations to comply with national fire regulations.

**PUBLIC SAFETY**  
Level change, ramps, driveways and pools to comply with SANS 10400-D.

**SPACE HEATING**  
The provision for space heating to comply with national regulations.

**STORM WATER DISPOSAL**  
The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-AA or be subject of a rational design or rational assessment.  
The means for the control and disposal in interconnected complex subject of a rational design or rational assessment.

**LIGHTING AND VENTILATION**  
In a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-R or be subject of a rational design.  
The ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-D and be subject of a rational design.  
All habitable rooms to have a minimum of 10% natural lighting.

**GLAZING**  
The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N.  
The selection of the glazing to comply with national regulations.

**SIGNATURES:**

PROFESSIONAL:	PR, NR	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	29-10-2019	HK	ISSUED FOR CLIENT APPROVAL
1	08-06-2021	HK	ISSUED FOR CLIENT APPROVAL



**JOHANNESBURG**  
Unit C2-001, Edenburg Terrace  
348 Rivonia Blvd | Rivonia 2129  
Tel: +27 11 234 5141 | Cell: +27 82 900 8288  
info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

CLIENT SIGNATURE:

PROJECT DESCRIPTION: DIPHUTI PRIMARY SCHOOL

TWO CLASSROOM BLOCK

DRAWING DESCRIPTION: FLOOR PLANS

SCALE / SHEET SIZE: DATE: 29-10-2019

PROJECT No. SHEET NUMBER: 063-17-001 005-C001

OCCUPANCY PHASE DISCIPLINE REVISION: A3 1 ARCH 1

DRAWING STATUS: INFO TENDER COUNCIL CONSTRUCTION

DRAWN BY: CHECKED: HK CD











**GENERAL NOTES**  
 All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.  
 The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

**DIMENSIONS**  
 To comply with SANS 10400-C  
 Figured dimensions to be taken in preference to scaling  
 Overall dimensions (external) to take precedence  
 All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

**FOUNDATIONS**  
 To comply with SANS 10400-B  
 Detailed requirements of SANS 10400-H  
 All concrete foundations to be a minimum of 600mm x 250mm.  
 Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

**FLOORS**  
 To comply with SANS 10400-J (kitchen, shower, bathroom or etc.)  
 Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082  
 detailed requirements to comply with SANS 10400-J.  
 Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.  
 finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.  
 fire walls to be taken to up to underside of roof covering  
 provide a minimum 150mm threshold and minimum 1m fire doors to garage where it interlocks to house.  
 All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

**WALLS**  
 Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K  
 Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K  
 water penetration through walls detailed requirements to comply with SANS 10400-K

**ROOFS**  
 Roof covering and waterproofing to comply with SANS 10400-L  
 Flat roofs or related gutter to comply with SANS 10400-L or national design/ rational assessment or both  
 Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L  
 where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L  
 Gutters and downpipes to comply with SANS 10400-R  
 Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

**STAIRWAYS**  
 To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.  
 Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

**FIRE INSTALLATION**  
 the fire installations to comply with national fire regulations  
 the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

**FIRE PROTECTION**  
 the fire protection measure to be in accordance with the detailed requirements of SANS 10400-T  
 the fire protection measure to be subject of a rational design or rational assessment.

**ENERGY EFFICIENCY**  
 the design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.

**PEOPLE WITH DISABILITIES**  
 the fire installations to comply with national fire regulations

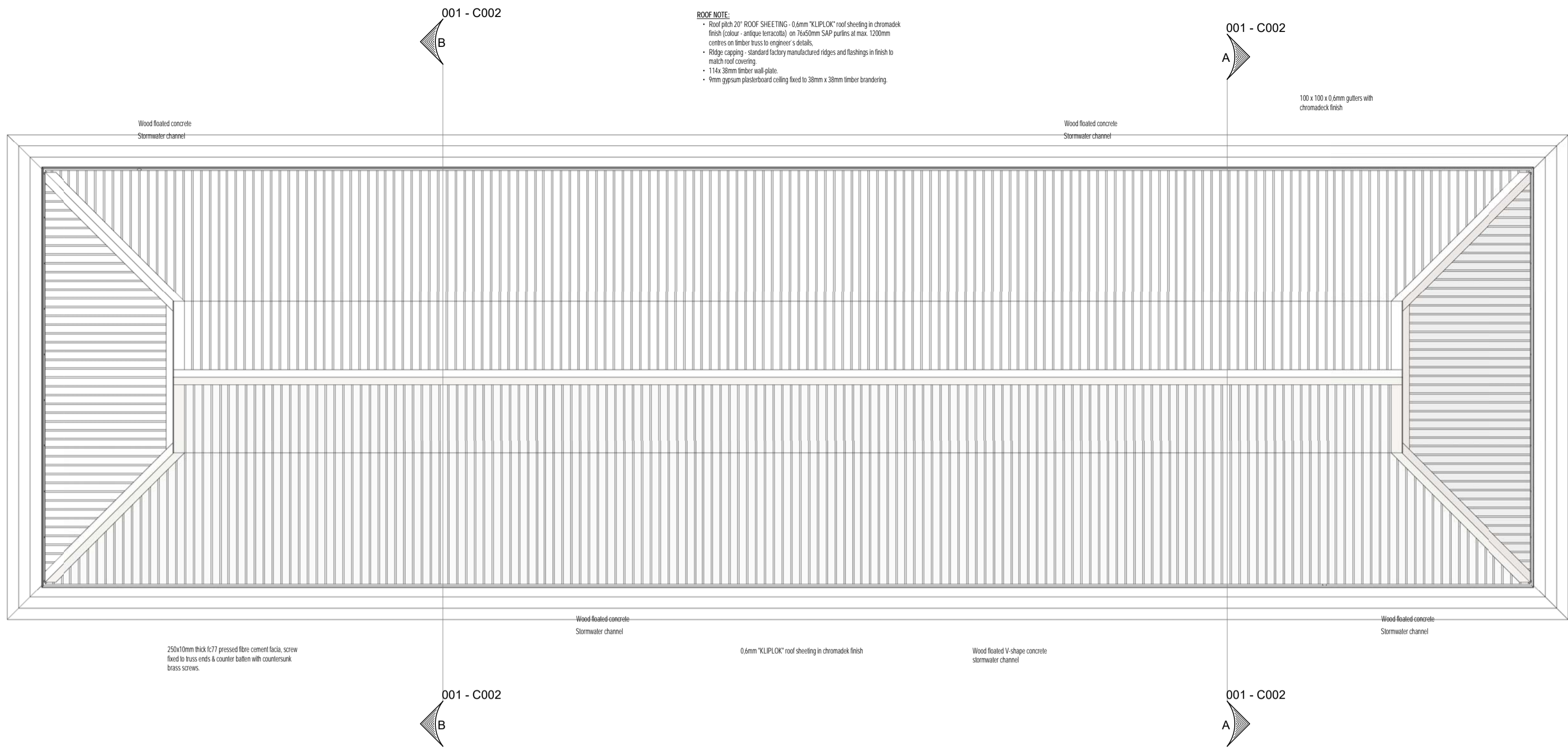
**PUBLIC SAFETY**  
 level change, ramps, driveways and pools to comply with SANS 10400-D

**SPACE HEATING**  
 the provision for space heating to comply with national regulations

**STORM WATER DISPOSAL**  
 the means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-VA or be subject of a rational design or rational assessment.

**LIGHTING AND VENTILATION**  
 in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-L or be subject of a rational design.  
 the ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-C and is subject of a rational design.  
 All habitable rooms to have a minimum of 10% natural lighting.

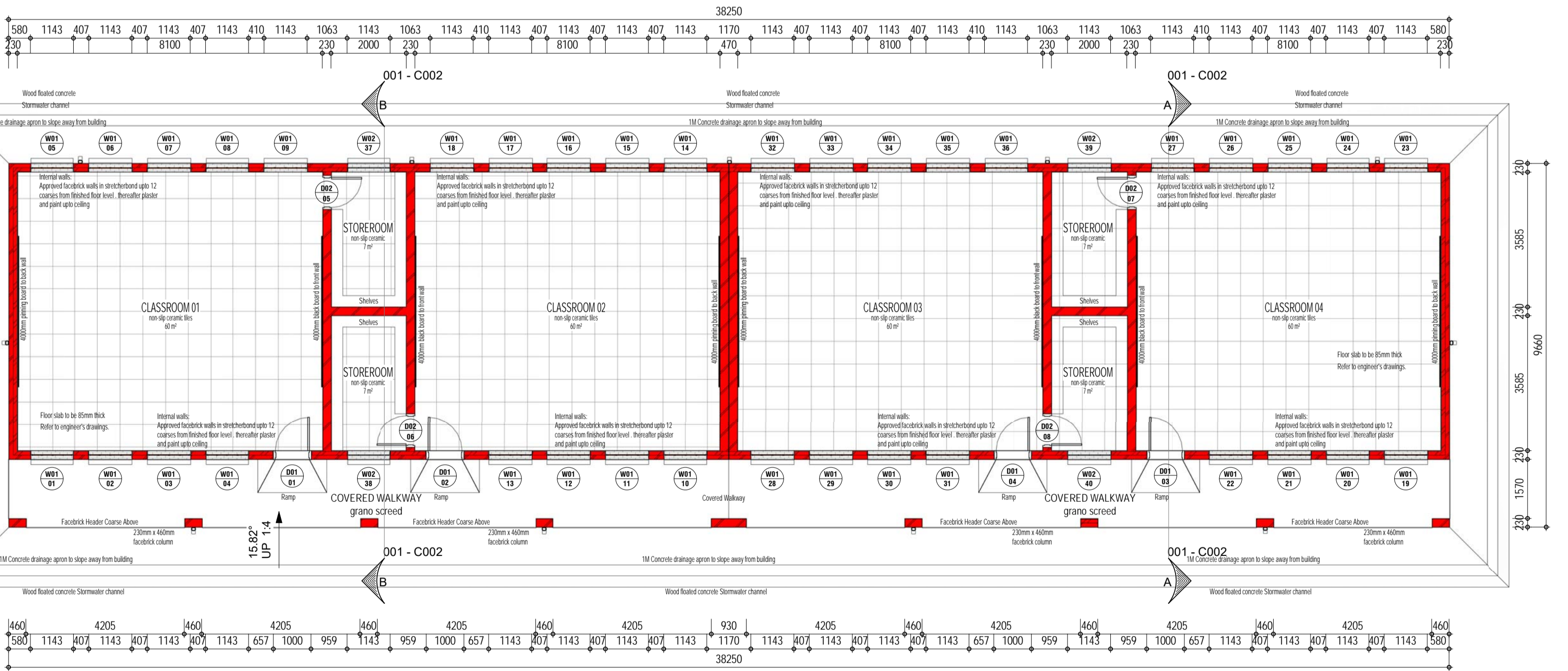
**GLAZING**  
 the type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
 the selection of the glazing to comply with national regulations



Window Schedule						
Type Mark	Mark	Width	Height	Level	From Room:	To Room:
					Name	Name
W01	01	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	02	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	03	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	04	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	05	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	06	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	07	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	08	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	09	1143	1311	Ground Floor Plan	CLASSROOM 01	
W01	10	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	11	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	12	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	13	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	14	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	15	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	16	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	17	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	18	1143	1311	Ground Floor Plan	CLASSROOM 02	
W01	19	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	20	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	21	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	22	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	23	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	24	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	25	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	26	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	27	1143	1311	Ground Floor Plan	CLASSROOM 04	
W01	28	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	29	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	30	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	31	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	32	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	33	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	34	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	35	1143	1311	Ground Floor Plan	CLASSROOM 03	
W01	36	1143	1311	Ground Floor Plan	CLASSROOM 03	
W02	37	1143	854	Ground Floor Plan	STOREROOM	
W02	38	1143	854	Ground Floor Plan	STOREROOM	
W02	39	1143	854	Ground Floor Plan	STOREROOM	
W02	40	1143	854	Ground Floor Plan	STOREROOM	

Grand total: 40

Site  
1 : 100



Ground Floor Plan  
1 : 100

Door Schedule						
Type Mark	Mark	Width	Height	Level	From Room:	To Room:
					Name	Name
D01	01	1000	2125	Ground Floor Plan	CLASSROOM 01	
D01	02	1000	2125	Ground Floor Plan	CLASSROOM 02	
D01	03	1000	2125	Ground Floor Plan	CLASSROOM 04	
D01	04	1000	2125	Ground Floor Plan	CLASSROOM 03	
D02	05	900	2125	Ground Floor Plan	STOREROOM	CLASSROOM 01
D02	06	900	2125	Ground Floor Plan	CLASSROOM 02	STOREROOM
D02	07	900	2125	Ground Floor Plan	CLASSROOM 04	STOREROOM
D02	08	900	2125	Ground Floor Plan	STOREROOM	CLASSROOM 03

Grand total: 8

**SIGNATURES:**

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	29-10-2019	HK	ISSUED FOR CLIENT APPROVAL
1	08-06-2021	HK	ISSUED FOR CLIENT APPROVAL



**IDC ARCHITECTS**  
 EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

**JOHANNESBURG**  
 Unit C2-001, Edenburg Terrace  
 346 Rivonia Blvd | Rivonia 2128  
 Tel: +27 11 234 5141 | Cell: +27 82 900 8288  
 info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
 ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

CLIENT SIGNATURE:

PROJECT DESCRIPTION:  
**DIPHUTI PRIMARY SCHOOL**

**FOUR CLASSROOM BLOCK**

**DRAWING DESCRIPTION**

**FLOOR PLANS**

SCALE / SHEET SIZE	DATE		
SCALE: 1 : 100 @ A1	29-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 001	001 - C001		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	1
DRAWING STATUS			
<input checked="" type="checkbox"/> INFO	<input type="checkbox"/> TENDER	<input type="checkbox"/> COUNCIL	<input type="checkbox"/> CONSTRUCTION
DRAWN BY:		CHECKED:	
HK		CD	

Z:\01 Projects\063 - 17 - LIMPOPO PUBLIC WORKS SCHOOLS\01 - Drawings\02 - Rev\04 - SJP\063 - 17 - 001 - Diputi Primary School - D1\01 - Buildings\Linked\01 - 4 Classroom Block - RW01 - 18-02-2020.rvt  
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**GENERAL NOTES:**  
 All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.  
 The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

**DIMENSIONS:**  
 To comply with SANS 10400-C  
 Figured dimensions to be taken in preference to scaling  
 Overall dimensions (external) to take precedence  
 All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

**FOUNDATIONS:**  
 To comply with SANS 10400-B  
 Detailed requirements of SANS 10400-H  
 All concrete foundations to be a minimum of 600mm x 250mm.  
 Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

**FLOORS:**  
 To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or etc)  
 Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082  
 detailed requirements to comply with SANS 10400-J.  
 Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.  
 finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.

fire walls to be taken up to underside of roof covering, provide a minimum 150mm threshold and minimum 170 fire doors to garage where it interlocks to house.  
 All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

**WALLS:**  
 Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K  
 Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K  
 water penetration through walls detailed requirements to comply with SANS 10400-K

**ROOFS:**  
 Roof covering and waterproofing to comply with SANS 10400-L  
 Flat roofs or related gutter to comply with SANS 10400-L or national design/ rational assessment or both  
 Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L  
 where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and detailed requirements to comply with SANS 10400-L  
 Outlets and downpipes to comply with SANS 10400-R  
 Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

**STAIRWAYS:**  
 To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.  
 Walls, screens, railing or balustrades to each stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

**FIRE INSTALLATION:**  
 The fire installations to comply with national fire regulations  
 the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

**FIRE PROTECTION:**  
 The fire protection measure to be in accordance with the detailed requirements of SANS 10400-L and the subject of a rational design.

**ENERGY EFFICIENCY:**  
 The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XX or be subject of a rational design or national assessment.

**PEOPLE WITH DISABILITIES:**  
 The design of the building to comply with national fire regulations

**PUBLIC SAFETY:**  
 fire escape, ramps, driveways and pools to comply with SANS 10400-D

**SPACE HEATING:**  
 The provision for space heating to comply with national regulations

**STORM WATER DISPOSAL:**  
 The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-AA or be subject of a rational design or national assessment.

**LIGHTING AND VENTILATION:**  
 in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-R or be subject of a rational design.  
 the ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-D and be subject of a rational design.  
 All habitable rooms to have a minimum of 10% natural lighting.

**GLAZING:**  
 The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
 the selection of the glazing to comply with national regulations

**SPECIFICATION NOTES:**  
 All applied strictly as per manufacturers specifications (or similar approved) to final approval of architect.

**ROOF:**  
 Global Roofing Solutions (OR SIMLAR APPROVED) 0.8mm thick 750mm cover.  
 Corrugated profile 2200 gpheter 52200 galvanneal steel roof sheeting with Chromalok finish, fixed to carboliteam treated 75 x 50mm SA Pine intermediate purlins at maximum 1000mm centres and eaves and ridge purlins at 900mm centres using Hex Flange Head + FPM Seal self-drilling Type 17 drill point, No. 12-11 x 65mm long, Class 3 fasteners. Purlin fixed to first, fourth and eighth crest of each sheet and at all ends at sheet ends, all in accordance with the manufacturer's specifications.

Ridges to be 0.8mm thick, of specification and finish as for roof sheets. Ridges to be 462mm girth with roll top and bent down edges with 225mm laps at heading joints. Ridges to be secured at maximum 300mm centres with battens as specified for roofing.

Note: Roof sheets shall be in single lengths to each slope of roof.

Purlins to be secured to pre-treated and pre-fabricated SA Pine trusses with hurricane clips at each intersection.  
 Trusses to be spaced at maximum 1200mm centres on a 225 x 75 SA Pine wallplate, all securely fixed to the wall with 1.6mm x 20mm galvanneal wall studs, built to minimum depth of 750mm into the brickwork and wrapped over the truss and fixed with four galvanneal nails, 40mm long.  
 Overlaping to be 300mm at eaves.  
 Roof pitch to be 1:7.

Install a 250mm wide x 50mm thick treated SAP gangplank in the ceiling void secured to the tie beams with hurricane clips at every second truss. The gangplank is to run the entire length of each building.  
 Note: All exposed roof timber, timber in contact with masonry and all purlins to be treated with carboliteam prior to installation.

FR 430 Fire retardant industrial grade reinforced aluminium foil insulation double sided, durable, reflective foil laminate incorporating a fire retardant between the various substrates, bonded together with low density polyethylene, tested for conformance with SANS 1814-2009, with a Class 1 fire rating in accordance with SANS 10117 - 3:2005 and ASTM E84 and BS 476 part 5, 6 and 7.

**FASCIAS AND BARGEBOARDS:**  
 Fascia: Everite (OR SIMLAR APPROVED) medium density plain Nutec (OR SIMLAR APPROVED) fascia boards, size 225 x 12mm thick, screw fixed to timber rather ends and two, 50 x 38mm, fascia cleats with 2 no. 4x 45mm (No. 10) brass countersunk screws to each fascia cleat. Fascia boards to be joined with a 30mm thick aluminium fascia joining plate as per detail.

Bargeboards: Everite (OR SIMLAR APPROVED) medium density plain Nutec (OR SIMLAR APPROVED) fascia boards, size 225 x 12mm thick, fixed to 75 x 50mm timber battens and purlins with 4x 45mm (No. 10) brass countersunk screws at maximum 350mm centres. Timber battens to be secured to purlins at each intersection. Finish with a 225 x 150mm external corner barge flashing secured with hex head topped screws at maximum 500mm centres.

Ensure surfaces are clean, dry and sound. Apply Plaster Primer (OR SIMLAR APPROVED) and finish with two coats of Nuroseal (OR SIMLAR APPROVED) Acrylic Roof Paint (colour: White). Application to be in strict accordance with manufacturer's specification.

**RAINWATER GOODS:**  
 150 x 100 x 0.6mm thick Walerite (OR SIMLAR APPROVED) seamless aluminium gutter, coated internally and externally with Colourcoat G4 (OR SIMLAR APPROVED) in colour Marble White including cut and mitre angles covered with a mitre strip externally, stop ends complete and all sealed internally with Dow Corning 913 silicone sealant, secured to fibre cement fascia with 20 x 2.5mm Australian longer brackets at 600mm centres using M6 galvanneal bolts and nuts with washers, including expanded aluminium mesh leaf guard set over gutter with 100 x 75 x 0.6mm thick rectangular fixed downpipes in colour Marble White, fixed to walls with straps at 1500mm centres using nail plugs, with downpipes riveted and silicone sealed to gutter outlets, including all necessary bends, elbows, shoes, etc.

**CEILING INSULATION:**  
 Thermagard (OR SIMLAR APPROVED) low density cellulose fibre insulation evenly blown to a depth of 120mm in roof space above ceilings.

**CEILING:**  
 As per Finishes Schedule.  
 800 x 600mm Tappdoor to be positioned as indicated on ceiling plan.

**CORNICHE:**  
 As per Finishes Schedule.

**WALLS:**  
 FSR Face brick clint.  
 Facebrick Wall: Secondary colour to 460mm above finished floor level and above lintel to wall plate. Primary colour from 460mm above lintel to wall plate to underside roof height, clad with a smooth finish (external to be wood grained and internal to be steel trowel).  
 All walls to be 250mm and 115mm as indicated on plan.  
 40-SMPA clay face brick, bedded and jointed in Class II mortar and pointed with recessed vertical and recessed horizontal joints, suitable for exposure zones 1-3.

**Architraves:**  
 Plaster 120mm wide architraves to protrude 15mm proud of wall at all windows as indicated. All splayed angles to be neatly routed. Ensure that the substrate is slanted over with a 2:1 cement grout to form key.

**Bridging:**  
 2.8mm Diameter bridgework to be built at every course in foundation walls, every course for first five courses above foundation walls, every course above window and door openings and every fourth course for the balance.

**SORTING:**  
 As per Finishes Schedule.

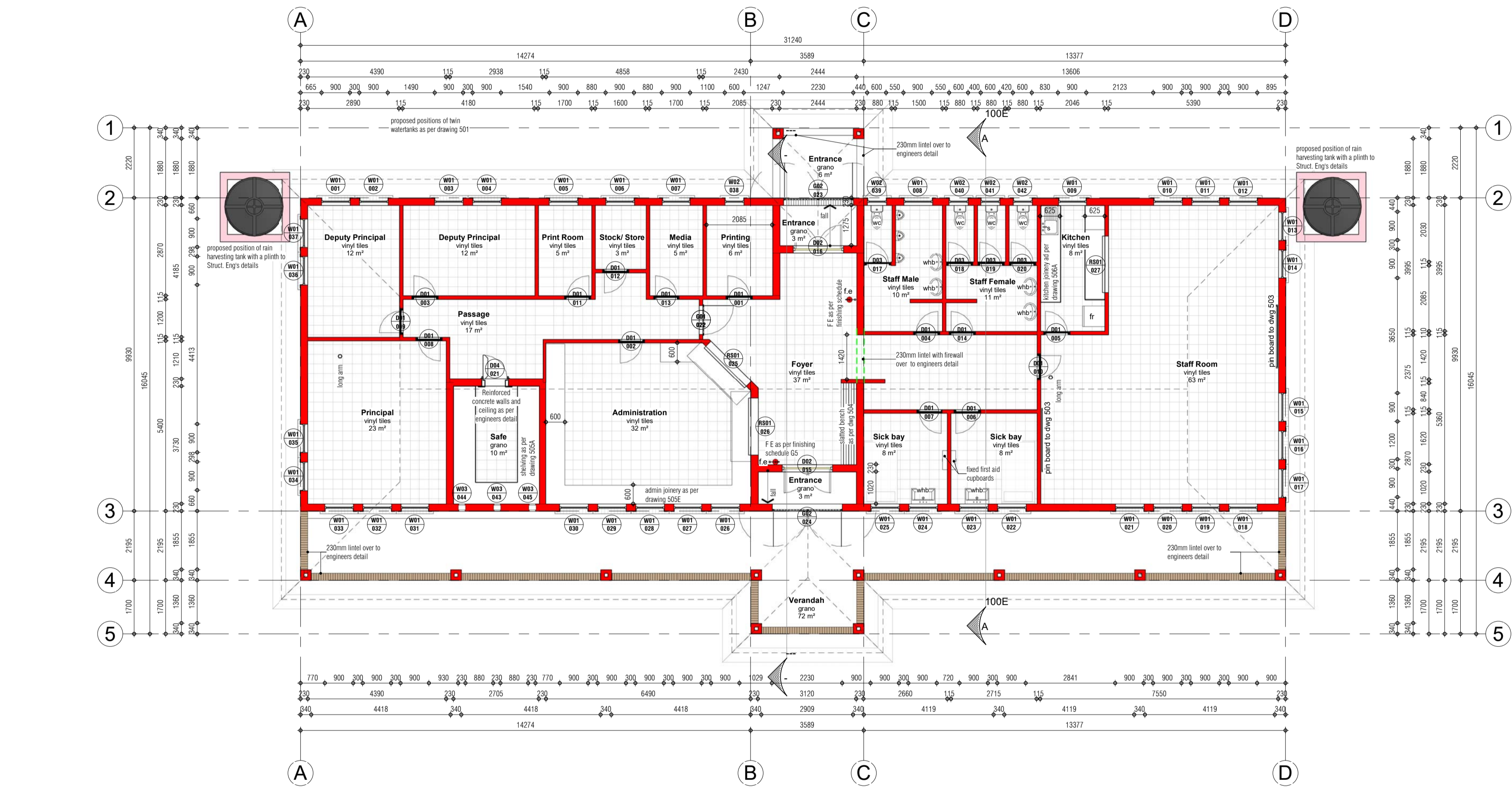
**FLOORS AND FOUNDATIONS:**  
 Floor finish as specified in Finishes Schedule on 30mm thick screed on reinforced concrete slab foundation (strictly as per engineers detail) 50mm thick underfloor insulation (applied to the underside of the slab and sides of the beams) on 250 micron grade green (or similar approved) 6mm on 50mm thick sand standing layer treated with Chlorotane Hepachlorolamin on hardcore fill, well compacted in layers not exceeding 150mm thick. All constructed strictly as per engineers specifications. Dpc to be 375 micron.

**DOORS:**  
 Refer to Door Schedule.

**WINDOWS:**  
 Refer to Window Schedule.  
 EXTERNAL - Brick on edge to match adjacent wall. End bricks to be solid.  
 INTERNAL - As per Finishes Schedule.

2 General notes for schools latest  
 1 : 100

Room Schedule				
Number	Name	Area	Floor Finish	Ceiling Finish
01	Foyer	37 m <sup>2</sup>	vinyl tiles	fibro cement
01a	Passage	17 m <sup>2</sup>	vinyl tiles	fibro cement
02	Administration	32 m <sup>2</sup>	vinyl tiles	fibro cement
04	Safe	10 m <sup>2</sup>	grano	concrete
05	Principal	23 m <sup>2</sup>	vinyl tiles	fibro cement
06	Deputy Principal	12 m <sup>2</sup>	vinyl tiles	fibro cement
07	Deputy Principal	12 m <sup>2</sup>	vinyl tiles	fibro cement
08	Printing	6 m <sup>2</sup>	vinyl tiles	fibro cement
09	Staff Male	10 m <sup>2</sup>	vinyl tiles	fibro cement
10	Kitchen	8 m <sup>2</sup>	vinyl tiles	fibro cement
11	Staff Female	63 m <sup>2</sup>	vinyl tiles	fibro cement
12	Sick bay	8 m <sup>2</sup>	vinyl tiles	fibro cement
13	Sick bay	8 m <sup>2</sup>	vinyl tiles	fibro cement
14	Print Room	5 m <sup>2</sup>	vinyl tiles	fibro cement
15	Stock/Store	3 m <sup>2</sup>	vinyl tiles	fibro cement with security mesh over
16	Media	5 m <sup>2</sup>	vinyl tiles	fibro cement
18	Staff Female	11 m <sup>2</sup>	vinyl tiles	fibro cement
001	Entrance	6 m <sup>2</sup>	grano	fibro cement
001a	Entrance	3 m <sup>2</sup>	grano	fibro cement
002	Verandah	72 m <sup>2</sup>	grano	No Ceiling
002a	Entrance	3 m <sup>2</sup>	grano	fibro cement
Grand total	21	353 m <sup>2</sup>		



1 Ground Storey  
 1 : 100

SIGNATURES:		
PROFESSIONAL ARCHITECT:	PR NR	SIGNATURE:
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS			
REV	DATE	DRAWN	DESCRIPTION
0	08-08-2021	HK	ISSUED FOR CLIENT APPROVAL



ARCHITECT:  
**IDC ARCHITECTS**  
 EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

JOHANNESBURG  
 Unit C2-001, Edenburg Terrace  
 346 Rivonia Blvd | Rivonia 2128  
 Tel: +27 11 234 5141 | Cell: +27 82 900 8288  
 info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
 ARCHITECT NAME: B Ilori

CLIENT:  
**DEPARTMENT OF PUBLIC WORKS LIMPOPO**

CLIENT SIGNATURE:

PROJECT DESCRIPTION:  
**DIPHUTI PRIMARY SCHOOL, THE OAKS, LIMPOPO**  
**LARGE ADMINISTRATION BLOCK**

DRAWING DESCRIPTION:  
**GROUND FLOOR PLAN**

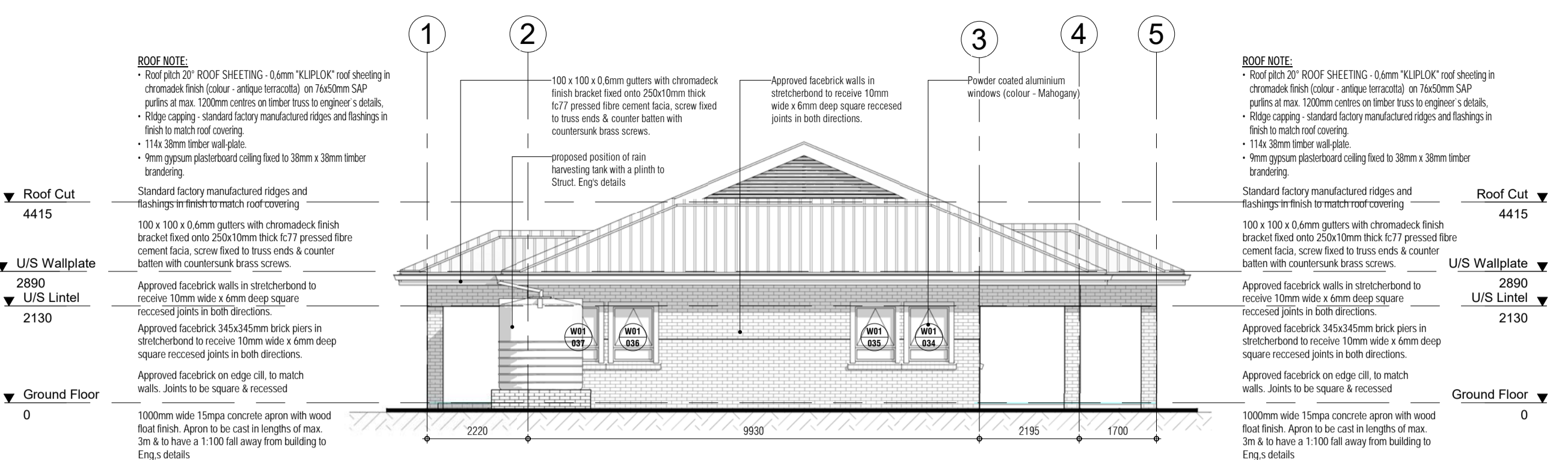
SCALE / SHEET SIZE	DATE		
SCALE: 1 : 100 @ A1	17-05-2021		
PROJECT No.	SHEET NUMBER		
063 - 17 - 001	100A		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
DRAWING STATUS			
INFO	TENDER	COUNCIL	CONSTRUCTION
DRAWN BY: HK	CHECKED: BI		

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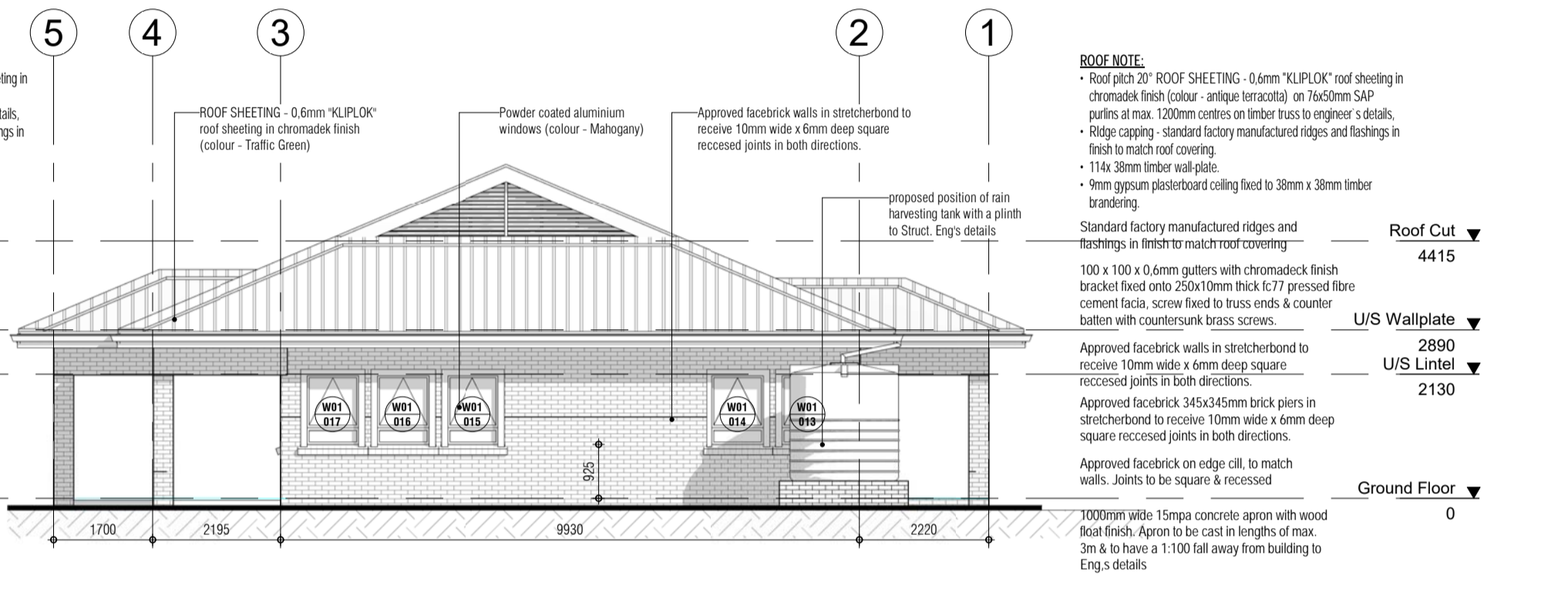
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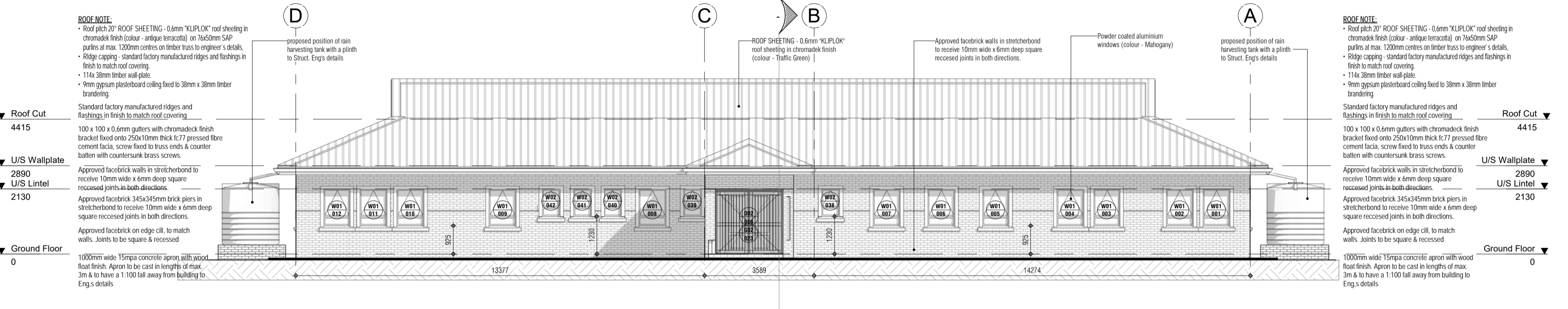
**GENERAL NOTES:**  
 All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.  
 The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.  
 To comply with SANS 10400-C  
 Figured dimensions to be taken in preference to scaling  
 Overall dimensions (external) to take precedence.  
 All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works.  
**FOUNDATIONS:**  
 To comply with SANS 10400-B  
 Detailed requirements of SANS 10400-H  
 All concrete foundations to be a minimum of 600mm x 250mm.  
 Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.  
**FLOORS:**  
 To comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J  
 Suspended floors to comply with SANS 10400-B, SANS 10400-T, SANS 10022  
 Detailed requirements to comply with SANS 10400-J  
 Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J  
 Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.



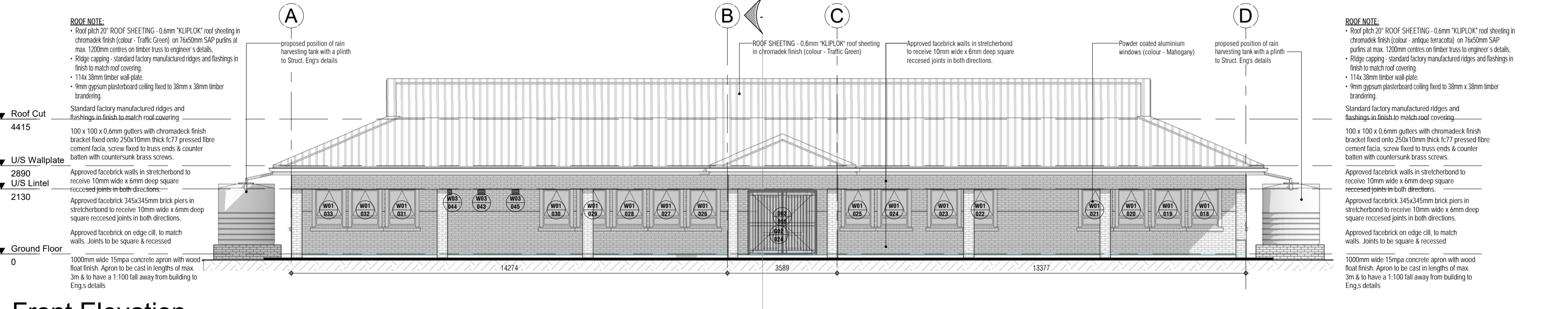
**4 Right Elevation**  
 1 : 100



**3 Left Elevation**  
 1 : 100



**2 Back Elevation**  
 1 : 100



**1 Front Elevation**  
 1 : 100

**Window Schedule**

Type Mark	Mark	Width	Height	Count
W01	001	900	1200	1
W01	002	900	1200	1
W01	003	900	1200	1
W01	004	900	1200	1
W01	005	900	1200	1
W01	006	900	1200	1
W01	007	900	1200	1
W01	008	900	1200	1
W01	009	900	1200	1
W01	010	900	1200	1
W01	011	900	1200	1
W01	012	900	1200	1
W01	013	900	1200	1
W01	014	900	1200	1
W01	015	900	1200	1
W01	016	900	1200	1
W01	017	900	1200	1
W01	018	900	1200	1
W01	019	900	1200	1
W01	020	900	1200	1
W01	021	900	1200	1
W01	022	900	1200	1
W01	023	900	1200	1
W01	024	900	1200	1
W01	025	900	1200	1
W01	019	900	1200	1
W01	027	900	1200	1
W01	028	900	1200	1
W01	029	900	1200	1
W01	030	900	1200	1
W01	031	900	1200	1
W01	032	900	1200	1
W01	033	900	1200	1
W01	034	900	1200	1
W01	035	900	1200	1
W01	036	900	1200	1
W01	037	900	1200	1
W02	038	600	900	1
W02	039	600	900	1
W02	040	600	900	1
W02	041	600	900	1
W02	042	600	900	1
W03	043	900	160	1
W03	044	900	160	1
W03	045	900	160	1

**Door Schedule**

Type Mark	Mark	Height	Width	Count	Type
D01	001	2030	813	1	Duramen B13 x 2030 - D02
D01	002	2030	813	1	Duramen B13 x 2030 - D02
D01	003	2030	813	1	Duramen B13 x 2030 - D02
D01	004	2030	813	1	Duramen B13 x 2030 - D02
D01	005	2030	813	1	Duramen B13 x 2030 - D02
D01	006	2030	813	1	Duramen B13 x 2030 - D02
D01	007	2030	813	1	Duramen B13 x 2030 - D02
D01	008	2030	813	1	Duramen B13 x 2030 - D02
D01	009	2030	813	1	Duramen B13 x 2030 - D02
D01	010	2030	813	1	Duramen B13 x 2030 - D02
D01	011	2030	813	1	Duramen B13 x 2030 - D02
D01	012	2030	813	1	Duramen B13 x 2030 - D02
D01	013	2030	813	1	Duramen B13 x 2030 - D02
D01	014	2030	813	1	Duramen B13 x 2030 - D02
D02	015	2032	1613	1	2032 x 1613 Square - L2
D02	016	2032	1613	1	2032 x 1613 Square - L2
D03	017	2030	813	1	Duramen B13 x 2030 - Cubicle
D03	018	2030	813	1	Duramen B13 x 2030 - Cubicle
D03	019	2030	813	1	Duramen B13 x 2030 - Cubicle
D03	020	2030	813	1	Duramen B13 x 2030 - Cubicle
D04	021	2032	762	1	30' x 80'
D01	022	2032	914	1	30' x 80'
D02	023	2032	2230	1	30' x 80'
D02	024	2032	2230	1	30' x 80'
RS01	025	1270	1800	1	2419x1100
RS01	026	1270	1800	1	2419x1100
RS01	027	1270	1800	1	2419x1100

**SIGNATURES:**

PROFESSIONAL ARCHITECT	PR. NR.	SIGNATURE
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	08-08-2021	HK	ISSUED FOR CLIENT APPROVAL



**IDC ARCHITECTS**  
 EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG  
**JOHANNESBURG**  
 Unit C2-001, Edenburg Terrace  
 346 Rivonia Blvd | Rivonia 2128  
 Tel: +27 11 234 8141 | Cell: +27 82 900 8288  
 info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
 ARCHITECT NAME: B Ilori

CLIENT: DEPARTMENT OF PUBLIC WORKS LIMPOPO

PROJECT DESCRIPTION: DIPHUTI PRIMARY SCHOOL, THE OAKS, LIMPOPO

**LARGE ADMINISTRATION BLOCK**

**ELEVATIONS, DOOR & WINDOW SCHEDULE**

SCALE / SHEET SIZE	DATE
SCALE: 1 : 100 @ A1	17-05-2021

PROJECT No.	SHEET NUMBER
063 - 17 - 001	100C

OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0

DRAWING STATUS: TENDER COUNCIL CONSTRUCTION  
 DRAWN BY: HK CHECKED: BI

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DOOR LEGEND	1613		870		914		900		2227	
	813		1411		2032		2175		2175	
DOOR NO.	<b>D01</b>	<b>D02</b>	<b>D03</b>	<b>D04</b>	<b>GD01</b>	<b>GD02</b>				
POSITION	OFFICES, PRINT ROOMS, STORE, STAFF MALE, STAFF FEMALE, KITCHEN, STAFF ROOM, SICK BAYS & ADMIN CLERKS	FRONT ENTRANCE & BACK ENTRANCE	STAFF MALE & STAFF FEMALE	STRONGROOM	LOBBY	FRONT ENTRANCE & BACK ENTRANCE				
QUANTITY	14 5 RH 9 LH	2 2 x DOUBLE SWING DOORS	4 0 RH 4 LH	4 2 RH 2 LH	1 0 RH 1 LH	2 2 x DOUBLE SWING DOORS				
DOOR FRAME DISCRPTION	standard mild steel 813x2032x1,2mm single rebate pressed metal door frame for 115mm walls	extruded aluminium frame as per aamsa specifications according to dimensions 1613w x 2447h	standard mild steel 813x2032x1,2mm single rebate pressed metal door frame for 115mm walls	To be supplied by manufacture complete with door for 230mm walls	45x45x3mm square tubing frame bolted to wall	45x45x3mm square tubing frame bolted to wall				
DOOR FRAME FINISH	1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect	natural anodised aluminium. colour to architect	1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect	1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect	1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect	1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect				
DOOR DISCRPTION	900x2032mm solid core door veneered on both sides to receive paint	1485x2015mm extruded aluminium door as per AAMSA	813x2032mm solid core door veneered on both sides to receive paint	Category 1 strongroom door as supplied by manufacture.	Gate out of 40x60x2mm square tubing in gate surround with 19mm metal rods welded to surround	Gate out of 40x60x2mm square tubing in gate surround with 19mm metal rods welded to surround				
IRONMONGY:	Hinges - 2x100mm m/s butterfly hinges per door leaf	LOCKSET - narrow style sabs approved double cylinder lockset. DOOR CLOSERS & FLOOR SPRINGS - SABS approved doorclosers & floor-spring as supply by DORMA or equal approved. BARREL BOLT - recessed type as supply by UNION 100mm length. DOOR HANDLES DOUBLE SIDED - satin chrome finish handles according to Architect.	HINGES - 2x100mm m/s butterfly hinges per LOCKSET - "SOLID BLESBOK" thumb turn 460/313 toilet lockset. Provide male & female 150 x 150mm satin chrome signs against doors.	H1 door step & 3 double sided vents all as per supplier LOCKSET - 7 lever security door	Hinges - pin type hinges	Hinges - pin type hinges				
FITTINGS:	Lockset - "solid blesbok" 460/313 four lever lockset.				Lockset - 1x 100mm barrel bolt. finish: chrome. 75x75x16mm meranti mounting block. edges of mounting block to receive 5mm chamfers	Lockset - 1x 100mm barrel bolt. finish: chrome. 75x75x16mm meranti mounting block. edges of mounting block to receive 5mm chamfers				
FINISHES	1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect	Cleandown	1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect	All as per supplier	1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect	1/red oxide primer + 1/coat universal, undercoat + 2/coats plascon gloss enamel paint. - colour to architect.				
GLASS	Not applicable	GLASS 6mm PVB fadeband laminated safety glass acc. to SANS 10400 PART N	Not applicable	Not applicable	Not applicable	Not applicable				

**GENERAL NOTES:**  
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

**DIMENSIONS:**  
To comply with SANS 10400-C  
Figured dimensions to be taken in preference to scaling  
Overall dimensions (external) to take precedence.  
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

**FOUNDATIONS:**  
To comply with SANS 10400-B  
Detailed requirements of SANS 10400-H  
All concrete foundations to be a minimum of 600mm/250mm.  
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

**FLOORS:**  
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wet)  
Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082  
Detailed requirements to comply with SANS 10400-J.  
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.  
finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.  
fire walls to be taken to up to underside of roof covering provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to hoists.  
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

**WALLS:**  
Flat roofs or related gutter to comply with SANS 10400-L or rational design/ rational assessment or both  
Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L  
where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B  
Cutters and downpipes to comply with SANS 10400-R  
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

**STAIRWAYS:**  
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.  
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T; SANS 10400-K and SANS 10400-T.

**FIRE INSTALLATION:**  
The fire installations to comply with national fire regulations  
the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

**FIRE PROTECTION:**  
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-L  
the fire protection measure to be subject of a rational design or rational assessment.

**ENERGY EFFICIENCY:**  
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-NA or be subject of a rational design or rational assessment.

**PEOPLE WITH DISABILITIES:**  
The fire installations to comply with national fire regulations

**PUBLIC SAFETY:**  
level change, ramps, driveways and pools to comply with SANS 10400-D

**SPACE HEATING:**  
The provision for space heating to comply with national regulations

**STORM WATER DISPOSAL:**  
The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-NA or be subject of a rational design or rational assessment.

**LIGHTING AND VENTILATION:**  
in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-RH and be subject of a rational design.  
to detailed requirements of SANS 10400-O and be subject of a rational design.  
All habitable rooms to have a minimum of 10% natural lighting.

**GLAZING:**  
The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
the selection of the glazing to comply with national regulations

SIGNATURES:		
PROFESSIONAL ARCHITECT	PR, NR	SIGNATURE:
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

DOOR LEGEND	1800		1270		2115	
	845		845		2115	
DOOR NO.	<b>RS01</b>					
POSITION	KITCHEN & ADMIN CLERKS					
QUANTITY	3 ROLLERSHUTTER DOORS					
DOOR FRAME DISCRPTION	Standard Wispeco 2185 x 2400mm rollershutter door with chromadek finish complete with fittings as supply by manufacturer.					
DOOR FRAME FINISH	Chromadek finish: - colour by architect					
DOOR DISCRPTION	Standard Wispeco 2185 x 2400mm rollershutter door with chromadek finish complete with fittings as supply by manufacturer.					
IRONMONGY:	Standard Wispeco 2185 x 2400mm rollershutter door with chromadek finish complete with fittings as supply by manufacturer.					
FITTINGS:						
FINISHES	Chromadek finish: - colour by architect					
GLASS	Not applicable					

WINDOW LEGEND	880		580		230	
	1200		890		230	
WINDOW NO.	<b>W01</b>	<b>W02</b>	<b>W03</b>			
POSITION	OFFICES, PRINT ROOMS, STORE, STAFF MALE, KITCHEN, STAFF ROOM, SICK BAYS & ADMIN CLERKS	STAFF MALE & STAFF FEMALE	STRONGROOM			
QUANTITY	37	5	3			
WINDOW FRAME DISCRPTION	900mm 600mm wide Powder coated aluminium windows (colour - Mahogany)	900mm 600mm wide Powder coated aluminium windows (colour - Mahogany)	precast concrete airbricks to manufacture's specifications			
WINDOW FURNITURE	Iron-mongery & fittings as supply by window manufacturer. and according to architects approval	Iron-mongery & fittings as supply by window manufacturer. and according to architects approval	none			
BURGLAR - BAR	Made out of 10mm wide flat-bars	Made out of 10mm wide flat-bars	none			
FINISHES	1 coat red oxide primer, 1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect	1 coat red oxide primer, 1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect	none			
GLASS	6mm obscure glazing to meet all requirements of SANS 10400 Part N	6mm obscure glazing to meet all requirements of SANS 10400 Part N	none			

Window Legend  
1 : 50

REV	DATE	DRAWN	DESCRIPTION
0	08-06-2021	HK	ISSUED FOR CLIENT APPROVAL



**IDC ARCHITECTS**  
EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

JOHANNESBURG  
Unit C2-001, Edenburg Terrace  
348 Rivonia Blvd | Rivonia 2128  
Tel: +27 11 234 5141 | Cell: +27 82 900 8288  
info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
ARCHITECT NAME: B Ilori

CLIENT: DEPARTMENT OF PUBLIC WORKS LIMPOPO

CLIENT SIGNATURE:  
PROJECT DESCRIPTION:  
**DIPHUTI PRIMARY SCHOOL, THE OAKS, LIMPOPO**  
**LARGE ADMINISTRATION BLOCK**

DRAWING DESCRIPTION: <b>DOOR &amp; WINDOW LENGENDS</b>			
SCALE / SHEET SIZE	DATE		
SCALE: 1 : 50 @ A1	05/17/21		
PROJECT No.	SHEET NUMBER		
063 - 17 - 001	100D		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
DRAWING STATUS			
INFO	TENDER	COUNCIL	CONSTRUCTION
DRAWN BY: Author		CHECKED: Checker	

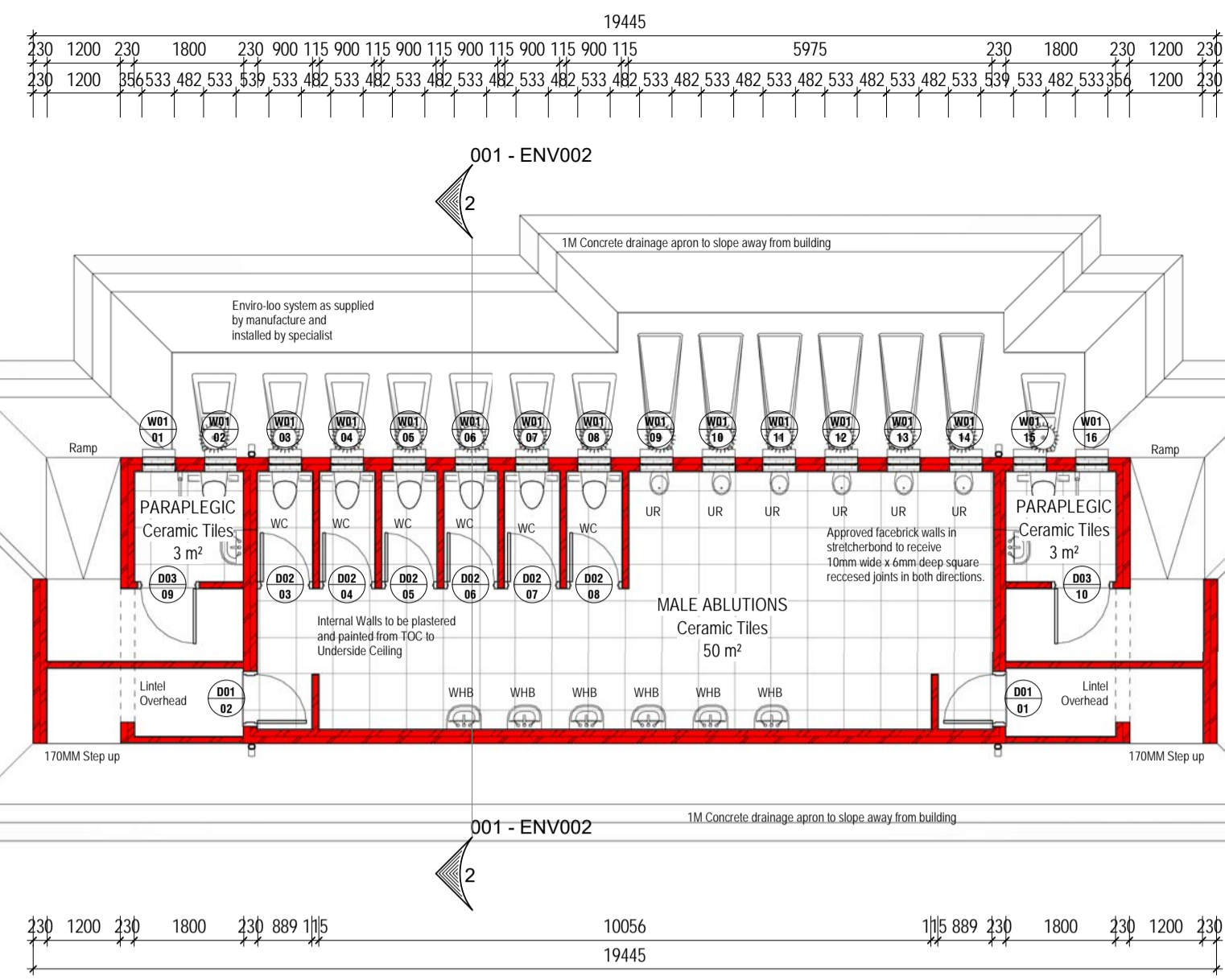
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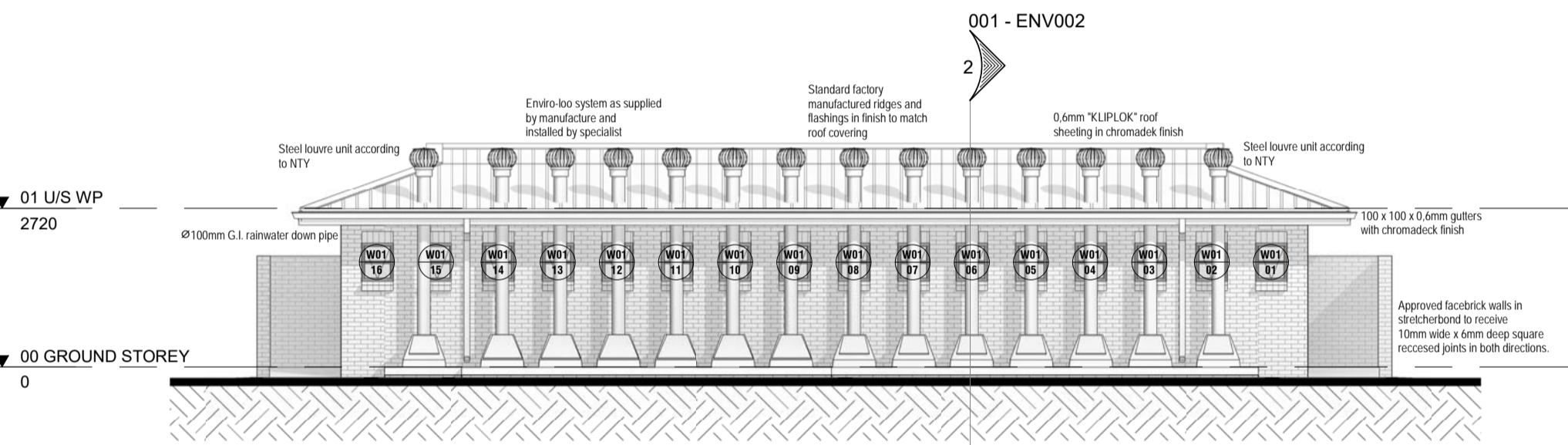




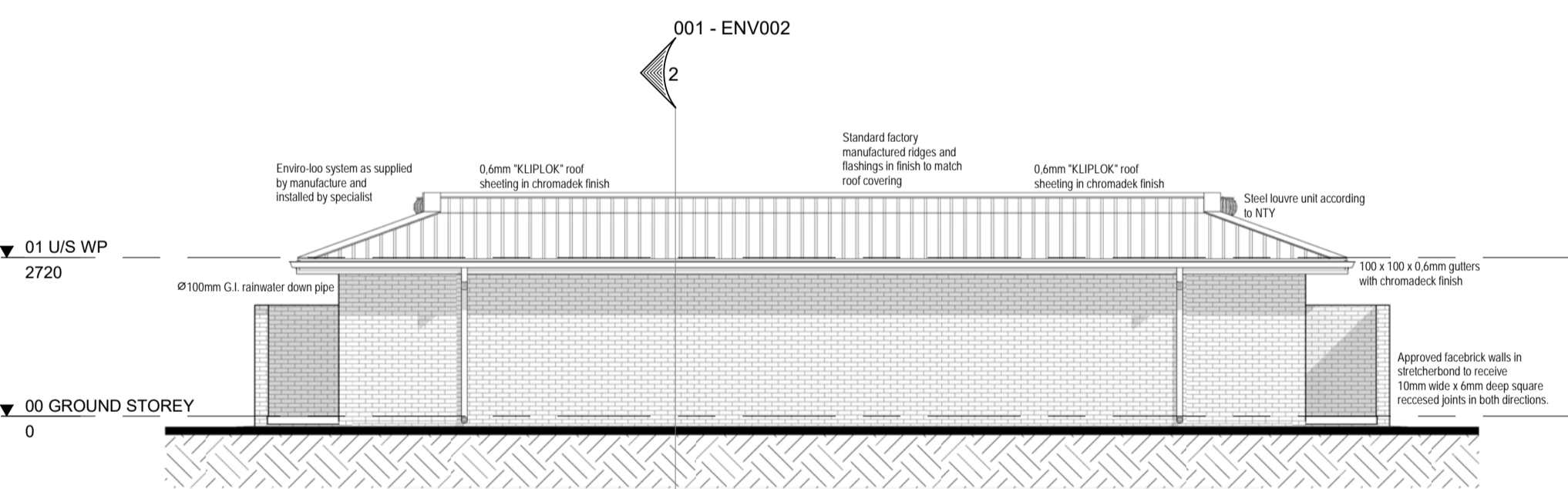




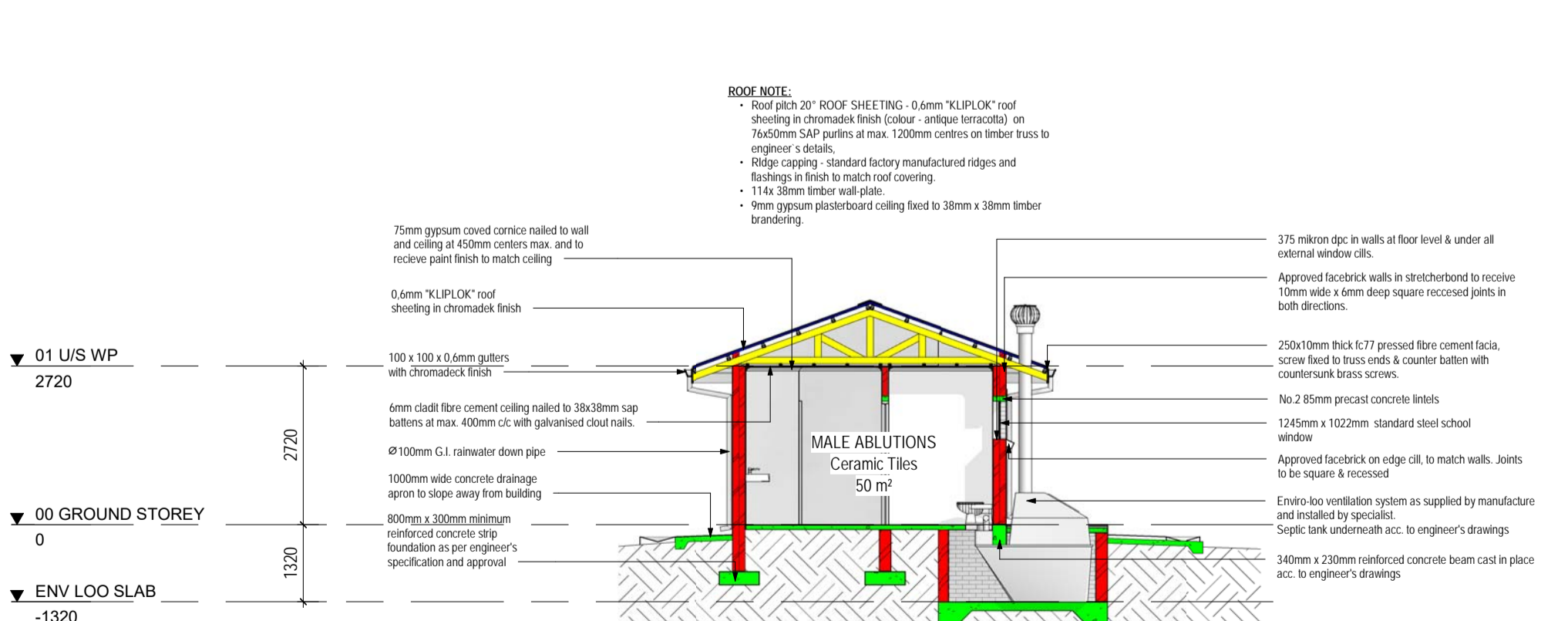
00 GROUND STOREY  
1 : 100



North  
1 : 100

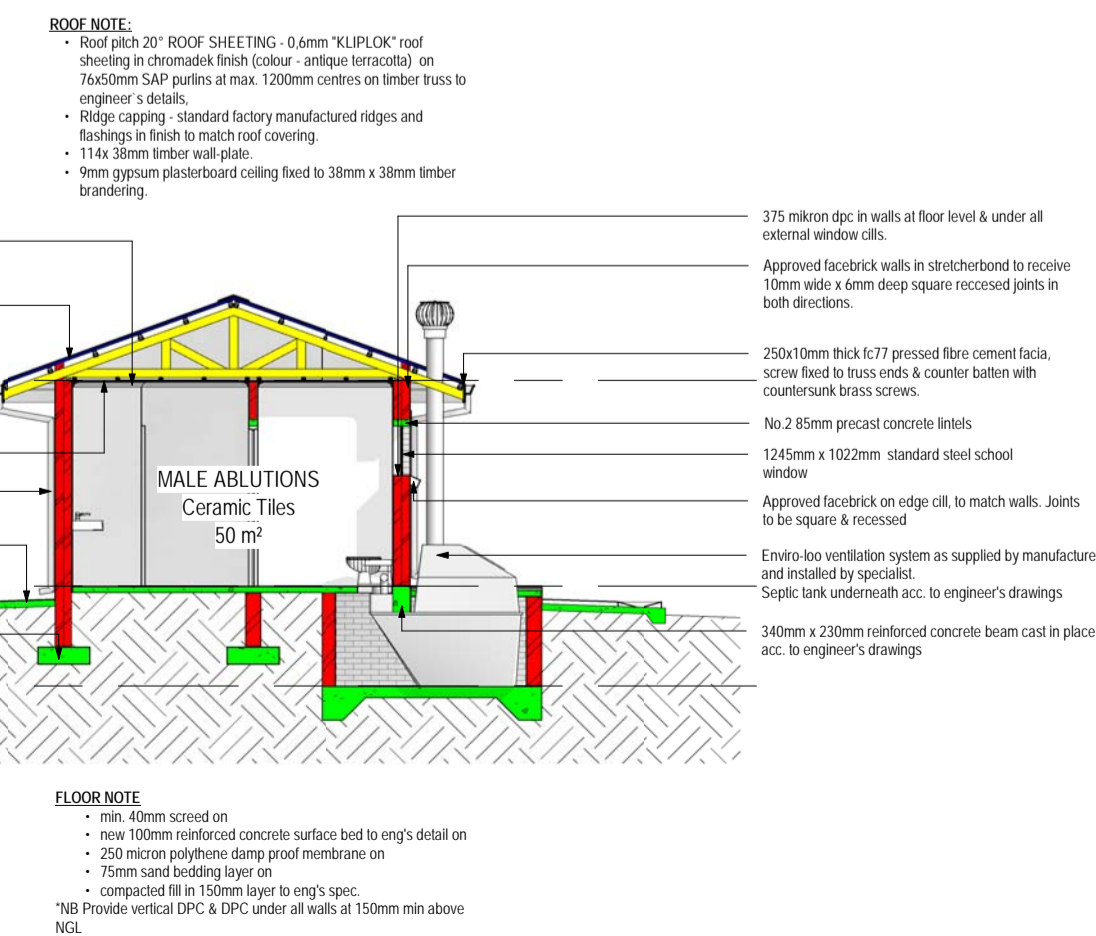


East  
1 : 100



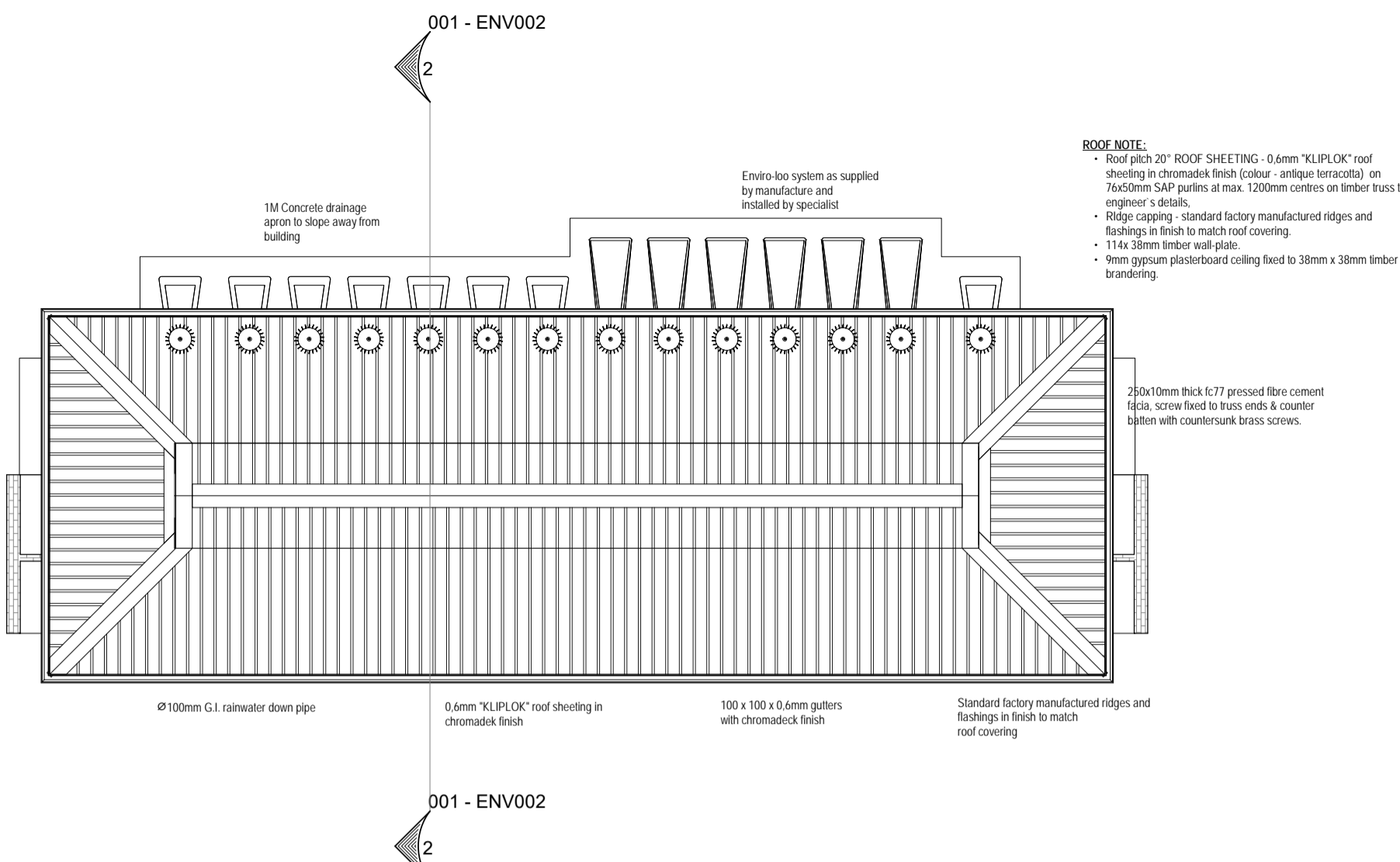
South  
1 : 100

Section A  
1 : 100

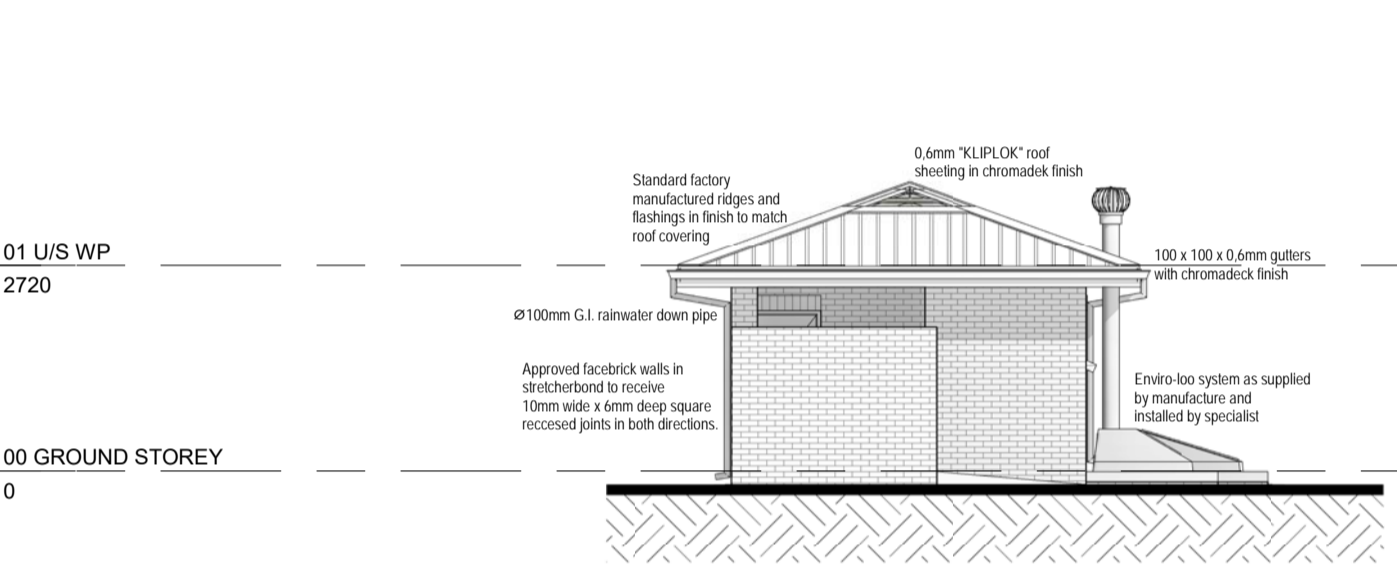


**ROOF NOTE:**  
 Roof pitch 20° ROOF SHEETING - 0.6mm "XLPL" roof sheeting in chromalok finish (color - anthracite) on 1400mm S48 purlins at max. 1200mm centres on timber truss to engineer's detail.  
 Ridge capping - standard factory manufactured ridges and flashings in finish to match roof covering.  
 114 x 38mm timber wall plate.  
 18mm gypsum plasterboard ceiling fixed to 38mm x 38mm timber bracing.

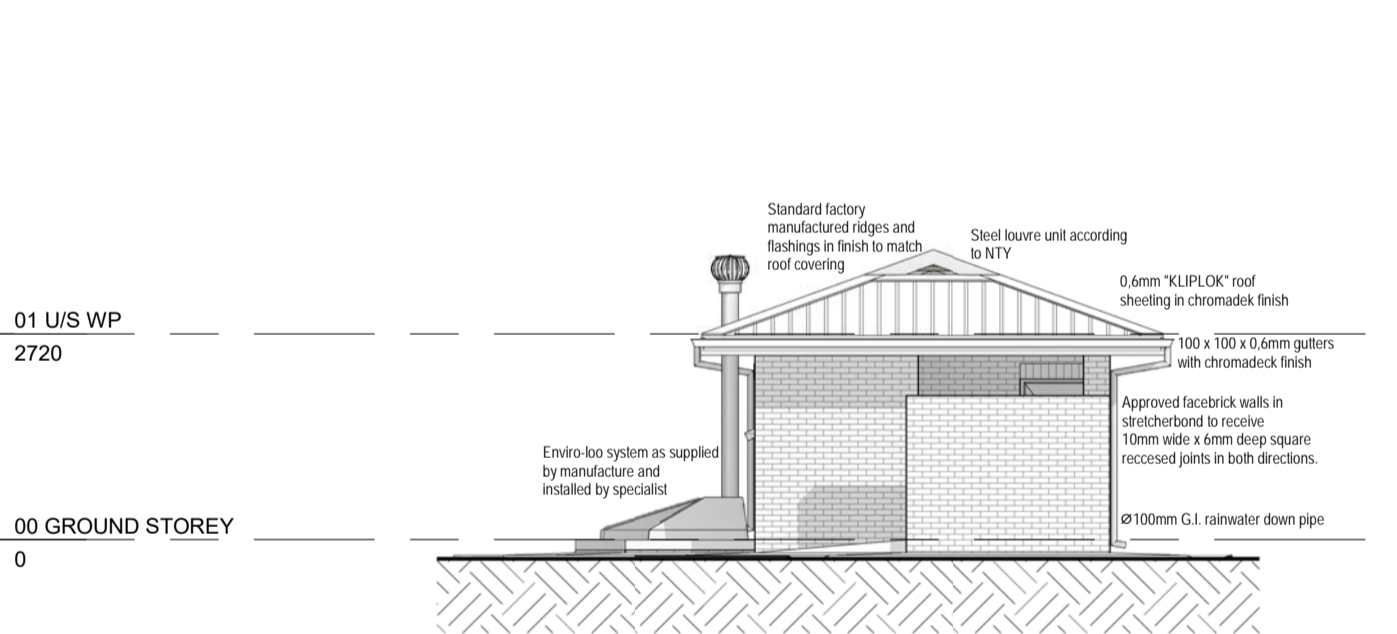
**FLOOR NOTE:**  
 min. 40mm screed on  
 new 100mm reinforced concrete surface bed to eng's detail on  
 250 micron polythene damp proof membrane on  
 50mm sand bedding layer on  
 compacted fill to 150mm min above  
 100 Provide vertical DPC & DPC under all walls at 150mm min above NGL.



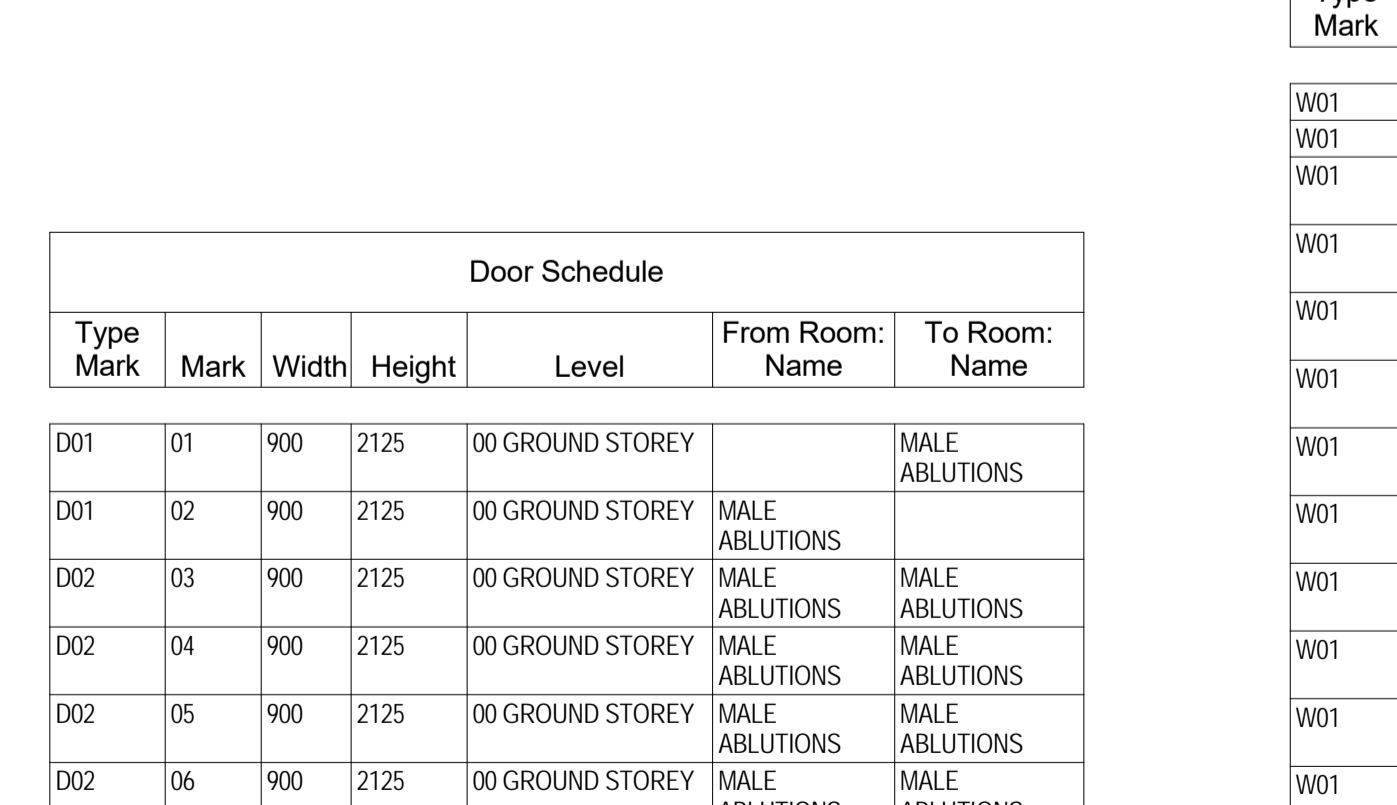
East  
1 : 100



West  
1 : 100



North  
1 : 100



Section A  
1 : 100

Section A  
1 : 100

Type Mark	Mark	Width	Height	Level	From Room: Name	To Room: Name
D01	01	900	2125	00 GROUND STOREY		MALE ABLUTIONS
D01	02	900	2125	00 GROUND STOREY	MALE ABLUTIONS	MALE ABLUTIONS
D02	03	900	2125	00 GROUND STOREY	MALE ABLUTIONS	MALE ABLUTIONS
D02	04	900	2125	00 GROUND STOREY	MALE ABLUTIONS	MALE ABLUTIONS
D02	05	900	2125	00 GROUND STOREY	MALE ABLUTIONS	MALE ABLUTIONS
D02	06	900	2125	00 GROUND STOREY	MALE ABLUTIONS	MALE ABLUTIONS
D02	07	900	2125	00 GROUND STOREY	MALE ABLUTIONS	MALE ABLUTIONS
D02	08	900	2125	00 GROUND STOREY	MALE ABLUTIONS	MALE ABLUTIONS
D03	09	1000	2125	00 GROUND STOREY	PARAPLEGIC	PARAPLEGIC
D03	10	1000	2125	00 GROUND STOREY	PARAPLEGIC	PARAPLEGIC

Grand total: 10

Type Mark	Mark	Width	Height	Level	From Room: Name
W01	01	533	654	00 GROUND STOREY	PARAPLEGIC
W01	02	533	654	00 GROUND STOREY	PARAPLEGIC
W01	03	533	654	00 GROUND STOREY	MALE ABLUTIONS
W01	04	533	654	00 GROUND STOREY	MALE ABLUTIONS
W01	05	533	654	00 GROUND STOREY	MALE ABLUTIONS
W01	06	533	654	00 GROUND STOREY	MALE ABLUTIONS
W01	07	533	654	00 GROUND STOREY	MALE ABLUTIONS
W01	08	533	654	00 GROUND STOREY	MALE ABLUTIONS
W01	09	533	654	00 GROUND STOREY	MALE ABLUTIONS
W01	10	533	654	00 GROUND STOREY	MALE ABLUTIONS
W01	11	533	654	00 GROUND STOREY	MALE ABLUTIONS
W01	12	533	654	00 GROUND STOREY	MALE ABLUTIONS
W01	13	533	654	00 GROUND STOREY	MALE ABLUTIONS
W01	14	533	654	00 GROUND STOREY	MALE ABLUTIONS
W01	15	533	654	00 GROUND STOREY	PARAPLEGIC
W01	16	533	654	00 GROUND STOREY	PARAPLEGIC

Grand total: 16

**GENERAL NOTES:**  
 All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.  
 The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.  
**DIMENSIONS:**  
 To comply with SANS 10400-C  
 Figured dimensions to be taken in preference to scaling  
 Overall dimensions (external) to take precedence  
 All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works  
**FOUNDATIONS:**  
 To comply with SANS 10400-B  
 Detailed requirements of SANS 10400-H  
 All concrete foundations to be a minimum of 600mm x 250mm.  
 Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.  
**FLOORS:**  
 To comply with SANS 10400-J (kitchen, shower, bathroom or wet)  
 Suspended floors to comply with SANS 10400-B, SANS 10400-T, SANS 10082  
 Detailed requirements to comply with SANS 10400-J  
 Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.  
 Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.  
 Fire walls to be taken to up to underside of roof covering, provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to house.  
 All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inwards must have a 15mm step up along the longitudinal centreline of the door leaf.  
**WALLS:**  
 Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K  
 Roof framing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K  
 Water penetration through walls detailed requirements to comply with SANS 10400-K  
**ROOFS:**  
 Roof covering and waterproofing to comply with SANS 10400-L  
 Flat roofs or raised gutters to comply with SANS 10400-L or rational design/ rational assessment or both  
 Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L  
 where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L  
 Outlets and downpipes to comply with SANS 10400-R  
 Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.  
**STAIRWAYS:**  
 To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.  
 Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.  
**FIRE INSTALLATION:**  
 The fire installations to comply with national fire regulations  
 the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.  
**FIRE PROTECTION:**  
 The fire protection measure to be in accordance with the detailed requirements of SANS 10400-T  
 the fire protection measure to be subject of a rational design or rational assessment.  
**ENERGY EFFICIENCY:**  
 the design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.  
**PEOPLE WITH DISABILITY:**  
 the fire installations to comply with national fire regulations  
**PUBLIC SAFETY:**  
 level change, ramps, driveways and pools to comply with SANS 10400-D  
**SPACE HEATING:**  
 the provision for space heating to comply with national regulations  
**STORM WATER DISPOSAL:**  
 the means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-VA or be subject of a rational design or rational assessment.  
**LIGHTING AND VENTILATION:**  
 in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-T and in accordance to detailed requirements of SANS 10400-D and is subject of a rational design.  
 All habitable rooms to have a minimum of 10% natural lighting.  
**GLAZING:**  
 The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
 the selection of the glazing to comply with national regulations

**SIGNATURES:**

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	20-10-2019	HK	ISSUED FOR CLIENT APPROVAL
1	08-06-2021	HK	ISSUED FOR CLIENT APPROVAL



**IDC ARCHITECTS**  
 EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

JOHANNESBURG  
 Unit C2-001, Edenburg Terrace  
 348 Rivonia Blvd | Rivonia 2128  
 Tel: +27 11 234 5141, Cell: +27 82 900 8288  
 info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
 ARCHITECT NAME: B Ilori  
 CLIENT: LIMPOPO PUBLIC WORKS  
 PROJECT DESCRIPTION: DIPHUTI PRIMARY SCHOOL  
 DRAWING DESCRIPTION: PLANS, SECTIONS & ELEVATIONS

SCALE / SHEET SIZE	DATE
SCALE: 1 : 100 @ A1	20-10-2019

PROJECT No.	SHEET NUMBER
063 - 17 - 001	001 - ENV002

OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	1

**DRAWING STATUS**

TENDER	COUNCIL	CONSTRUCTION
INFC		

DRAWN BY: LW CHECKED: CD

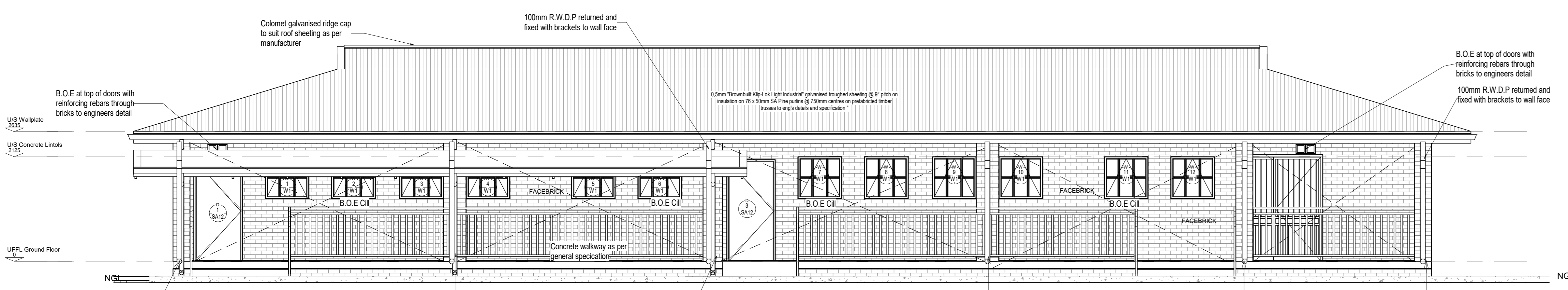
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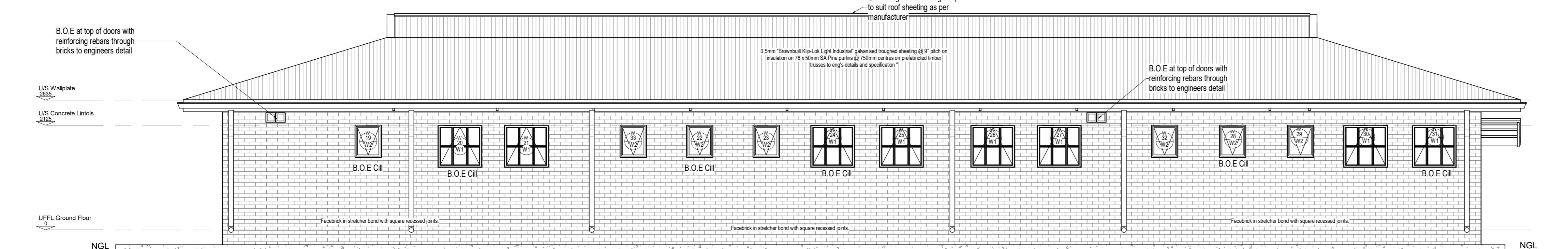




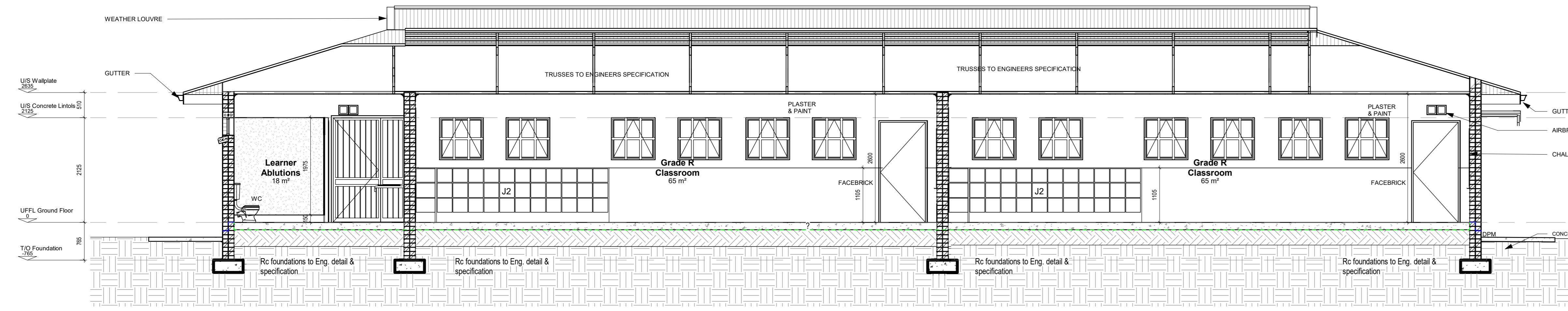




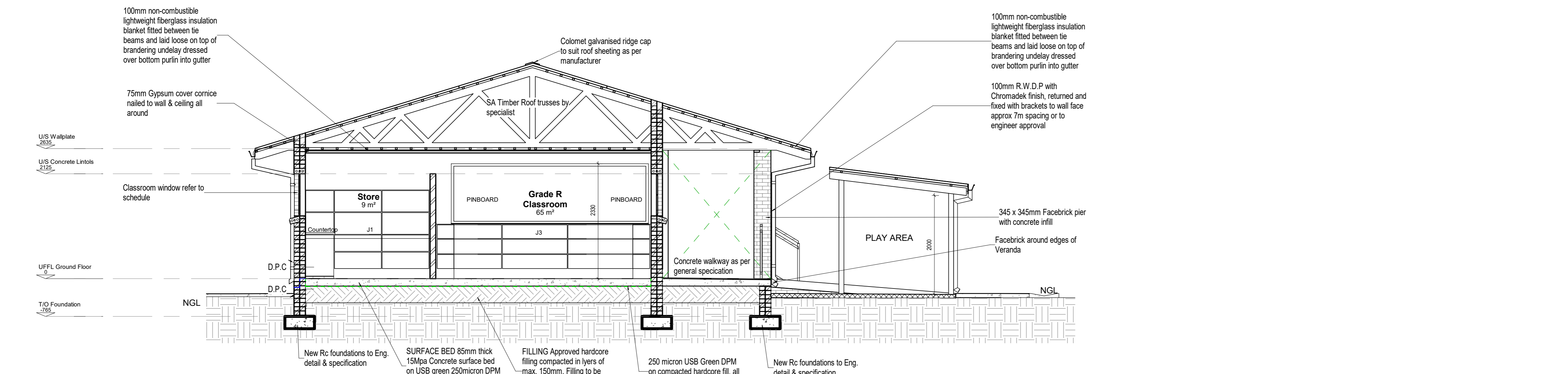
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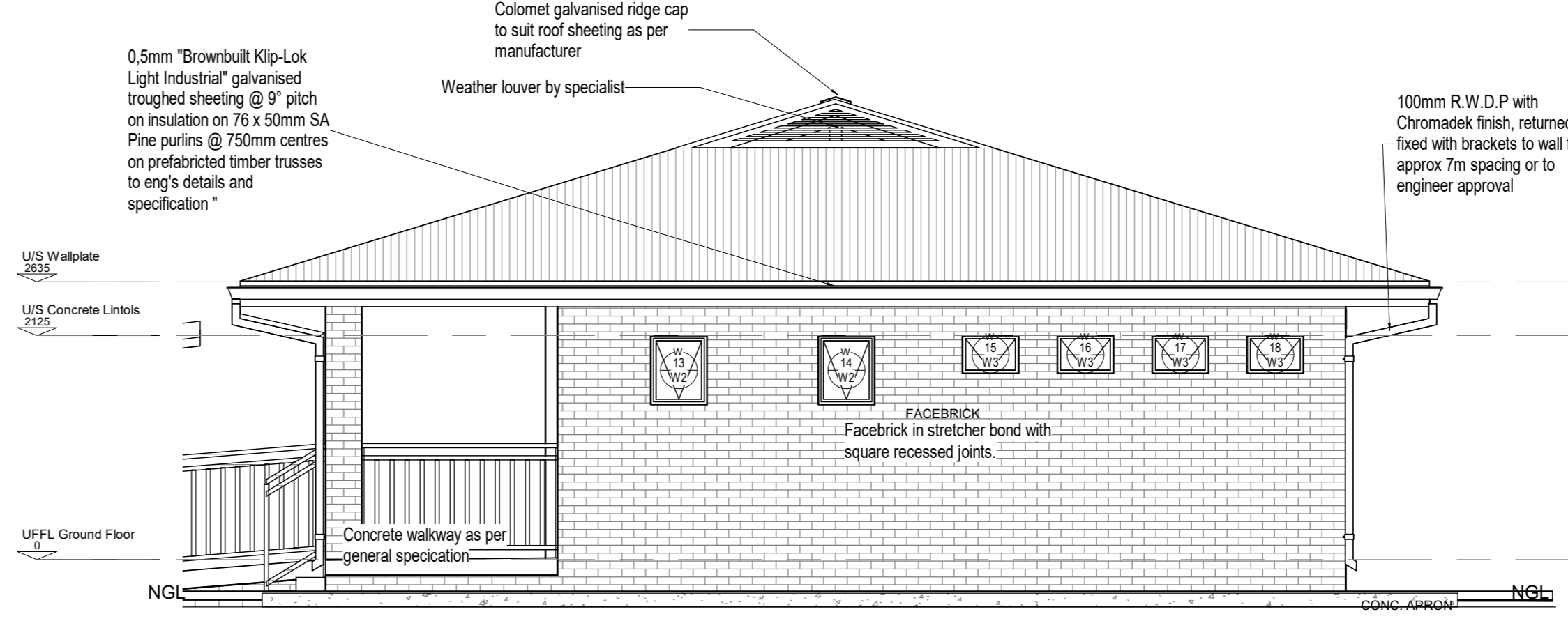
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1 : 50



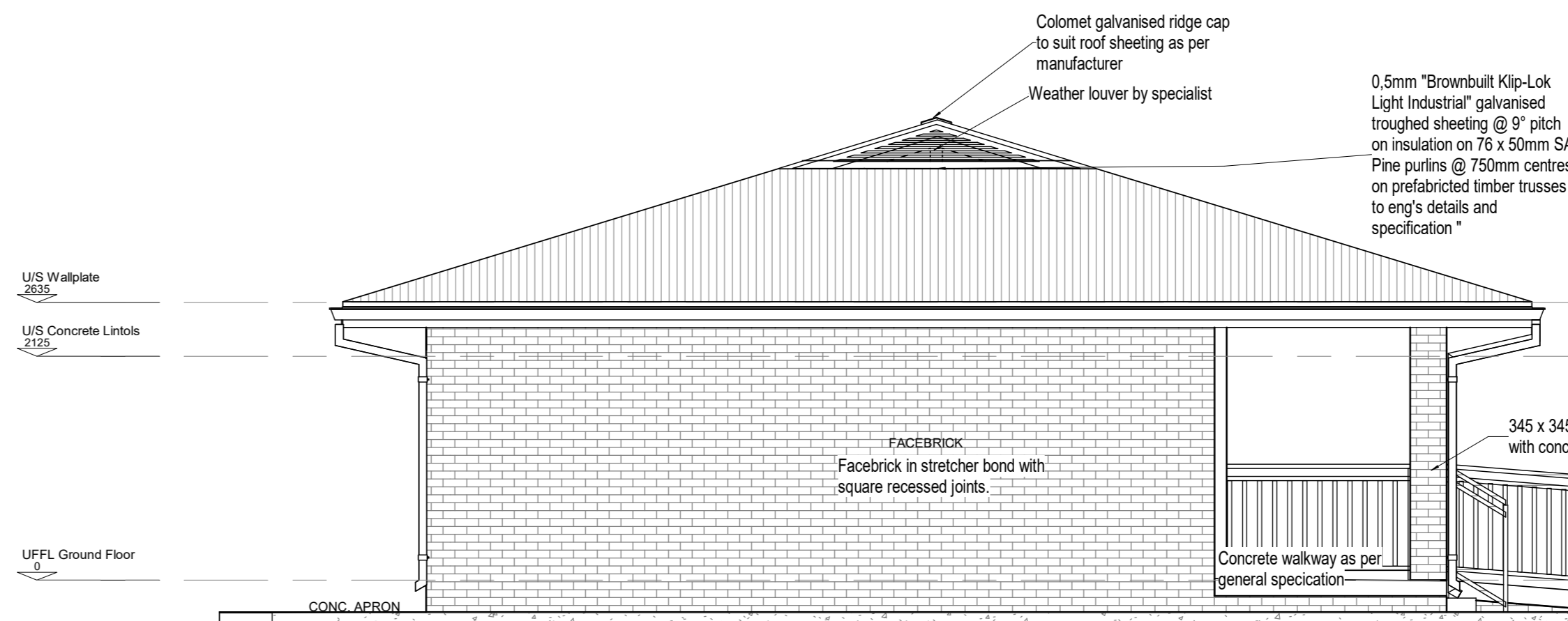
**SECTION A-A**  
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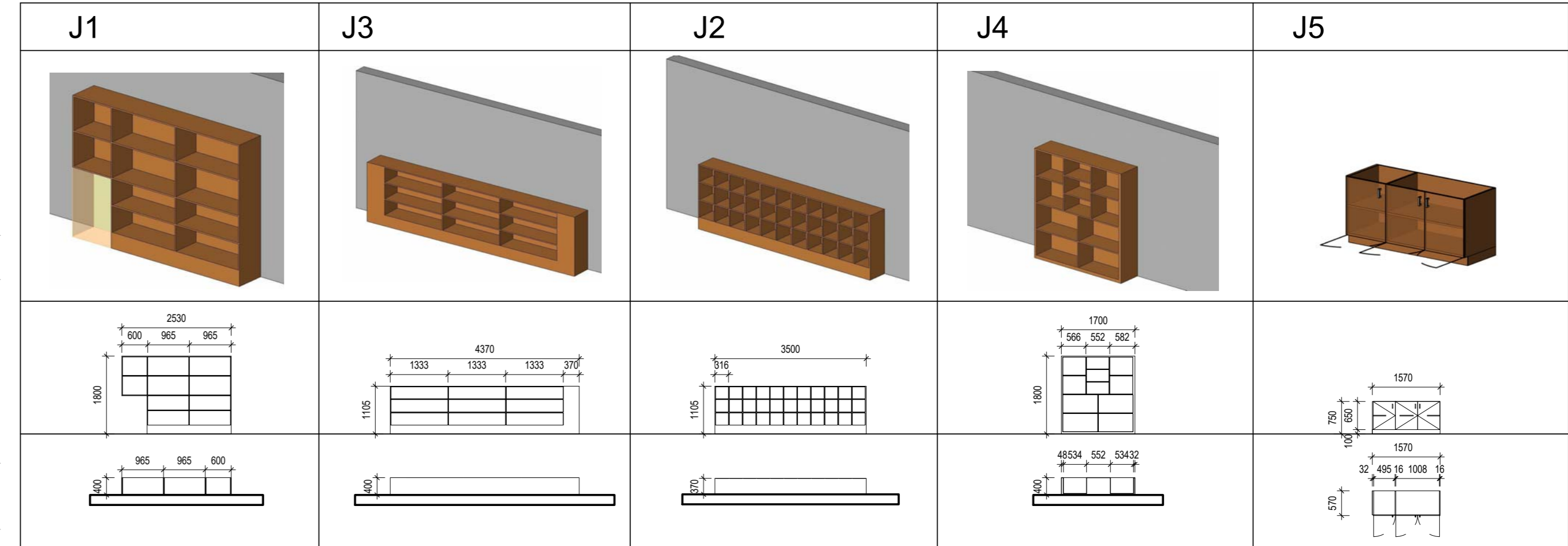
**SECTION B-B**  
1 : 50



**EAST ELEVATION**  
1 : 50



**WEST ELEVATION**  
1 : 50



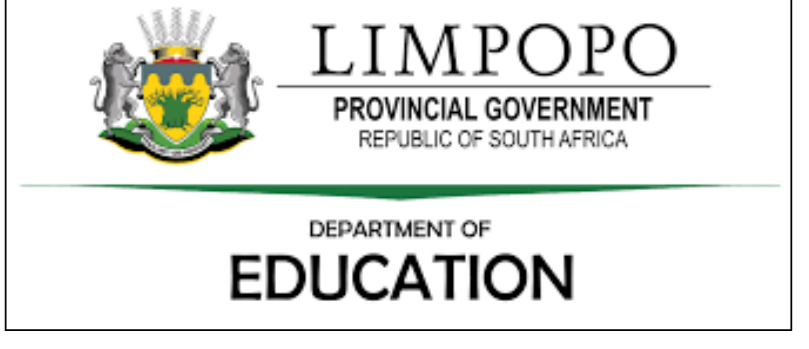
**Joinery**  
1 : 100

Joinery - Floor Units				
Type	Count	Width	Depth	Height
Shelf Type J2	4	3500	370	1105
Shelf Type J1	2	400	1800	
Shelf Type J3	2	4370	400	1105
Shelf Type J4	1	1800	400	1800
Granite Counter	2	1600	600	740
600mm Depth	2	1600	600	900
Granite Counter	1	2700	600	740
Customised Type J5	2	1550	370	750
<b>Grand total:</b>	<b>16</b>			

**GENERAL NOTES**  
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.  
The contractor is responsible for all site risks by local authorities and inspectors and shall pay for all associated costs.  
**DIMENSIONS**  
Figured dimensions to be taken in preference to scaling.  
Clear dimensions referred to take measurements.  
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of work.  
**CONCRETE**  
To comply with SANS 10400-B.  
Concrete foundations to be a minimum of 600mm x 250mm.  
Unless shown otherwise use of concrete foundations to be a minimum of 300mm below natural ground level.  
**ROOFING**  
To comply with SANS 10400-B (Roofing). Where shown, battens or rafters.  
Suspended Rafters to comply with SANS 10400-B, SANS 10400-T, SANS 10400-1.  
Roofing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-1.  
Rafters to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-1.  
Roofing floor level to be a minimum of 150mm above natural ground level unless otherwise shown.  
The eave to be taken to top of underside of roof covering.  
Provide a minimum 150mm throat and minimum 100mm doors to garage where it intersects with roof.  
All external doors opening outwards to have a 15mm step up to the inside of the outside of the door.  
All external doors opening inwards to have a 15mm step up to the inside of the outside of the door.  
**WALLS**  
Structural strength and stability to comply with SANS 10400-B, SANS 10400-T and detailed requirements to comply with SANS 10400-1.  
Roof framing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-1.  
Roof framing through walls detailed requirements to comply with SANS 10400-1.  
**ROOFING**  
Roof covering and waterproofing to comply with SANS 10400-1.  
Flat roofs or related gutter to comply with SANS 10400-1 or relevant design or national assessment of SANS 10400-1.  
Where not explicitly indicated in walls, roof comply with the detailed requirements of SANS 10400-B and in accordance to SANS 10400-1 and SANS 10400-1.  
Gutters and downpipes to comply with SANS 10400-1.  
The structure and construction of the roof assembly or using assembly in accordance to detailed requirements of SANS 10400-1 and SANS 10400-1.  
**FINISHES**  
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-1 and SANS 10400-1.  
Walls, windows, doors & shutters to finish in accordance to detailed requirements of SANS 10400-1 and SANS 10400-1 and SANS 10400-1.  
SANS 10400-1 and SANS 10400-1.  
**PAINTS**  
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-1 and SANS 10400-1.  
The contractor is responsible for the selection of the paint to be used in accordance to detailed requirements of SANS 10400-1 and SANS 10400-1.  
**GLAZING**  
The contractor is responsible for the selection of the glazing to be used in accordance to detailed requirements of SANS 10400-1 and SANS 10400-1.  
The contractor is responsible for the selection of the glazing to be used in accordance to detailed requirements of SANS 10400-1 and SANS 10400-1.  
The contractor is responsible for the selection of the glazing to be used in accordance to detailed requirements of SANS 10400-1 and SANS 10400-1.

SIGNATURES:	PRO. NR.	SIGNATURE
PROFESSIONAL ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS			
REV.	DATE	DRAWN	DESCRIPTION
1	06-08-2021	JP	ISSUED FOR CLIENT APPROVAL



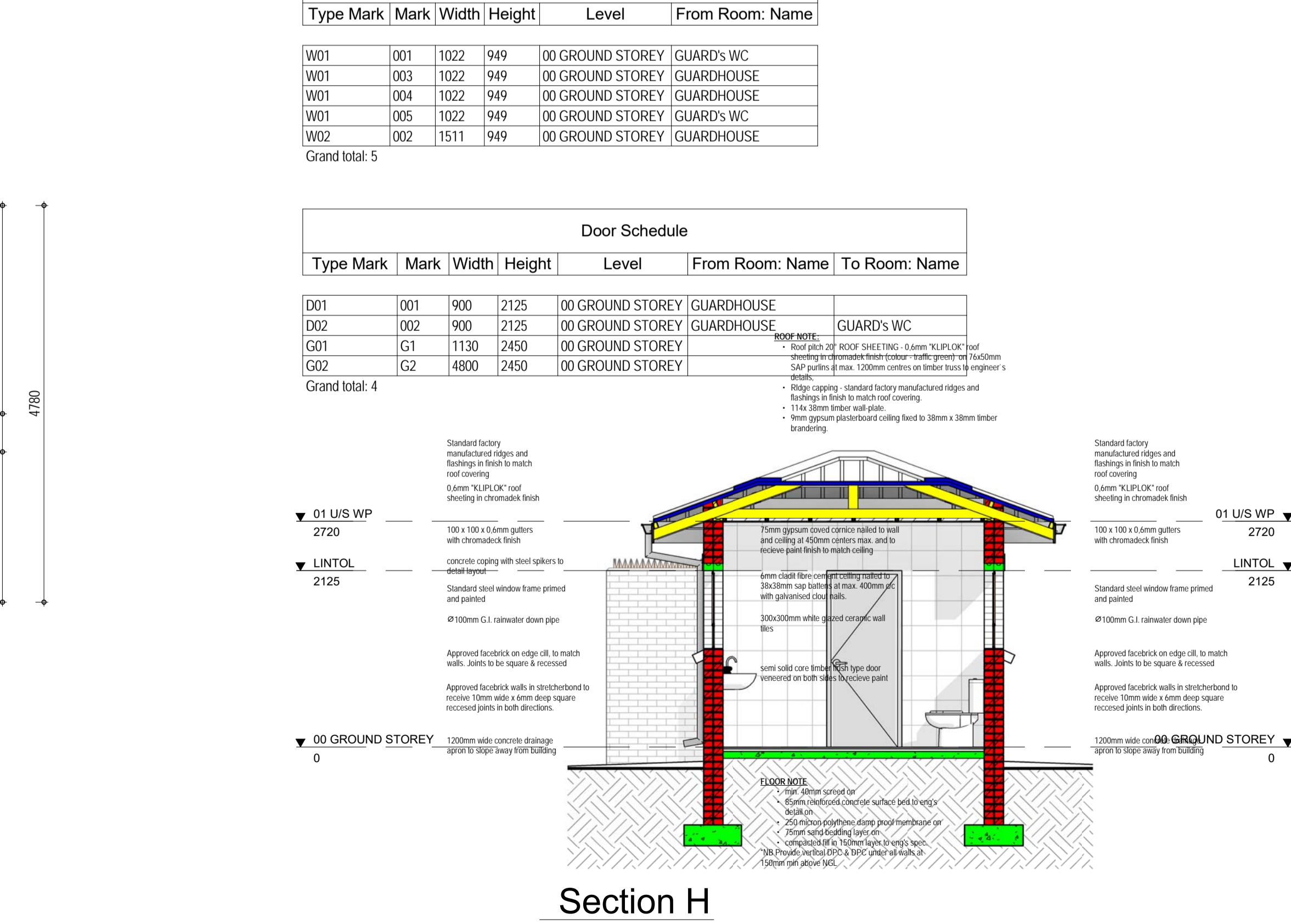
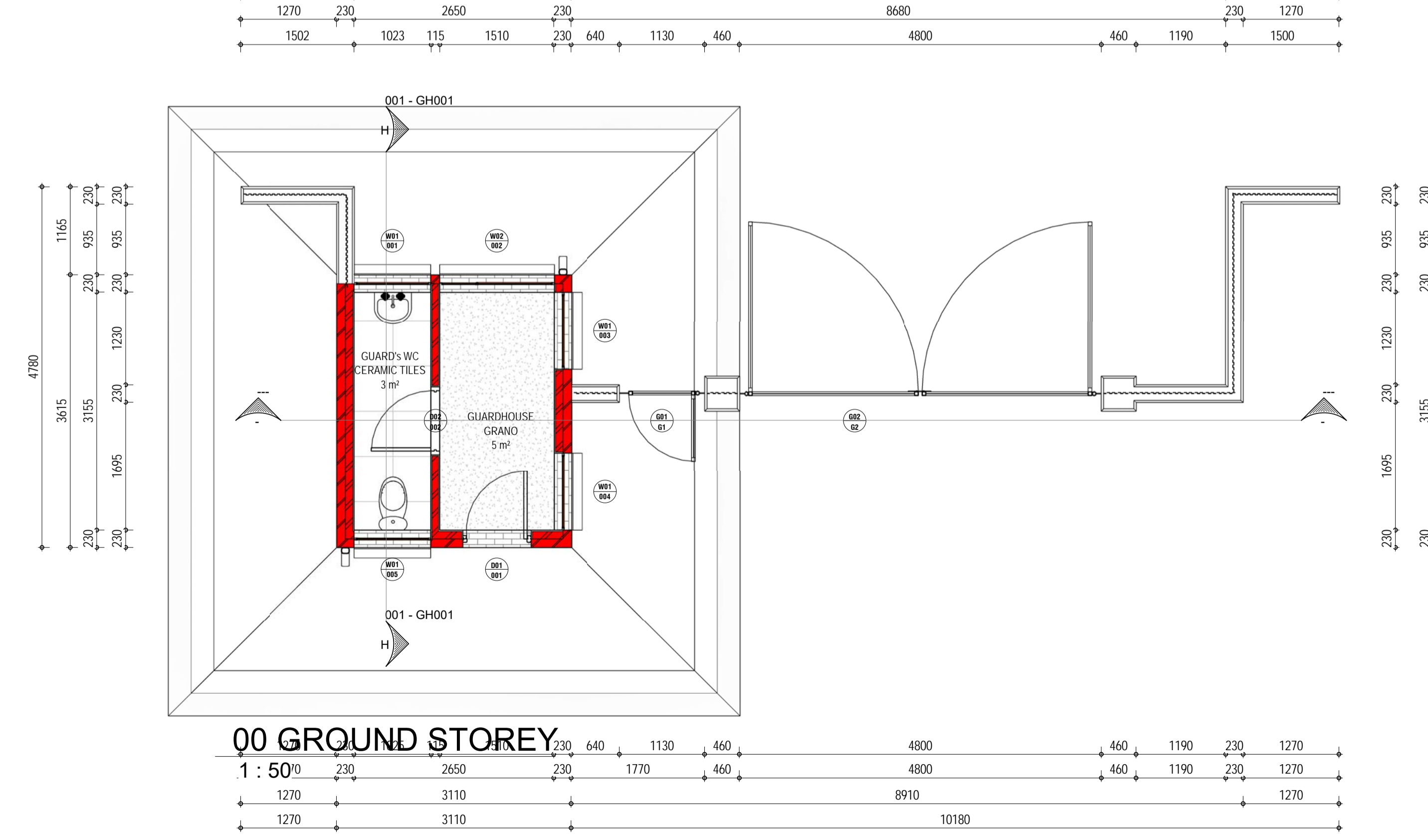
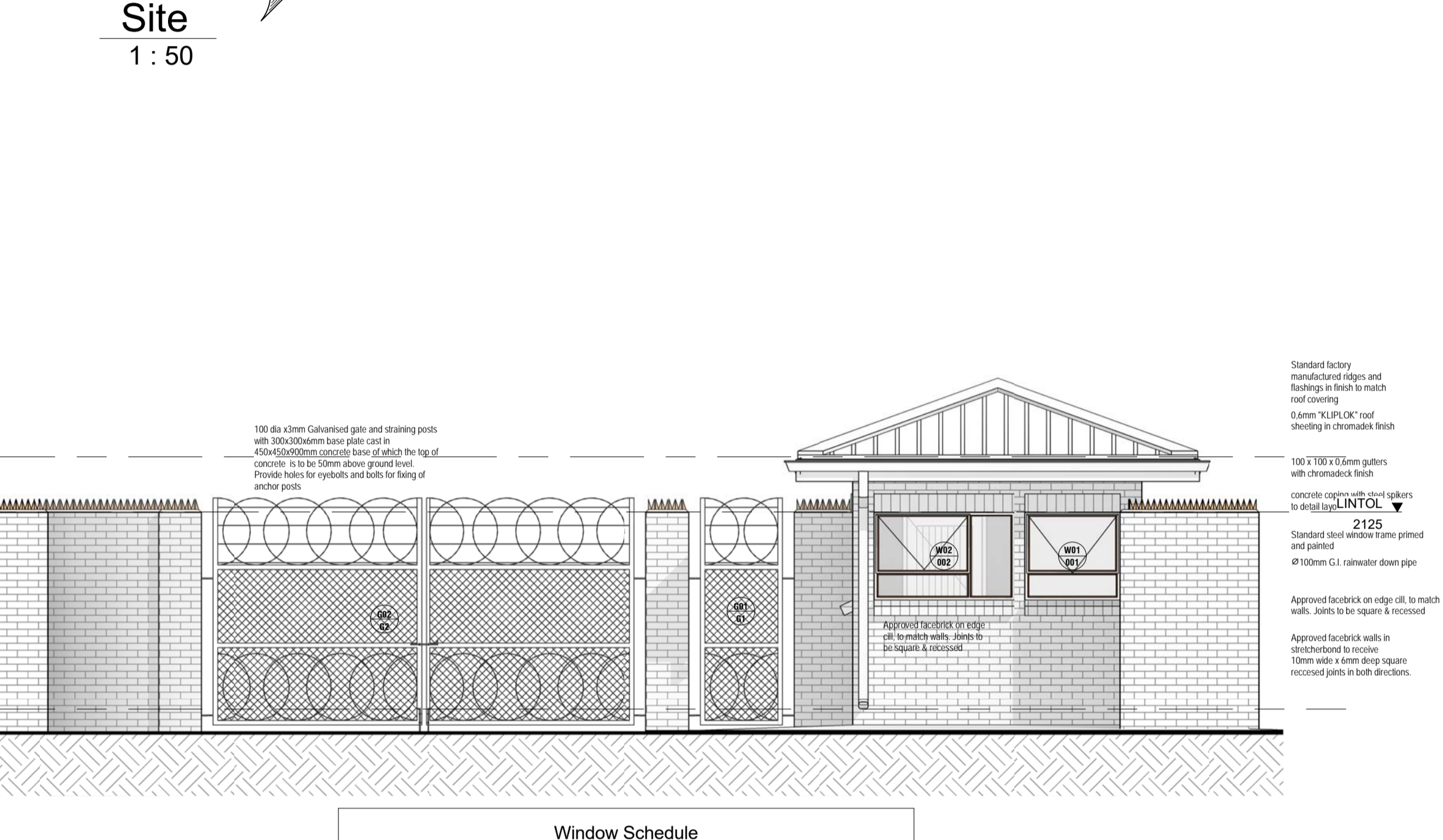
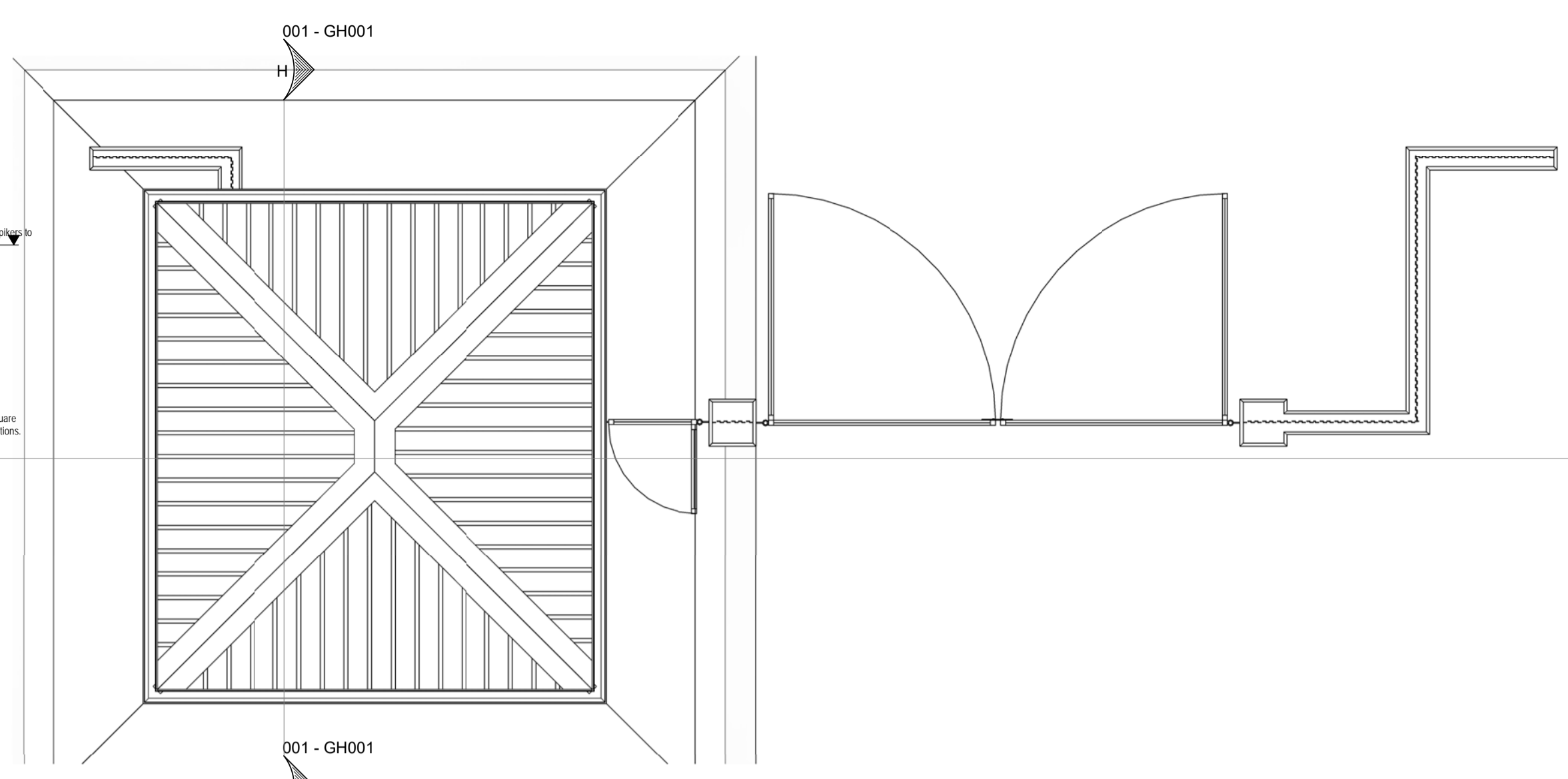
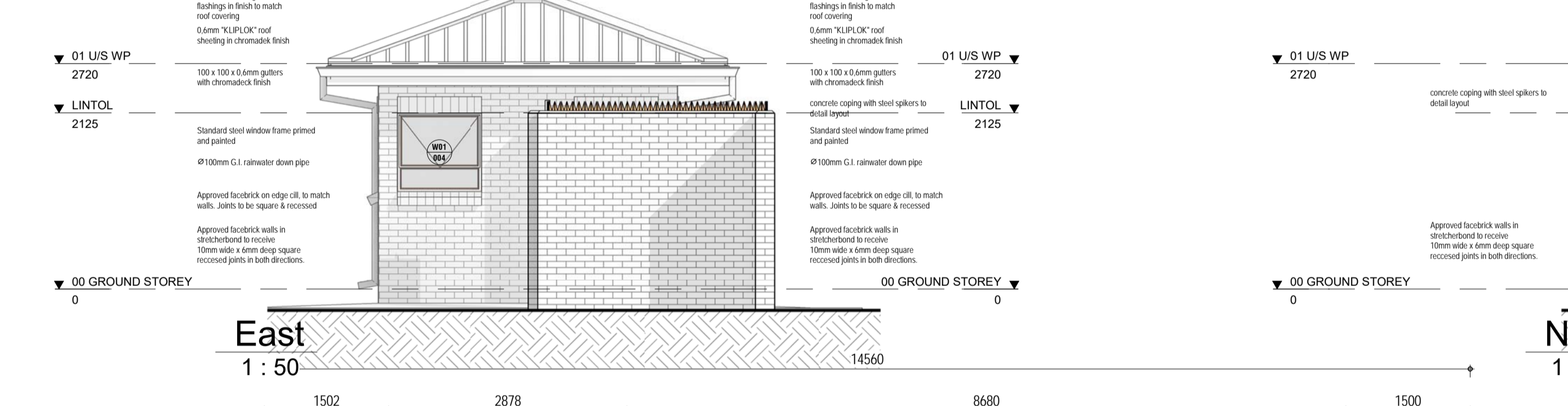
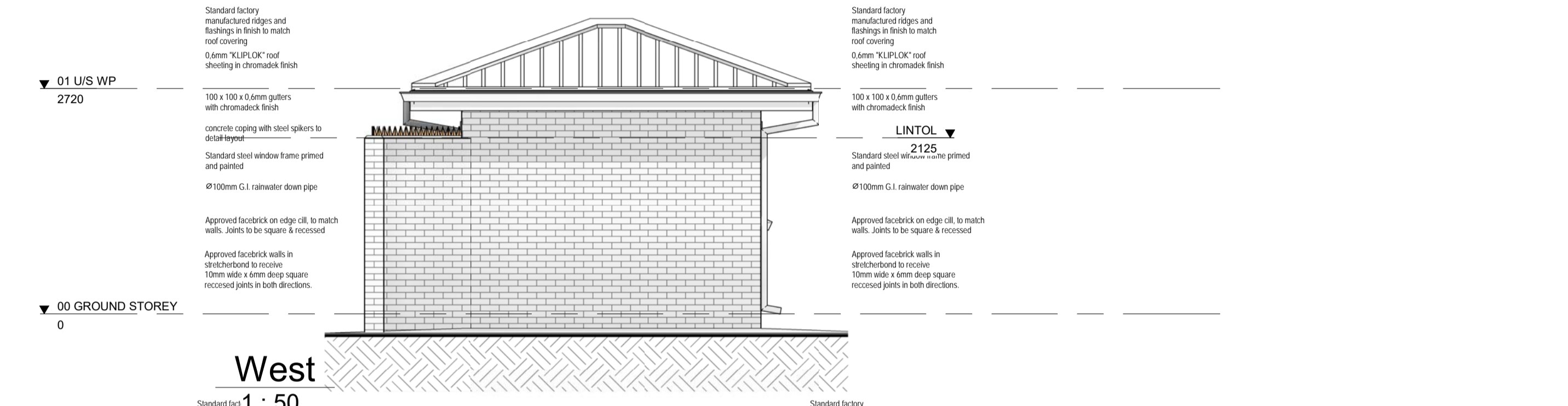
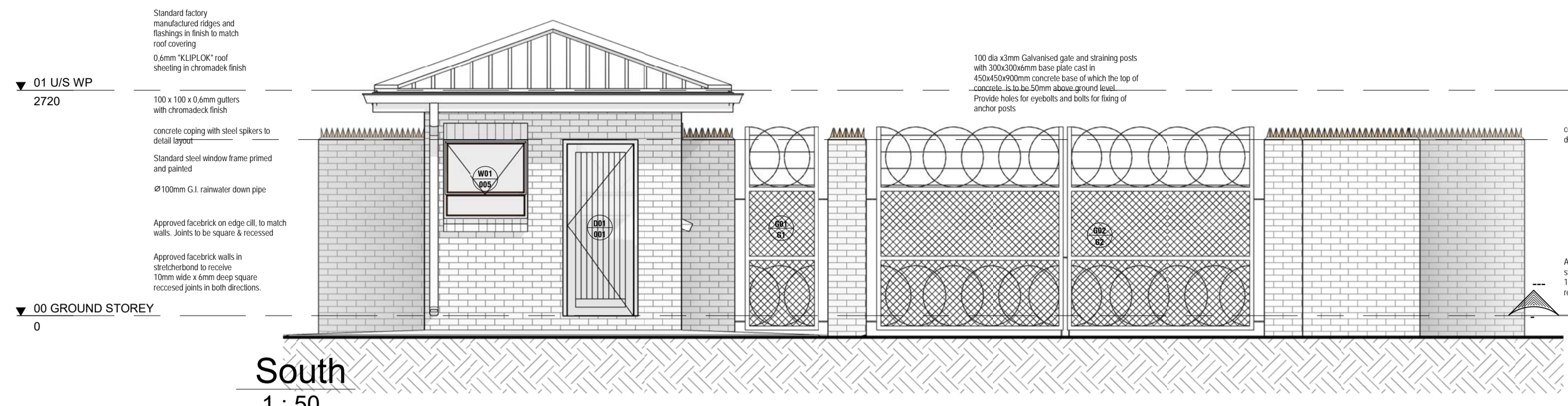
**JOHANNESBURG**  
Unit C2-001, Enderburg Terrace  
348 Rivonia Blvd | Rivonia 2128  
Tel: +27 11 234 5141 | Cell: +27 82 900 8288  
info@idcarchitects.co.za

REGISTRATION NUMBER:	PrArch 4849
ARCHITECT NAME:	B Ilori
CLIENT:	LIMPOPO PUBLIC WORKS
PROJECT NAME:	DIPHUTI PRIMARY SCHOOL
PROJECT NUMBER:	GRADE R CLASSROOM
SCALE:	AS INDICATED
DATE:	06-08-2021
PROJECT No.:	
SHEET NUMBER:	
Project Number:	GR002
OCCUPANCY:	A3
PHASE:	1
DISCIPLINE:	ARCH
REVISION:	0
DRAWING STATUS:	
TENDER:	COUNCIL
CONSTRUCTION:	
DRAWN BY:	JP
CHECKED:	BI









Type Mark	Mark	Width	Height	Level	From Room: Name
W01	001	1022	949	00 GROUND STOREY	GUARD'S WC
W01	003	1022	949	00 GROUND STOREY	GUARDHOUSE
W01	004	1022	949	00 GROUND STOREY	GUARDHOUSE
W01	005	1022	949	00 GROUND STOREY	GUARD'S WC
W02	002	1511	949	00 GROUND STOREY	GUARDHOUSE

Grand total: 5

Type Mark	Mark	Width	Height	Level	From Room: Name	To Room: Name
D01	001	900	2125	00 GROUND STOREY	GUARDHOUSE	GUARD'S WC
D02	002	900	2125	00 GROUND STOREY	GUARDHOUSE	GUARD'S WC
G01	G1	1130	2450	00 GROUND STOREY		
G02	G2	4800	2450	00 GROUND STOREY		

Grand total: 4

**GENERAL NOTES**  
 All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.  
 The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.  
**DIMENSIONS**  
 To comply with SANS 10400-C  
 Figured dimensions to be taken in preference to scaling  
 Overall dimensions (external) to take precedence  
 All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works  
**FOUNDATIONS**  
 To comply with SANS 10400-B  
 Detailed requirements of SANS 10400-H  
 All concrete foundations to be a minimum of 600mm x 250mm.  
 Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.  
**FLOORS**  
 To comply with SANS 10400-J (kitchen, shower, bathroom or wet)  
 Suspended floors to comply with SANS 10400-B, SANS 10400-T, SANS 10082  
 Detailed requirements to comply with SANS 10400-J  
 Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J  
 Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.  
 Fire walls to be taken up to underside of roof covering  
 provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to house.  
 All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.  
**WALLS**  
 Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K  
 Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K  
**ROOFS**  
 Roof covering and waterproofing to comply with SANS 10400-L  
 Flat roofs or related gutter to comply with SANS 10400-L or rational design/ rational assessment or both  
 Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L  
 where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L  
 Outlets and downpipes to comply with SANS 10400-R  
 Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.  
**STAIRWAYS**  
 To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.  
 Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.  
**FIRE INSTALLATION**  
 The fire installations to comply with national fire regulations  
 the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.  
**FIRE PROTECTION**  
 The fire protection measure to be in accordance with the detailed requirements of SANS 10400-T  
 the fire protection measure to be subject of a rational design or rational assessment.  
**ENERGY EFFICIENCY**  
 The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XX or be subject of a rational design or rational assessment.  
**PEOPLE WITH DISABILITIES**  
 The fire installations to comply with national fire regulations  
**PUBLIC SAFETY**  
 The provision for spaces heating to comply with SANS 10400-D  
**SPACE HEATING**  
 The provision for spaces heating to comply with national regulations  
**STORM WATER DISPOSAL**  
 The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-XX or be subject of a rational design or rational assessment.  
**LIGHTING AND VENTILATION**  
 In a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-R and be subject of a rational design.  
 The ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-C and be subject of a rational design.  
 All habitable rooms to have a minimum of 10% natural lighting.  
**GLAZING**  
 The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
 the selection of the glazing to comply with national regulations

**SIGNATURES:**

PROFESSIONAL:	PR, NR	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	20-10-2019	JP	ISSUED TO CLIENT FOR APPROVAL



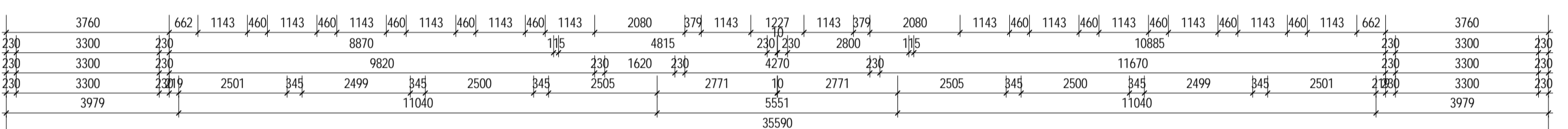
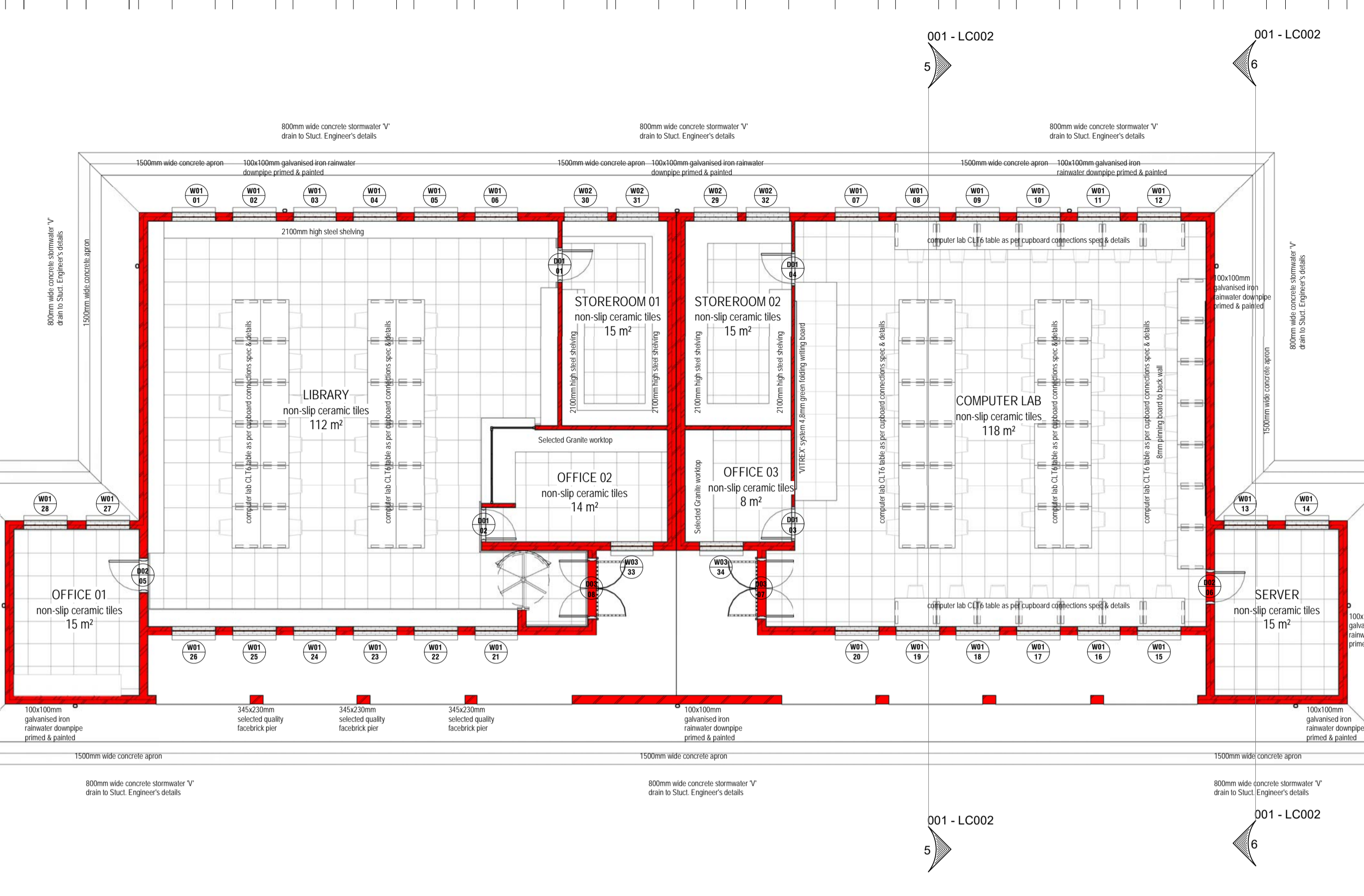
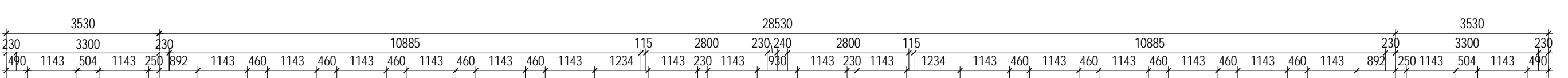
**IDC ARCHITECTS**  
 EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG  
 JOHANNESBURG  
 Unit C2-001, Edenburg Terrace  
 346 Rivonia Blvd | Rivonia 2128  
 Tel: +27 11 234 5141 | Cell: +27 82 900 8288  
 info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
 ARCHITECT NAME: B Ilori  
 CLIENT: LIMPOPO PUBLIC WORKS  
 CLIENT SIGNATURE:  
 PROJECT DESCRIPTION: DIPHUTI PRIMARY SCHOOL  
 DRAWING DESCRIPTION: PLANS, SECTIONS & ELEVATIONS  
 SCALE / SHEET SIZE: SCALE: 1 : 50 @ A1 DATE: 20-10-2019  
 PROJECT No.: 063 - 17 - 001 SHEET NUMBER: 001 - GH001  
 OCCUPANCY: A3 PHASE: 1 DISCIPLINE: ARCH REVISION: 0  
 DRAWING STATUS: TENDER COUNCIL CONSTRUCTION  
 DRAWN BY: J.P. CHECKED: C.D.

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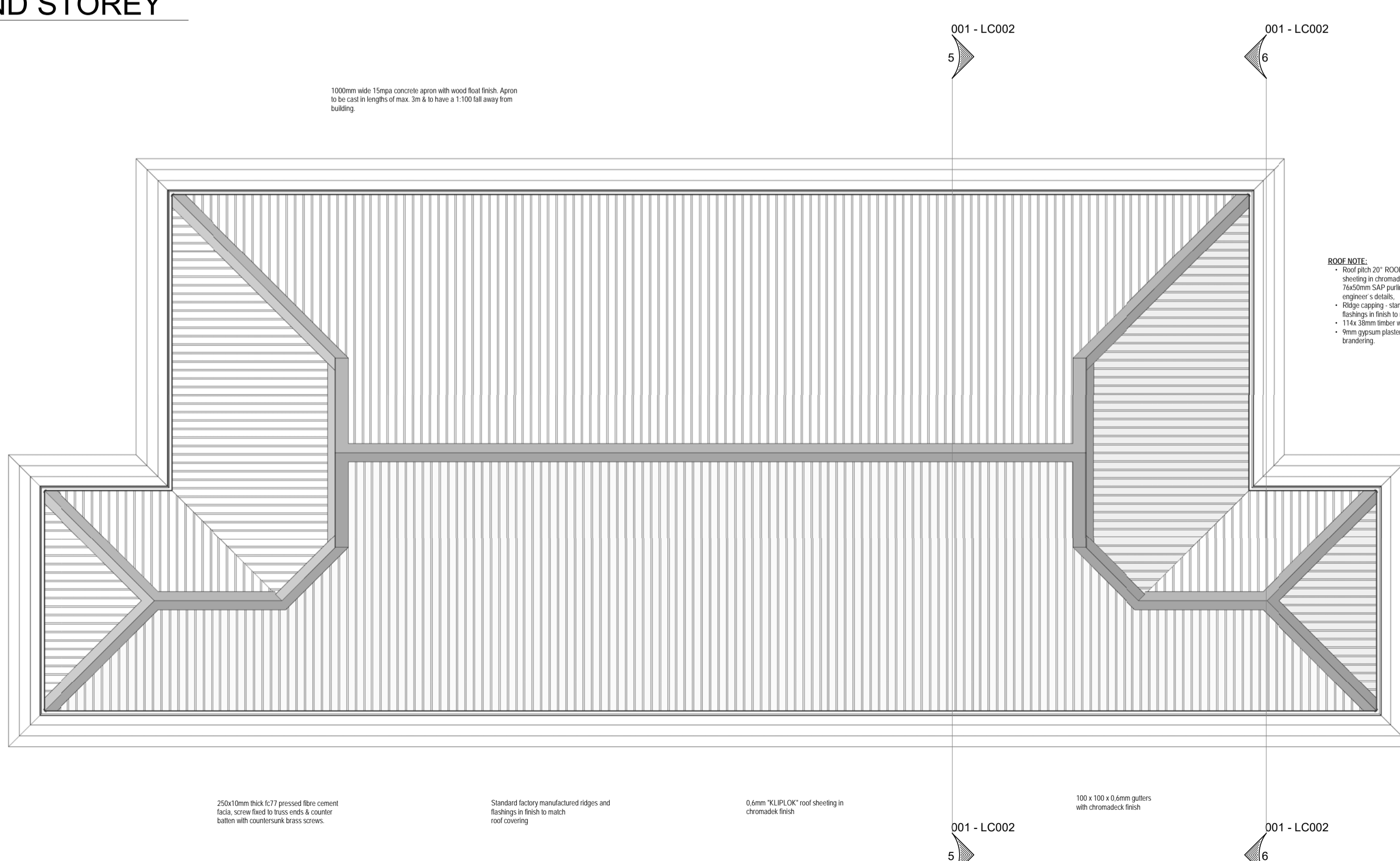


Window Schedule

Type Mark	Mark	Width	Height	Level	From Room:	Name
W01	01	1143	1311	00 GROUND STOREY		
W01	02	1143	1311	00 GROUND STOREY		
W01	03	1143	1311	00 GROUND STOREY		
W01	04	1143	1311	00 GROUND STOREY		
W01	05	1143	1311	00 GROUND STOREY		
W01	06	1143	1311	00 GROUND STOREY		
W01	07	1143	1311	00 GROUND STOREY	COMPUTER LAB	
W01	08	1143	1311	00 GROUND STOREY	COMPUTER LAB	
W01	09	1143	1311	00 GROUND STOREY	COMPUTER LAB	
W01	10	1143	1311	00 GROUND STOREY	COMPUTER LAB	
W01	11	1143	1311	00 GROUND STOREY	COMPUTER LAB	
W01	12	1143	1311	00 GROUND STOREY	COMPUTER LAB	
W01	13	1143	1311	00 GROUND STOREY		
W01	14	1143	1311	00 GROUND STOREY	SERVER	
W01	15	1143	1311	00 GROUND STOREY		
W01	16	1143	1311	00 GROUND STOREY		
W01	17	1143	1311	00 GROUND STOREY		
W01	18	1143	1311	00 GROUND STOREY		
W01	19	1143	1311	00 GROUND STOREY		
W01	20	1143	1311	00 GROUND STOREY		
W01	21	1143	1311	00 GROUND STOREY	LIBRARY	
W01	22	1143	1311	00 GROUND STOREY	LIBRARY	
W01	23	1143	1311	00 GROUND STOREY	LIBRARY	
W01	24	1143	1311	00 GROUND STOREY	LIBRARY	
W01	25	1143	1311	00 GROUND STOREY	LIBRARY	
W01	26	1143	1311	00 GROUND STOREY	LIBRARY	
W01	27	1143	1311	00 GROUND STOREY	OFFICE 01	
W01	28	1143	1311	00 GROUND STOREY		
W02	29	1143	854	00 GROUND STOREY		
W02	30	1143	854	00 GROUND STOREY	STOREROOM 01	
W02	31	1143	854	00 GROUND STOREY	STOREROOM 01	
W02	32	1143	854	00 GROUND STOREY		
W03	33	1143	1311	00 GROUND STOREY	OFFICE 02	
W03	34	1143	1311	00 GROUND STOREY		

Grand total: 34

00 GROUND STOREY  
1 : 100



Door Schedule

Type Mark	Mark	Width	Height	Level	From Room:	To Room:
D01	01	900	2125	00 GROUND STOREY	LIBRARY	STOREROOM 01
D01	02	900	2125	00 GROUND STOREY	OFFICE 02	LIBRARY
D01	03	900	2125	00 GROUND STOREY	OFFICE 03	COMPUTER LAB
D01	04	900	2125	00 GROUND STOREY	STOREROOM 02	COMPUTER LAB
D02	05	900	2125	00 GROUND STOREY	LIBRARY	OFFICE 01
D02	06	900	2125	00 GROUND STOREY	SERVER	COMPUTER LAB
D03	07	1600	2125	00 GROUND STOREY	COMPUTER LAB	
D03	08	1600	2125	00 GROUND STOREY	LIBRARY	
D04	09	1575	2125	00 GROUND STOREY	LIBRARY	
D04	10	1575	2125	00 GROUND STOREY		COMPUTER LAB

Grand total: 10

**GENERAL NOTES**  
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.  
The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

**DIMENSIONS**  
To comply with SANS 10400-C  
Figured dimensions to be taken in preference to scaling  
Overall dimensions (external) to take precedence  
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

**FOUNDATIONS**  
To comply with SANS 10400-B  
Detailed requirements of SANS 10400-H  
All concrete foundations to be a minimum of 600mm/250mm.  
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

**FLOORS**  
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wc)  
Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082  
finished requirements to comply with SANS 10400-J.  
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.  
finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.  
fire walls to be taken to up to underside of roof covering  
provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to house.  
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

**WALLS**  
Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-L  
Roof framing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K  
water penetration through walls detailed requirements to comply with SANS 10400-K

**ROOFS**  
Roof covering and waterproofing to comply with SANS 10400-L  
flat roofs or related gable to comply with SANS 10400-L or rational design/ rational assessment or both  
Roof assembly or ceiling assembly to comply with SANS 10400-C and detailed requirements of SANS 10400-L  
where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L  
Outlets and downpipes to comply with SANS 10400-R  
fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

**STAIRWAYS**  
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.  
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T; SANS 10400-K and SANS 10400-T.

**FIRE INSTALLATION**  
the fire installations to comply with national fire regulations  
the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.  
**FIRE PROTECTION**  
the fire protection measure to be in accordance with the detailed requirements of SANS 10400-L  
the fire protection measure to be subject of a rational design or rational assessment.  
**ENERGY EFFICIENCY**  
the design of the building envelope to be in accordance with the detailed requirements of SANS 10400-AA or be subject of a rational design or rational assessment.  
**PEOPLE WITH DISABILITIES**  
the fire installations to comply with national fire regulations  
the fire protection measure to be in accordance with the detailed requirements of SANS 10400-L  
the fire protection measure to be subject of a rational design or rational assessment.  
**PUBLIC SAFETY**  
level change ramps, driveways and pools to comply with SANS 10400-D  
**SPACE HEATING**  
the provision for space heating to comply with national regulations  
the means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-AA or be subject of a rational design or rational assessment.  
the means for the control and disposal in interconnected complex subject of a rational design or rational assessment.  
**LIGHTING AND VENTILATION**  
in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-H and in accordance to detailed requirements of SANS 10400-T and in accordance to detailed requirements of SANS 10400-C and in accordance to detailed requirements of SANS 10400-N  
All habitable rooms to have a minimum of 10% natural lighting.  
**GLAZING**  
the type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
the selection of the glazing to comply with national regulations

**SIGNATURES:**

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT:		
CIVIL ENGINEER:		
STRUCTURAL ENGINEER:		
MECHANICAL ENGINEER:		
ELECTRICAL ENGINEER:		
FIRE ENGINEER:		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	07-11-2019	JP	ISSUED FOR CLIENT APPROVAL



**ARCHITECT**  
**IDC ARCHITECTS**  
EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

**JOHANNESBURG**  
Unit C2-001, Edenburg Terrace  
348 Rivonia Blvd | Rivonia 2128  
Tel: +27 11 234 5141 | Cell: +27 82 900 8288  
info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

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

PROJECT DESCRIPTION:  
**DIPHUTI PRIMARY SCHOOL**  
**LIBRARY/COMPUTER LAB BLOCK**

DRAWING DESCRIPTION:  
**FLOOR PLANS**

SCALE / SHEET SIZE: 1 : 100 @ A1  
DATE: 07-11-2019

PROJECT No. 063 - 17 - 001  
SHEET NUMBER 001 - LC001

OCCUPANCY: A3 | PHASE: 1 | DISCIPLINE: ARCH | REVISION: 0

DRAWING STATUS: TENDER | COUNCIL | CONSTRUCTION

DRAWN BY: HK | CHECKED: CD

**ROOF NOTE:**  
• Roof pitch 20° ROOF SHEETING: 10mm "ECLIPLOCK" roof sheeting in chromadex finish (colour - antique terracotta) on 750mm SAP purlins at max. 1200mm centres on timber truss to engineer's details.  
• Ridge capping - standard factory manufactured ridges and flashings in fresh to match roof covering.  
• 114x 38mm timber wall plate.  
• 10mm gypsum plasterboard ceiling fixed to 38mm x 38mm timber bracing.



**GENERAL NOTES**  
 All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.  
 The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

**DIMENSIONS**  
 To comply with SANS 10400-C  
 Figured dimensions to be taken in preference to scaling  
 Overall dimensions (external) to take precedence  
 All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

**FOUNDATIONS**  
 To comply with SANS 10400-B  
 Detailed requirements of SANS 10400-H  
 All concrete foundations to be a minimum of 600mm x 250mm.  
 Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

**FLOORS**  
 To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wc)  
 Suspended floors to comply with SANS 10400-B, SANS 10400-T, SANS 10082  
 Detailed requirements to comply with SANS 10400-J  
 Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J  
 Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.

**ROOFS**  
 Fire walls to be taken to up to underside of roof covering, provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to house.  
 All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

**WALLS**  
 Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K  
 Roof framing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K  
 Roof covering and waterproofing to comply with SANS 10400-L  
 Flat roofs or related gables to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L  
 Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L  
 Where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-T  
 Outlets and downpipes to comply with SANS 10400-R  
 Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

**STAIRWAYS**  
 To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.  
 Walls, screens, railing or balustrades to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

**FIRE INSTALLATION**  
 The fire installations to comply with national fire regulations  
 The supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

**FIRE PROTECTION**  
 The fire protection measure to be in accordance with the detailed requirements of SANS 10400-T  
 The fire protection measure to be subject of a rational design or rational assessment.

**ENERGY EFFICIENCY**  
 The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-BA or be subject of a rational design or rational assessment.

**PEOPLE WITH DISABILITIES**  
 The fire installations to comply with national fire regulations

**PUBLIC SAFETY**  
 Level change, ramps, driveways and pools to comply with SANS 10400-D

**SPACE HEATING**  
 The provision for space heating to comply with national regulations

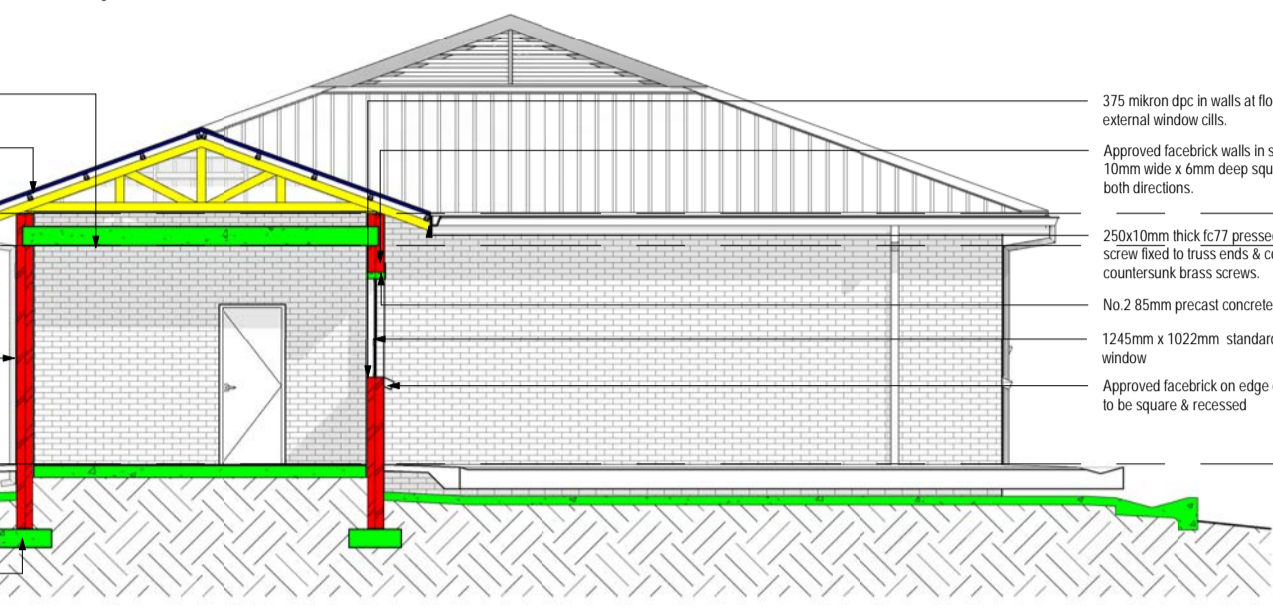
**STORM WATER DISPOSAL**  
 The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-CA or be subject of a rational design or rational assessment.

**LIGHTING AND VENTILATION**  
 In a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-DA and in accordance to detailed requirements of SANS 10400-D and in accordance to detailed requirements of SANS 10400-D and is subject of a rational design.  
 All habitable rooms to have a minimum of 10% natural lighting.

**GLAZING**  
 The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
 The selection of the glazing to comply with national regulations

**ROOF NOTE**

- Roof pitch 20° ROOF SHEETING: 0.6mm 'XLPLCOK' roof sheeting in chromadick finish (colour - antique terracotta) on 750x125mm S40 purlins at max. 1200mm centres on timber truss to engineer's detail.
- Edge-capping: standard factory manufactured ridges and flashings in finish to match roof covering.
- 114x 38mm timber wall plate.
- 9mm gypsum plasterboard ceiling fixed to 38mm x 38mm timber bracing.



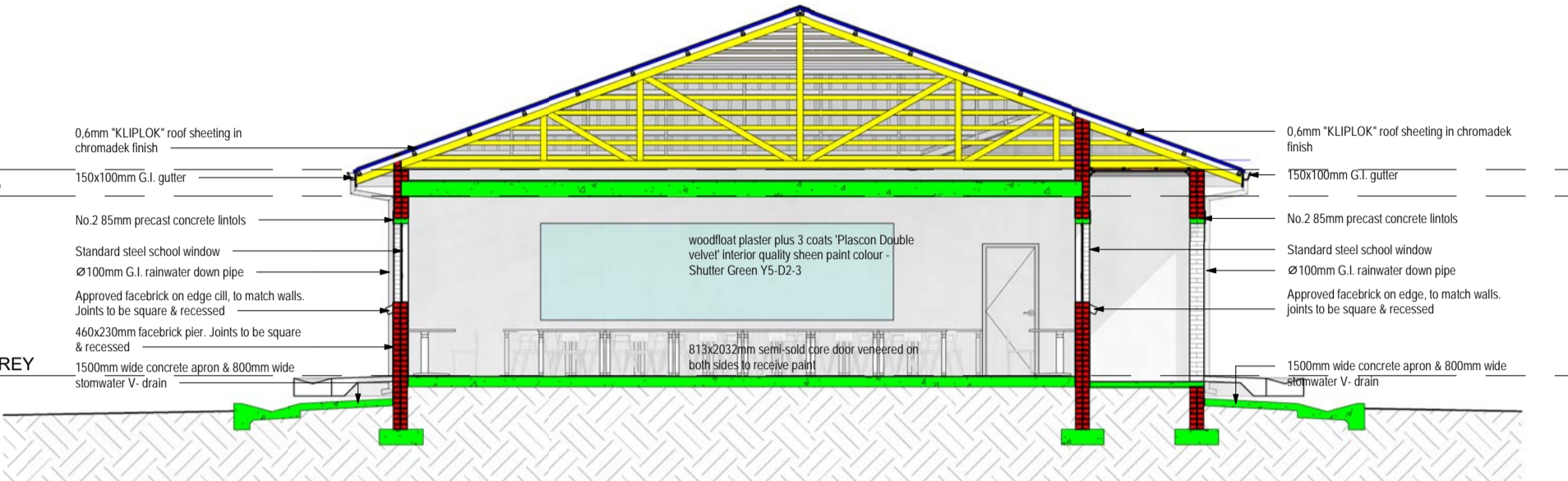
**FLOOR NOTE**

- min. 40mm screed on
- new 100mm reinforced concrete surface bed to eng's detail on
- 250 micron polythene damp proof membrane on
- 75mm sand bedding layer on
- compacted fill in 150mm layer to eng's spec.
- 108 provide vertical DPC & DPC under all walls at 150mm min above NGL

**Section A-A**  
1 : 100

**ROOF NOTE**

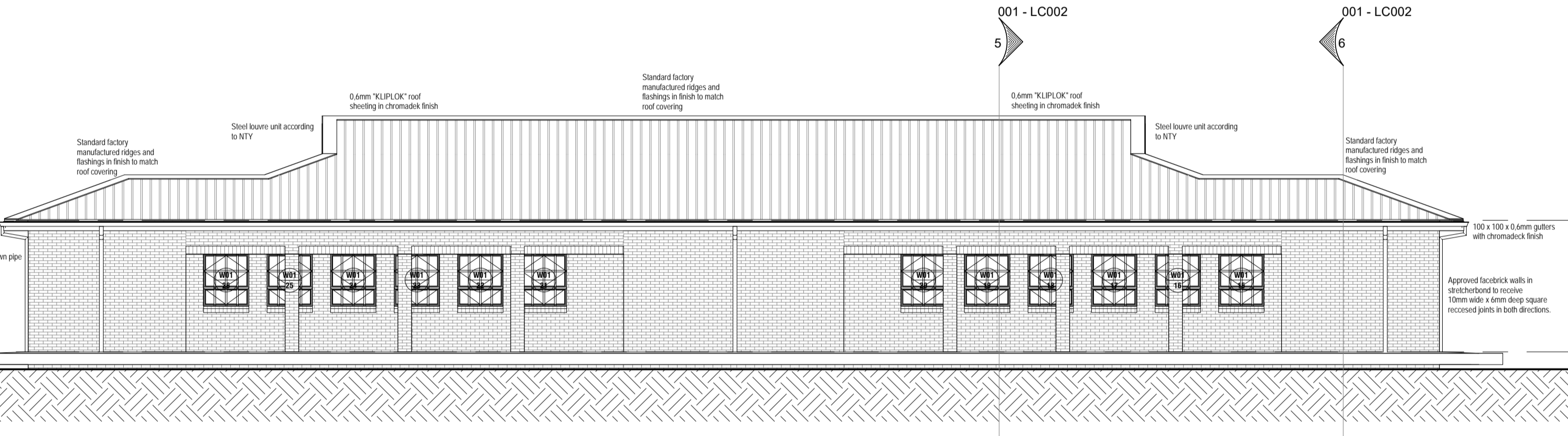
- Roof pitch 20° ROOF SHEETING: 0.6mm 'XLPLCOK' roof sheeting in chromadick finish (colour - antique terracotta) on 750x125mm S40 purlins at max. 1200mm centres on timber truss to engineer's detail.
- Edge-capping: standard factory manufactured ridges and flashings in finish to match roof covering.
- 114x 38mm timber wall plate.
- 9mm gypsum plasterboard ceiling fixed to 38mm x 38mm timber bracing.



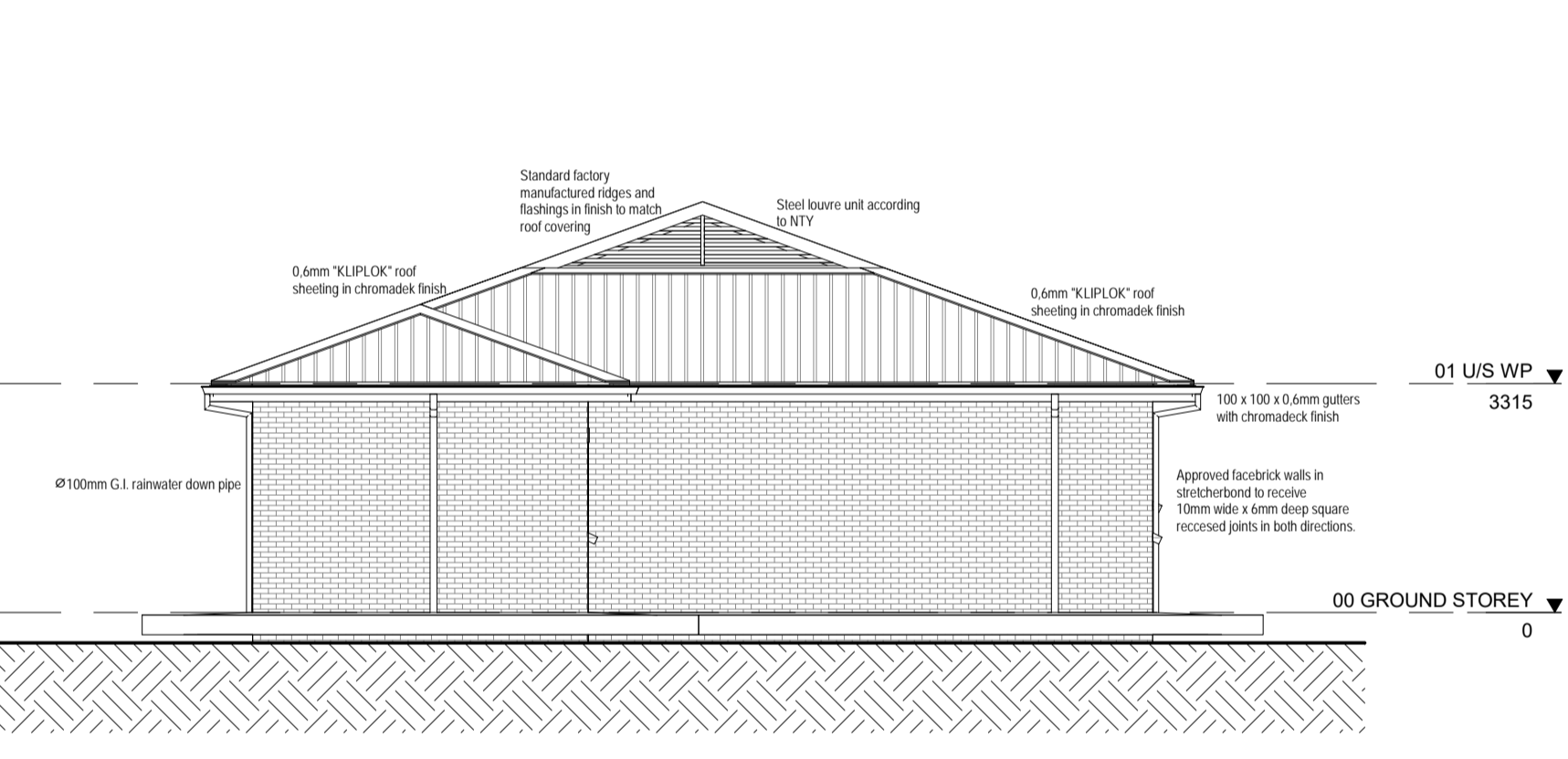
**FLOOR NOTE**

- min. 40mm screed on
- new 100mm reinforced concrete surface bed to eng's detail on
- 250 micron polythene damp proof membrane on
- 75mm sand bedding layer on
- compacted fill in 150mm layer to eng's spec.
- 108 provide vertical DPC & DPC under all walls at 150mm min above NGL

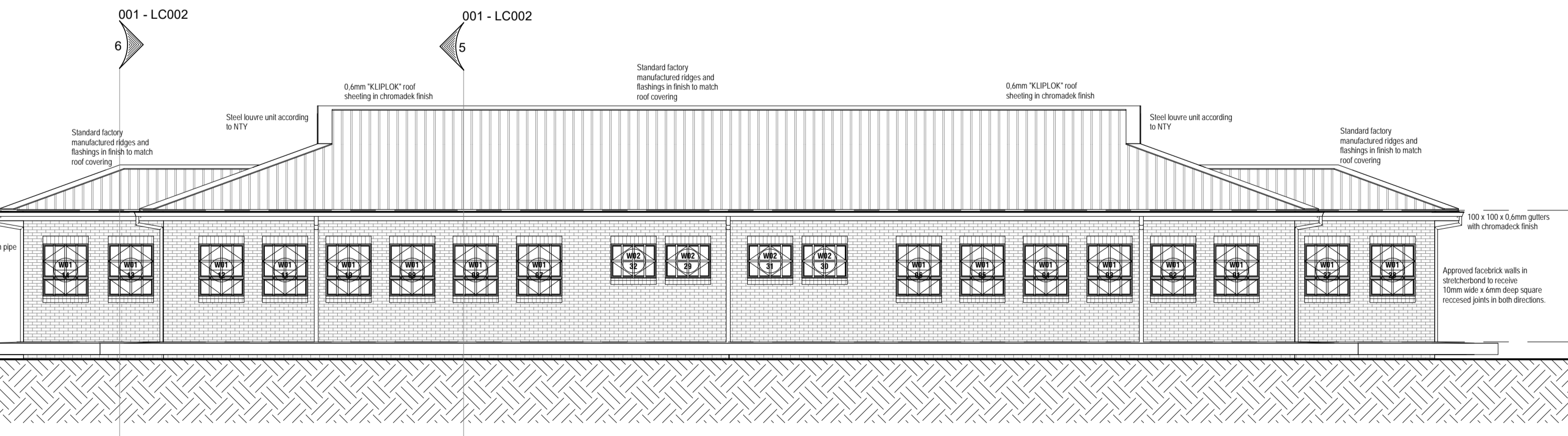
**Section B-B**  
1 : 100



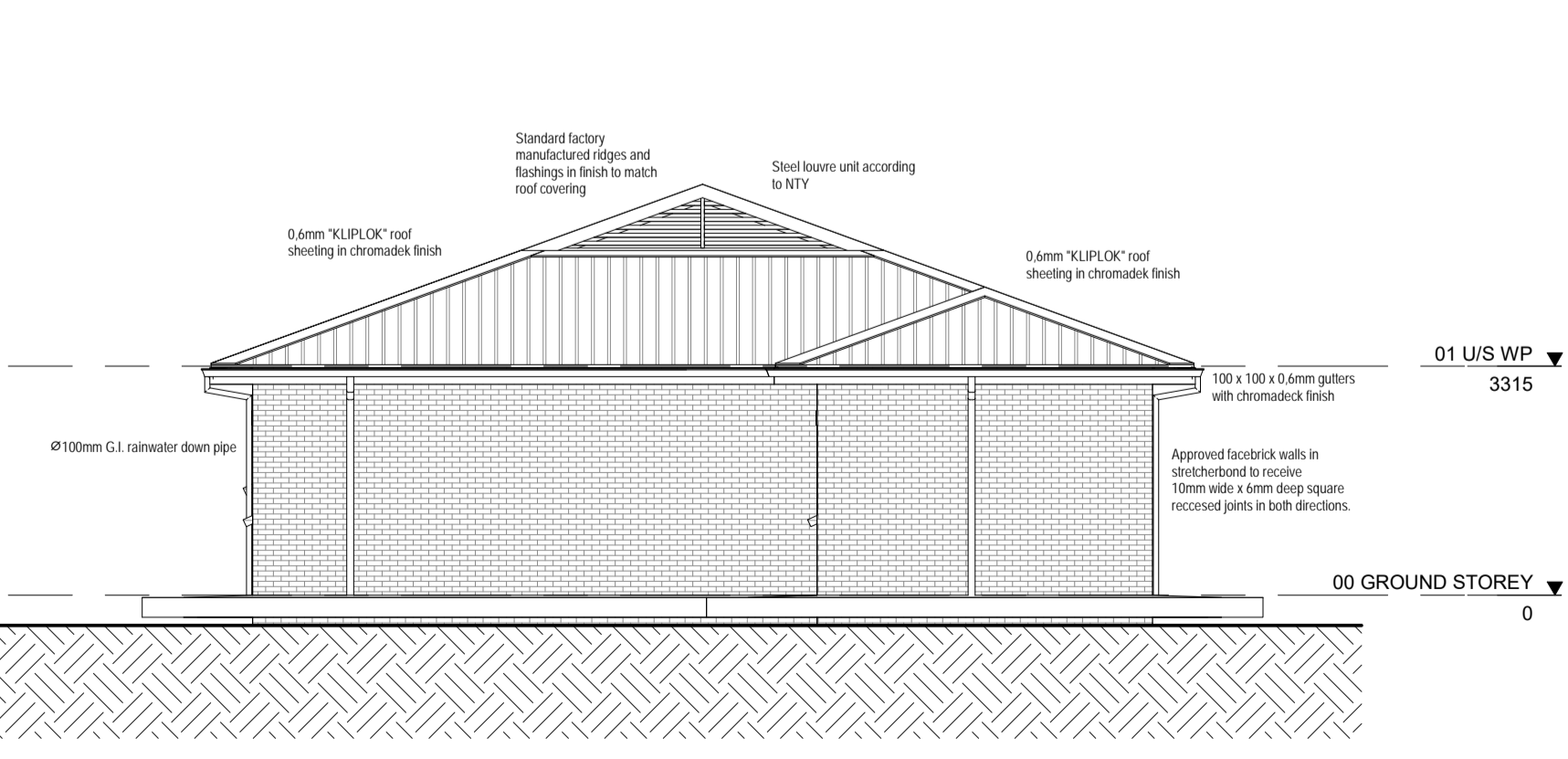
**South**  
1 : 100



**East**  
1 : 100



**North**  
1 : 100



**West**  
1 : 100

**SIGNATURES:**

PROFESSIONAL:	PR, NR	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	07-11-2019	JP	ISSUED FOR CLIENT APPROVAL



**IDC ARCHITECTS**  
 EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

**JOHANNESBURG**  
 Unit C2-001, Edenburg Terrace  
 348 Rivonia Blvd | Rivonia 2128  
 Tel: +27 11 234 6141, Cell: +27 82 900 8288  
 info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
 ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION:  
**DIPHUTI PRIMARY SCHOOL**

**LIBRARY/COMPUTER LAB BLOCK**

DRAWING DESCRIPTION:  
**SECTIONS & ELEVATIONS**

SCALE / SHEET SIZE	DATE		
SCALE: 1 : 100 @ A1	07-11-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 001	001 - LC002		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
DRAWING STATUS			
<input checked="" type="checkbox"/> INFO	<input type="checkbox"/> TENDER	<input type="checkbox"/> COUNCIL	<input type="checkbox"/> CONSTRUCTION
DRAWN BY: HK		CHECKED: CD	

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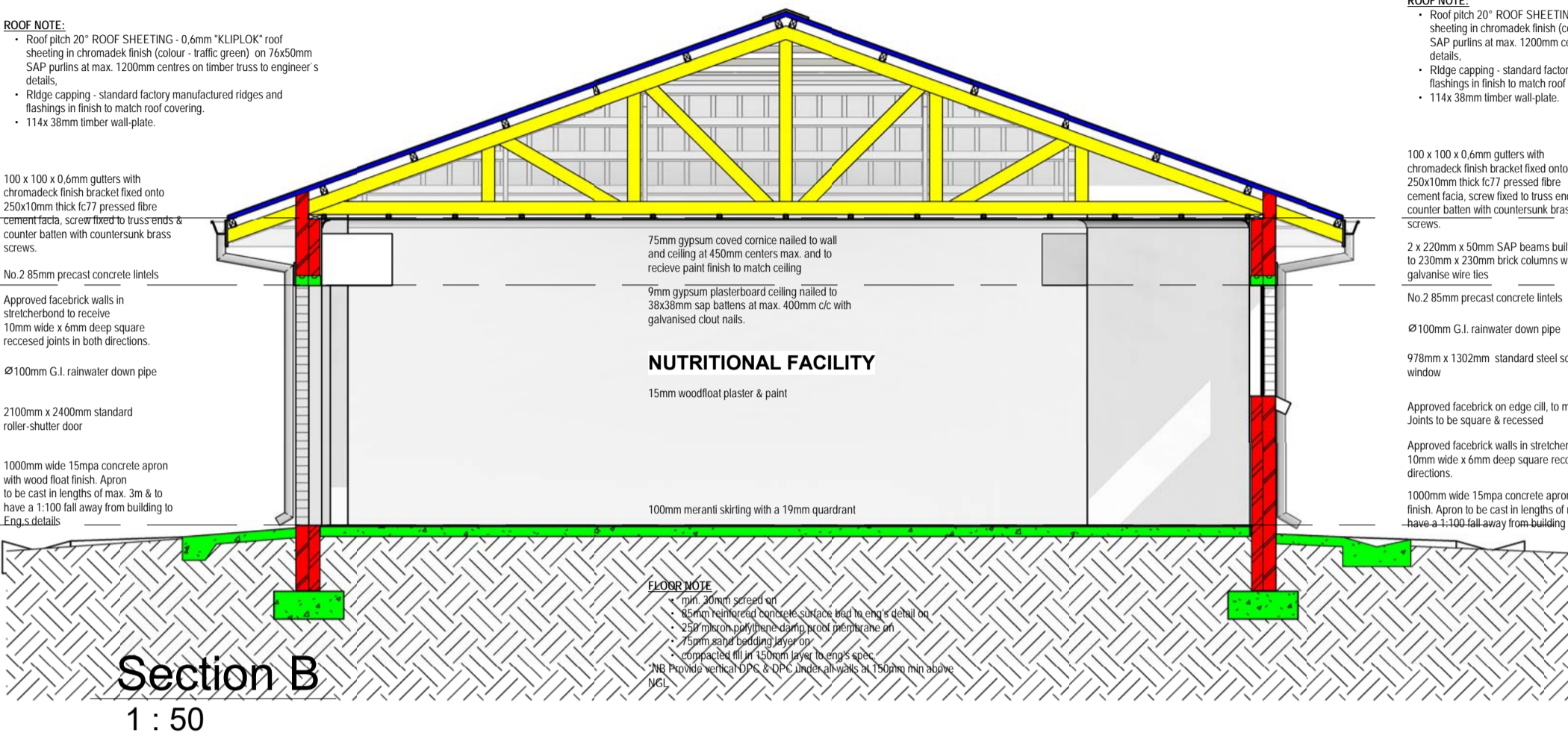
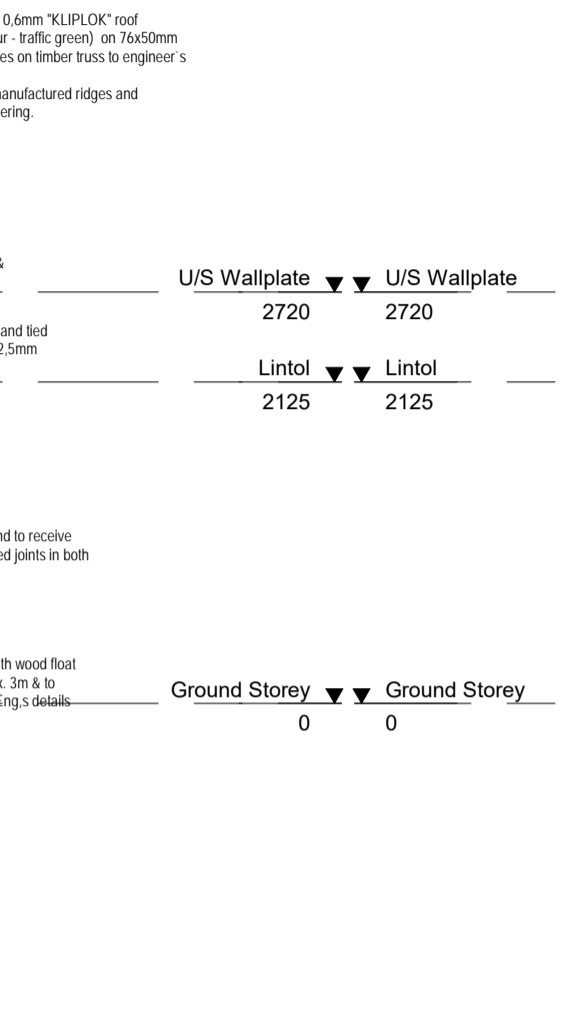
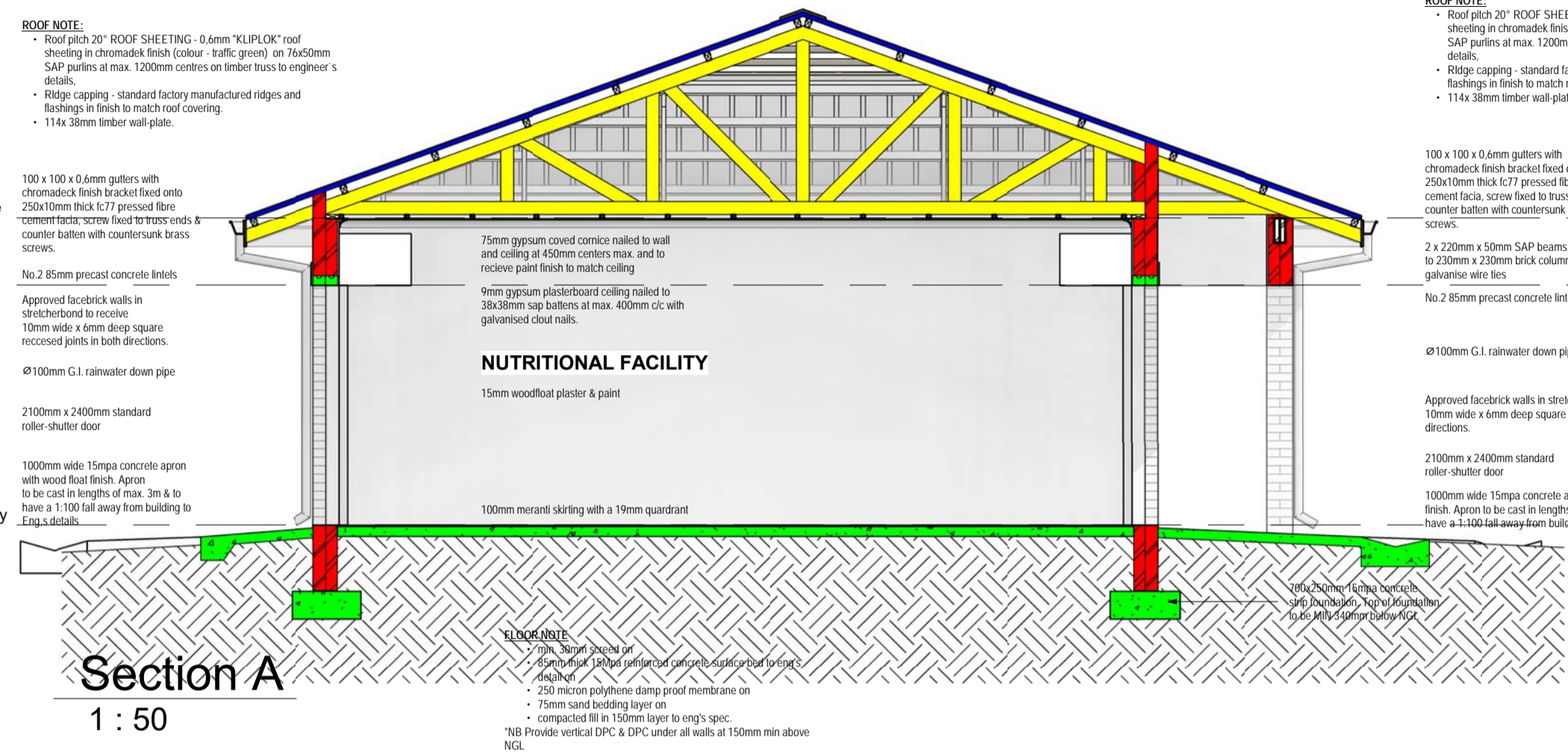






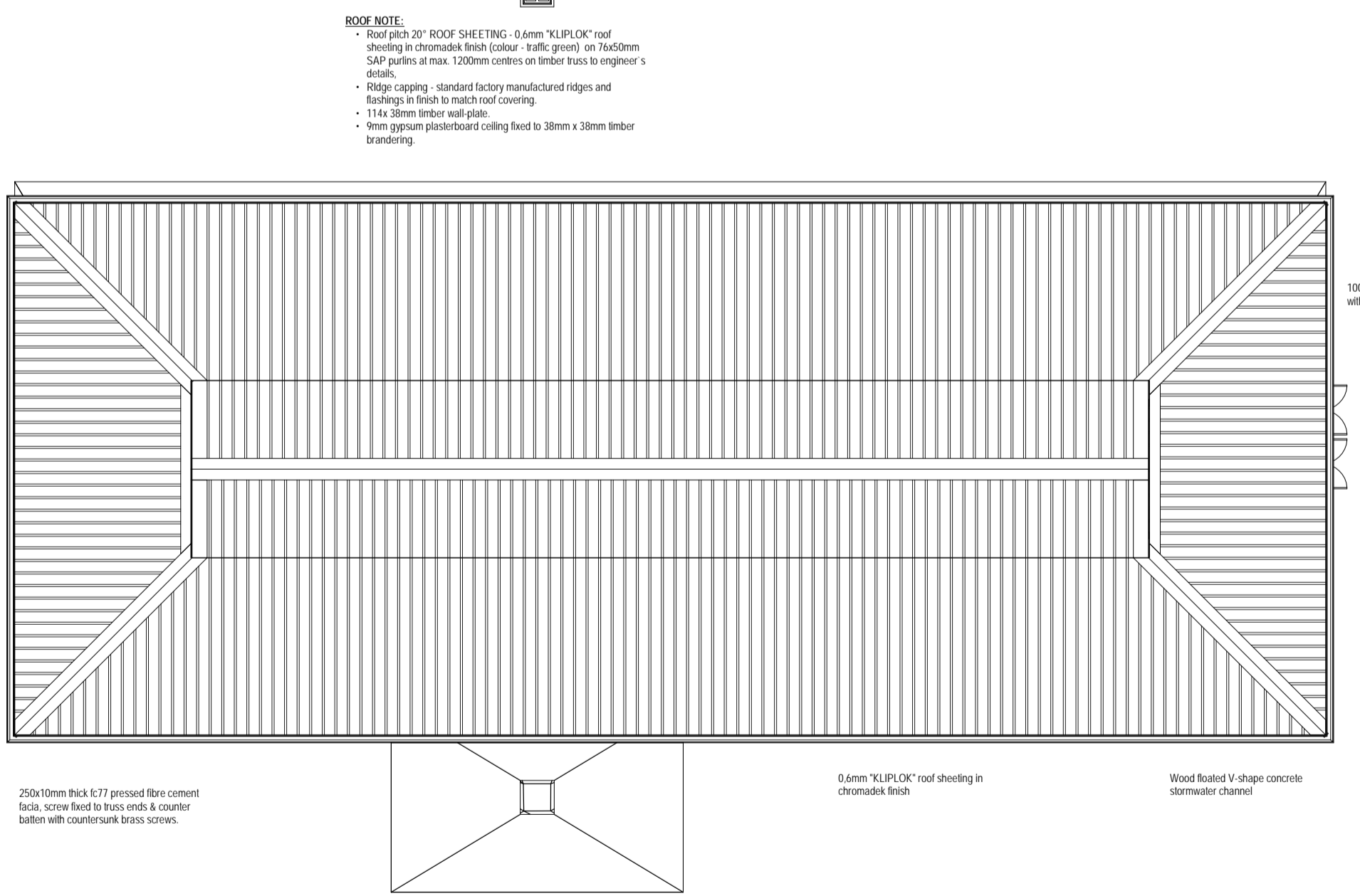
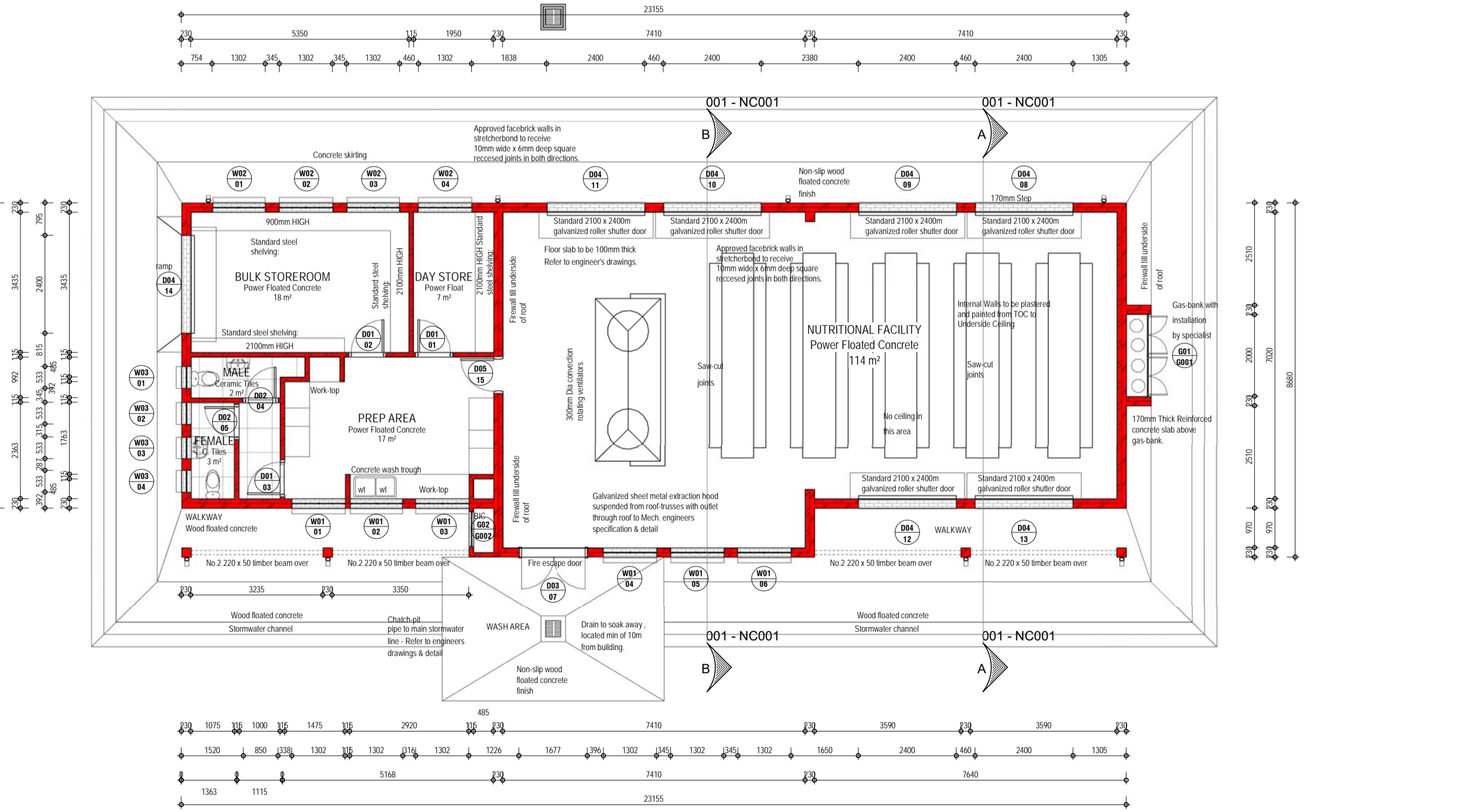






Window Schedule					
Type	Mark	Width	Height	Level	From Room: Name
W01	1302	978	978	Ground Storey	NUTRITIONAL FACILITY
W01	1302	978	978	Ground Storey	NUTRITIONAL FACILITY
W01	1302	978	978	Ground Storey	NUTRITIONAL FACILITY
W01	1302	978	978	Ground Storey	PREP AREA
W01	1302	978	978	Ground Storey	PREP AREA
W01	1302	978	978	Ground Storey	PREP AREA
W02	1302	978	978	Ground Storey	BULK STOREROOM
W02	1302	978	978	Ground Storey	BULK STOREROOM
W02	1302	978	978	Ground Storey	BULK STOREROOM
W02	1302	978	978	Ground Storey	DAY STORE
W03	533	654	654	Ground Storey	MALE
W03	533	654	654	Ground Storey	FEMALE
W03	533	654	654	Ground Storey	FEMALE
W03	533	654	654	Ground Storey	FEMALE

Grand total: 14



**GENERAL NOTES**  
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

**DIMENSIONS**  
To comply with SANS 10400-C  
Figured dimensions to be taken in preference to scaling  
Overall dimensions (external) to take precedence  
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

**FOUNDATIONS**  
To comply with SANS 10400-B  
Detailed requirements of SANS 10400-H  
All concrete foundations to be a minimum of 600mm/250mm.  
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

**FLOORS**  
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or etc)  
Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS 10082  
Detailed requirements to comply with SANS 10400-J  
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J  
Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.  
Fire walls to be taken up to underside of roof covering, provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to house.  
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

**WALLS**  
Structural strength and stability to comply with SANS 10400-B, SANS 10400-T and detailed requirements to comply with SANS 10400-K  
Roof framing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K  
Water penetration through walls detailed requirements to comply with SANS 10400-K

**ROOFS**  
Roof covering and waterproofing to comply with SANS 10400-L  
That roofs or related gutter to comply with SANS 10400-L or national design/ rational assessment or both  
Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L  
Where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L  
Outlets and downpipes to comply with SANS 10400-R  
Roof framing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-T

**STAIRWAYS**  
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-T  
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-T, SANS 10400-K and SANS 10400-T

**FIRE INSTALLATION**  
The fire installations to comply with national fire regulations  
The supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.  
**FIRE PROTECTION**  
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-T  
The fire protection measure to be subject of a rational design or national assessment.

**ENERGY EFFICIENCY**  
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XX or be subject of a rational design or national assessment.

**PEOPLE WITH DISABILITIES**  
The installations to comply with national fire regulations

**PUBLIC SAFETY**  
Level change, ramps, driveways and pools to comply with SANS 10400-D

**SPACE HEATING**  
The provision for space heating to comply with national regulations

**STORM WATER DISPOSAL**  
The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-XX or be subject of a rational design or national assessment.  
The means for the control and disposal in interconnected complexes subject of a rational design or national assessment.

**LIGHTING AND VENTILATION**  
In a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-R or be subject of a rational design.  
The ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-C and is subject of a rational design.  
All habitable rooms to have a minimum of 10% natural lighting.

**GLAZING**  
The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
The selection of the glazing to comply with national regulations

**SIGNATURES:**

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	20-10-2019	JP	ISSUED TO CLIENT FOR APPROVAL



**ARCHITECT**  
**IDC ARCHITECTS**  
EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG  
JOHANNESBURG  
Unit C2-001, Edenburg Terrace  
348 Rivonia Blvd | Rivonia 2128  
Tel: +27 11 234 5141 | Cell: +27 82 900 8288  
info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
ARCHITECT NAME: B Ilori  
CLIENT: LIMPOPO PUBLIC WORKS

CLIENT SIGNATURE:  
**DIPHUTI PRIMARY SCHOOL**

PROJECT DESCRIPTION:  
**NUTRITION CENTRE**

**DRAWING DESCRIPTION**

SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	20-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 001	001 - NC001		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
DRAWING STATUS			
<input checked="" type="checkbox"/> INFO	<input type="checkbox"/> TENDER	<input type="checkbox"/> COUNCIL	<input type="checkbox"/> CONSTRUCTION
DRAWN BY:		CHECKED:	
LWN		CD	

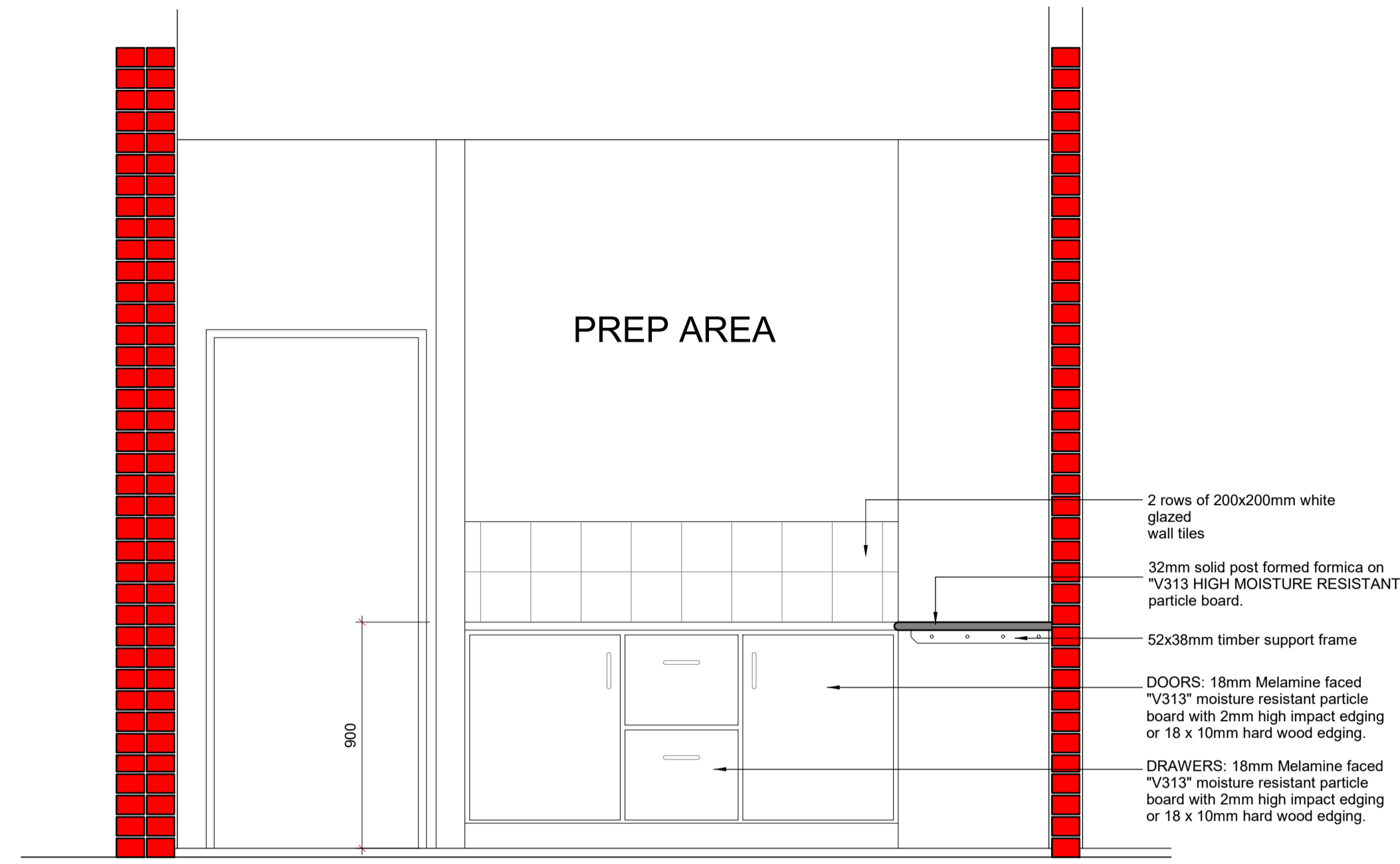
Ground Storey  
1 : 100

Site  
1 : 100

E:\00 - IDC Architects 063 - 17 - LIMPOPO PUBLIC WORKS SCHOOLS\00 - Work from home\063 - 17 - 001 - Diphuti Primary School\001\001 - Nutrition Centre - RW1 - 20-02-2020.rvt

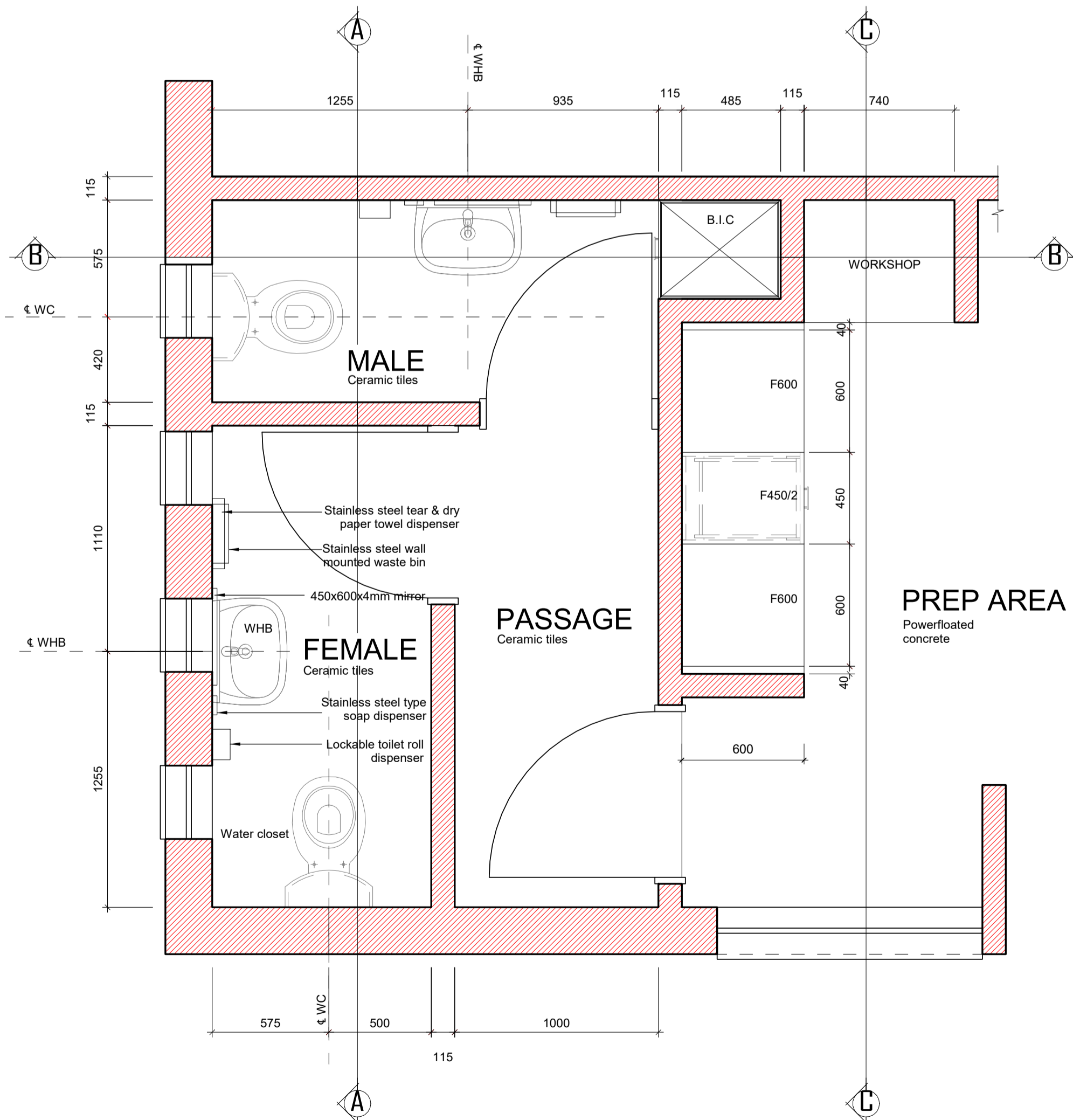
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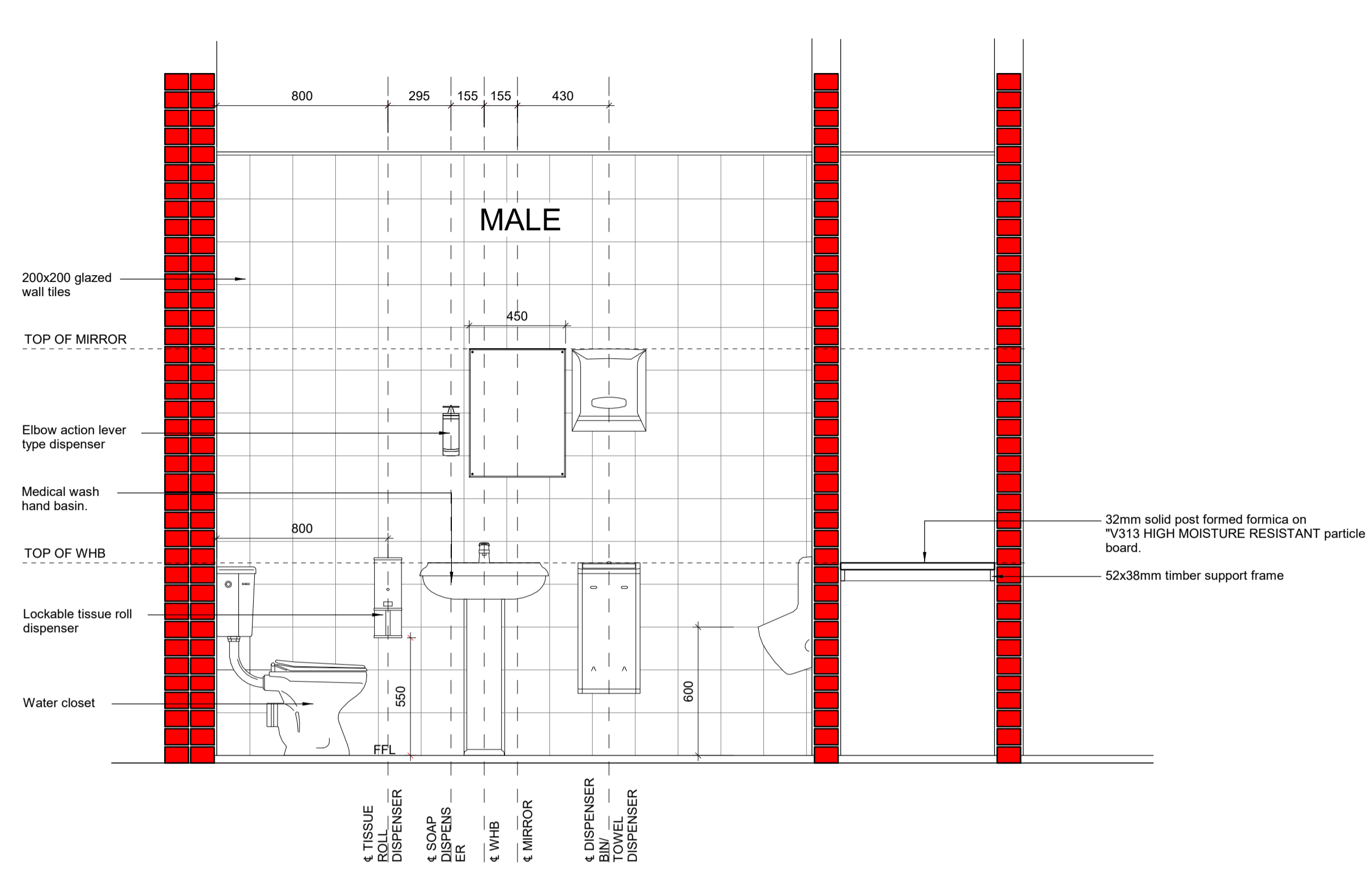
**SECTION C - C**

SCALE 1:20



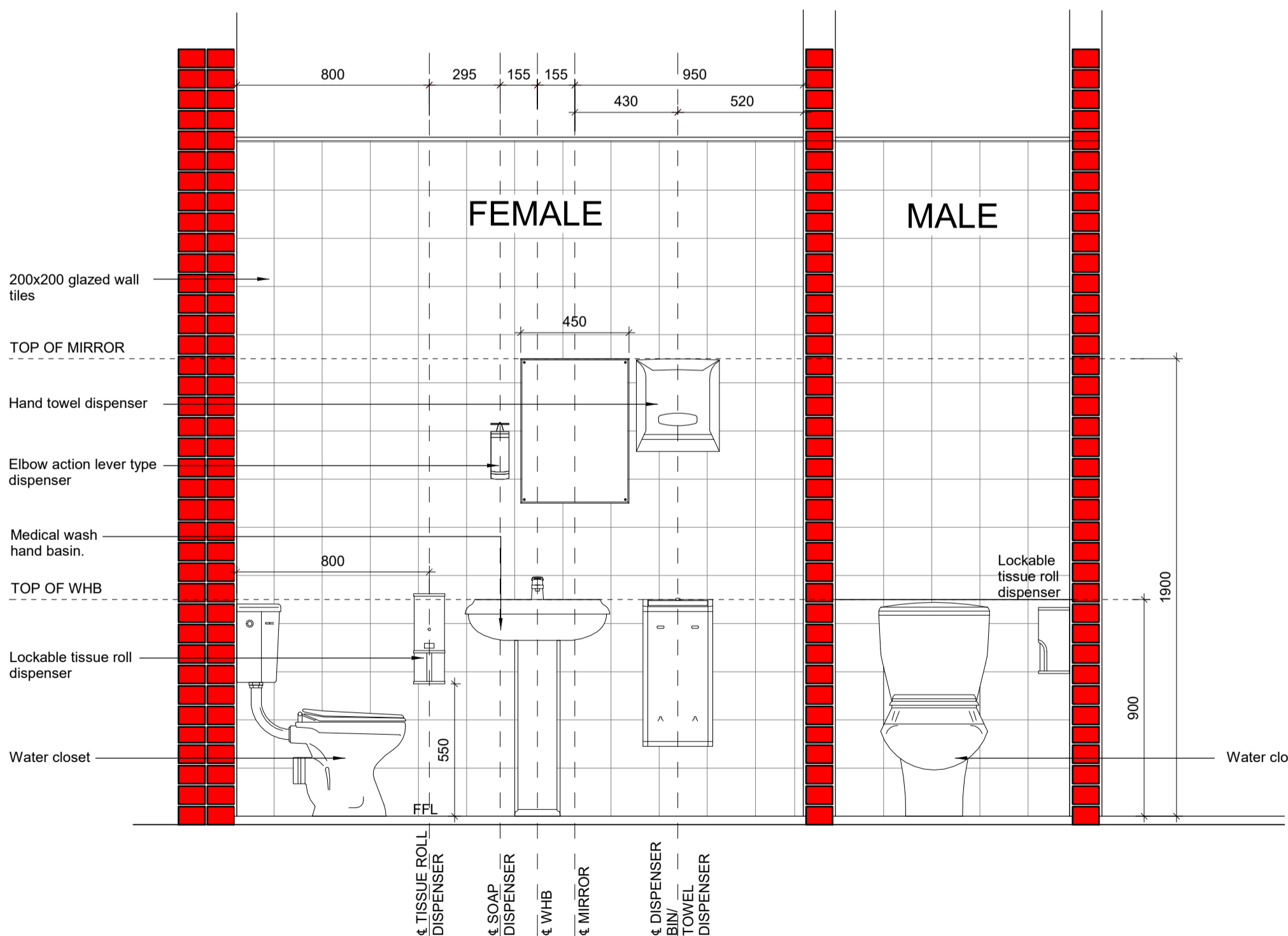
**PART PLAN**

SCALE 1:20



**SECTION B - B**

SCALE 1:20



**SECTION A - A**

SCALE 1:20

**GENERAL NOTES**  
 All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

**DIMENSIONS**  
 To comply with SANS 10400-C  
 Figured dimensions to be taken in preference to scaling  
 Overall dimensions (external) to take precedence  
 All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

**FOUNDATIONS**  
 To comply with SANS 10400-B  
 Detailed requirements of SANS 10400-H  
 All concrete foundations to be a minimum of 600mm/250mm  
 Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

**FLOORS**  
 To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wet)  
 Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS 10082  
 detailed requirements to comply with SANS 10400-J  
 Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J  
 finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.

fire walls to be taken up to underside of roof covering, provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to house.  
 All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

**WALLS**  
 Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K  
 Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K  
 water penetration through walls detailed requirements to comply with SANS 10400-K

**ROOFS**  
 Roof covering and waterproofing to comply with SANS 10400-L  
 Flat roofs or related gable to comply with SANS 10400-L or rational design/ rational assessment or both  
 Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L  
 where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-T

Outlets and downpipes to comply with SANS 10400-R  
 Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T

**STAIRWAYS**  
 To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M  
 Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T; SANS 10400-K and SANS 10400-T

**FIRE INSTALLATION**  
 the fire installations to comply with national fire regulations  
 the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

**FIRE PROTECTION**  
 the fire protection measure to be in accordance with the detailed requirements of SANS 10400-T  
 the fire protection measure to be subject of a rational design or rational assessment.

**ENERGY EFFICIENCY**  
 the design of the building envelope to be in accordance with the detailed requirements of SANS 10400-KA or be subject of a rational design or rational assessment.

**PEOPLE WITH DISABILITY**  
 the fire installations to comply with national fire regulations

**PUBLIC SAFETY**  
 level change, ramps, driveways and pools to comply with SANS 10400-D

**SPACE HEATING**  
 the provision for space heating to comply with national regulations

**STORM WATER DISPOSAL**  
 the means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-KA or be subject of a rational design or rational assessment.

**LIGHTING AND VENTILATION**  
 in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-T and in accordance to detailed requirements of SANS 10400-D and its subject of a rational design  
 All habitable rooms to have a minimum of 10% natural lighting.

**GLAZING**  
 the type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
 the selection of the glazing to comply with national regulations

**SIGNATURES:**

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	20-10-2019	JP	ISSUED TO CLIENT FOR APPROVAL



**IDC ARCHITECTS**  
 EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

**JOHANNESBURG**  
 Unit C2-001, Edenburg Terrace  
 346 Rivonia Blvd | Rivonia 2128  
 Tel: +27 11 234 5141, Cell: +27 82 900 8288  
 info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
 ARCHITECT NAME: B Ilori  
 CLIENT: LIMPOPO PUBLIC WORKS

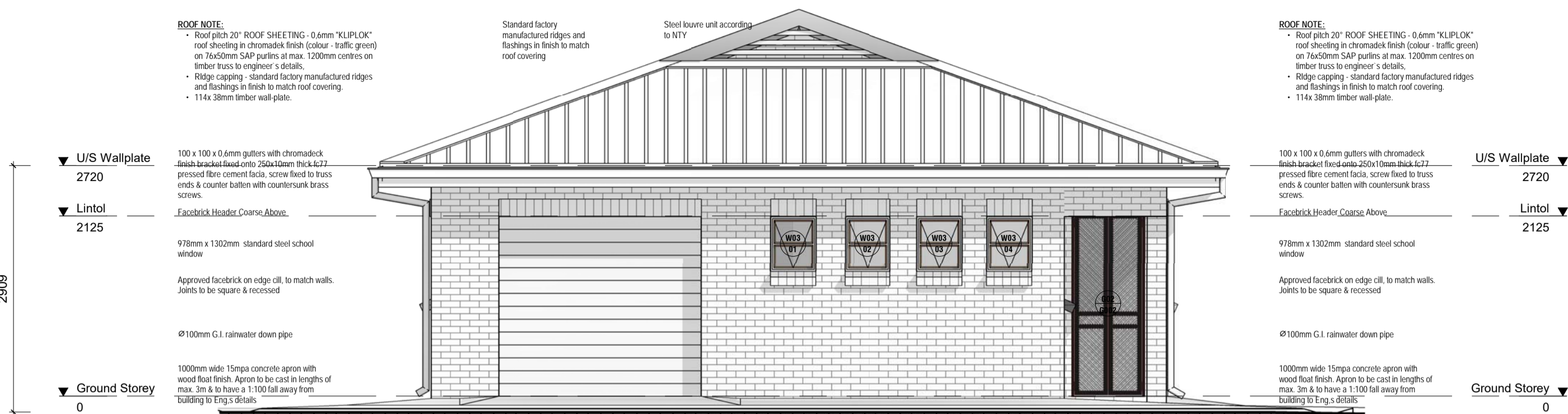
CLIENT SIGNATURE:  
**DIPHUTI PRIMARY SCHOOL**  
**NUTRITION CENTRE**

**BATHROOM/PREP AREA DETAILS**

SCALE / SHEET SIZE	DATE		
SCALE: 1 : 20 @ A1	20-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 001	001 - NC002		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
DRAWING STATUS			
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DRAWN BY: HK	CHECKED: CD		

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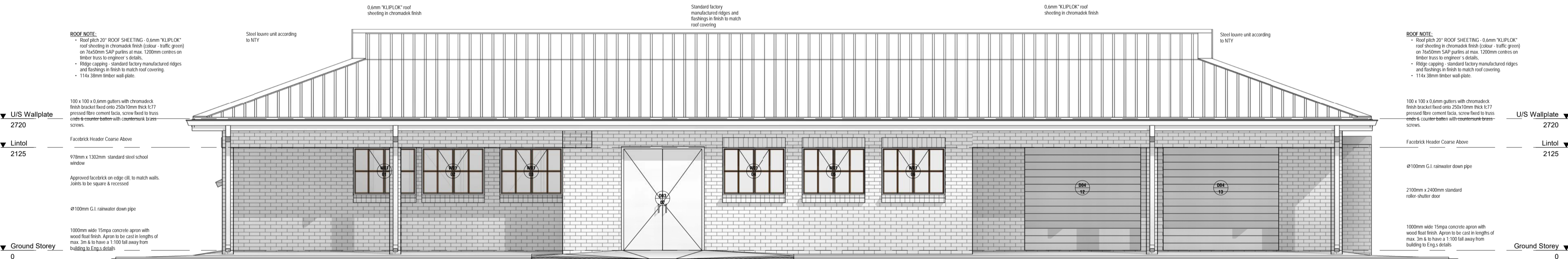




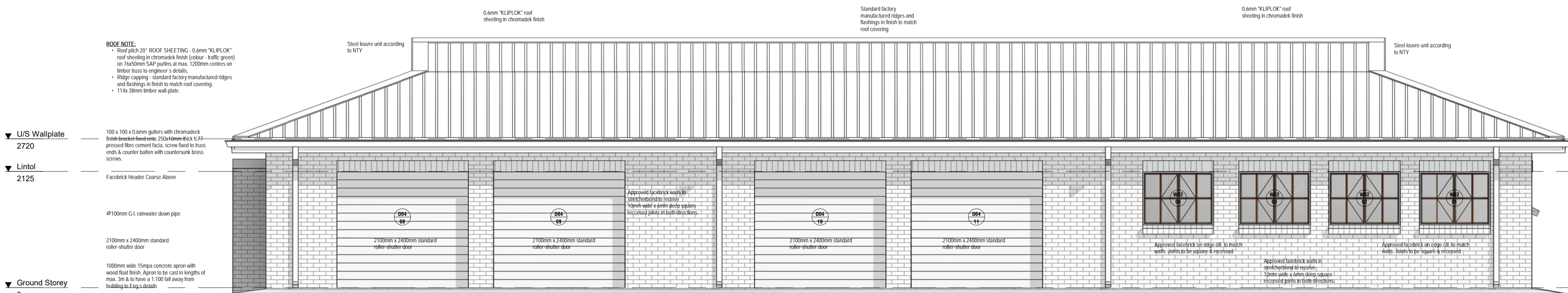
**West Elevation**  
1 : 50



**East Elevation**  
1 : 50



**South Elevation**  
1 : 50



**North Elevation**  
1 : 50

**GENERAL NOTES**  
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.  
The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

**DIMENSIONS**  
To comply with SANS 10400-C  
Figured dimensions to be taken in preference to scaling  
Overall dimensions (external) to take precedence.  
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works.

**FOUNDATIONS**  
To comply with SANS 10400-B  
Detailed requirements of SANS 10400-H  
All concrete foundations to be a minimum of 600mm/250mm.  
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

**FLOORS**  
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wc)  
Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082  
Detailed requirements to comply with SANS 10400-J.  
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.  
Finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.  
Fire walls to be taken to up to underside of roof covering  
provide a minimum 150mm threshold and minimum 1m fire doors to garage where it interlocks to house.  
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

**WALLS**  
Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K  
Roof framing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K  
water penetration through walls detailed requirements to comply with SANS 10400-K

**ROOFS**  
Roof covering and waterproofing to comply with SANS 10400-L  
Flat roofs or related gutter to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L  
where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-T  
Outlets and downpipes to comply with SANS 10400-R  
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

**STAIRWAYS**  
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.  
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

**FIRE INSTALLATION**  
The fire installations to comply with national fire regulations  
the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.  
**FIRE PROTECTION**  
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-T  
the fire protection measure to be subject of a rational design or rational assessment.  
**ENERGY EFFICIENCY**  
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XX or be subject of a rational design or rational assessment.  
**PEOPLE WITH DISABILITIES**  
The fire installations to comply with national fire regulations  
**PUBLIC SAFETY**  
level change, ramps, driveways and pools to comply with SANS 10400-D  
**SPACE HEATING**  
The provision for space heating to comply with national regulations  
**STORM WATER DISPOSAL**  
The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-K and be subject of a rational design or rational assessment.  
the means for the control and disposal in interconnected complexes subject of a rational design or rational assessment.  
**LIGHTING AND VENTILATION**  
In a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-L or be subject of a rational design.  
the ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-C and be subject of a rational design.  
All habitable rooms to have a minimum of 10% natural lighting.  
**GLAZING**  
The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
the selection of the glazing to comply with national regulations

**SIGNATURES:**

PROFESSIONAL ARCHITECT	PR. NR.	SIGNATURE
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	20-10-2019	JP	ISSUED TO CLIENT FOR APPROVAL



**JOHANNESBURG**  
Unit C2-001, Edenburg Terrace  
348 Rivonia Blvd | Rivonia 2128  
Tel: +27 11 234 5141, Cell: +27 82 900 8288  
info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
ARCHITECT NAME: B Ilori  
CLIENT: LIMPOPO PUBLIC WORKS

CLIENT SIGNATURE:  
PROJECT DESCRIPTION:  
**DIPHUTI PRIMARY SCHOOL**

**NUTRITION CENTRE**

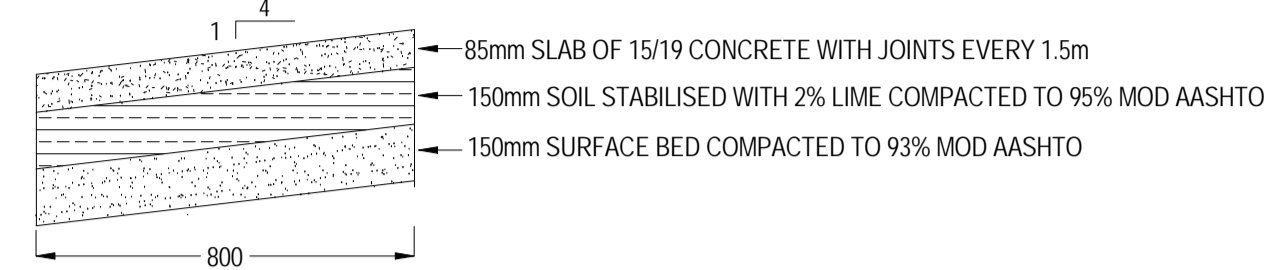
DRAWING DESCRIPTION:  
**ELEVATIONS**

SCALE / SHEET SIZE	DATE		
SCALE: 1 : 50 @ A1	20-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 001	001 - NC003		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
DRAWING STATUS			
<input checked="" type="checkbox"/> INFO	<input type="checkbox"/> TENDER	<input type="checkbox"/> COUNCIL	<input type="checkbox"/> CONSTRUCTION
DRAWN BY: HK		CHECKED: BI	



DIPHUTI PRIMARY SCHOOL - ENROLMENT INFORMATION 2019				
GRADE	BOYS	GIRLS	TOTAL	GRAND TOTAL
GRADE RA	22	21	43	95
GRADE RB	25	27	52	
GRADE 1A	26	33	59	152
GRADE 1B	45	48	93	
GRADE 2A	30	36	66	131
GRADE 2B	32	33	65	
GRADE 3A	30	37	67	130
GRADE 3B	35	28	63	
GRADE 4A	30	33	63	128
GRADE 4B	29	36	65	
GRADE 5A	39	27	66	140
GRADE 5B	43	31	74	
GRADE 6A	31	37	68	130
GRADE 6B	31	31	62	
GRADE 7A	27	33	60	124
GRADE 7B				
TOTAL PUPILS				1030
TEACHERS				14

**Site Section A**  
1 : 250



**CONCRETE APRON DETAILS**

SCHEDULE INDICATING EXISTING FACILITIES		
DESCRIPTION	NUMBER	TOTAL
BLOCK A	5 CLASSROOM BLOCK	5
BLOCK B	5 CLASSROOM BLOCK	5
BLOCK C	4 CLASSROOM BLOCK	4
BLOCK D	4 CLASSROOM BLOCK	4=18 CLASSROOMS
BLOCK E	NUTRITION SHADE	
BLOCK F	WATERBORNE TOILETS	9 SEATS
BLOCK G	1 COMMUNITY INFORMATION CENTRE	
BLOCK H	PIT TOILETS BLOCK	8 SEATS
BLOCK I	ENVIROLOO TOILETS BLOCK	8 SEATS
BLOCK J	STORAGE	

SCHEDULE INDICATING DEMOLITION		
UNIT	DESCRIPTION	TOTAL
BLOCK A	5 CLASSROOM BLOCK	5
BLOCK B	5 CLASSROOM BLOCK	5=10 CLASSROOMS
BLOCK E	NUTRITION BLOCK	
BLOCK F	WATERBORNE TOILETS	9 SEATS
BLOCK H	PIT TOILETS BLOCK	8 SEATS
BLOCK J	STORAGE	

SCHEDULE INDICATING RENOVATIONS		
UNIT	DESCRIPTION	TOTAL
BLOCK C	4 CLASSROOM BLOCK	
BLOCK D	4 CLASSROOM BLOCK	
BLOCK G	1 COMMUNITY INFORMATION CENTRE	
BLOCK I	ENVIROLOO TOILET BLOCK	8 SEATS

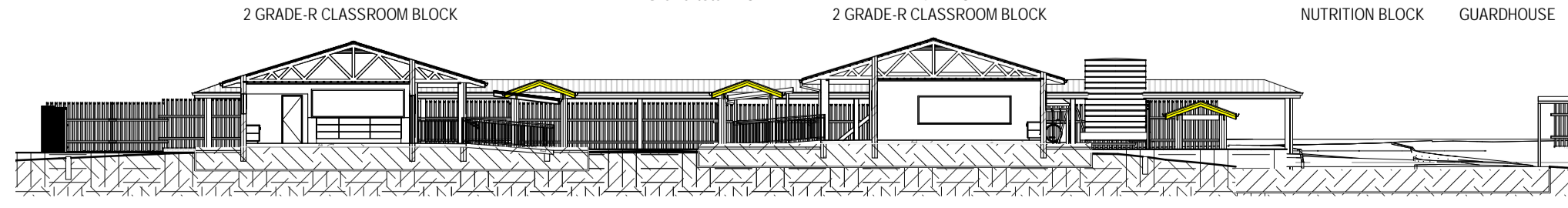
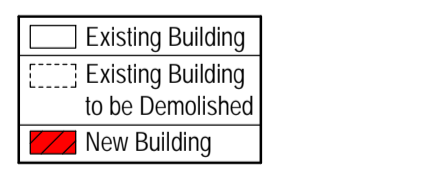
SCHEDULE INDICATING CURRENT PROPOSAL		
DESCRIPTION	NUMBER	TOTAL
LARGE ADMINISTRATION BLOCK	1	1
NUTRITION CENTRE	1	1
COMPUTER & LIBRARY COMBO	1	1
GRADE R CLASSROOM BLOCK	4	4 CLASSROOMS
4 CLASSROOM BLOCK	4 x 4 CLASSROOM BLOCKS	16 CLASSROOMS
GUARD HOUSE AND FENCING	1	1
ASSEMBLY AREA	1300sqm	1
PARKING BAYS	13 OPEN BAYS + 13 COVERED BAYS	26 PARKING BAYS

Area Schedule (Gross Building) Future		
Name	Area	Comments
COMPUTER & LIBRARY COMBO	406.16 m <sup>2</sup>	Future Area
GENERAL PURPOSE HALL	830.92 m <sup>2</sup>	Future Area
GUARDHOUSE	11.24 m <sup>2</sup>	Future Area
NUTRITION BLOCK	200.99 m <sup>2</sup>	Future Area
SCIENCE LAB	203.02 m <sup>2</sup>	Future Area
Future Area: 5	1652.33 m <sup>2</sup>	
Grand total: 5	1652.33 m <sup>2</sup>	

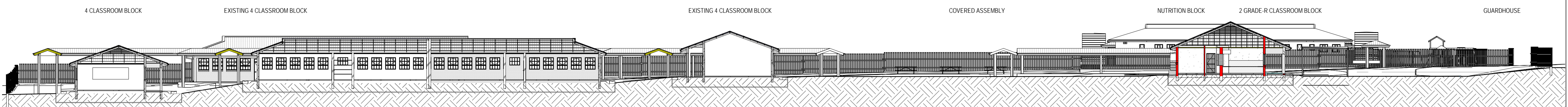
Area Schedule (Gross Building) Existing + New			
Name	Area	Comments	
4 CLASSROOM BLOCK	328.63 m <sup>2</sup>	Existing Area	
4 CLASSROOM BLOCK	328.63 m <sup>2</sup>	Existing Area	
Existing Area: 2	657.27 m <sup>2</sup>		
2 GRADE-R CLASSROOM BLOCK	260.02 m <sup>2</sup>	New Area	
2 GRADE-R CLASSROOM BLOCK	260.07 m <sup>2</sup>	New Area	
2 MULTIPURPOSE CLASSROOM BLOCK	184.70 m <sup>2</sup>	New Area	
4 CLASSROOM BLOCK	369.49 m <sup>2</sup>	New Area	
4 CLASSROOM BLOCK	369.49 m <sup>2</sup>	New Area	
4 CLASSROOM BLOCK	369.49 m <sup>2</sup>	New Area	
4 CLASSROOM BLOCK	369.49 m <sup>2</sup>	New Area	
ADMIN BLOCK	334.58 m <sup>2</sup>	New Area	
COVERED ASSEMBLY	781.41 m <sup>2</sup>	New Area	
COVERED PARKING	89.76 m <sup>2</sup>	New Area	
COVERED PARKING	77.01 m <sup>2</sup>	New Area	
New Area: 11	3465.54 m <sup>2</sup>		
Grand total: 13	4122.81 m <sup>2</sup>		

Site Co-Ordinates:  
 A = +X 2 695 603m  
 +Y 34 269m  
 B = +X 2 695 627m  
 +Y 34 193m  
 C = +X 2 695 650m  
 +Y 34 220m  
 D = +X 2 695 694m  
 +Y 34 334m

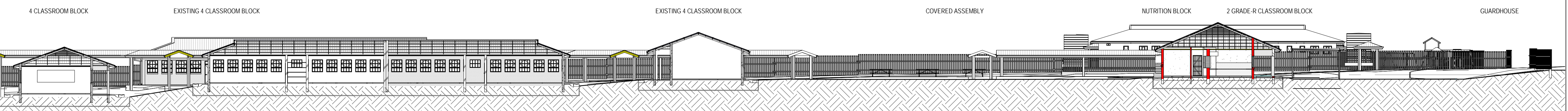
**Site SDP**  
1 : 500



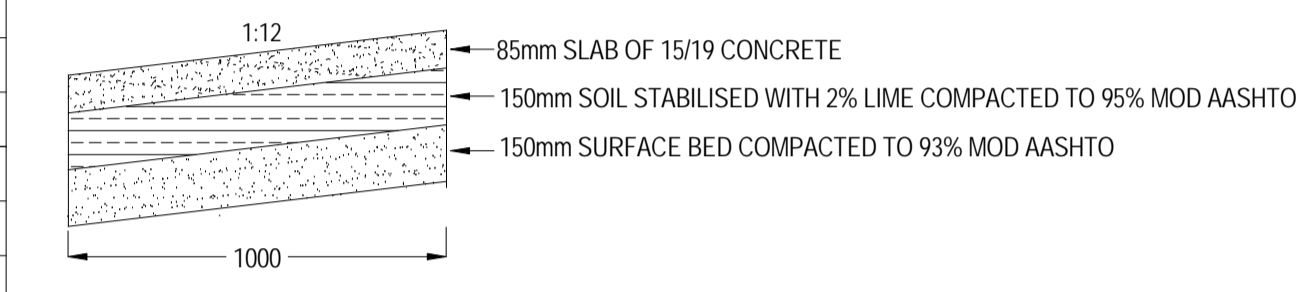
**Site Section B**  
1 : 250



**Site Section A**  
1 : 250

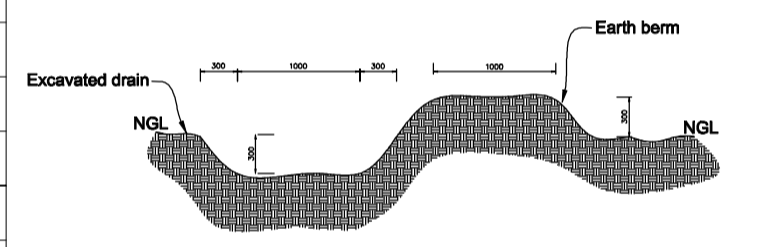


**Site Section B**  
1 : 250

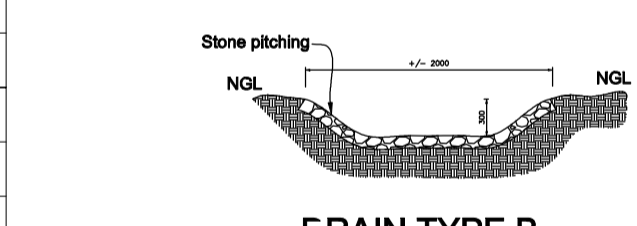


**CONCRETE RAMP DETAILS**

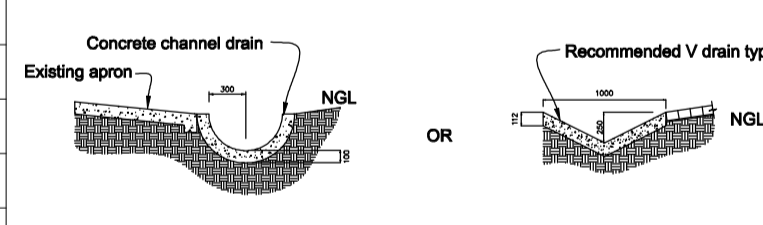
LEGEND:  
 1000mm LONG x 1500mm WIDE RAMP  
 800mm APRON AROUND BUILDING



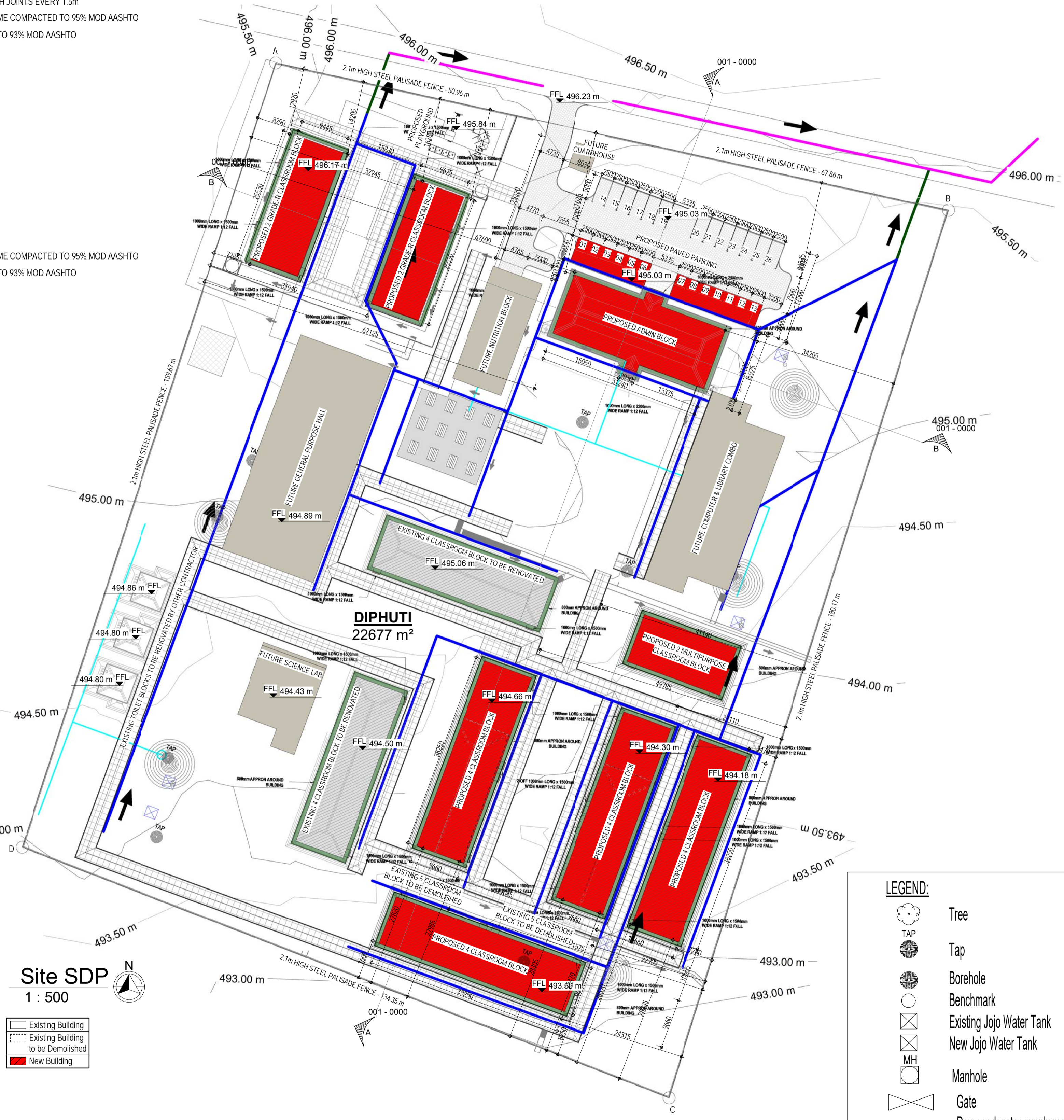
**DRAIN TYPE A**  
Catch water Drain & Berm - compacted natural ground



**DRAIN TYPE B**  
Stone pitched drain



**DRAIN TYPE C**  
600mm concrete channel



**LEGEND:**

- Tree
- TAP
- Tap
- Borehole
- Benchmark
- Existing Jojo Water Tank
- New Jojo Water Tank
- Manhole
- Gate
- Proposed water supply main
- Fence
- Elec pole
- Drain Type A
- Drain Type B
- Drain Type C
- Walkway



SIGNATURES:		
PROFESSIONAL:	PR. NR.	SIGNATURE:
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS				
REV	DATE	DRAWN	ISSUED TO CLIENT	DESCRIPTION
0	15-04-2020			ISSUED TO CLIENT
1	04-05-2021			SDP REVISED AS PER CLIENT REQUEST

**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF  
**EDUCATION**

**IDC ARCHITECTS**  
EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

JOHANNESBURG  
Unit C2-001, Edenburg Terrace  
346 Rivonia Blvd | Rivonia 2128  
Tel: +27 11 234 5141 | Cell: +27 82 900 8288  
info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
 ARCHITECT NAME: B Ilori  
 CLIENT: LIMPOPO PUBLIC WORKS  
 PROJECT DESCRIPTION: DIPHUTI PRIMARY SCHOOL  
**ALTERATIONS AND ADDITIONS**

DRAWING DESCRIPTION			
SDP		DATE	
SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	06-11-2019		
PROJECT No.	SHEET NUMBER		
17 - 063 - 001	001 - 0000		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	1
DRAWING STATUS			
INFO	TENDER	COUNCIL	CONSTRUCTION
DRAWN BY: J.P.		CHECKED: C.D.	



**LEGEND:**

	MINI-SUBSTATION
	RING MAIN UNIT
	LOW VOLTAGE KIOSK
	STREETLIGHTING KIOSK
	DISTRIBUTION BOARD
	STREETLIGHT
	MEDIUM VOLTAGE CABLE
	LOW VOLTAGE CABLE
	STREETLIGHT CABLE
	HOUSE CONNECTION
	ELECTRICAL SLEEVES
	MV MANHOLE
	LV MANHOLE
	DATA MANHOLE

**LEGEND**

	L1 - 15W LED SURFACE MOUNT BULKHEAD
	L2 - 43W LINEAR LED SURFACE MOUNT 1500
	L4 - 150W LED LOW BAY LIGHT FITTING
	L6 - 2X18W LED SURFACE MOUNT BULKHEAD C/W WITH BLACK TRIM
	LIGHT SWITCH SINGLE WAY
	LIGHT SWITCH 2 WAY
	LIGHT SWITCH TWO WAY
	MOTION SENSOR
	PHOTOCELL - DAY/NIGHT SWITCH

**LEGEND**

	ELECTRICAL DISTRIBUTION BOARD
	3-PIN SINGLE SWITCHED SOCKET OUTLET
	3-PIN SINGLE SWITCHED SOCKET OUTLET - NEW SA PLUG
	WEATHERPROOF 3-PIN SWITCHED SOCKET OUTLET
	3-PIN DOUBLE SWITCHED SOCKET OUTLET C/W 3 PIN NEW SA PLUG
	3-PIN DOUBLE SWITCHED SOCKET OUTLET
	SINGLE PHASE ISOLATOR
	3 PHASE ISOLATOR
	SINGLE PHASE WEATHERPROOF ISOLATOR
	IP65 RATED SINGLE PHASE ISOLATOR
	ELECTRICAL OUTLET FOR FACADE SIGNAGE
	FLOOR BOX
	DATA OUTLET
	3 COMPACT, 2 COVER PERIMETER POWER SKIRTING TO BE FIXED AT +750mm AFFL TO THE BOTTOM EDGE OF POWER SKIRTING, UNLESS OTHERWISE SPECIFIED ON THE DRAWING.



Site SDP Electrical  
1 : 500

**PROPOSED LIGHT FITTINGS POWER OUTLETS**

OUTSIDE SECURITY LIGHT	SOCKET OUTLETS
MULTI PURPOSE HALL LIGHT	STOVE ISOLATOR
ABLUTIONS AND STOREROOM LIGHT	TYPICAL DISTRIBUTION BOARD
CLASSROOMS AND OFFICES LIGHT	

**SIGNATURES:**

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	06-07-2021		ELECTRICAL LAYOUT ADDED FROM ENGINEER

**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF  
**EDUCATION**

**IDC ARCHITECTS**  
EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

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REGISTRATION NUMBER: PrArch 4849  
ARCHITECT NAME: B Ilori

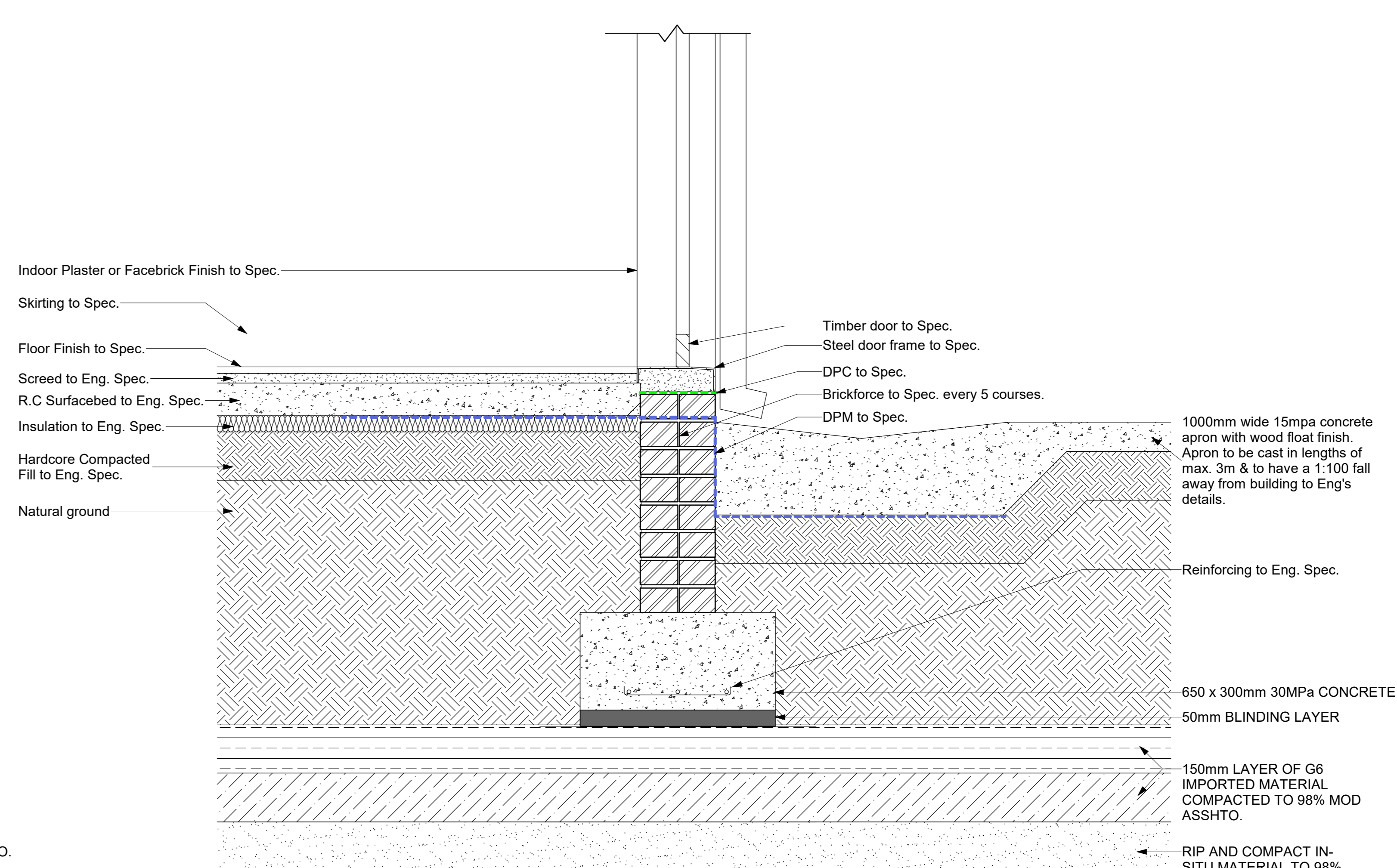
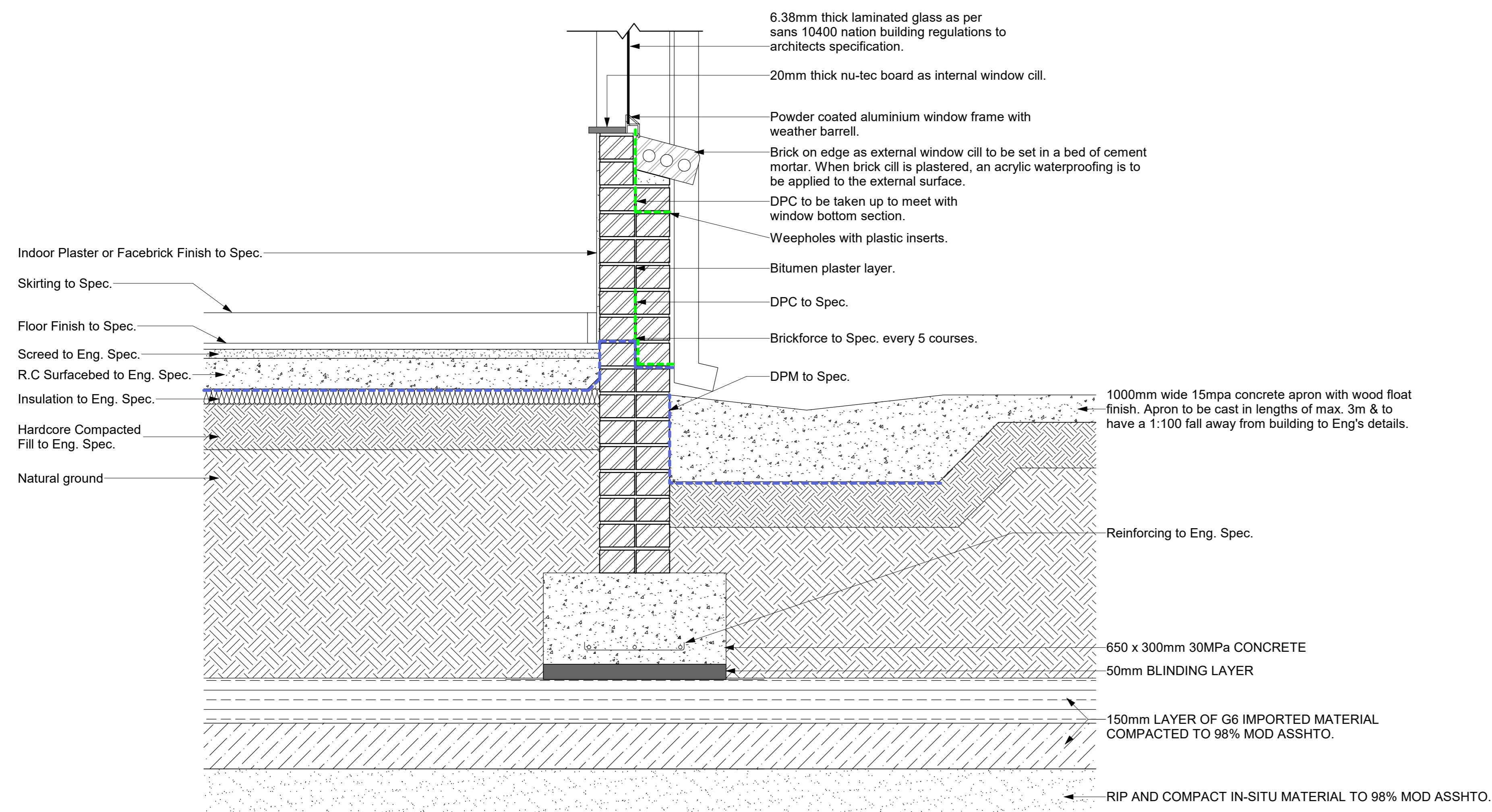
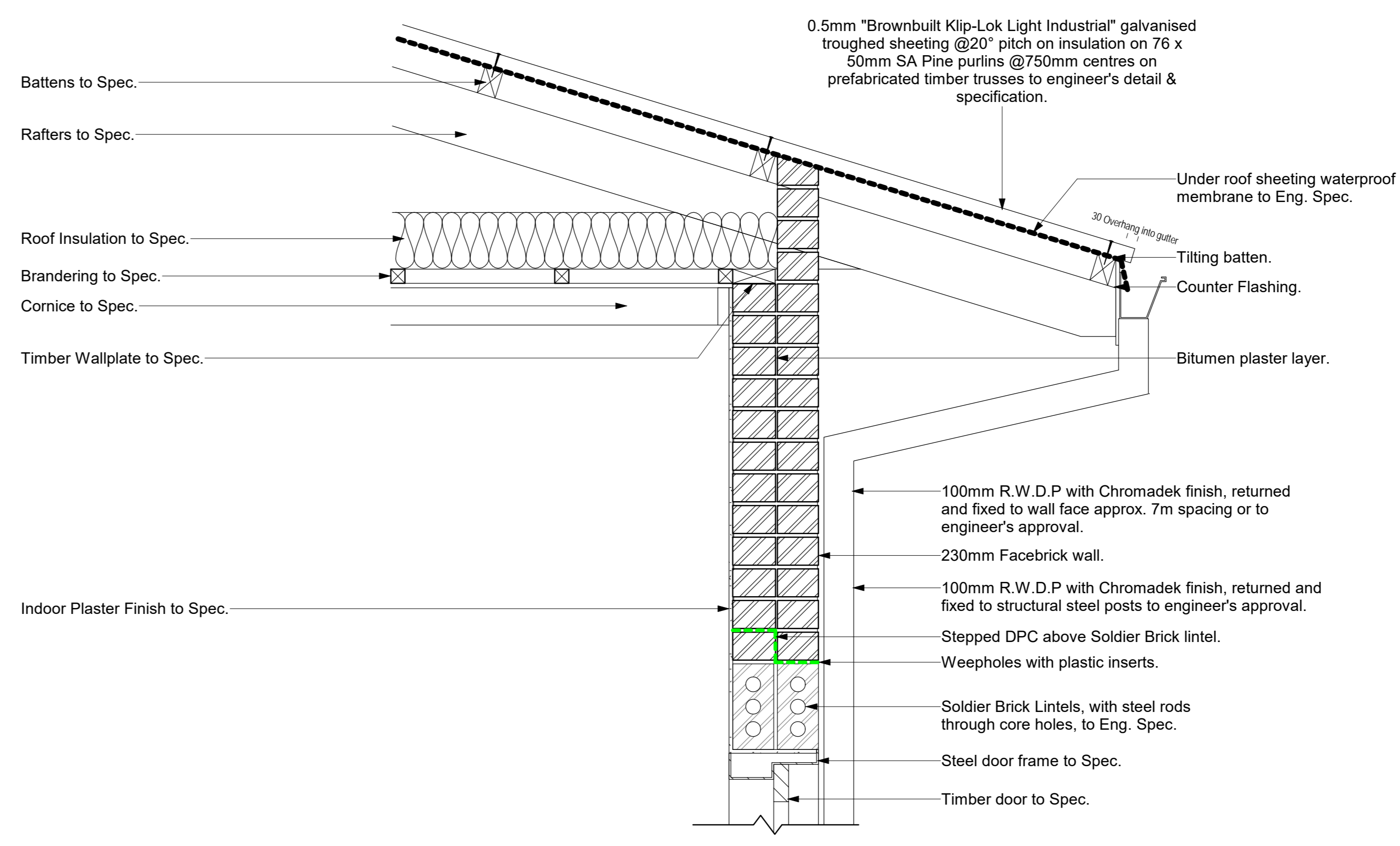
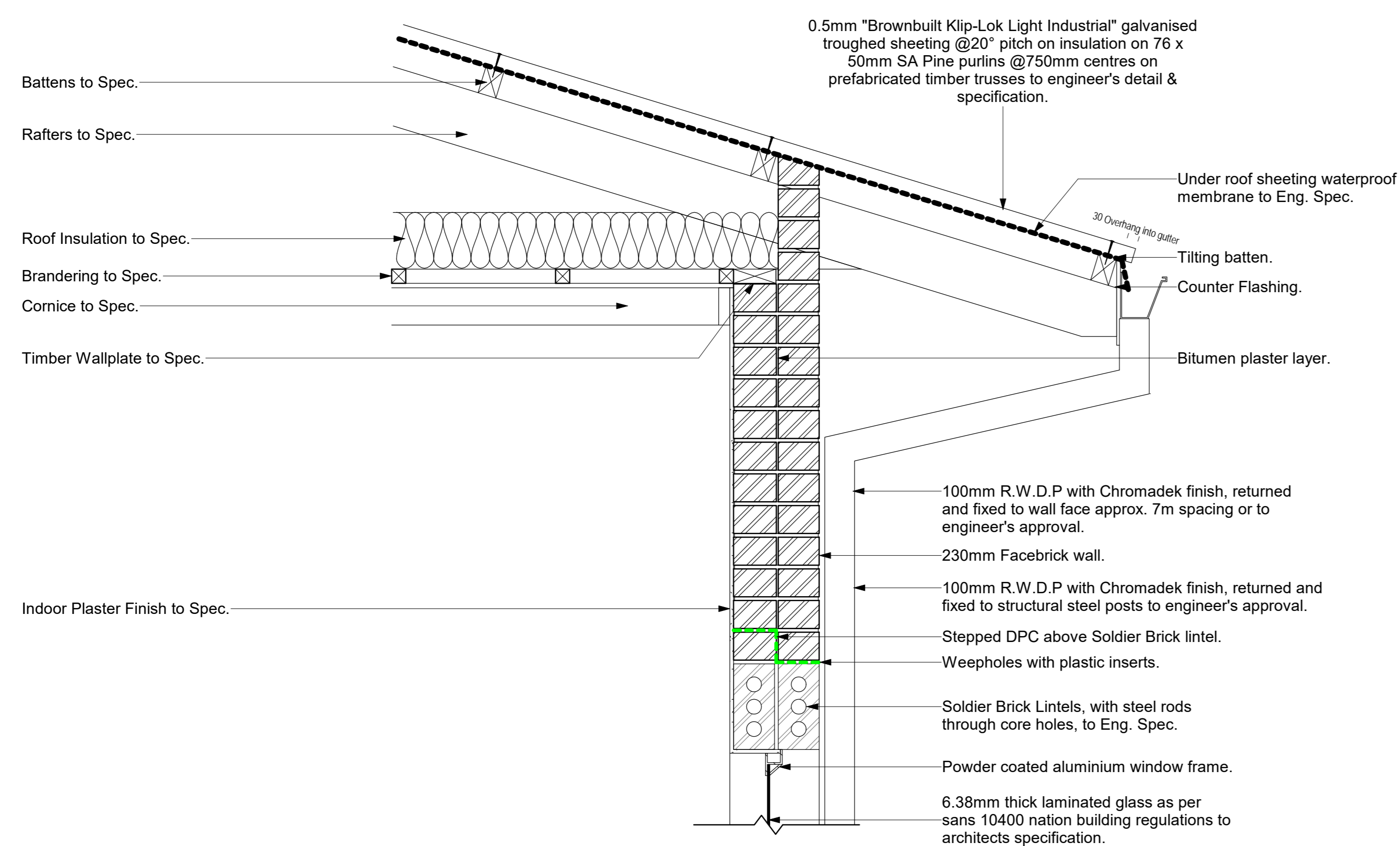
CLIENT: LIMPOPO PUBLIC WORKS  
CLIENT SIGNATURE:

PROJECT DESCRIPTION:  
**DIPHUTI PRIMARY SCHOOL**  
**ALTERATIONS AND ADDITIONS**

DRAWING DESCRIPTION:  
**SDP ELECTRICAL**

SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	06-07-2021		
PROJECT No.	SHEET NUMBER		
17 - 063 - 001	001 - 0001		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
DRAWING STATUS			
INFO	TENDER	COUNCIL	CONSTRUCTION
DRAWN BY: JP		CHECKED: BI	





WALL WITH WINDOW DETAIL SECTION

Scale 1:10

WALL WITH DOOR DETAIL SECTION

Scale 1:10

SIGNATURES:		
PROFESSIONAL:	PR. NR.	SIGNATURE
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

REVISIONS			
REV.	DATE	DRAWN	DESCRIPTION
1	11-08-2021	JP	ISSUED FOR STAGE 4 APPROVAL



**IDC ARCHITECTS**  
 EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG  
 JOHANNESBURG  
 Unit C2-001, Edenburg Terrace  
 348 Rivonia Blvd | Rivonia 2128  
 Tel: +27 11 234 8141 | Cell: +27 82 900 8288  
 info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
 ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

PROJECT NAME: DIPHUTI PRIMARY SCHOOL

TYPICAL DETAILS

TYPICAL WALL SECTION DETAILS			
SCALE / SHEET SIZE	DATE		
SCALE: 1 : 10 @ A0	11-08-2021		
PROJECT No.	SHEET NUMBER		
063 - 17 - 001	CD001		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	1
DRAWING STATUS			
TENDER	COUNCIL	CONSTRUCTION	
DRAWN BY: JP	CHECKED: BI		



**GENERAL NOTES**  
 All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.  
 The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

**DIMENSIONS**  
 To comply with SANS 10400-C  
 Figured dimensions to be taken in preference to scaling  
 Overall dimensions (external) to take precedence  
 All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

**FOUNDATIONS**  
 To comply with SANS 10400-B  
 Detailed requirements of SANS 10400-H  
 All concrete foundations to be a minimum of 600mm/250mm.  
 Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

**FLOORS**  
 To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wc)  
 Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082  
 detailed requirements to comply with SANS 10400-J  
 Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.  
 finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.  
 fire walls to be taken up to underside of roof covering, provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to house.  
 All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

**WALLS**  
 Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K  
 Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K  
 water penetration through walls detailed requirements to comply with SANS 10400-K

**ROOFS**  
 Roof covering and waterproofing to comply with SANS 10400-L  
 Flat roofs or raised gable to comply with SANS 10400-L or rational design/ rational assessment or both  
 Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L  
 where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-T  
 Outlets and downpipes to comply with SANS 10400-R  
 Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T, SANS 10400-K and SANS 10400-T

**STAIRWAYS**  
 To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-T  
 Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-T, SANS 10400-K and SANS 10400-T

**FIRE INSTALLATION**  
 the fire installations to comply with national fire regulations  
 the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

**FIRE PROTECTION**  
 the fire protection measure to be in accordance with the detailed requirements of SANS 10400-T  
 the fire protection measure to be subject of a rational design or rational assessment.

**ENERGY EFFICIENCY**  
 the design of the building envelope to be in accordance with the detailed requirements of SANS 10400-BA or be subject of a rational design or rational assessment.

**PEOPLE WITH DISABILITIES**  
 the fire installations to comply with national fire regulations

**PUBLIC SAFETY**  
 level change, ramps, driveways and pools to comply with SANS 10400-D

**SPACE HEATING**  
 the provision for space heating to comply with national regulations

**STORM WATER DISPOSAL**  
 the means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-CA or be subject of a rational design or rational assessment.

**LIGHTING AND VENTILATION**  
 in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-T and in accordance to detailed requirements of SANS 10400-T and in accordance to detailed requirements of SANS 10400-C and be subject of a rational design  
 All habitable rooms to have a minimum of 10% natural lighting.

**GLAZING**  
 the type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
 the selection of the glazing to comply with national regulations

**SIGNATURES:**

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	08-08-2021	HK	ISSUED FOR CLIENT APPROVAL



**IDC ARCHITECTS**  
 EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

**JOHANNESBURG**  
 Unit C2-001, Edenburg Terrace  
 348 Rivonia Blvd | Rivonia 2128  
 Tel: +27 11 234 5141 | Cell: +27 82 900 8288  
 info@idcarchitects.co.za

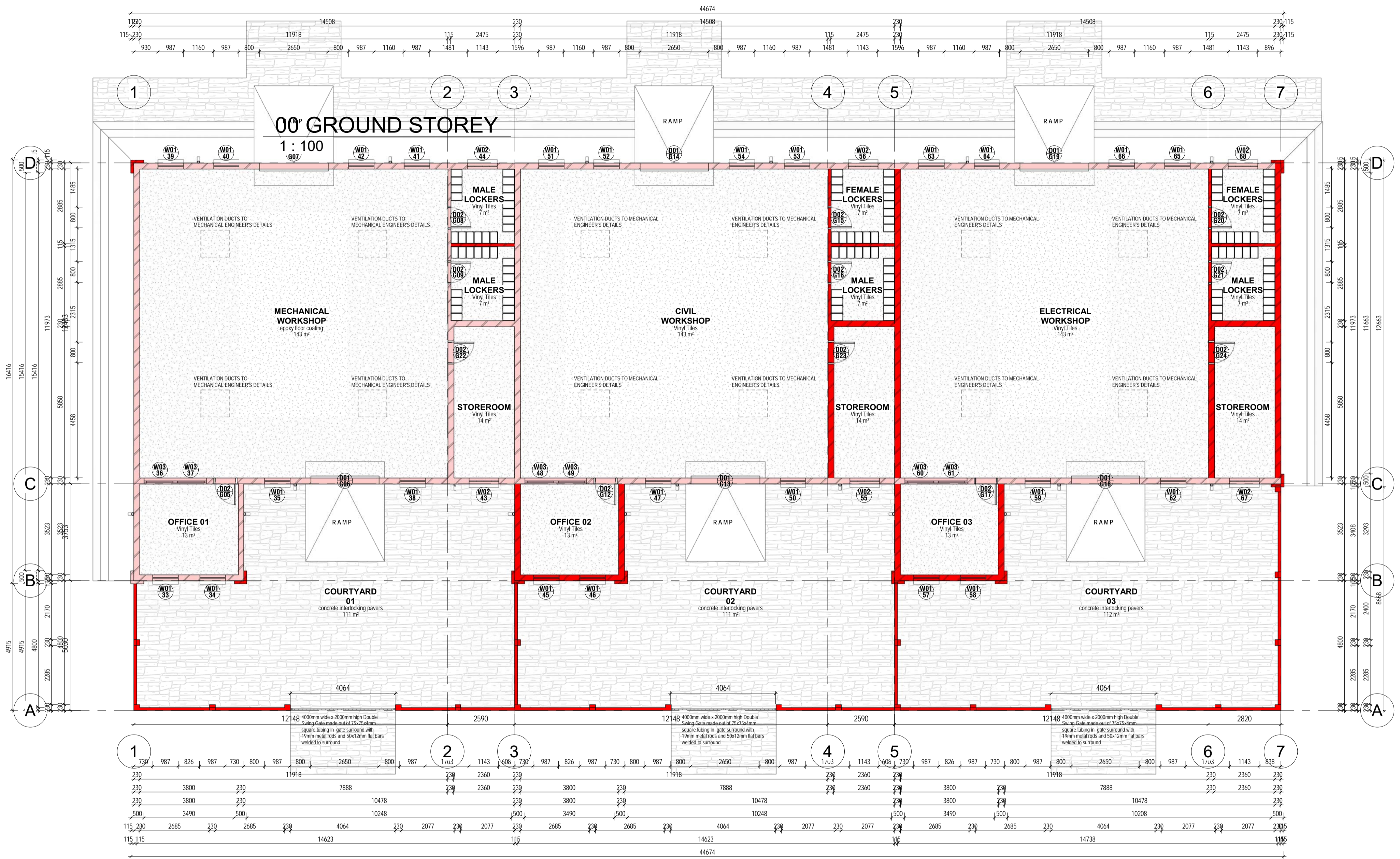
REGISTRATION NUMBER: PrArch 4849  
 ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION: DIPHUTI PRIMARY SCHOOL  
 WORKSHOPS BLOCK

DRAWING DESCRIPTION: GROUND STOREY PLAN

SCALE / SHEET SIZE	DATE		
SCALE: 1 : 100 @ A1	20-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 001	WKS001		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
DRAWING STATUS			
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DRAWN BY: LWN		CHECKED: CD	



Z:\01 Projects\063 - 17 - LIMPOPO PUBLIC WORKS SCHOOLS\01 - Drawings\02 - Revit\04 - SDF\063 - 17 - 001 - Digital Primary School - D1\01 - Buildings Linked\Digital - Workshops - R100 - 07-05-2021.rvt  
 2021/06/09 08:53:22



**GENERAL NOTES**  
 All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes.  
 The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

**DIMENSIONS**  
 To comply with SANS 10400-C  
 Figured dimensions to be taken in preference to scaling  
 Overall dimensions (external) to take precedence  
 All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

**FOUNDATIONS**  
 To comply with SANS 10400-B  
 Detailed requirements of SANS 10400-H  
 All concrete foundations to be a minimum of 600mm/250mm.  
 Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

**FLOORS**  
 To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or etc)  
 Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS10082  
 detailed requirements to comply with SANS 10400-J  
 Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.  
 finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.  
 fire walls to be taken to up to underside of roof covering, provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to house.  
 All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

**WALLS**  
 Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-K  
 Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K  
 water penetration through walls detailed requirements to comply with SANS 10400-K

**ROOFS**  
 Roof covering and waterproofing to comply with SANS 10400-L  
 Flat roofs or related gutter to comply with SANS 10400-L or national design/ rational assessment or both  
 Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L  
 where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-T  
 Outlets and downpipes to comply with SANS 10400-R  
 fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

**STAIRWAYS**  
 To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.  
 Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T; SANS 10400-K and SANS 10400-T

**FIRE INSTALLATION**  
 fire installations to comply with national fire regulations  
 the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

**FIRE PROTECTION**  
 the fire protection measure to be in accordance with the detailed requirements of SANS 10400-W and the fire protection measure to be subject of a rational design or rational assessment.

**ENERGY EFFICIENCY**  
 the design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.

**PEOPLE WITH DISABILITY**  
 the fire installations to comply with national fire regulations

**PUBLIC SAFETY**  
 level change, ramps, driveways and pools to comply with SANS 10400-D

**SPACE HEATING**  
 the provision for space heating to comply with national regulations

**STORM WATER DISPOSAL**  
 the means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-VA or be subject of a rational design or rational assessment.

**LIGHTING AND VENTILATION**  
 in a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-T and in accordance to detailed requirements of SANS 10400-C and be subject of a rational design.  
 All habitable rooms to have a minimum of 10% natural lighting.

**GLAZING**  
 the type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
 the selection of the glazing to comply with national regulations

**SIGNATURES:**

PROFESSIONAL ARCHITECT	PR. NR.	SIGNATURE:
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	08-08-2021	HK	ISSUED FOR CLIENT APPROVAL



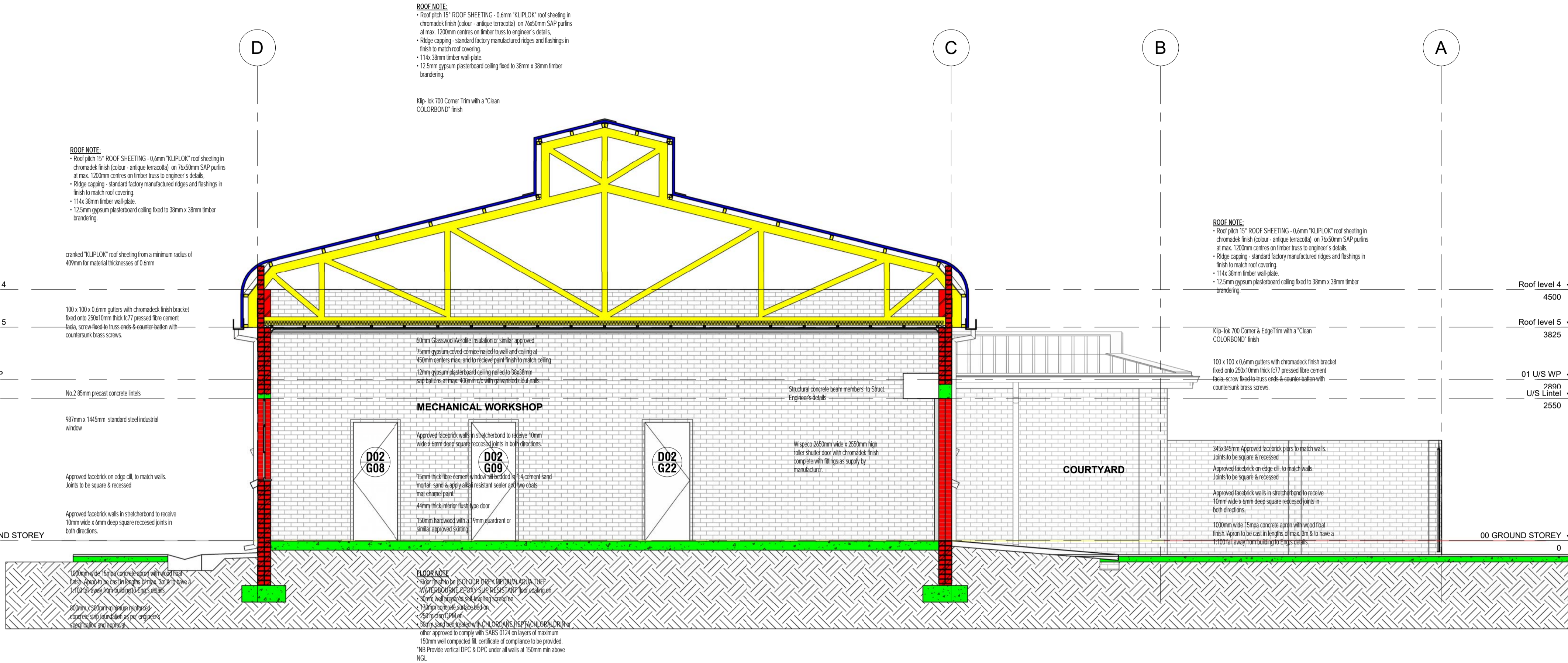
**IDC ARCHITECTS**  
 EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

**JOHANNESBURG**  
 Unit C2-001, Edenburg Terrace  
 348 Rivonia Blvd | Rivonia 2128  
 Tel: +27 11 234 5141, Cell: +27 82 900 8288  
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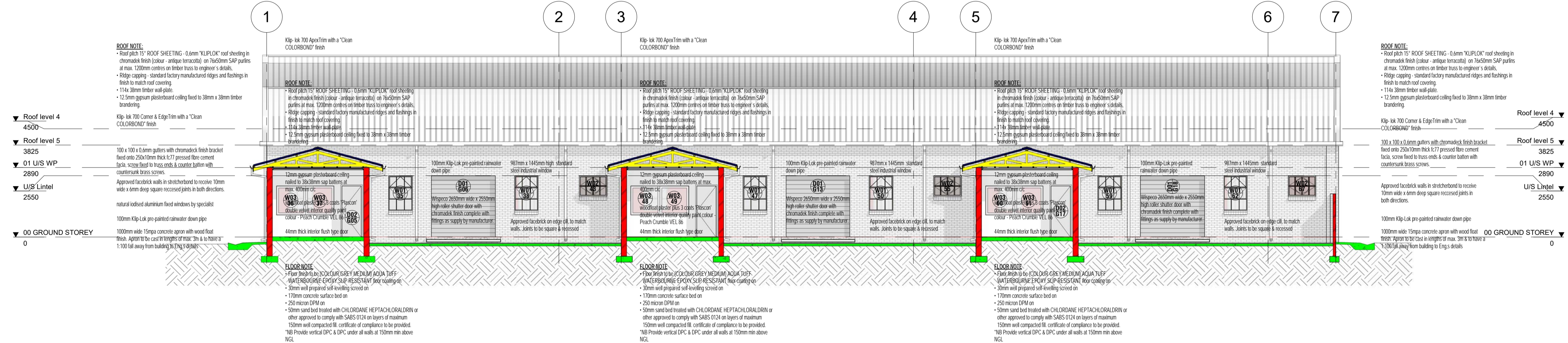
REGISTRATION NUMBER: PrArch 4849  
 ARCHITECT NAME: B Ilori  
 CLIENT: LIMPOPO PUBLIC WORKS  
 CLIENT SIGNATURE: \_\_\_\_\_  
 PROJECT DESCRIPTION: DIPHUTI PRIMARY SCHOOL WORKSHOPS BLOCK

**DRAWING DESCRIPTION**

SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	20-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 001	WKS002		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
DRAWING STATUS			
INFO	TENDER	COUNCIL	CONSTRUCTION
DRAWN BY: LW		CHECKED: CD	



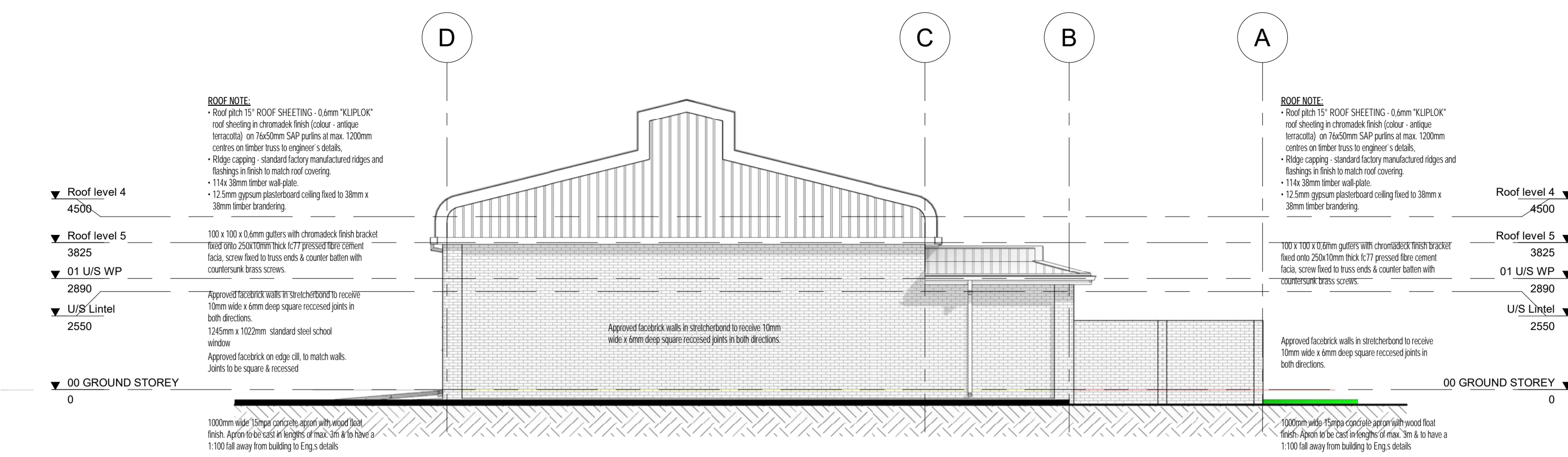
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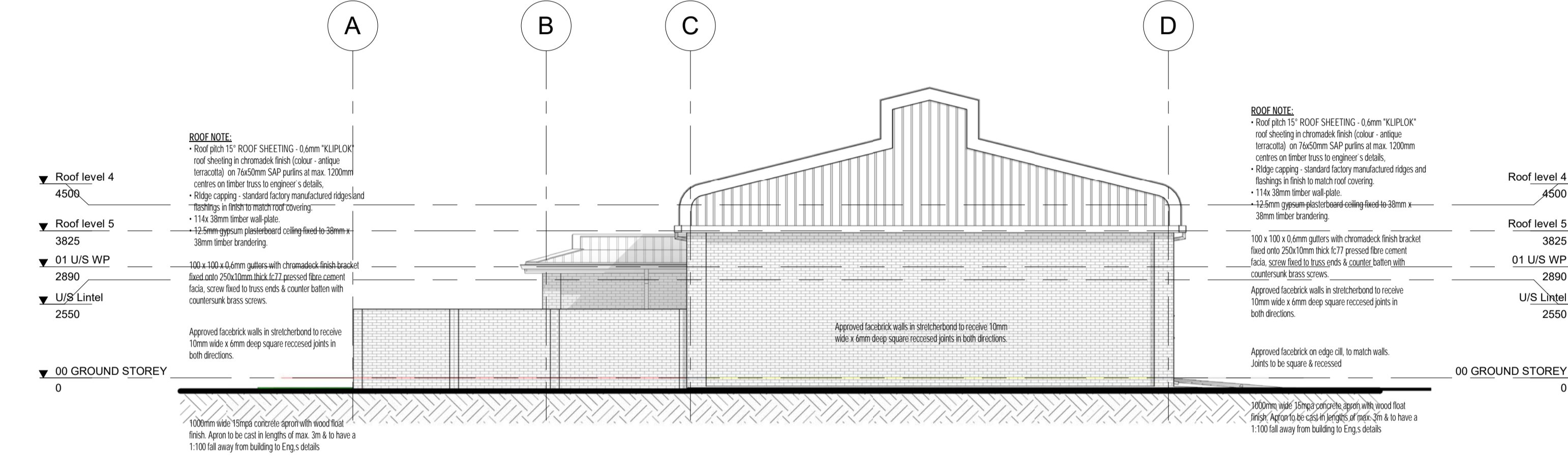
**Section B**  
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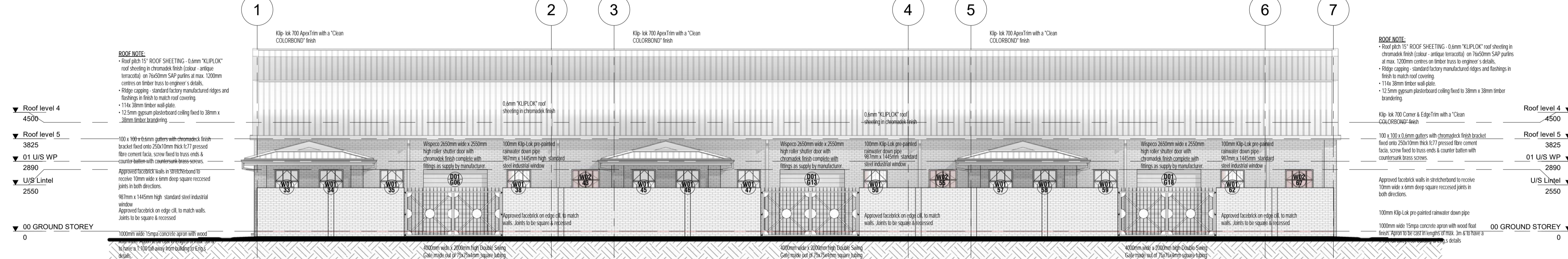




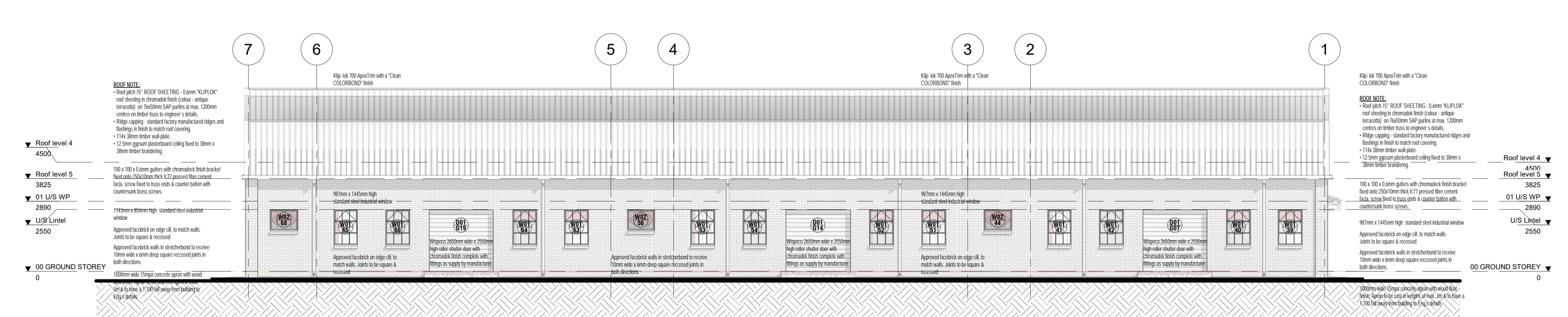
West Elevation  
1 : 100



East Elevation  
1 : 100



South Elevation  
1 : 100



North Elevation  
1 : 100

**GENERAL NOTES**  
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

**DIMENSIONS**  
To comply with SANS 10400-C  
Figured dimensions to be taken in preference to scaling  
Overall dimensions (external) to take precedence  
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

**FOUNDATIONS**  
To comply with SANS 10400-B  
Detailed requirements of SANS 10400-H  
All concrete foundations to be a minimum of 600mm x 200mm.  
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

**FLOORS**  
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or etc)  
Suspended Floors to comply with SANS 10400-B, SANS 10400-T, SANS 10082  
Detailed requirements to comply with SANS 10400-J  
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J  
finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.  
fire walls to be taken to up underside of roof covering  
provide a minimum 150mm threshold and minimum 175 fire doors to garage where it interlocks to bases.  
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inwards must have a 15mm step up along the longitudinal centreline of the door leaf.

**WALLS**  
Structural strength and stability to comply with SANS 10400-B, SANS 10400-T and detailed requirements to comply with SANS 10400-K  
Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K  
water penetration through walls detailed requirements to comply with SANS 10400-K

**ROOFS**  
Roof covering and waterproofing to comply with SANS 10400-L  
Flat roofs or related gutter to comply with SANS 10400-L or rational design/ rational assessment or both  
Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L  
where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-T  
Outlets and downpipes to comply with SANS 10400-R  
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

**STAIRWAYS**  
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.  
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T, SANS 10400-K and SANS 10400-T.

**FIRE INSTALLATION**  
The fire installations to comply with national fire regulations  
the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

**FIRE PROTECTION**  
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-T  
the fire protection measure to be subject of a rational design or rational assessment.  
ENERGY EFFICIENCY  
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.

**PEOPLE WITH DISABILITY**  
The fire installations to comply with national fire regulations

**PUBLIC SAFETY**  
The provision for access heating to comply with national regulations

**SPACE HEATING**  
The means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-X and be subject of a rational design.

**STORM WATER DISPOSAL**  
The means for the control and disposal in interconnected complexes subject of a rational design or rational assessment.

**LIGHTING AND VENTILATION**  
In a habitable room, bathroom, shower and W.C. to be in accordance with the detailed requirements of SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-T  
The ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-T  
All habitable rooms to have a minimum of 10% natural lighting.

**GLAZING**  
The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
The selection of the glazing to comply with national regulations

**SIGNATURES:**

PROFESSIONAL ARCHITECT	PR. NR.	SIGNATURE:
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
0	08-08-2021	HK	ISSUED FOR CLIENT APPROVAL



**JOHANNESBURG**  
Unit C2-001, Edenburg Terrace  
348 Rivonia Blvd | Rivonia 2128  
Tel: +27 11 234 6141, Cell: +27 82 900 8288  
info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
ARCHITECT NAME: B Ilori  
CLIENT: LIMPOPO PUBLIC WORKS

CLIENT SIGNATURE:  
PROJECT DESCRIPTION:  
**DIPHUTI PRIMARY SCHOOL**

**WORKSHOPS BLOCK**

**DRAWING DESCRIPTION**

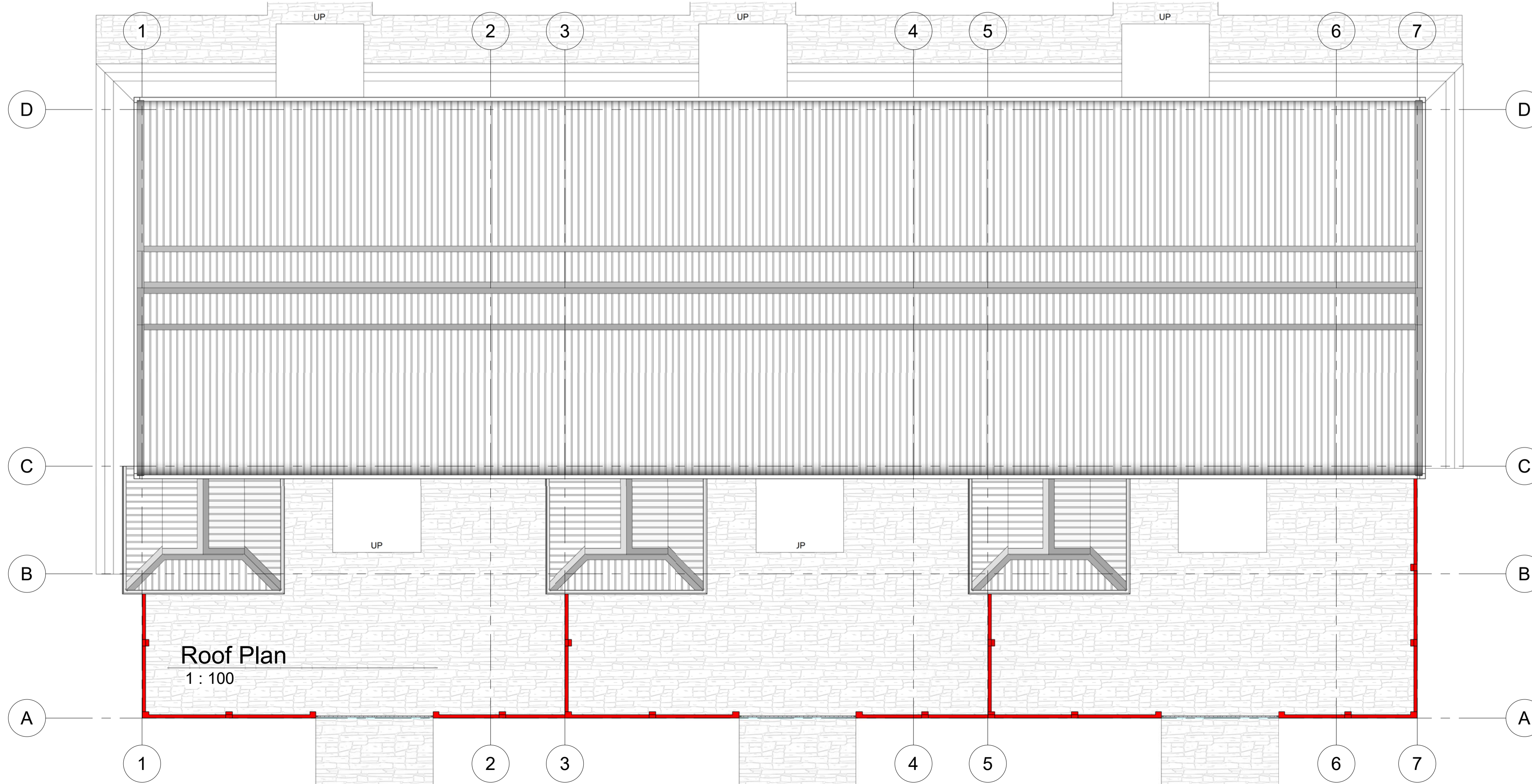
SCALE / SHEET SIZE	DATE		
SCALE: 1 : 100 @ A1	20-10-2019		
PROJECT No.	SHEET NUMBER		
063 - 17 - 001	WKS003		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	ARCH	0
DRAWING STATUS			
INFO	TENDER	COUNCIL	CONSTRUCTION
DRAWN BY: HK		CHECKED: BI	

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<b>DOOR LEGEND</b>		
	<b>DOOR NO.</b>	<b>D01</b>
<b>POSITION</b>	MAIN ENTRANCE & DELIVERY TO ALL WORKSHOPS	OFFICES, STOREROOMS & LOCKER ROOMS
<b>QUANTITY</b>	6	12 3 RH 9 LH
<b>DOOR FRAME DISCRIPTION</b>	standard wispeco 2185 x 2400mm rollershutter door with chromadek finish complete with fittings as supply by manufacturer.	standard mild steel 900x2032x1,2mm single rebate pressed metal door frame for 230mm walls
<b>DOOR FRAME FINISH</b>	FINISH:chromadek finish: - colour by architect	1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect
<b>DOOR DISCRIPTION</b>	standard wispeco 2185 x 2400mm rollershutter door with chromadek finish complete with fittings as supply by manufacturer. FINISH:chromadek finish: - colour by architect	900x2032mm sold core door veneered on both sides to receive paint
<b>IRONMONGY: FITTINGS:</b>	standard wispeco 2185 x 2400mm rollershutter door with chromadek finish complete with fittings as supply by manufacturer.	Hinges - 2x100mm m/s butterfly hinges per door leaf Lockset - "solid blesbok" 460/313 four lever lockset.
<b>FINISHES</b>	FINISH:chromadek finish: - colour by architect	1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect
<b>GLASS</b>	Not applicable	Not applicable

**Door Legend**  
1 : 50



<b>WINDOW LEGEND</b>			
	<b>WINDOW NO.</b>	<b>W01</b>	<b>W02</b>
<b>POSITION</b>	WORKSHOPS & OFFICES	STOREROOMS & LOCKER ROOMS	OFFICES
<b>QUANTITY</b>	24	6	6
<b>WINDOW FRAME DISCRIPTION</b>	standard SS industrial type steel window-frame catalogue number E1H complete with fittings as supply by manufacturer	standard SS residential type steel window-frame catalogue number D2 complete with fittings as supply by manufacturer	1200mm x 1200mm fixed panel aluminium window
<b>WINDOW FURNITURE</b>	Iron-mongery & fittings as supply by window manufacturer. and according to architects approval	Iron-mongery & fittings as supply by window manufacturer. and according to architects approval	not applicable
<b>BURGLAR - BAR</b>	Made out of 10mm wide flat-bars	Made out of 10mm wide flat-bars	not applicable
<b>FINISHES</b>	1 coat red oxide primer, 1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect	1 coat red oxide primer, 1 coat universal undercoat and 2 coats plascon gloss enamel. colour as per architect	naturally idodised aluminium
<b>GLASS</b>	5mm obscure glazing to meet all requirements of SANS 10400 Part N	5mm clear glazing to meet all requirements of SANS 10400 Part N	5mm clear glazing to meet all requirements of SANS 10400 Part N

**Window Legend**  
1 : 50

**GENERAL NOTES**  
All works to comply with SANS 10400 under the national regulations, building standards, local authority requirements and all relevant specifications and codes. The contractor is responsible for all site visits by local authorities and inspectors and shall pay all fees in connection therewith.

**DIMENSIONS**  
To comply with SANS 10400-C  
Figured dimensions to be taken in preference to scaling  
Overall dimensions (external) to take precedence.  
All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before commencement of works

**FOUNDATIONS**  
To comply with SANS 10400-B  
Detailed requirements of SANS 10400-H  
All concrete foundations to be a minimum of 600mm/250mm.  
Unless shown otherwise top of concrete foundation to be a minimum of 300mm below natural ground level.

**FLOORS**  
To comply with SANS 10400-J (laundry, kitchen, shower, bathroom or wc)  
Suspended floors to comply with SANS 10400-B, SANS 10400-T, SANS10082  
detailed requirements to comply with SANS 10400-J.  
Slabs to comply with SANS 10400-H and detailed requirements to comply with SANS 10400-J.  
finished floor level to be a minimum of 150mm above natural ground level unless otherwise shown.  
fire walls to be taken to up to underside of roof covering, provide a minimum 150mm threshold and minimum 1hr fire doors to garage where it interlocks to hoist.  
All external doors opening outwards to have a 15mm step up to the inside on the outside of the door leaf, and those opening inward must have a 15mm step up along the longitudinal centreline of the door leaf.

**WALLS**  
Structural strength and stability to comply with SANS 10400-B SANS 10400-T and detailed requirements to comply with SANS 10400-L.  
Flat roofs or related gable to comply with SANS 10400-L or rational design/ rational assessment or both.  
Roof fixing to comply with SANS 10400-B and detailed requirements to comply with SANS 10400-K  
water penetration through walls detailed requirements to comply with SANS 10400-K

**ROOFS**  
Roof covering and waterproofing to comply with SANS 10400-L.  
Roof assembly or ceiling assembly to comply with SANS 10400-C and in accordance to detailed requirements of SANS 10400-L.  
where roof assembly is supported in walls it must comply with the detailed requirements of SANS 10400-K and in accordance to SANS 10400-B and SANS 10400-L.  
Cutters and downpipes to comply with SANS 10400-R.  
Fire resistance and combustibility of the roof assembly or ceiling assembly in accordance to detailed requirements of SANS 10400-L and SANS 10400-T.

**STAIRWAYS**  
To comply with SANS 10400-B and SANS 10400-T and in accordance to detailed requirements of SANS 10400-L and SANS 10400-M.  
Walls, screens, railing or balustrades to such stairway to be in accordance to detailed requirements of SANS 10400-L and SANS 10400-B and SANS 10400-T; SANS 10400-K and SANS 10400-T.

**FIRE INSTALLATION**  
The fire installations to comply with national fire regulations  
the supply of water to be in accordance with the detailed requirements of SANS 10400-W and the subject of a rational design.

**FIRE PROTECTION**  
The fire protection measure to be in accordance with the detailed requirements of SANS 10400-L, the fire protection measure to be subject of a rational design or rational assessment.

**ENERGY EFFICIENCY**  
The design of the building envelope to be in accordance with the detailed requirements of SANS 10400-XA or be subject of a rational design or rational assessment.

**PEOPLE WITH DISABILITY**  
The fire installations to comply with national fire regulations

**PUBLIC SAFETY**  
level change, ramps, driveways and pools to comply with SANS 10400-D

**SPACE HEATING**  
the provision for space heating to comply with national regulations

**STORM WATER DISPOSAL**  
the means for the control and disposal to be in accordance with the detailed requirements of SANS 10400-A or be subject of a rational design or rational assessment.

**LIGHTING AND VENTILATION**  
in a habitable room, bathroom, shower and WC to be in accordance with the detailed requirements of SANS 10400-R or be subject of a rational design.  
the ventilation to comply with SANS 10400-T and in accordance to detailed requirements of SANS 10400-C and is subject of a rational design.  
All habitable rooms to have a minimum of 10% natural lighting.

**GLAZING**  
The type and fixing of glazing to comply with SANS 10400-B and in accordance to detailed requirements of SANS 10400-N  
the selection of the glazing to comply with national regulations

<b>SIGNATURES:</b>		
PROFESSIONAL:	PR, NR	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

<b>REVISIONS</b>			
REV	DATE	DRAWN	DESCRIPTION
0	08-08-2021	HK	ISSUED FOR CLIENT APPROVAL



**IDC ARCHITECTS**  
EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

**JOHANNESBURG**  
Unit C2-001, Edenburg Terrace  
348 Rivonia Blvd | Rivonia 2128  
Tel: +27 11 234 5141 | Cell: +27 82 900 8288  
info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
ARCHITECT NAME: B Ilori  
CLIENT: LIMPOPO PUBLIC WORKS  
CLIENT SIGNATURE:

PROJECT DESCRIPTION:  
**DIPHUTI PRIMARY SCHOOL  
WORKSHOPS BLOCK**

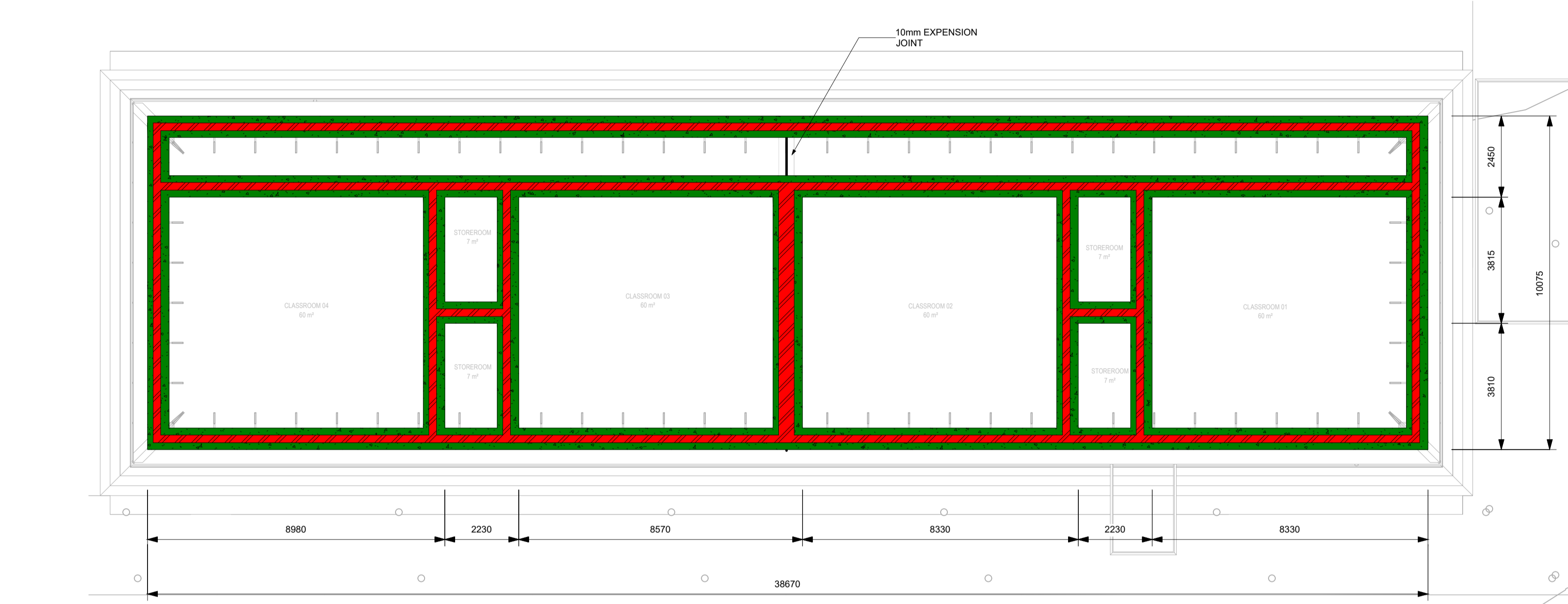
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063 - 17 - 001		WKS004	
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<b>DRAWN BY:</b>		<b>CHECKED:</b>	
HK		BI	

2:01 Projects\063 - 17 - LIMPOPO PUBLIC WORKS SCHOOLS\01 - Drawings\02 - Rev\04 - SFP\063 - 17 - 001 - Digital Primary School - D1\01 - Buildings Linked\Digital - Workshops - R100 - 07-05-2021.rvt









4 CLASSROOM BLOCK FOUNDATION PLAN  
1 : 100

**1. GENERAL NOTES**

- 1.1. All work to be done in accordance with the National Building Regulations and the relevant SABS Specifications.
- 1.2. All drawings to be read in conjunction with Architect's drawings and any discrepancies must be reported to the Engineer prior to any setting out of work.
- 1.3. No structural alterations are to be made without amended drawings.
- 1.4. All drawings must be checked by the Contractor and any discrepancies should be reported to the Engineer before any work commences.
- 1.5. All waterproofing and drainage to be to Architect's details and instructions.
- 1.6. Contractor to ensure that stability of banks and excavations are continuously maintained throughout the construction period.

**2. R.C. CONSTRUCTION**

- 2.1. No concrete is to be poured before the Engineer has inspected and approved the fixing of the reinforcement, 48 hours notice is required.
- 2.2. Breaks in concrete and construction joints are to be made only with Engineer's approval.
- 2.3. Shuttering and propping may be struck only after the lapse of the following times (in days):
 

Beam sides, walls and unloaded columns	2
Slab soffits without removal of slab props	4
Beam soffits without removal of beam props	7
Props unloaded slabs	10
Props unloaded beams	14
- 2.4. Minimum concrete cover to reinforcement (in mm)
 

piles	50	beams	30
pile caps	50	slabs	20
ground beams	50	retaining walls (earth face)	30
columns	30	retaining walls (exposed face)	30
- 2.5. Concrete cube strength at 28 days in (MPa)
 

blinding	15	beams	25
Mortar(Class A)	15	slabs	25
columns	30	walls	25
- 2.6. Concrete cover to reinforcing to be maintained by the use of either nylon spacers or precast concrete blocks with binding wires cast in.
- 2.7. All floor levels, unless otherwise indicated, are structural slab levels.

**LEGEND:**

- 600mm WIDE \* 300mm HIGH CONCRETE FOOTING
- BRICK WALL

**3. FOUNDING**

- 3.1. Foundations are subject to alterations as excavations proceed.
- 3.2. No foundations are to be cast or reinforcement fixed in bases until excavations have been approved by an Engineer.
- 3.3. All backfill material under foundations and floors to be as follows:
  - G6 Material or better
  - PI < 6
  - Compacted to 98% MOD AASHTO in layers of 150mm
  - Non-cohesive and free draining

**4. ADDITIONAL NOTES**

- 4.1. All exposed concrete slabs and beams bearing on brickwork to have a slip joint made up of 2 sheets of masonite with smooth faces abutting each other at top of brick-concrete interface. Joint to extend through plaster.
- 4.2. Special attention to be given to curing of concrete. Exact details to be discussed with Engineer on site prior to pouring of any concrete.
- 4.3. Two lintels plus five courses of brickwork to be built over all openings - reinforced every course with brickforce.
- 4.4. All brickwork to have a minimum compressive strength of 15MPa.
- 4.5. A construction joint sealed with suitable flexible sealant is to be formed at all junctions between new brickwork and existing brickwork.
- 4.6. No brickwork is to be built onto suspended slabs or beams until slabs/beams have attained their full strength and have been depropped.
- 4.7. All deviations from architect's drawing to be confirmed by architect prior to construction.
- 4.8. All work to be carried out in accordance with the National Building Regulations, Environment and Occupational Health and Safety Act, ( latest revision) and the Construction Regulations.
- 4.9. The main contractor is to ensure that a competent person, approved by the South African Qualification Authority supervises and approves all aspects of the requirements of the Occupational Health and Safety Act, latest revision.
- 4.10. All temporary works to be designed, detailed, supervised and certified by a competent person or professional engineer as defined in the OHS ACT.
- 4.11. The works will be inspected from time to time by the consulting engineer to ascertain that the contractor is carrying out the work in general conformity with the engineering drawings and documents. Such inspections are not carried out for the benefit of the contractor, and do not relieve him of the responsibility for the proper construction of the works in accordance with the engineering drawings, documents & good building practice.

**5. COMPLETION CERTIFICATE**

- 5.1. No completion certificate shall be issued if all material and compaction test results are not submitted to the Engineer

**SIGNATURES:**

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV.	DATE	DRAWN	DESCRIPTION
A	2021.08.19	TL	ISSUED FOR INFORMATION
B	2022.02.09	TL	FOUNDATIONS REVISED AND ISSUED FOR INFORMATION
C	2022.02.22	TL	FOUNDATIONS REVISED AND ISSUED FOR INFORMATION



JOHANNESBURG  
Unit C2-001, Edenburg Terrace  
340 Rivonia Blvd | Rivonia 2128  
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REGISTRATION NUMBER: PrArch 4849  
ARCHITECT NAME: B Ilori

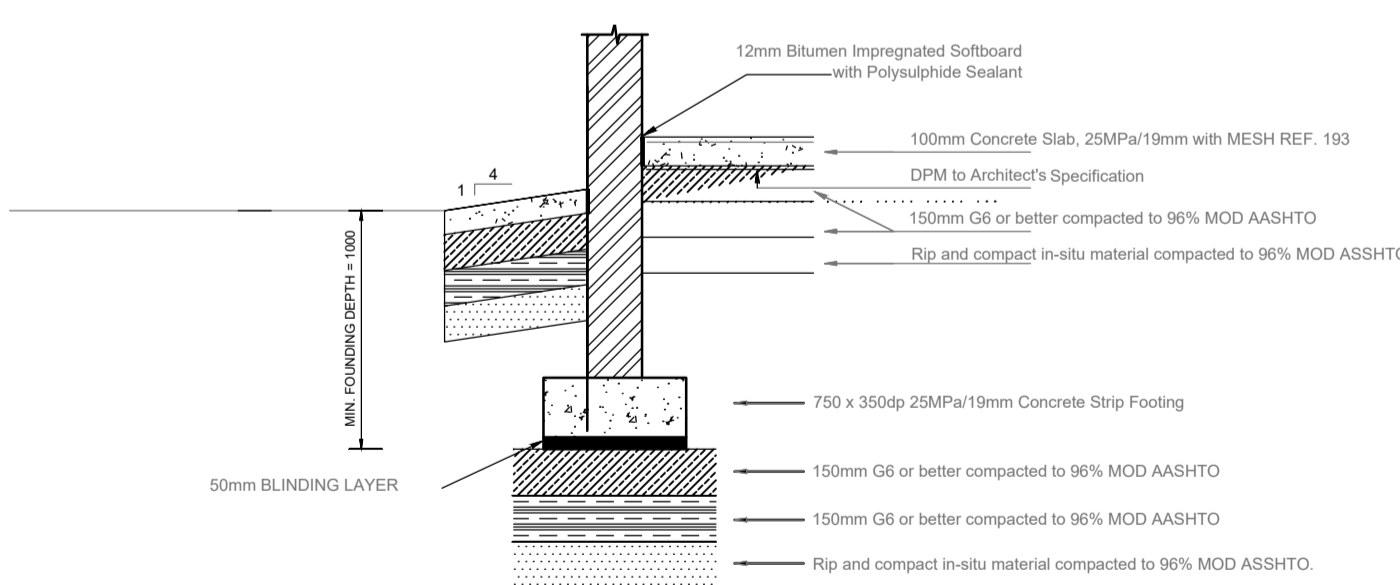
CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION: DIPHUTI PRIMARY SCHOOL

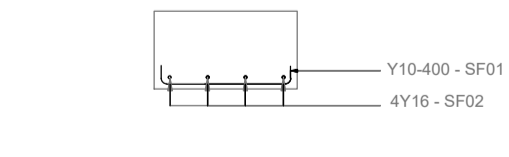
ALTERATIONS AND ADDITIONS

4 CLASSROOM BLOCK FOUNDATION LAYOUT

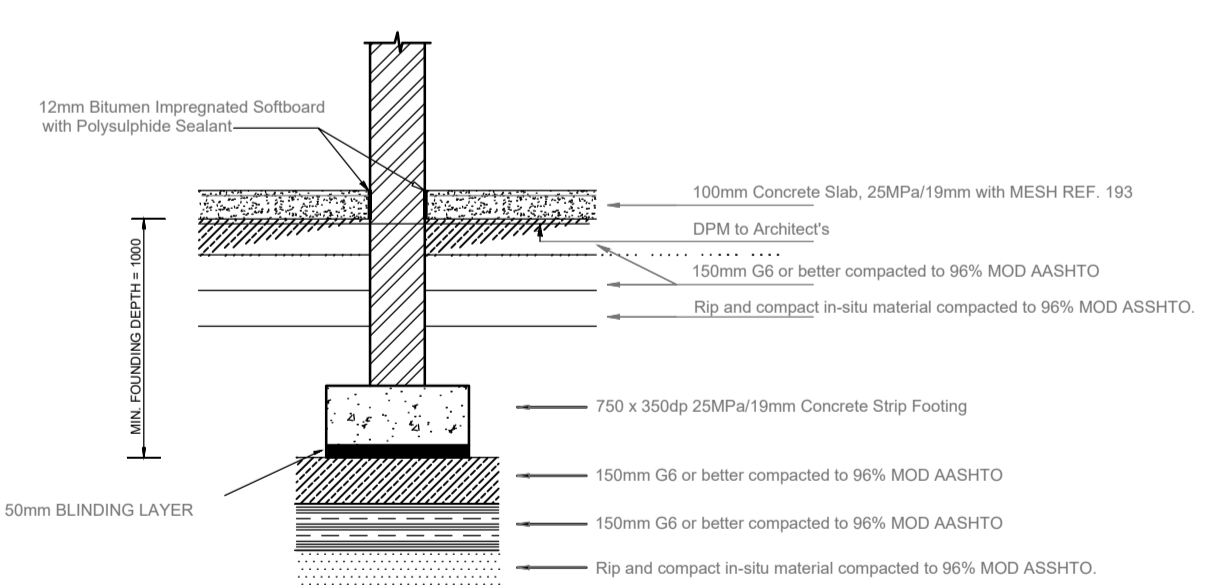
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PROJECT No.	SHEET NUMBER		
063-17-003	2019-DPS-S-02		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	STRUC	C
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DRAWN BY:		CHECKED:	
TL		RT	



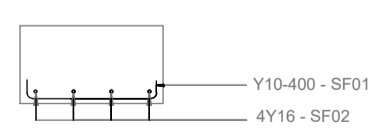
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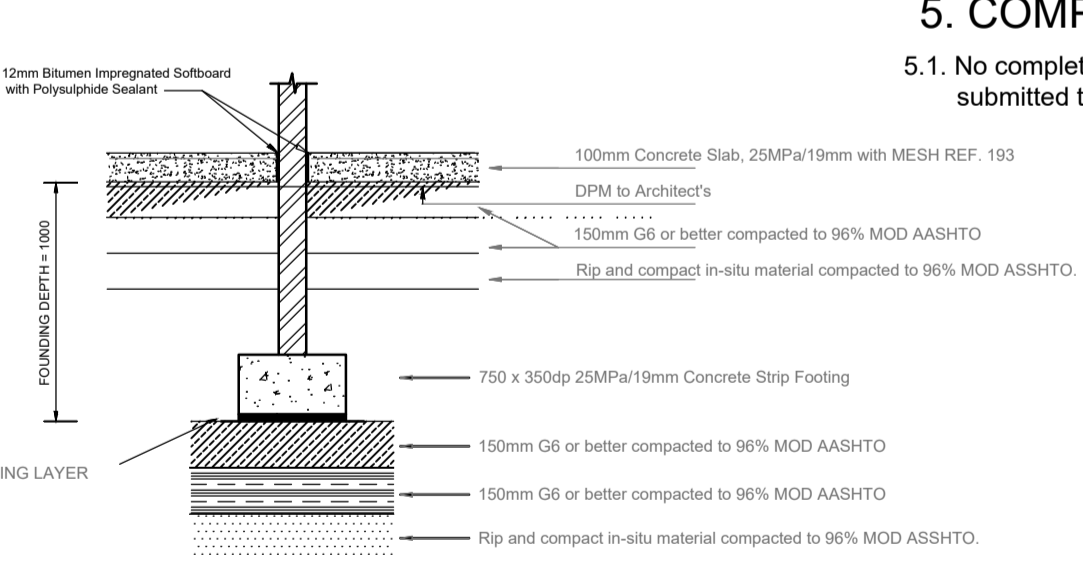
BASE REINFORCEMENT See Bending Schedule for Details



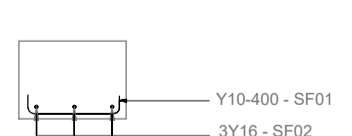
SECTION THROUGH STRIP FOUNDATION - 750 x 350 Dp Base 230 WALLS INTERNAL WALLS



BASE REINFORCEMENT See Bending Schedule for Details



TYPICAL SECTION THROUGH STRIP FOUNDATION - 750 x 350 Deep Base 115 INTERNAL WALLS



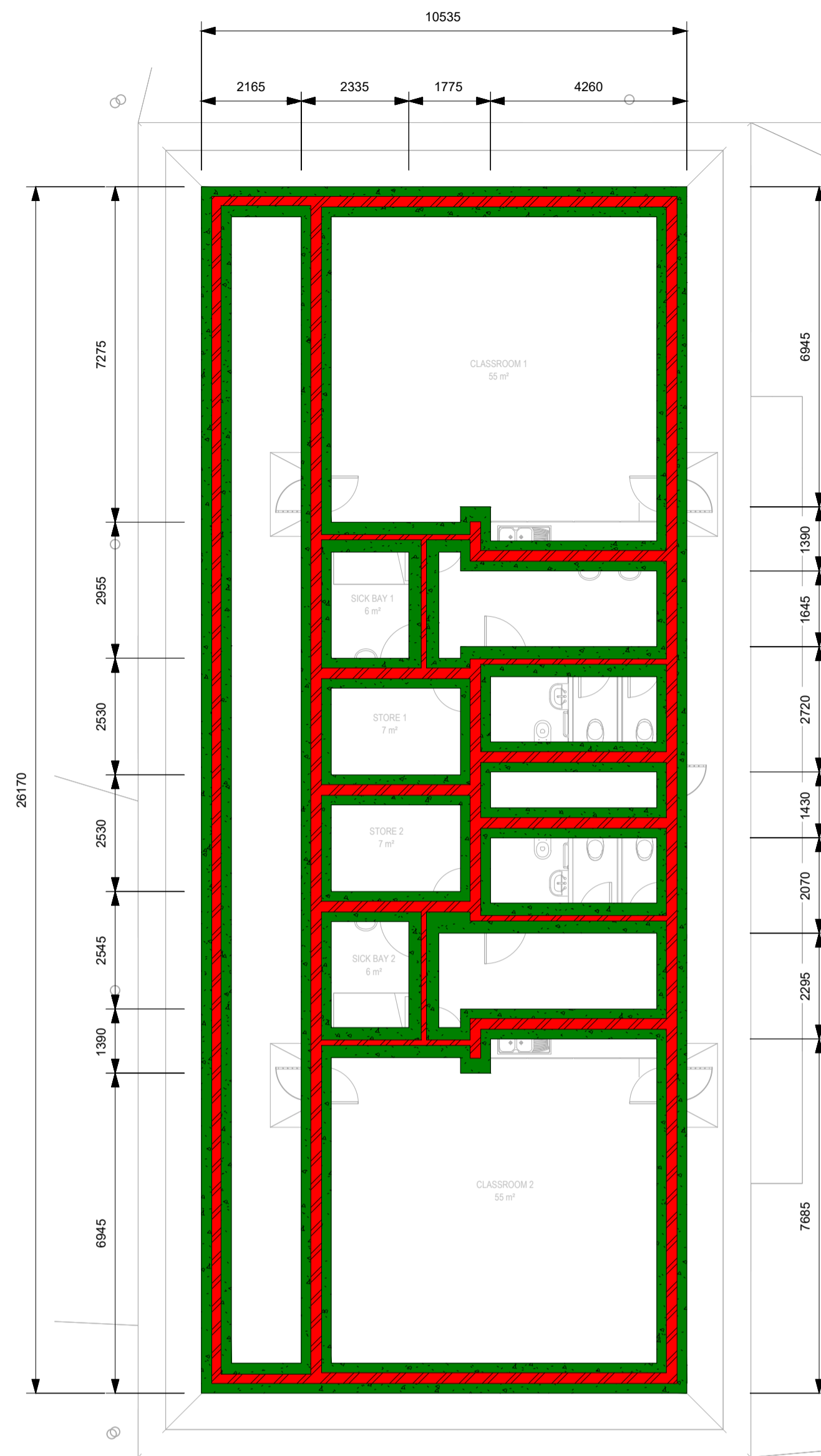
BASE REINFORCEMENT See Bending Schedule for Details

**FOUNDATION DETAILS - SECTIONS**

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GRADE R BLOCK FOUNDATION PLAN  
1 : 100

## 1. GENERAL NOTES

- All work to be done in accordance with the National Building Regulations and the relevant SABS Specifications.
- All drawings to be read in conjunction with Architect's drawings and any discrepancies must be reported to the Engineer prior to any setting out of work.
- No structural alterations are to be made without amended drawings.
- All drawings must be checked by the Contractor and any discrepancies should be reported to the Engineer before any work commences.
- All waterproofing and drainage to be to Architect's details and instructions.
- Contractor to ensure that stability of banks and excavations are continuously maintained throughout the construction period.

## 2. R.C. CONSTRUCTION

- No concrete is to be poured before the Engineer has inspected and approved the fixing of the reinforcement, 48 hours notice is required.
- Breaks in concrete and construction joints are to be made only with Engineer's approval.
- Shuttering and propping may be struck only after the lapse of the following times (in days):
 

Beam sides, walls and unloaded columns	2
Slab soffits without removal of slab props	4
Beam soffits without removal of beam props	7
Props unloaded slabs	10
Props unloaded beams	14
- Minimum concrete cover to reinforcement (in mm)
 

piles	50	beams	30
pile caps	50	slabs	20
ground beams	50	retaining walls (earth face)	30
columns	30	retaining walls (exposed face)	30
- Concrete cube strength at 28 days in (MPa)
 

blinding	15	beams	25
Mortar(Class A)	15	slabs	25
columns	30	walls	25
- Concrete cover to reinforcing to be maintained by the use of either nylon spacers or precast concrete blocks with binding wires cast in.
- All floor levels, unless otherwise indicated, are structural slab levels.

## 3. FOUNDING

- Foundations are subject to alterations as excavations proceed.
- No foundations are to be cast or reinforcement fixed in bases until excavations have been approved by an Engineer.
- All backfill material under foundations and floors to be as follows:
  - G6 Material or better
  - PI < 6
  - Compacted to 98% MOD AASHTO in layers of 150mm
  - Non-cohesive and free draining

## 4. ADDITIONAL NOTES

- All exposed concrete slabs and beams bearing on brickwork to have a slip joint made up of 2 sheets of masonite with smooth faces abutting each other at top of brick-concrete interface. Joint to extend through plaster.
- Special attention to be given to curing of concrete. Exact details to be discussed with Engineer on site prior to pouring of any concrete.
- Two lintels plus five courses of brickwork to be built over all openings - reinforced every course with brickforce.
- All brickwork to have a minimum compressive strength of 15MPa.
- A construction joint sealed with suitable flexible sealant is to be formed at all junctions between new brickwork and existing brickwork.
- No brickwork is to be built onto suspended slabs or beams until slabs/beams have attained their full strength and have been depropped.
- All deviations from architect's drawing to be confirmed by architect prior to construction.
- All work to be carried out in accordance with the National Building Regulations, Environmental and Occupational Health and Safety Act, (latest revision) and the Construction Regulations.
- The main contractor is to ensure that a competent person, approved by the South African Qualification Authority supervises and approves all aspects of the requirements of the Occupational Health and Safety Act, latest revision.
- All temporary works to be designed, detailed, supervised and certified by a competent person or professional engineer as defined in the OHS ACT.
- The works will be inspected from time to time by the consulting engineer to ascertain that the contractor is carrying out the work in general conformity with the engineering drawings and documents. Such inspections are not carried out for the benefit of the contractor, and do not relieve him of the responsibility for the proper construction of the works in accordance with the engineering drawings, documents & good building practice.

## 5. COMPLETION CERTIFICATE

- No completion certificate shall be issued if all material and compaction test results are not submitted to the Engineer.

### LEGEND:

- 600mm WIDE \* 300mm HIGH CONCRETE FOOTING
- BRICK WALL

### SIGNATURES:

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

### REVISIONS

REV.	DATE	DRAWN	DESCRIPTION
A	2021.08.19	TL	ISSUED FOR INFORMATION
B	2022.02.09	TL	FOUNDATIONS REVISED AND ISSUED FOR INFORMATION
C	2022.02.22	TL	FOUNDATIONS REVISED AND ISSUED FOR INFORMATION



DEPARTMENT OF  
**EDUCATION**



LIMPOPO PROVINCE  
39 Grobler Street  
Polokwane North | Polokwane 0999  
Tel: +27 15 291 4056  
mail@muteo.co.za



JOHANNESBURG  
Unit C2-001, Edenburg Terrace  
340 Rivonia Blvd | Rivonia 2128  
Tel: +27 11 234 8141 Cell: +27 82 900 8288  
info@idcarchitects.co.za

REGISTRATION NUMBER: PrArch 4849  
ARCHITECT NAME: B Ilori

CLIENT: LIMPOPO PUBLIC WORKS

PROJECT DESCRIPTION: DIPHUTI PRIMARY SCHOOL

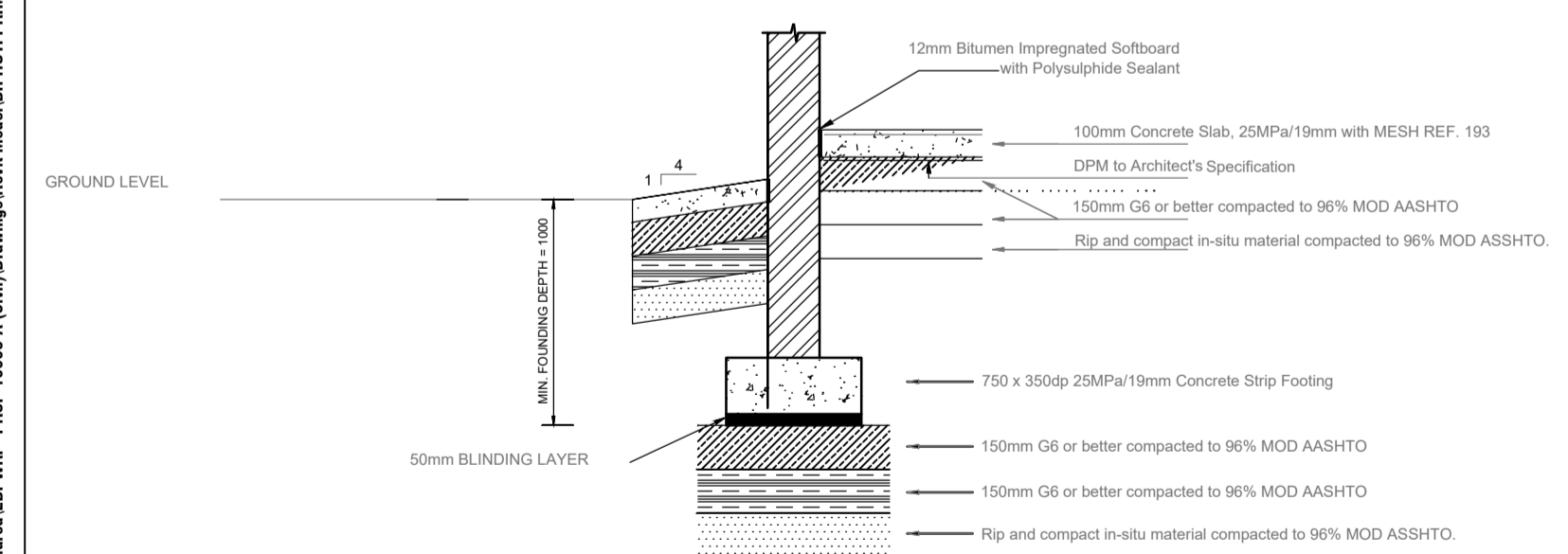
ALTERATIONS AND ADDITIONS

DRAWING DESCRIPTION: GRADE R BLOCK FOUNDATION LAYOUT

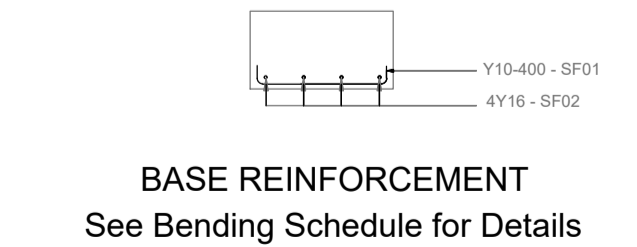
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063-17-003	2019-DPS-S-03		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	STRUC	C
DRAWING STATUS			
INFO	TENDER	COUNCIL	CONSTRUCTION
DRAWN BY:		CHECKED:	
TL			RT

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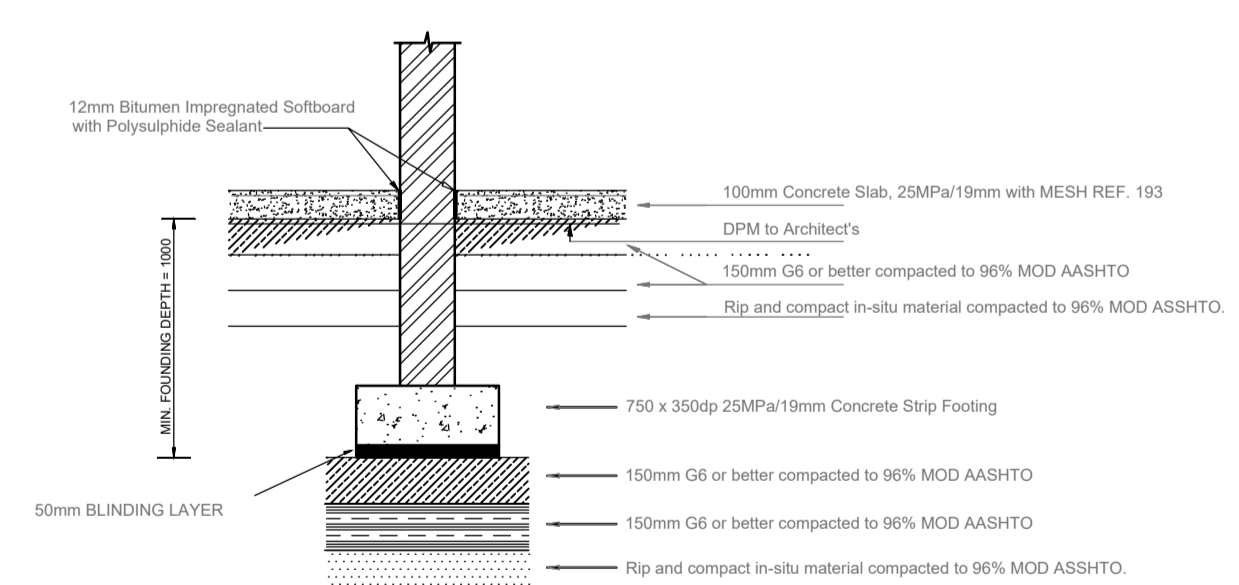
## FOUNDATION DETAILS - SECTIONS



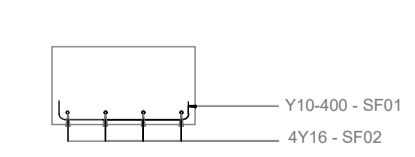
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230 WALLS EXTERNAL WALLS



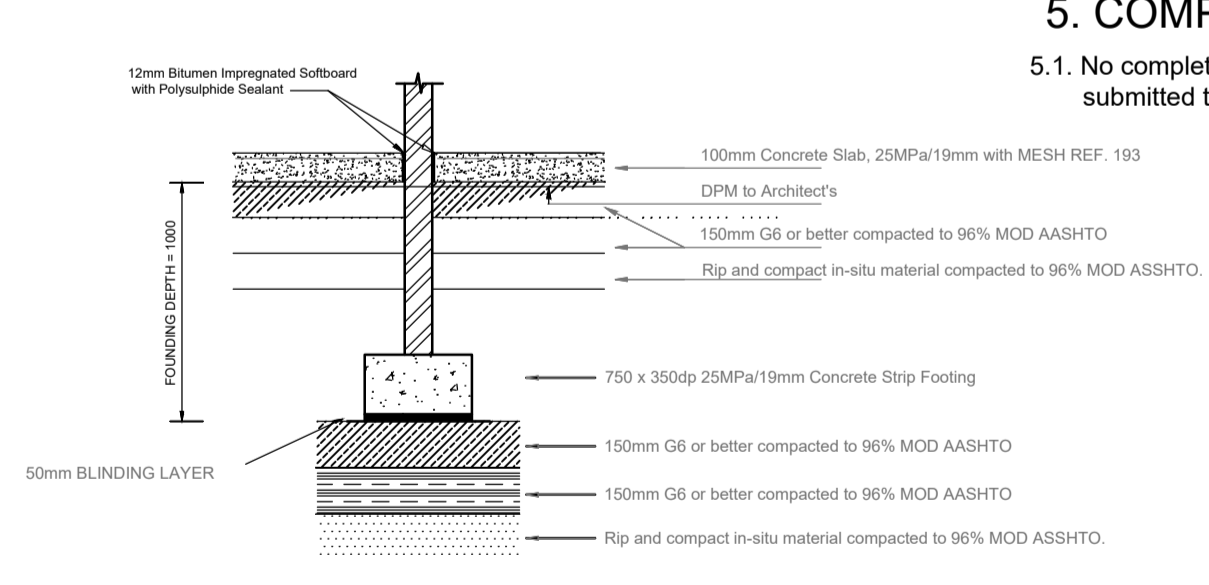
BASE REINFORCEMENT  
See Bending Schedule for Details



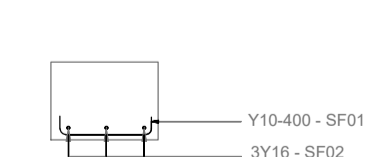
SECTION THROUGH STRIP FOUNDATION - 750 x 350 Dp Base  
230 WALLS INTERNAL WALLS



BASE REINFORCEMENT  
See Bending Schedule for Details

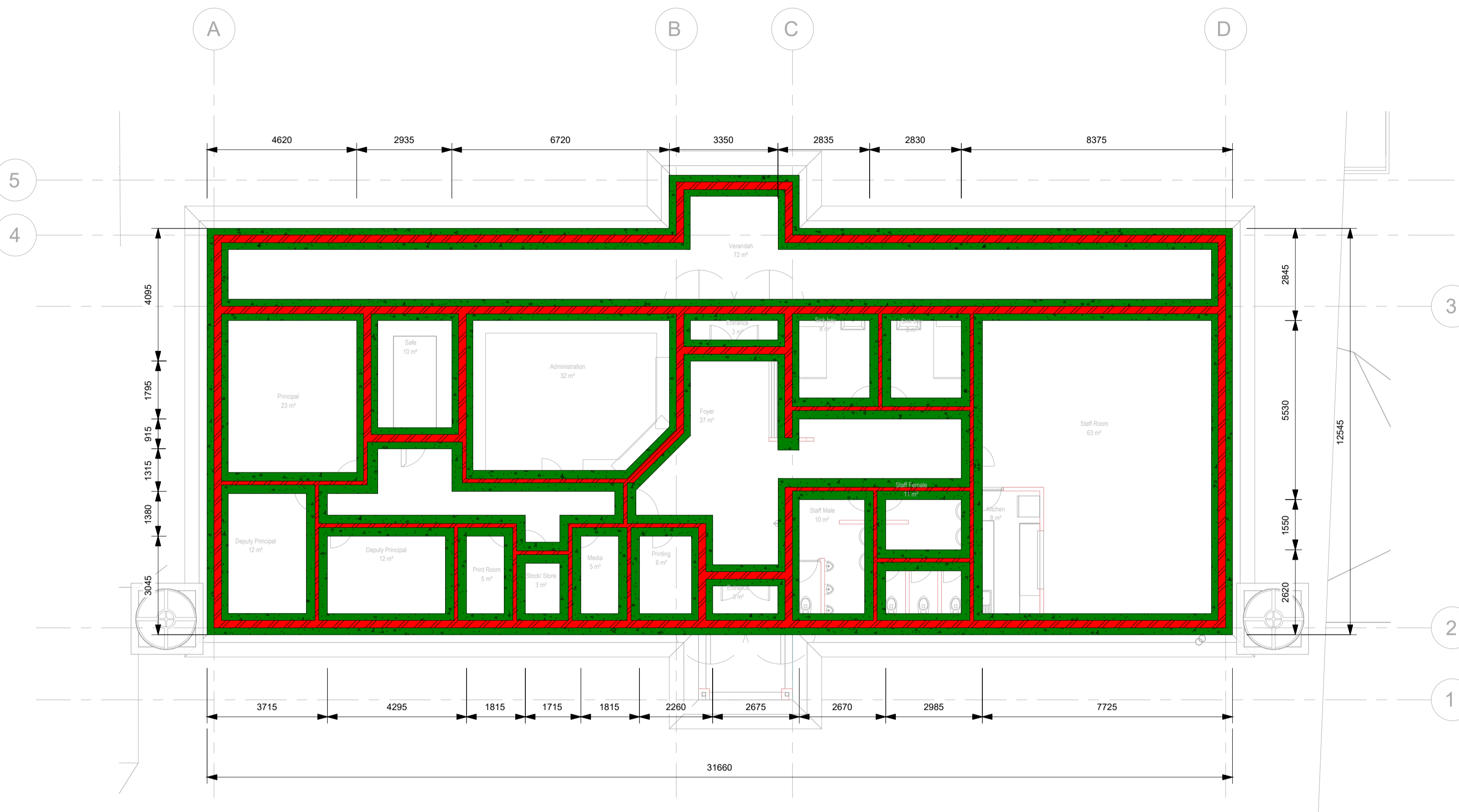


TYPICAL SECTION THROUGH STRIP FOUNDATION - 750 x 350 Deep Base  
115 INTERNAL WALLS



BASE REINFORCEMENT  
See Bending Schedule for Details





**ADMIN BLOCK FOUNDATION PLAN**  
1 : 100

**1. GENERAL NOTES**

- All work to be done in accordance with the National Building Regulations and the relevant SABS Specifications.
- All drawings to be read in conjunction with Architect's drawings and any discrepancies must be reported to the Engineer prior to any setting out of work.
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- Contractor to ensure that stability of banks and excavations are continuously maintained throughout the construction period.

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Beam soffits without removal of beam props	7
Props unloaded slabs	10
Props unloaded beams	14
- Minimum concrete cover to reinforcement (in mm)
 

beams	30
slabs	20
retaining walls (earth face)	30
retaining walls (exposed face)	30
- Concrete cube strength at 28 days in (MPa)
 

blinding	15	beams	25
Mortar(Class A)	15	slabs	25
columns	30	walls	25
- Concrete cover to reinforcing to be maintained by the use of either nylon spacers or precast concrete blocks with binding wires cast in.
- All floor levels, unless otherwise indicated, are structural slab levels.

**3. FOUNDING**

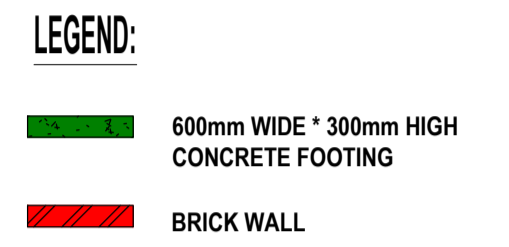
- Foundations are subject to alterations as excavations proceed.
- No foundations are to be cast or reinforcement fixed in bases until excavations have been approved by an Engineer.
- All backfill material under foundations and floors to be as follows:
  - G6 Material or better
  - PI < 6
  - Compacted to 98% MOD AASHTO in layers of 150mm
  - Non-cohesive and free draining

**4. ADDITIONAL NOTES**

- All exposed concrete slabs and beams bearing on brickwork to have a slip joint made up of 2 sheets of masonite with smooth faces abutting each other at top of brick-concrete interface. Joint to extend through plaster.
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**5. COMPLETION CERTIFICATE**

- No completion certificate shall be issued if all material and compaction test results are not submitted to the Engineer

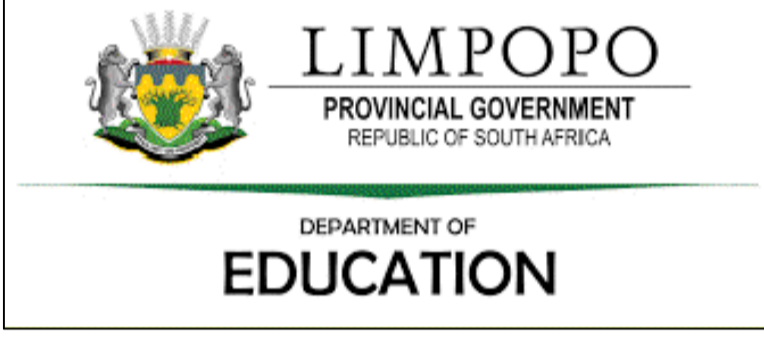


**SIGNATURES:**

PROFESSIONAL:	PR. NR.	SIGNATURE:
ARCHITECT		
CIVIL ENGINEER		
STRUCTURAL ENGINEER		
MECHANICAL ENGINEER		
ELECTRICAL ENGINEER		
FIRE ENGINEER		

**REVISIONS**

REV	DATE	DRAWN	DESCRIPTION
A	2021.08.19	TL	ISSUED FOR INFORMATION
B	2022.02.09	TL	FOUNDATIONS REVISED AND ISSUED FOR INFORMATION
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**JOHANNESBURG**  
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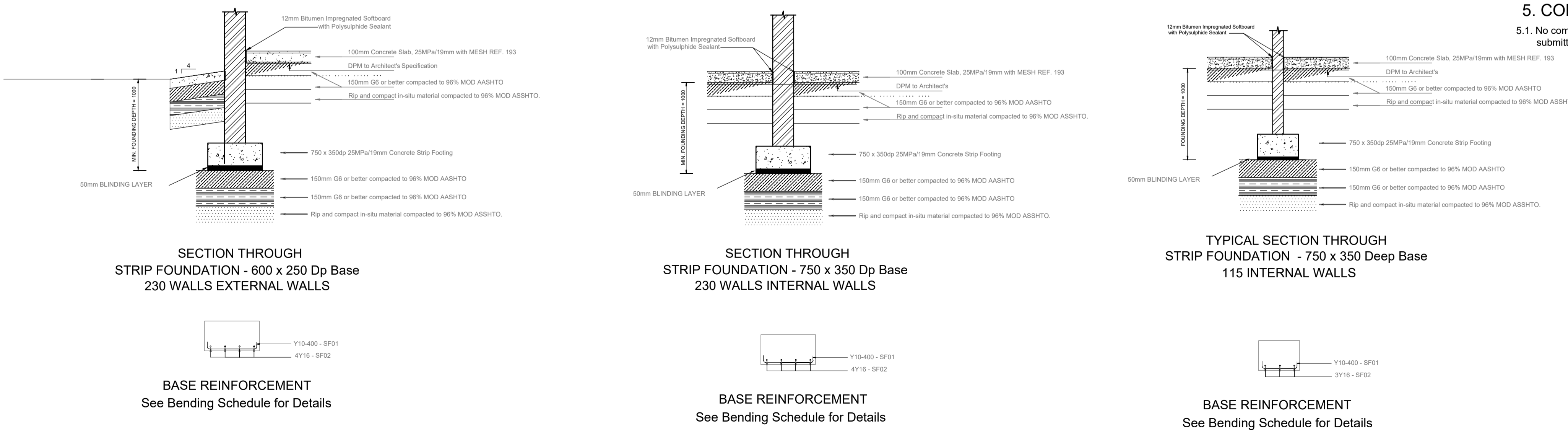
REGISTRATION NUMBER: PrArch 4849  
ARCHITECT NAME: B Ilori

CLIENT: **LIMPOPO PUBLIC WORKS**

PROJECT DESCRIPTION: **DIPHUTI PRIMARY SCHOOL ALTERATIONS AND ADDITIONS**

DRAWING DESCRIPTION: **ADMIN BLOCK FOUNDATION LAYOUT**

SCALE / SHEET SIZE	DATE		
SCALE: As indicated @ A1	2021.08.19		
PROJECT No.	SHEET NUMBER		
063-17-003	2019-DPS-S-04		
OCCUPANCY	PHASE	DISCIPLINE	REVISION
A3	1	STRUC	C
DRAWING STATUS			
INFO	TENDER	COUNCIL	CONSTRUCTION
DRAWN BY:		CHECKED:	
T.L		R.T	



**FOUNDATION DETAILS - SECTIONS**

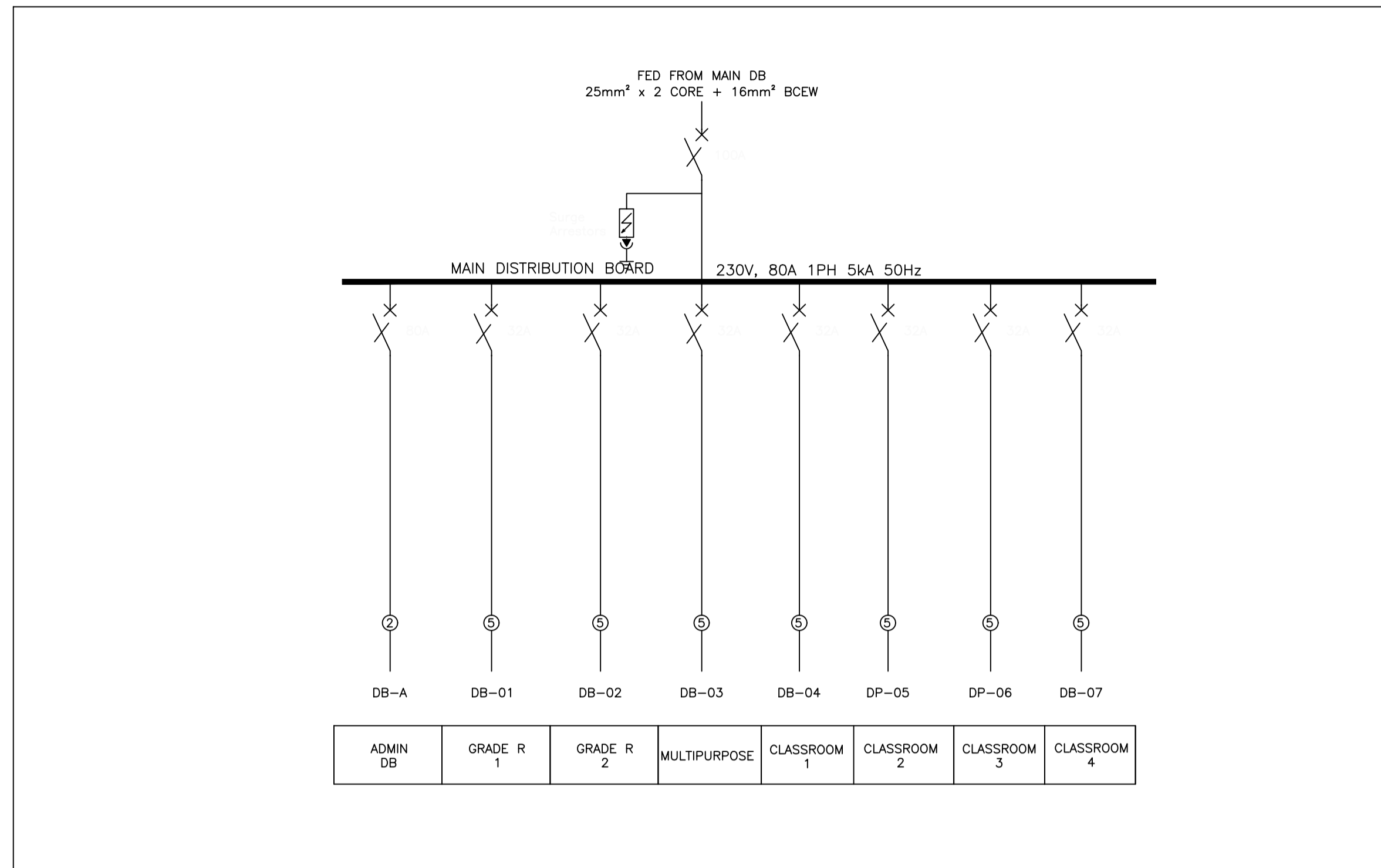
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LEGEND	
	PHASE INDICATIONS: SINGLE PHASE DOUBLE POLE THREE PHASE
	CIRCUIT BREAKER
	ISOLATOR (ON LOAD)
	GENERAL SYMBOL FOR SWITCH
	EARTH LEAKAGE
	CONTACTOR

CABLE SCHEDULE	
1	25mm <sup>2</sup> x 2C + 16mm <sup>2</sup> BCEW
2	16mm <sup>2</sup> x 2C + 10mm <sup>2</sup> BCEW
3	10mm <sup>2</sup> x 2C + 6mm <sup>2</sup> BCEW
4	6mm <sup>2</sup> x 2C + 4mm <sup>2</sup> BCEW
5	4mm <sup>2</sup> x 2C + 2.5mm <sup>2</sup> BCEW
6	2.5mm <sup>2</sup> x 2C + 2.5mm <sup>2</sup> BCEW
7	1.5mm <sup>2</sup> x 2C + 1.5mm <sup>2</sup> BCEW

MAIN DISTRIBUTION BOARD	
POSITIONING:	SURFACE MOUNTED
DIMENSIONS:	SPECIFY
PANEL COLOUR:	ORANGE
CABLE ENTRY:	BOTTOM
CABLE EXIT:	TOP & BOTTOM
DOORS:	LOCKABLE
SPARE CAPACITY:	25%
OTHER:	WEATHERPROOF

DISTRIBUTION BOARDS	
POSITIONING:	RECESSED
DIMENSIONS:	SPECIFY
PANEL COLOUR:	WHITE
CABLE ENTRY:	BOTTOM
CABLE EXIT:	TOP & BOTTOM
DOORS:	LOCKABLE
SPARE CAPACITY:	25%
OTHER:	SPECIFY

POWER OUTLETS



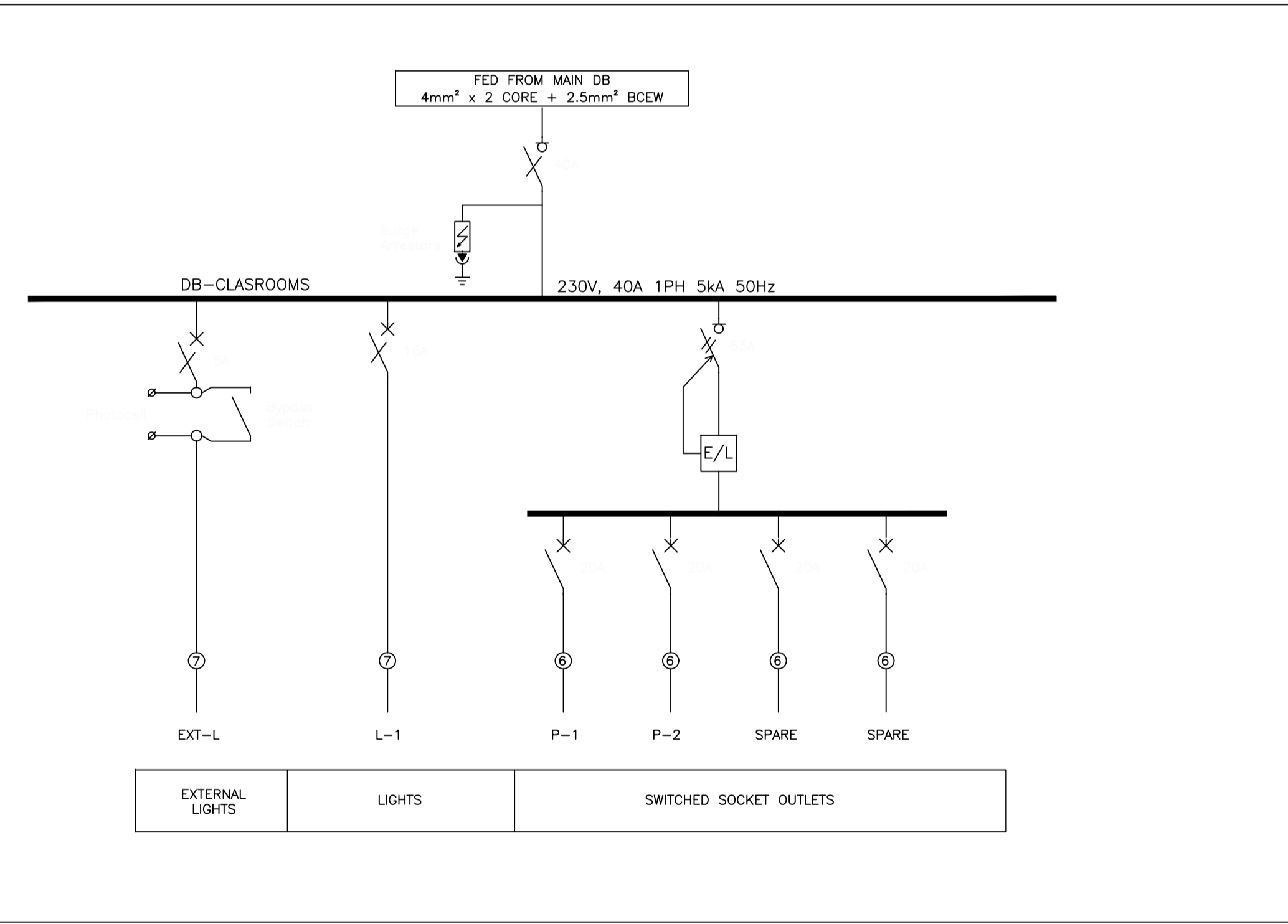
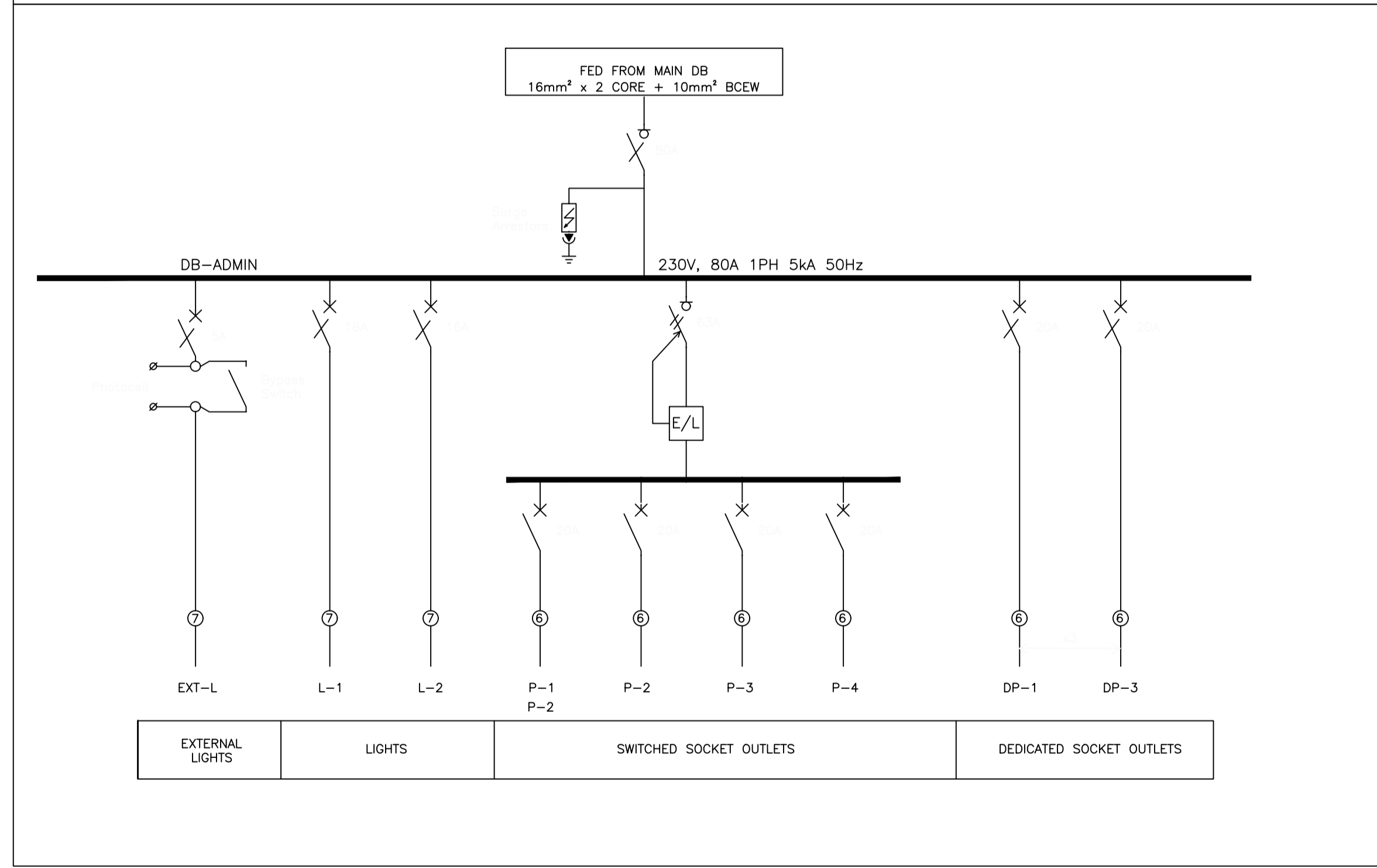
SOCKET OUTLETS



STOVE ISOLATOR



TYPICAL DISTRIBUTION BOARD



REVISIONS			
NO.	DATE	DESCRIPTION	BY
A.	09/10/19	ISSUED FOR INFORMATION	SM
B.	01/06/21	ISSUED FOR INFORMATION	SM
C.	02/02/22	ISSUED FOR TENDER	SN

CLIENT

ARCHITECT

JOHANNESBURG  
Unit C2-001, Edenburg Terrace  
348 Rivonia Blvd | Rivonia 2128  
Tel: +27 11 234 8088 Cell: +27 72 068 0958  
johannesburg@idcgroup.co.za

ELECTRICAL ENGINEER

**MED-TECH**  
ENGINEERS

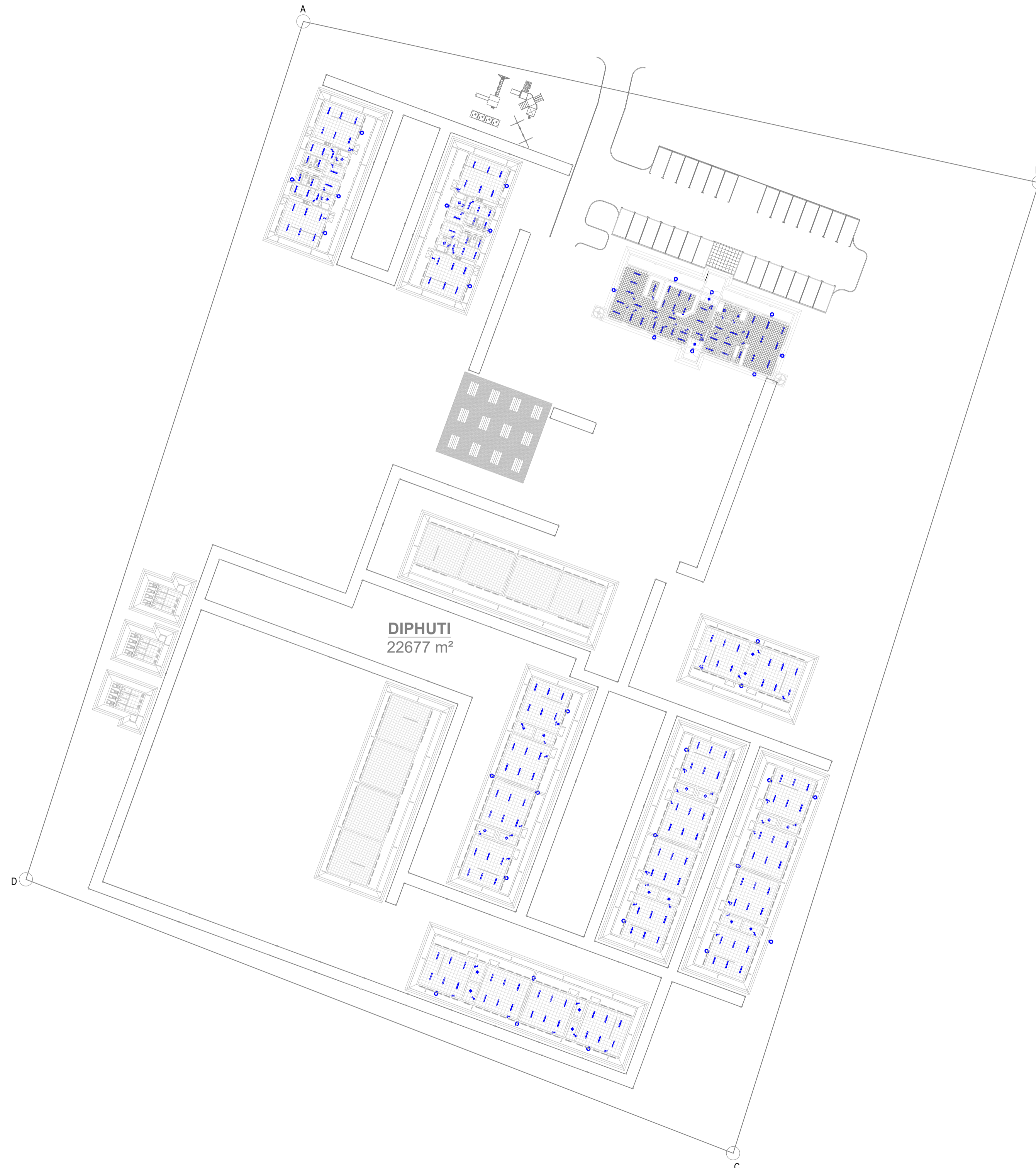
1283 De Villebois Mareuil Drive,  
Moreleta Park,  
Pretoria, 0181  
Tel: +27 12 997 3676  
Email: gift@med-techengineers.com

ELECTRICAL ENGINEER'S NAME: G. Mphedu  
REGISTRATION NUMBER: Pr.Eng No. 20130744  
CLIENT'S SIGNATURE:






PROJECT DESCRIPTION

**PROPOSED RENOVATIONS AND ALTERATIONS AT DIPHUTI, LIMPOPO**

DRAWING DESCRIPTION		
ELECTRICAL POWER LAYOUT		
SCALE	SHEET SIZE	DATE
1:500	A1	01 JUNE 2021
PROJECT No.		REVISION
PEB013		C
DRAWING NUMBER		
PEB013-P-001		
DRAWING STATUS:		
INFO ONLY	TENDER	COUNCIL CONSTRUCTION
DRAWN BY:		CHECKED:
Sesha		Gift



### LEGEND

-  L1 - 15W LED SURFACE MOUNT BULKHEAD
-  L2 - 43W LINEAR LED SURFACE MOUNT 1500
-  L4 - 150W LED LOW BAY LIGHT FITTING
-  L6 - 2X18W LED SURFACE MOUNT BULKHEAD CW WITH BLACK TRIM
-  LIGHT SWITCH SINGLE WAY
-  LIGHT SWITCH 2 WAY

### PROPOSED LIGHT FITTINGS



OUTSIDE SECURITY LIGHT



MULTI-PURPOSE HALL LIGHT



ABLUTIONS AND STOREROOM LIGHT



CLASSROOMS AND OFFICES LIGHT

REVISIONS			
NO.	DATE	DESCRIPTION	BY
A.	09/10/19	ISSUED FOR INFORMATION	SM
B.	01/06/21	ISSUED FOR INFORMATION	SM
C.	02/02/22	ISSUED FOR TENDER	SN

CLIENT



**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

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


ARCHITECT



**IDC ARCHITECTS**  
EAST LONDON | PORT ELIZABETH | DURBAN | CAPE TOWN | JOHANNESBURG

JOHANNESBURG  
Unit C2-001, Edenburg Terrace  
348 Rivonia Blvd | Rivonia 2128  
Tel: +27 11 234 8088 Cell: +27 72 068 0958  
johannesburg@idcgroup.co.za

ELECTRICAL ENGINEER



**MED-TECH**  
ENGINEERS

1283 De Villebois Mareuil Drive,  
Moreleta Park,  
Pretoria, 0181  
Tel: +27 12 997 2676  
Email: gftm@med-techengineers.com

ELECTRICAL ENGINEER'S NAME: G. Mphedu  
REGISTRATION NUMBER: Pr.Eng No. 20130744  
CLIENT'S SIGNATURE:

PROJECT DESCRIPTION  
**PROPOSED RENOVATIONS AND ALTERATIONS AT DHIPUTI, LIMPOPO**

DRAWING DESCRIPTION  
ELECTRICAL LIGHTING LAYOUT

SCALE	SHEET SIZE	DATE	
1:500	A1	06 JUNE 2021	
PROJECT No.	REVISION		
PEB013	C		
DRAWING NUMBER			
PEB013-L-001			
DRAWING STATUS:			
INFO ONLY	<b>TENDER</b>	COUNCIL	CONSTRUCTION
DRAWN BY:		CHECKED:	
Sesha		Gift	



