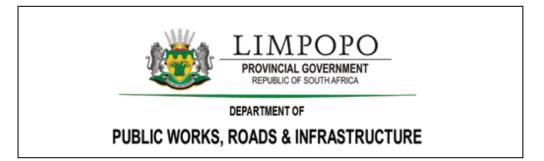
CONTRACT No. LDPWRI-B/20308



BID NUMBER: LDPWRI-B/20308

APPOINTMENT OF A CONTRACTOR FOR THE DEMOLITIONS OF 13 CLASSROOMS AND 13 PIT TOILETS, RENOVATIONS TO 10 ENVIROLOO TOILETS AND THE CONSTRUCTION OF MEDIUM ADMIN, 12 CLASSROOMS, 2 GRADE R CLASSROOMS, 14 ENVIROLOO TOILET SEATS AND 1 x 5 SEATER WATERBORNE TOILET BLOCK AT RUNNYMEDE PRIMARY SCHOOL IN MOPANI DISTRICT

for

LIMPOPO DEPARTMENT OF EDUCATION (LDOE),

LIMPOPO PROVINCE

FRAMEWORK CATEGORY A (7GB AND ABOVE)

Issued by:

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

Contact Person: General Queries

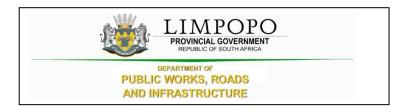
Name	: Mr NJ Motsopye,
Tel No.	: 015 284 7126
Email	: motsopyen@dpw.limpopo.gov.za

Technical: Technical Queries

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

Name of the Bidder :....

CONTRACT No. LDPWRI-B/20308



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PART T1: TENDERING PROCEDURE

CONTRACT No. LDPWRI-B/20308

T1.1 Tender Notice and Invitation to Tender

The Limpopo Department of Public Works, Roads and Infrastructure invites tenderers from contractors appointed on the framework agreement on category A for APPOINTMENT OF A CONTRACTOR FOR THE DEMOLITIONS OF 13 CLASSROOMS AND 13 PIT TOILETS, RENOVATIONS TO 10 ENVIROLOO TOILETS AND THE CONSTRUCTION OF MEDIUM ADMIN, 12 CLASSROOMS, 2 GRADE R CLASSROOMS, 14 ENVIROLOO TOILET SEATS AND 1 x 5 SEATER WATERBORNE TOILET BLOCK AT RUNNYMEDE PRIMARY SCHOOL IN MOPANI DISTRICT FOR LIMPOPO DEPARTMENT OF EDUCATION (LDOE) for a period of 12 months. It is estimated that tenderers must have a CIDB contractor grading designation of 7 GB or higher.

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

Project Name	APPOINTMENT OF A CONTRACTOR FOR THE DEMOLITIONS OF 13 CLASSROOMS AND 13 PIT TOILETS, RENOVATIONS TO 10 ENVIROLOO TOILETS AND THE CONSTRUCTION OF MEDIUM ADMIN, 12 CLASSROOMS, 2 GRADE R CLASSROOMS, 14 ENVIROLOO TOILET SEATS AND 1 x 5 SEATER WATERBORNE TOILET BLOCK AT RUNNYMEDE PRIMARY SCHOOL IN MOPANI DISTRICT FOR LIMPOPO DEPARTMENT OF EDUCATION (LDOE) FOR A PERIOD OF 12 MONTHS		
Tender Number	LDPWRI- B/20308		
Tender documents availability		f Public Works, Roads and Infrastructure website	
Address for submission of tenders	DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE.		
		er River and Blaauwberg Streets, Ladanna, 0699.	
Closing date of the tender	As per Tender invite		
Closing time of the tender	As per Tender invite		
Compulsory briefing	Yes 🗆 No 🖂		
meeting (Tenderers must sign the attendance register in the name of the tendering	Meeting venue	As per Tender invite	
entity. Addenda (if any) will be issued only to those	Date	As per Tender invite	
tendering entities appearing on the attendance register)	Time:	As per Tender invite	
Evaluation criteria	 Compliance with mandatory or compulsory requirements Risk assessment on current projects Price Preference 		
Mandatory or Compulsory Requirements (failure to submit or comply with these requirements will lead to automatic disqualification)	Only tenderers who are appointed on category A registered with the Construction Industry Development Board (CIDB) with designation of 7 GB or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations are eligible to have their tenders evaluated Completed and signed Form of Offer Priced Bills of Quantities Record of addenda to tender documents Proposed amendments and qualificationsDeclaration on the status of Administration complianceCIDB grading certificate (Valid CIDB)Declaration of current projects		

CONTRACT No. LDPWRI-B/20308



T1.2 Tender Data

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

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

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C.2.7	Compulsory site briefing	
	A compulsory briefing meeting will be held as per Tender invite	
	Failure to attend the site briefing will result in the bidders not being considered for the project	
	Tenderers must sign the attendance list in the name of the tendering entity. Addenda (if any) will be issued only to those tendering entities appearing on the attendance list.	
C.2.11	Alterations to the documents	
	Bidders are required to not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations	
C.2.12	Alternative tender offer	
	No alternative tender offer is permitted in this tender.	
C.2.13.2	Replace sub-clause C.2.13.2 with the following; Return all returnable documents to the employer after completing them in by writing in non- erasable black ink (<i>Black pen</i>)	
C.2.13.3	Parts of each tender offer communicated on paper shall be submitted as an original	
C.2.13.4	The tender shall be signed by a person duly authorized to do so.	
C.2.13.5	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:	
	Location of tender box: DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE. Physical address: Corner River and Blaauwberg Streets, Ladanna, 0699 Identification details: Sealed Tender with Tender reference number, Title of Tender and the closing date and time of the tender.	
C.2.15.1	The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender. Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.	
C.2.16.1	The tender offer validity period is 120 days.	
C.2.16.2	The tender accepts that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2.16.1 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).	
C.3.1	 The tenderer is required to indicate how they claim points for each preference point system and attached relevant supporting documents. The specific goals for claiming of preference points include the following: Persons who had no franchise in national elections prior to 1983 and 1993 Women Disabled persons Promotion of SMMEs Enterprises located in Limpopo Province Promotion of youth South African owned enterprises 	

CONTR	ACT No. LD	PWRI-B/20308	
	CIDB Grading Certificate		
	Tenders are required to provide proof of registration with the CIDB register of contractors indicating the category of registration, grading as well as the CRS number of the tenderer.		
	Letter of Good Standing		
		s are required to submit, bound with the tender submission, a letter of good standing from ensation commissioner indicating that the bidder is in good standing.	
C3.2	Notwithstanding any requests for confirmation of receipt of Addenda issued, the tenderer shall be deemed to have received such addenda if the employer can show proof of transmission thereof (or a notice in respect thereof) via electronic mail, facsimile or registered post.		
C.3.4.1	Tenders w	vill not be opened immediately after the closing time for tenders.	
C.3.11	C.3.11 The tenderers will be evaluated in four stages (i) Stage 1: Compliance with mandatory requirements as stated in Part T1.1 (ii) Stage 2: Risk assessment on current projects (iii) Stage 3: Price (iv) Stage 4: Preference		
	The technical capacity (functionality) of the contractors will not be evaluated any further evaluation of the RFQ. However, the contractors will be required to declare the status of th staff and any administrative compliance. In cases where there are changes in the key st contractor should provide CVs and qualifications of the new staff to LDPWR&I. The new staff have similar skills, qualifications and experience as the staff submitted during tender. Similar contractors will be expected to provide an update on any changes in their administrative complement. A should submit the required SBD document/forms in such cases.		
	The award will only be issued to contractors with valid Tax Clearance certificates, active of grading and the contractor who meets all the legislative requirement – this shall be verified by in line with the departmental SCM Policy. The total value of current projects for a contractor under consideration cannot exceed twice maximum value of their relevant CIDB grade. ¹		
	a)	Stage 1: Administrative Compliance: The Compliance or compulsory documents and returnables are detailed in Section T.2.1 of this tender document. Failure to submit, complete or comply with these requirements will lead to automatic disqualification.	
	b)	Stage 2: Risk assessment on current projects	
		The total value of current projects for a contractor under consideration cannot exceed twice the maximum value of their relevant CIDB grade. Should it exceed, the bidder will therefore not be appointed.	

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Stage 3 and 4:

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

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

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

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

Where:

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

P is the points awarded to the bid under consideration

 P_m is the lowest Comparative bid price

- P_o is the comparative price under consideration
- b) *N_P* is the number of tender evaluation points awarded for preferences claimed in accordance with the Preferencing Schedule in 3.18

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PART T2: RETURNABLE DOCUMENTS

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T2.1 : LIST OF RETURNABLE DOCUMENTS

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

A -- MANDATORY REQUIREMENTS

2.1 Fully completed Form of Offer (Fully Completed and Signed Form of Offer)

2.2 Bills of Quantities (P&Gs are allowed to have a lump sum total in the P&Gs Summary Page and the rest of the Bill of Quantities trades must be completed in full (Rates and Amounts))

2.3 Record of Addenda to tender documents (Records of addendum must be captured in full, whether applicable of not)

2.5 Declaration on the status of Administration compliance (Fully completed, circled and signed)

2.6 CIDB grading certificate (Valid CIDB)

2.7 Declaration of current projects (Fully completed, circled and signed)

B – NON- MANDATORY REQUIREMENTS

2.8 SBD 1 (Fully Completed and Signed)

2.9 SBD 4 (Fully Completed and Signed). False declaration by the bidder will render the proposal non-responsive and will not be considered

2.9 SBD 6.1 (Failure on the part of a bidder to complete and submit proof or documentation required in terms of this tender to claim points for specific goals with tender, will be interpreted to mean that preference points for specific goals are not claimed)

SPECIFIC GOALS	REQUIRED ATTACHMENT
Persons who had no franchise in national elections prior to 1983 and 1993	Attach certified copy of South African ID as proof
Women	Attach Director's certified copy of South African ID as proof + company registration documents
Disabled Persons	Bidder with disability must attach medical certificate completed by registered medical practitioner which is registered with Health Professions Council of South Africa (HPCSA) as proof
Promotion of SMMEs	Attach latest financial statement as proof
Enterprises located in Limpopo Province	 N.B: The physical address given in the SBD 1 will be used and it should be consistent or the same as the preferred address in the Central Supplier Database Report a) A Title deed, Letter from a Traditional Authority or Municipal Statement which must not be older than three (3) months; or b) A Formal Lease Agreement together with Lessor's Municipal Account or Letter from Traditional Authority
Promotion of Youth	Attach Director's certified copy of South African ID as proof
South African owned enterprises	Attach Director's certified copy of South African ID as proof + company registration documents

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2.10 Attach full CSD Report (For verification of the required attachments above)

2.11 Proposed amendments and qualifications (Proposed amendments and qualifications must be captured in full, whether applicable of not)

Failure by the service provider to submit or complete item 2.1, 2.2, 2.3, 2.5, 2.6, and 2.7 will render their proposal not responsive and will not be considered. The bidder should also not appear on the National Treasury's list of black listed entities.

C -- SPECIAL NOTES TO BIDDERS AND DEPARTMENTAL RIGHTS

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

I.1 LDPWR&I reserve the right to call interviews with short-listed bidders before final selection.

1.2 LDPWR&I reserve the right to conduct supplier due diligence prior to final award or at any time during the contract period. This may include surprise site visits.

I.3 LDPWR&I reserves the right to appoint the bidder that proves to be fully capable and qualifies to handle and execute the job.

I.4 The proposals submitted must be in line with the detailed specification.

- I.5 LDPWR&I reserve the right to cancel or withdraw this bid if:
- i. Due to changed circumstances, there is no longer a need for these services; or
- ii. Funds are no longer available to cover the total envisaged expenditure; or
- iii. No acceptable bods are received; or
- iv. There is a material irregularity in the Bid process.

1.6 In the case of sub-contracting or joint venture agreement, LDPWR&I will enter into a single contract with the principal bidder.

1.7 Bidders who are not registered on Central Supplier Database (CSD) must register before submission of bids.

1.8 Any completion of the bid document in pencil or erasable ink will not be acceptable and will automatically disqualify the submitted bid.

1.9 Successful bidder will be required to sign and enter into a formal contract upon the award.

1.10 Notwithstanding shortcomings and/or inconsistencies, if any, in this specification, which is only a minimum specification, a bidder shall make provision for a complete solution that will deliver the required service efficiently and cost-effectively.

1.11 Bid documents must be submitted physically to the closing address as reflected on the Request for Quotation/Tender.

1.12 Quotations/Tenders received after the closing date and time will not be accepted for consideration.

1.13 This request for bid document contains confidential information about LDPWR&I, which has been provided to supply potential bidders with the data necessary to provide a holistic response.

1.14 No part of the contents may be used, copied, disclosed or conveyed in whole or in part to any party, in any manner whatsoever without the prior written permission of LDPWR&I.

1.15 Any reproduction or transmission of information contained in this document except for the sole purpose of responding to this bid is strictly prohibited.

1.16 References to LDPWR&I must not be made in any literature, promotional material, and brochures or sales presentations without the express written consent of LDPWR&I

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T 2.2: RETURNABLE SCHEDULE

	Document Name		Returnable document	
1.	Fully completed Form of Offer	□Yes	🗆 No	
2.	Priced Bills of Quantities	□Yes	🗆 No	
3.	Record of Addenda to tender documents	□Yes	🗆 No	
4.	Proposed amendments and qualifications	□Yes	🗆 No	
5.	Proof of specific goals for award of the preference points		🗆 No	
6.	SBD 1. Invitation to Tender		🗆 No	
7.	SBD 6.1: Reference Points claim form in terms of the Preferential Procurement Regulations 2022 or amended	□Yes	🗆 No	
8.	Declaration on the status of Administration compliance.	□Yes	🗆 No	
9.	Proof of CIDB class grading: 7GB or higher.	□Yes	🗆 No	
10.	Full CSD Report	□Yes	🗆 No	
11.	Declaration of current projects	□Yes	🗆 No	

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Declaration on the status of administrative compliance

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

Signed	 Date	
Name	 Position	
Enterprise		

CONTRACT No. LDPWRI-B/20308



Record of Addenda to tender documents

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:			
	Date	Title or Details	
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Attach additional pages if more space is required.

Signed	 Date	
Name	 Position	
Tenderer	 	

CONTRACT No. LDPWRI-B/20308

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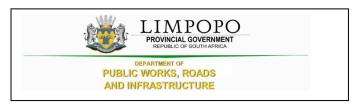
Proposed amendments and qualifications

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

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

Page	Clause or item	Proposal	
Signe	d	Date	
Name	-	Position	
Tende	erer		

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SBD 1

PART A: INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE LIMPOPO DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE								
BID NUMBER:	LDPWRI-B/20308		CLOSING D	DATE	As per Tender Advert		NG TIME:	As per Tender Advert
	REFURBISHME	NT AND ADDIT	IONS AT R	UNNEYME				
DESCRIPTION BID RESPONSE	DISTRICT.	E DEPOSITED IN		SITUATED A	T (STREET ADD	RESS)		
	T OF PUBLIC WC							
	ess: Corner River a	,			9.			
BIDDING PROCE	EDURE ENQUIRIES N	IAY BE DIRECTED	то					
CONTACT PERS	ON	Mr. NJ Motsopye						
TELEPHONE NU	MBER	0152847126	E-MAIL AI	DDRESS		motsop	yen@dpw.limpop	o.gov.za
CONTACT PERS	ON (TECHNICAL)	Mr. K Modjadji				1		
TELEPHONE NU		083 673 5436	E-MAIL AI	DDRESS		Modjad	jiM@dpw.limpopo	o.gov.za
SUPPLIER INFO		[
POSTAL ADDRE								
STREET ADDRE								
TELEPHONE NU		CODE			NUMBER			
CELLPHONE NU								
E-MAIL ADDRES								
VAT REGISTRAT	ION NUMBER PLIANCE STATUS	TAX			CENTRAL			
		COMPLIANCE SYSTEM PIN:		OR	SUPPLIER DATABASE No	: MAA	AA	
ARE YOU THE REPRESENTA SOUTH AFRIC		□Yes	No	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS		∐Yes [IF YES, ANSW		
GOODS /SER	VICES /WORKS	[IF YES ENCLOS	E PROOF]	OFFERED)?		QUESTIONNAI	
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS								
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?					ES 🗌 NO			
DOES THE ENTITY HAVE A BRANCH IN THE RSA?					ES 🗌 NO			
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?						ES 🗌 NO		
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?					ES 🗌 NO			
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?					ES 🗌 NO			
IF THE ANSWER System Pin Co	IS "NO" TO ALL OF DE FROM THE SOUT	THE ABOVE, THEN TH AFRICAN REVE	N IT IS NOT A ENUE SERVIC	REQUIREME E (SARS) AN	ENT TO REGISTE ND IF NOT REGIS	R FOR A	TAX COMPLIAN PER 2.3 BELOW	ICE STATUS /.

CONTRACT No. LDPWRI-B/20308 PART B: TERMS AND CONDITIONS FOR BIDDING

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

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

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

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SBD 4

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

YES/NO

2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest2 in the enterprise,

employed by the state?

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of institution	State

- 2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**
- 2.2.1 If so, furnish particulars:

.....

² the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence on to direct the course and decisions of the enterprise.

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- 2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**
- 2.3.1 If so, furnish particulars:

.....

3 DECLARATION

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 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 consortium3 will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 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.

³ 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.

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I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....

Signature

Date

.....

Position

Name of bidder

CONTRACT No. LDPWRI-B/20308



SBD 6.1

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

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

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

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to invitations to tender:
 - the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 To be completed by the organ of state

(delete whichever is not applicable for this tender).

- a) The applicable preference point system for this tender is the 90/10 preference point system.
- b) The applicable preference point system for this tender is the 80/20 preference point system.
- c) Either the 90/10 or 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.
- 1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:
 - (a) Price; and
 - (b) Specific Goals.

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1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

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

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

2. DEFINITIONS

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

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FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES 3.

POINTS AWARDED FOR PRICE 3.1.

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

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

80/20 90/10 or

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

Ps Points scored for price of tender under consideration =

Pt Price of tender under consideration =

Pmin = Price of lowest acceptable tender

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

3.2.1. POINTS AWARDED FOR PRICE

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

80/20 or 90/10

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

Where

Ps Points scored for price of tender under consideration =

Pt Price of tender under consideration =

Price of highest acceptable tender Pmax =

POINTS AWARDED FOR SPECIFIC GOALS 4.

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of-

4.3.

(a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or Page 25 of 477

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(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

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

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

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

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Persons who had no franchise in national elections prior to 1983 and 1993	6	
Women	3	
Disabled persons	2	
Promotion of SMMEs	2	
Enterprises located in Limpopo Province	4	
Promotion of youth	1	
South African owned enterprises	2	

DECLARATION WITH REGARD TO COMPANY/FIRM

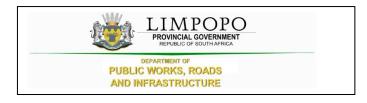
- 4.4. Name of company/firm.....
- 4.5. Company registration number:
- 4.6. TYPE OF COMPANY/ FIRM
 - Partnership/Joint Venture / Consortium
 - One-person business/sole propriety
 - □ Close corporation
 - Public Company
 - Personal Liability Company
 - (Pty) Limited
 - Non-Profit Company
 - □ State Owned Company

[TICK APPLICABLE BOX]

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

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



DECLARATION OF CURRENT PROJECTS

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

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

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

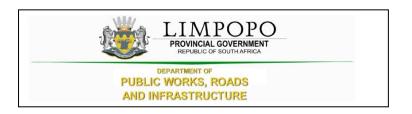
Misrepresentation of facts will render your bid non-responsive.

Table 1 List of current projects executed by the bidder

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

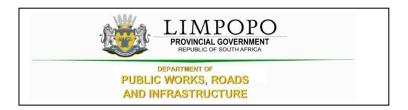
Project Description	Project Value	Start date	Planned end date	Client Name	Contact Person number

Signed	 Date	
Name	 Position	
Enterprise		



THE CONTRACT

30



PART C1: AGREEMENT AND CONTRACT DATA



C1.1. FORM OF OFFER AND ACCEPTANCE

Offer

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

REFURBISHMENT AND ADDITIONS AT RUNNEYMEDE PRIMARY SCHOOL IN MOPANI DISTRICT .

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

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

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

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

(in figures) R.....

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

Signature(s)		
Name(s)		
Capacity		
For the tenderer:		
Name & signature o witness	f	Date

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

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

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
---------	--

- Part C2 Pricing Data
- Part C3 Scope of Work

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

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

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

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

For the Employer

Signature	
Name	
Capacity	

Name and address of organization

Signature and Name of Witness

Signature	
Name	
Capacity	

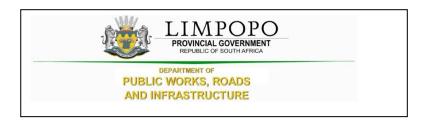
Schedule of Deviations

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

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

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

.....



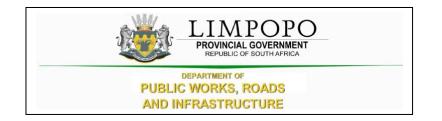
C2.1 CONTRACT DATA

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.

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



PART C2: PRICING DATA

C2.1 Pricing instruction

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



PART C2.2: BILLS OF QUANTITIES

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

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
LDPW-B/20308

I			1
	Vii) Any reference to the words "Tender" or "Tenderer" herein and/or in any other documentation shall be construed to have the same meaning as the words "Bid" or "Bidder"	R	
	SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT		
	Definitions (A1)		
1	Definitions and interpretation (clause 1)		
	Clause 1.1 Definition of " Agreement" is amended by replacing it with the following:		
	Agreement means the agreement arising from the signing of the Form of Offer and Acceptance by the parties.		
	Clause 1.1 Definition of " Bills of Quantities" is amended by adding the following:		
	"and the Pricing Instructions contained in the Pricing Data" after the word measuring system.		
	Clause 1.1 Definition of " Contract Documents" is amended by adding the following:		
	"this Agreement and all other documents referenced therein" after the word this document		
	Clause 1.1 Definition of "Contract Drawings" is amended by replacing it with the following:		
	Contract Drawings means the drawings upon which the tender was accepted and used in preparing the bills of quantities and are available for viewing at the offices of the Principal Agent at the time of tender		
	Clause 1.1 Definition of " Contract Sum" is amended by replacing it with the following:		
	Contract Sum means the total of prices in the Form of Offer and Acceptance.		
	Carried Forward Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G	R	

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

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

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

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

	DEPARTMENT OF PUBLIC				
	PROVISIONAL BILLS OF QUANTITIE RUNNYMEDE PRIMARY SCHOO				
				LDPW-B/203	80
	Brought Forward		R		
9	Indemnities (clause 9)				
	Clause 9.0 is amended by adding Clause 9.1.4:				
	The contractor indemnifies and holds harmless the employer against all liability, losses, claims, damages, penalties, actions, proceedings or judgments (collectively referred to as "Losses") arising from any infringement of letters, patent design, trademark, name, copyright or other protected rights in respect of any machine, plant, work, materials, thing, system or method of using, fixing, working or arrangement used or fixed or supplied by the contractor , but such indemnity shall not cover any use of the equipment of part thereof otherwise than in accordance with the provisions of the specification. All payments and royalties payable in one sum or by installments or otherwise shall be included by the contractor in the price and shall be paid by him to those to whom they may be payable. The contractor shall reimburse the employer for all legal and other costs and expenses, including without limitation attorney's fees on attorney-client scale incurred by the employer in connection with investigation, defending or settling any Losses in connection with pending or threatening litigation in which the employer is a party.				
	Fixed	ltem			
	Value Related Time Related	Item			
10	Works insurances (clause 10)				
	Clause 10.0 is amended by the addition of the following clauses				
	10.5 Damage to the Works				
	(a) Without in any way limiting the contractor's obligations in terms of the contract, the contractor shall bear the full risk of damage to and/or destruction of the works by whatever cause during construction of the works and hereby indemnifies and holds harmless the				
	Carried Forward		R		
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G				

		I		
	Brought Forward employer against any such damage. The contractor shall take such precautions and		R	
	security measures and other steps for the protection and security of the works as the contractor may deem necessary			
b)	The contractor shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the works and to rebuild, restore, replace and/or repair the works			
(c)	The employer shall carry the risk of damage to or destruction of the works and material paid for by the employer that is the result of the excepted risks as set out in 10.6			
(d)	Where the employer bears the risk in terms of this contract, the contractor shall, if requested to do so, reinstate any damage or destroyed portions of the works and the costs of such reinstatement shall be measured and valued in terms of 32.0 hereof			
10.6 In Proper	jury to Persons or loss of or damage to ties			
(a)	The contractor shall be liable for and hereby indemnifies the employer against any liability, loss, claim or proceeding whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever arising out of or in the course of or caused by the execution of the works unless due to any act or neglect of any person for whose actions the employer is legally liable			
(b)	The contractor shall be liable for and hereby indemnifies the employer against any liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the site , whether belonging to or under the control of the employer or any other body or person, arising out of or in the course of or by reason of the execution of the works unless due to any			
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	act or neglect of any person for whose actions the employer is legally liable		
c)	The contractor shall, upon receiving a contract instruction from the principal agent , cause the same to be made good in a perfect and workmanlike manner at his own cost and in default thereof the employer shall be entitled to cause it to be made good and to recover the cost thereof from the contractor or to deduct the same from amounts due to the contractor		
(d)	The contractor shall be responsible for the protection and safety of such portions of the premises placed under his control by the employer for the purpose of executing the works until the issue of the certificate of practical completion		
(e)	Where the execution of the works involves the risk of removal of or interference with support to adjoining properties including land or structures or any structures to be altered or added to, the contractor shall ogtain adequate insurance and will remain adequately insured or insured to the specific limit stated in the contract against the death of or injury to persons or damage to such property consequent on such removal or interference with the support until such portion of the works has been completed		
(f)	The contractor shall at all times proceed immediately at his own cost to remove or dispose of any debris and to rebuild, restore, replace and/or repair such property and to execute the works		
10.7 Hi	gh risk insurance		
geologi an area conditic movem	vent of the project being executed in a cal area classified as a "High Risk Area", that is which is subject to highly unstable subsurface ons that might result in catastrophic ground ent evident by sinkhole or doline formation the g will apply:		
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10.7.1 Damage to the works		
The contractor shall, from the commencement date of the works until the date of the certificate of practical completion bear the full risk of and hereby indemnifies and holds harmless the employer against any damage to and/or destruction of the works consequent upon a catastrophic ground movement as mentioned above. The contractor shall take such precautions and security measures and other steps for the protection of the works as he may deem necessary		
When so instructed to do so by the principal agent, the contractor shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the works and to rebuild, restore, replace and/or repair the works, at the contractor's own costs.		
10.7.2 Injury to persons or loss of or damage to property		
The contractor shall be liable for and hereby indemnifies and holds harmless the employer against any liability, loss, claim or proceeding arising at any time during the period of the contract whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above		
The contractor shall be liable for and hereby indemnifies the employer against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the site , whether belonging to or under the control of the employer or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the period of the contract		
10.7.3 It is the responsibility of the contractor to ensure that he has adequate insurance to cover his risk and liability as mentioned in 10.7.1 and 10.7.2. Without limiting the contractor's obligations in terms of the		
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	contract, the contractor shall, within twenty-one (21) calendar days of the commencement date but before commencement of the works, submit to the employer proof of such insurance policy, if requested to do so 10.7.4 The employer shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the contractor's default of his obligations as set out in 10.7.1; 10.7.2 and 10.7.3. Such losses or damages may be recovered from the contractor or by deducting the same from any amounts still due under this contract or under any other			
	contract presently or hereafter existing between the employer and the contractor and for this purpose all these contracts shall be considered one indivisible whole			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
11	Liability insurances (clause 11)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
12	Effecting insurances (clause 12)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
13	No clause (clause 13)	ltem		
14	Security (clause 14)			
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14.0 Replace the entire clause 14.0 with the following:		
14.0 Security		
14.1 In respect of contracts with a contract sum up to R1 million, the security to be provided by the contractor to the employer will be a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT)		
14.1.1 The payment reduction of the value certified in a payment certificate shall be <i>mutatis mutandi</i> in terms of 31.8(A)		
14.1.2 The employer shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employer's entitlement shall take precedence over his obligations to refund the payment reduction security or portions thereof to the contractor		
14.2 In respect of contracts with a contract sum above R1 million, the contractor shall have the right to select the security to be provided in terms of 14.3, 14.4, 14.5, 14.6, or 14.7 as stated in the schedule . Such security shall be provided to the employer within twenty-one (21) calendar days from commencement date . Should the contractor fail to select the security to be provided or should the contractor fail to provide the employer with the selected security within twenty-one (21) calendar days from commencement date , the security in terms of 14.7 shall be deemed to have been selected.		
14.3 Where the security as a cash deposit of ten per cent (10%) of the contract sum (excluding VAT) has been selected:		
14.3.1 The contractor shall furnish the employer with a cash deposit equal in value to ten per cent (10%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date .		
14.3.2 Within twenty-one (21) calendar days of the date of practical completion of the works the employer		
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shall reduce the cash deposit to an amount equal to three per cent (3%) of the contract value (excluding VAT), and refund the balance to the contractor .		
14.3.3 Within twenty-one (21) calendar days of the date of final completion of the works the employer shall reduce the cash deposit to an amount equal to one per cent (1%) of the contract value (excluding VAT) and refund the balance to the contractor .		
14.3.4 On the date of payment of the amount in the final payment certificate , the employer shall refund the remainder of the cash deposit to the contractor .		
14.3.5 The employer shall be entitled to recover expense and loss from the cash deposit in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employer's entitlement shall take precedence over his obligations to refund the cash deposit security or portions thereof to the contractor .		
14.3.6 The parties expressly agree that neither the employer nor the contractor shall be entitled to cede the rights to the deposit to any third party.		
14.4 Where security as a variable construction guarantee of ten percent (10%) of the contract sum (excluding VAT) has been selected:		
14.4.1 The contractor shall furnish the employer with an acceptable variable construction guarantee equal in value to ten per cent (10%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date		
14.4.2 The variable construction guarantee shall reduce and expire in terms of the Variable Construction Guarantee form included in the invitation to tender		
14.4.3 The employer shall return the variable construction guarantee to the contractor within fourteen (14) calendar days of it expiring		
14.4.4 Where the employer has a right of recovery against the contractor in terms of 33.0, the employer		
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shall issue a written demand in terms of the variable construction guarantee

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14.5 Where **security** as a fixed **construction guarantee** of five per cent (5%) of the **contract sum** (excluding VAT) and a five per cent (5%) payment reduction of the value certified in the **payment certificate** (excluding VAT) has been selected:

14.5.1 The **contractor** shall furnish a fixed **construction guarantee** to the **employer** equal in value to five per cent (5%) of the **contract sum** (excluding VAT)

14.5.2 The fixed **construction guarantee** shall come into force on the date of issue and shall expire on the date of the last certificate of **practical completion**

14.5.3 The **employer** shall return the fixed **construction guarantee** to the **contractor** within fourteen (14) **calendar days** of it expiring

14.5.4 The payment reduction of the value certified in a **payment certificate** shall be in terms of 31.8(A) and 34.8

14.5.5 Where the **employer** has a right of recovery against the **contractor** in terms of 33.0, the **employer** shall be entitled to issue a written demand in terms of the fixed **construction guarantee** or may recover from the payment reduction or may do both

14.6 Where **security** as a cash deposit of five per cent (5%) of the **contract sum** (excluding VAT) and a payment reduction of five per cent (5%) of the value certified in the **payment certificate** (excluding VAT) has been selected:

14.6.1 The **contractor** shall furnish the **employer** with a cash deposit equal in value to five per cent (5%) of the **contract sum** (excluding VAT) within twenty-one (21) **calendar days** from **commencement date**

14.6.2 Within twenty-one (21) **calendar days** of the date of **practical completion** of the **works** the **employer** shall refund the cash deposit in total to the **contractor**

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14.6.3 The payment reduction of the value certified in a payment certificate shall be <i>mutatis mutandi</i> in terms of 31.8(A)			
14.6.4 Where the employer has a right of recovery against the contractor in terms of 33.0, the employer may issue a written notice in terms of 33.4 or may recover from the payment reduction or may do both			
14.7 Where security as a payment reduction of ten per cent (10%) of the value certified in the payment certificate (excluding VAT) has been selected:			
14.7.1 The payment reduction of the value certified in a payment certificate shall be <i>mutatis mutandi</i> in terms of 31.8(B)			
14.7.2 The employer shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employer's entitlement shall take precedence over his obligations to refund the payment reduction or portions thereof to the contractor			
14.8 Payments made by the guarantor to the employer in terms of the fixed or variable construction guarantee shall not prejudice the rights of the employer or contractor in terms of this agreement			
14.9 Should the contractor fail to furnish the security in terms of 14.2 the employer , in his sole discretion, and without notification to the contractor , is entitled to change the contractor's selected form of security to that of a ten per cent (10%) payment reduction of the value certified in the payment certificate (excluding VAT), where after 14.7 shall be applicable			
Fixed	Item		
Value Related	Item		
Time Related	Item		
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	Execution (A15 - A23)			
15	Preparation for and execution of the works (clause 15)			
	Clause 15.1.1 is amended by replacing it with:			
	No clause			
	Clause 15.1.2 is amended by replacing it with:			
	The security selected in terms of 14.0			
	Clause 15.1 is amended by the addition of the following clause:			
	15.1.4 An acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) or latest edition, revision and ammendments, within twenty-one (21) calendar days of commencement date			
	Clause 15.2.1 is amended by replacing it with the following clause:			
	Give the contractor possession of the site within ten (10) working days of the contractor complying with the terms of 15.1.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
16	Access to the works (clause 16)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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17	Contract instructions (clause 17)				
	Fixed	ltem			
	Value Related	ltem			
	Time Related	Item			
10		literri			
18	Setting out of the works (clause 18) 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				
	The contractor shall perform tolerance control checks regularly throughout the contract period and report on this at regular interval to the Principal Agent in the approved format. Should the contractor fail to comply with this requirement to the satisfaction of the the Principal Agent, progressively as the structure is being constructed, the Employer will commission a Registered Land Surveyor to do so on the Contractor's behalf and at the Contractor's Expense.				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
19	Assignment (clause 19) Fixed	ltem			
	Value Related	Item			
	Time Related	Item			
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20	Nominated sub-contractors (clause 20)			
	Clause 20.0			
	Clause 20.1.3 is amended by replacing it with the following:			
	No Clause			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
21	Selected sub-contractors (clause 21)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
22	Employer's direct contractors (clause 22)			
	The Contractor shall allow the direct contractors and employers agents access to the work, allocate reasonable space in the building for storage of their materials, tools and equipment, all to the satisfaction of the Principal Agent. The contractor shall also allow the direct contractors, etc. free of charge, use of their ablution facilities and water and power supply to the and shall in no way hinder or prevent the execution of their works. Attendance may be priced against the relevant specified items in the bills of quantities.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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23	Contractor's domestic sub-contractors (Clause 23)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	COMPLETION			
	Completion (A24-A30)			
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		
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R **Brought Forward** Time Related Item 28 Sectional completion (clause 28) Fixed Item Value Related Item Time Related Item 29 Revision of date of practical completion (clause 29) Clause 29.1.1 shall be deemed to be omitted and replaced by the following: Inclement weather shall be defined as weather in excess of the average rainfall (volume and period) for each calender month over the past ten (10) years as recorded by the nearest commonly recognised weather bureau in the region of the project It shall be deemed that the contractor has adequately allowed in his programme and tendered rates for expenses which might result from delays due to average or below rainfall as described above Add Clause 29.9 as follows: Revision to the date for practical completion shall only be considered when work on the critical path of the agreed programme for the works is delayed." Add Clause 29.10 as follows: Clause 29.10 - Acceleration Clause 29.10.1 Irrespective of whether or not the principal agent rules that the contractor is entitled to an extension of time or a revision of the date for practical completion, the principal agent shall nevertheless, at any time, be entitled to instruct the contractor in writing to accelerate the **Carried Forward** R Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES **CLUSTER G**

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progress of the remaining works to ensure that the works are completed by the original date for practical completion or revised date as the case may be.			
Clause 29.10.2 Upon receipt of such instruction, the contractor shall take all necessary steps to ensure that the works are completed timeously including the provision by him of additional resources, plant, manpower, etc and the working overtime or additional overtime beyond that contemplated at the time of tender (at all times adhering to the regulations and requirements of all authorities) and by all other adequate and proper means and methods. The contractor shall prove that such steps are being taken if called upon to do so.			
Clause 29.10.3 The contractor's entitlement to compensation arising out of or in respect of any revision to the date for practical completion that may have been granted by the principal agent or alternatively where the principal agent has instructed the contractor to accelerate, shall be adjudicated strictly in terms of clause 32.			
Fixed	ltem		
Value Related	ltem		
Time Related	ltem		
Penalty for non-completion (clause 30)			
Clause 30 is amended by replacing reference to 36.3 at end of sentence with 36.0			
The penalty per calender day shall be calculated at 0.05% of contract sum excluding contingency allowance and CPAP			
Fixed	ltem		
Value Related	ltem		
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	Brought Forward		R	
	Time Related	ltem		
	<u> Payment (A31 - A35)</u>			
31	31.5.2 Security adjustments in terms of 14.0 or 31.8			
	31.8 Amend as follows:			
	31.8(A) Where a security is selected in terms of 14.1; 14.5 or 14.6, the value of the works in terms of 31.4.1 and of the materials and goods in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:			
	31.8(A).1 Ninety-five per cent (95%) of such value in interim payment certificates issued up to the date of practical completion			
	31.8.(A).2 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion			
	31.8(A).3 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms of 34.6			
	31.8(A).4 One hundred per cent (100%) of such value in the final payment certificate in terms of 34.6 except where the amount certified is in favour of the employer . In such an event the payment reduction shall remain at the adjustment level applicable to the final payment certificate .			
	31.8(B) Where security is a payment reduction in term of 14.7 has been selected the value of the works in terms of 31.4.1 and materials and goods in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:			
	31.8(B).1 Ninety per cent (90%) of such value in interim payment certificates issued up to the date of practical completion			
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31.8(B).2 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion			
31.8(B).3 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms of 34.6			
31.8(B).4 One hundred per cent (100%) of such value in the final payment certificate in terms of 34.6 except were the amount certified is in favour of the employer . In such an event the payment reduction shall remain at the adjustment level applicable to the final payment certificate			
Clause 31.9 is amended by replacing "seven (7) calender days" with "thirty (30) calender days" and by deleting the words "subject to the contractor giving the employer a tax invoice for the amount due			
31.12 Delete the following: "Payment shall be subject to the employer giving the contractor a tax invoice for the amount due."			
Fixed	Item		
Value Related	Item		
Time Related	Item		
Adjustment to the contract value (clause 32)			
Clause 32.0			
Clauses 32.5.1, 32.5.4 and 32.5.7 are amended by the addition of the following at the end of the sentence:			
"due to no fault of the contractor"			
Fixed	Item		
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	Cancellation (A36-A39)			
36	Cancellation by employer - contractor's default (clause 36)			
	Clause 36.1 is amended by the additions of the following clauses:			
	36.1.3 refuses or neglects to comply strictly with any of the conditions of contract			
	36.1.4 estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa			
	36.1.5 in the judgement of the employer , has engaged in corrupt or fraudulent practices in competing for or in executing the contract			
	Clause 36.3 is amended by removing the reference to "No clause" and replacing the words " principal agent " with " employer "			
	Clause 36.0 is amended by the addition of the following clause:			
	Clause 36.7 Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the contractor ; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site . The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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37	Cancellation by employer - loss and damage (clause 37)			
	Clause 37.3.5 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"			
	Clause 37.0 is amended by the addition of the following clause:			
	37.5 Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the contractor ; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site . The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
38	Cancellation by contractor - employer's default (clause 38)			
	Clause 38.5.4 is amended by replacing "ninety (90) with "one-hundred and twenty (120)"			
	Clause 38.0 is amended by the addition of the following clause:			
	Clause 38.7 Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the contractor ; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site . The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever			
	Fixed	Item		
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	Value Related	Item	
	Time Related	Item	
9	Cancellation - cessation of the works (clause 39)		
	Clause 39.3.5 is amended by the addition of the following at the end of the sentence: "within one-hundred and twenty (120) working days of completion of such report"		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
	Dispute Settlement (A40)		
	Disputes Settlement (clause 40)		
	Clause 40.2.2 is amended by replacing "one (1) year" with "three (3) years"		
	Clause 40.6 is amended by removing the reference to:		
	No clause		
	Clause 40.7.1 is amended by replacing "(10)" with "(15)" and by the addition of the following:		
	Whether or not mediation resolves the dispute, the parties shall bear their own cost concerning the mediation and equally share the costs of the mediator and related costs.		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
	State Provision (A41)		
	State Substitutions (clause 41)		
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Delete in the Substitute Provisions (41.0 State Clauses) clauses 40.2.1, 40.2.2, 40.3, 40.4, 40.5 and 40.6 and replace with the following:

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

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	by the Association of Arbitrators (Southern Africa) which are current at the time of the referral to arbitration. The Arbitrator shall, in his award, set out the facts and the provisions of the contract on which his award is based.			
	40.4 If the schedule provides for court proceedings to finally resolve disputes, disputes shall be determined by court proceedings.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Contract Variables (A41)			
42	The Schedule (clause 42)			
	Tenderers are referred to the Contract Data and Notes to Tenderes for variable pertaining to this contract			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	SECTION B: PRELIMINARIES			
	Definition and interpretation (B1)			
43	Definition and interpretation			
	See also clause A1.0 of Section A for additional and/or amended definitions which shall apply equally to this Section			
	Fixed	Item		
	Value Related	Item		
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	Time Related	Item		
	Documents (B2)			
44	Checking of documents (B2.1)			
	These bills of quantities:			
	(1) contain pages and annexes as indexed, and;			
	(2) are in multiple procurement format, i.e. all trades are fully measured with minor budgetary allowances			
	Items in these bills of quantities are to be read and priced in conjunction with and the descriptions regarded as amplified by the Model Preambles for Trades, 2008 edition, as recommended and published by the Association of South African Quantity Surveyors and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
45	Provisional bills of quantities (B2.2) Yes			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G		R	

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46	Availability of construction documentation (B2.3)			
	The minor budgetary allowances included in this document will be separately procured, based on multiple procurement of selected sub-contractors during the construction period			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
47	Interests of agents (B2.4)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
48	Priced documents (B2.5)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
49	Tender submission (B2.6)			
	Notwithstanding anything contained in this clause tenders shall be valid for a period of ninety (90) days from the closing date of tenders			
	Clause 2.6 is amended by replacing "JBCC Form of Tender" with "Form of Offer and Acceptance C1.1"			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward		R	
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l	<u>The site (B3)</u>			
50	Defined works area (B3.1)			
	Fixed	ltem		
	Value Related	ltem		
	Time Related	ltem		
51	Geotechnical investigation (B3.2)			
	Fixed	ltem		
	Value Related	ltem		
	Time Related	ltem		
52	Inspection of the site (B3.3)			
	Tenderers are instructed to familiarise themself before submission of their tender with regard to the relevant local site conditions, site accessibility, the nature of operations required, availability of labour and any conditions pertaining thereto, together with conditions relating to unloading, carting and storage of materials, equipment and tools required for the works.			
	No claims for extras arising from the contractor having failed to comply with this clause will be entertained			
	Fixed	ltem		
	Value Related	ltem		
	Time Related	ltem		
53	Existing premises occupied (B3.4)			
	Fixed	ltem		
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	Value Related	Item		
	Time Related	Item		
54	Previous work - dimensional accuracy (B3.5)			
	Work executed under a previous contract and the extent thereof will be pointed out to the contractor by the principal agent on handing over of the site			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
55	Previous work - defects (B3.6)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
56	Services - known (B3.7)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
57	Services - unknown (B3.8)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
58	Protection of trees, etc (B3.9)			
	Fixed	Item		
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	Brought Forward		R
	Value Related	Item	
	Time Related	Item	
59	Articles of value (B3.10)		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
60	Inspection of adjoining properties, etc (B3.11)		
00	Fixed	Item	
	Value Related	Item	
		Item	
	Time Related		
C 4	<u>Management of contract (B4)</u>		
61	Management of the works (B4.1) Fixed	Item	
	Value Related	Item	
	Time Related	Item	
62	Programming for the works (B4.2)		
	Clause B4.2 is hereby amended by the addition of the following:		
	Programme:		
	The contractor and the principal agent shall agree to a Contract Programme for the control of the Works.		
	The contractor shall submit a draft of the Contract Programme and method statement to the principal agent for approval together with the tender.		
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The contractor shall ensure that the contract programme:					
1.	Shall be prepared and drawn up to comply in all respects with the requirements of this Agreement.				
2.	shall be drawn up using logic developed during the tender period and complies with the planning requirements of the Client.				
3.	shall be in accordance with the dates given herein for possession and practical completion; and				
4.	shall be in sufficient and approved detail to ensure effective control of the work, including all items necessary to enable calculations to be made for the distribution of finance during the				
5.	cashflow analysis. shall be accompanied by a full written method statement				
The principal agent shall examine and comment on the contract programme and method statement within two weeks of its submission.					
Following on these comments the contractor shall amend the contract programme and method statement as may be necessary and submit the final contract programme and method statement to the principal agent for approval within a further two weeks thereafter.					
The contract programme shall be processed by computer and be presented to the principal agent in the form of logic charts and bar charts in such a way as to determine the critical path and the float on non-critical activities. All supporting printouts must be available to the principal agent on demand.					
The acceptance by the principal agent of the contract programme, or any revision thereof, does not necessarily sanction the accuracy of validity of the network logic, the correctness of individual activities in terms of description or duration, the comprehensiveness of networks or the discrepancies between drawings and any other documents presented by the contractor, and in no way relieves the responsibility of the contractor to comply with the requirements of the Agreement.					
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No policy decisions other than the planning requirements, procedures and policies provided, will be enforced on the contractor regarding construction of the project and the contractor shall be responsible at all times for ensuring the accuracy, validity and reasonableness of programming information.		
Documentation will not be available in complete detail at the date of award of the contract. Non-availability of information will not be deemed an excuse for non- presentation of programmes. In the event of inadequate information, the contractor shall estimate the predicted time applications on available information and quality the submission accordingly.		
Development of the contract programme and method statement		
Within two weeks of award of the contract, the contractor shall submit an updated contract programme and written method statement which shall include the latest information in sufficient detail to permit comprehensive monitoring.		
Progress of the works will be monitored by the principal agent. The contractor shall liaise with the principal agent in order to provide whatever information is required to facilitate such monitoring.		
Revisions to the contract programme		
Revisions to the contract programme may be introduced periodically by the contractor subject to compliance with the contract completion and handover dates.		
Providing the required consultation between the relevant parties has highlighted the implications of the required changes, the programming strategy on the project may be changed and the changes noted and specified on logic charts delivered to the principal agent. The changes to the programme will be recorded as firm and binding once the principal agent has sanctioned the said changes.		
A revision to the programme will not invalidate the contractual completion dates and applications for		
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extensions of time will be processed by the principal agent in accordance with the conditions of contract.		
Should the contractor fail to submit a request for revision to the construction programme , progress monitoring shall be based on the latest revised programme sanctioned by the principal agent.		
The contractor shall make all his necessary revisions on the approved network sheets clearly marking, inter-alia, the logic changes and duration changes. These will then be processed by the necessary parties and then approved in the normal manner.		
Progress Monitoring		
The contractor shall provide regular progress reports showing actual and expected progress against the latest contract programme. Progress reports shall be submitted at each site progress meeting and shall outline the progress against key target dates and deviation which has occurred against the most recently updated control programme due to the progress reflected in the as-built construction programme.		
The status of each activity must also be reported as follows:		
Target - If the activity is not complete, the latest predicted completion date shall be supplied.		
Start - If the activity has commenced, the actual date shall be supplied.		
Finish - If the activity is complete, the actual completion date shall be supplied.		
Problems which may occur during execution of the contract must be specifically identified in progress reports under a separate section of the contractor's report.		
Should problems occur during the execution of the contract or the scope of work be increased or decreased, the contractor may be requested to increase		
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the extent or the detail of the programme.

The principal agent may recommend action to be taken by the contractor, including the revision of resource levels, but this information will not be binding on the contractor unless the recommendations are enforced in terms of the conditions of contract by the principal agent and will in no way relieve the contractor's responsibility to comply with the requirements of the Agreement.

Extension of time

Any extension of time which is granted by the principal agent will be annotated to affect selected activities in the programme and the associated activities will be incorporated by revisions to the programme by the contractor. Should the additional activities or the extension of time on existing activities fall on a noncritical area of the programme, extension will be limited to the activities affected by the said additional activities or extensions and the contract dates shall not be affected. If, however, the additional activities fall on the critical path, the principal agent shall take this into account when granting any extension of time in terms of the conditions of contract.

The contractor agrees that the contract completion date (i.e. the date for practical completion) has been stipulated in the contract for the benefit of the employer, so that, without derogating from the generality of the aforegoing principle it is provide that:

- 1. The contractor shall not be entitled to deliver the site and the works to the employer prior to the contract completion date and
- 2. Should there for any reason be any float period indicated in the contract programme prior to the contractual completion date then this float period shall be utilized to absorb any delays or extensions of time without affecting the contract completion date.
- 3. The contractor shall, at all times, ensure that, notwithstanding the approval or sanctioning, reviewing or inspection of a programme or any

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	revision of a programme by the principal agent in the aforegoing terms, practical completion and completion of the works shall take place strictly in accordance with this Agreement.			
	A defective or faulty programme, even if so sanctioned, approved, reviewed or inspected by the principal agent, shall therefore not constitute a cause for granting an extension of time for completion of the works or for entitling the contractor to the payment by the employer in terms of the contract of any loss, compensation or damage whatsoever.			
	The contractor acknowledges that the principal agent's aforegoing participation in the approval of development of, revisions to and updating of the Contract Programme shall take place in consultation with the principal agent. The contractor shall therefore provide the principal agent with such co-operation and/or information and/or access as they may reasonably require for such purposes.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
63	Progress meetings (B4.3)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
64	Technical meetings (B4.4)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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R **Brought Forward** 65 Labour and plant records (B4.5) Fixed Item Value Related Item Time Related Item Samples, shop drawings and manufacturer's instructions (B5) 66 Samples of materials (B5.1) Item Fixed Value Related Item Time Related Item 67 Workmanship samples (B5.2) Fixed Item Value Related Item Time Related Item 68 Shop drawings (B5.3) Fixed Item Value Related Item Time Related Item 69 Compliance with manufacturer's instructions (B5.4) Item Fixed Value Related Item Time Related Item **Carried Forward** R Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES **CLUSTER G**

	Brought Forward		R		
	Temporary works and plant (B6)				
70	Deposits and fees (B6.1)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
71	Enclosure of the works (B6.2)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
72	Advertising (B6.3)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
73	Plant, equipment, sheds and offices (B6.4)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
74	Main notice board (B6.5)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
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75	Subcontractors notice board (B6.6)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Temporary services (B7)			
76	Location (B7.1)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
77	Water (B7.2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
78	Electricity (B7.3)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
79	Telecommunication facilities (B7.4)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward		R	
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80	Ablution facilities (B7.5)			
	Fixed	Item		
	Value Related	Item		
81	Time Related	Item		
	Prime cost amounts (B8)			
82	Responsibility for prime cost amounts (B8.1)			
	Fixed	ltem		
	Value Related	Item		
	Time Related	Item		
	Attendance on nominated and selected subcontractors (B9)			
83	General attendance (B9.1)			
	The schedule rates providing for attendance on nominated subcontractors and other contractors, will be adjusted only if the scope of the work has changed Fixed	Item		
	Value Related	ltem		
	Time Related	ltem		
84	Special attendance (B9.2)			
-	Fixed	Item		
	Value Related	ltem		
	Time Related	Item		
85	Commissioning - Fuel, water and electricity (B9.3)			
	Fixed	ltem		
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	Brought Forward	1	R	
	Value Related	Item		
	Time Related	Item		
	Financial aspects (B10)			
86	Statutory taxes, duties and levies (B10.1)			
	<i>Provision is made in the summary of these bills of quantities for the inclusion of Value Added Tax (VAT)</i>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
87	Payment of preliminaries (B10.2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
88	Adjustment of preliminaries (B10.3)			
	Clauses B10.3.1 and B10.3.2 are amended by replacing "within fifteen (15) working days of taking possession of the site " with "when submitting his priced bills of quantities "			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
89	Payment certificate cash flow (B10.4)			
	Fixed	Item		
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Brought Forward		R
Value Related	Item	
Time Related	Item	
<u>General (B11)</u>		
0 Protection of works (B11.1)		
Fixed	Item	
Value Related	Item	
Time Related	Item	
Protection/isolation of existing/sectionally occupied works(B11.2)		
Fixed	Item	
Value Related	Item	
Time Related	Item	
2 Site security (B11.3)		
Fixed	Item	
Value Related	Item	
Time Related	Item	
Notice before covering work (B11.4)		
Fixed	Item	
Value Related	Item	
Time Related	Item	
4 Disturbance (B11.5)		
Fixed	ltem	
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	Value Related	Item		
	Time Related	Item		
95	Enviromental disturbance (B11.6)			
	Fixed	Item		
	Time Related	Item		
	Value Related	Item		
96	Works cleaning and clearing (B11.7)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
97	Vermin (B11.8)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
98	Overhand work (B11.9)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
99	Instruction manuals and guarantees (B11.10)			
	Fixed	Item		
	Value Related	Item		
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	Time Related	Item		
100	As built information (B11.11)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
101	Tenant installations (B11.12)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Schedule of variables (B12)			
102	Pre-tender information (B12.1)			
	This schedule contains all variables referred to in this document and is divided into pretender and post-tender categories. The pre-tender category must be completed in full and included in the tender documents. Both the pre-tender and post-tender categories form part of these Preliminaries.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	12.1.1 Provisional bills of quantities (B12.1.1)			
	The quantities are provisional: Yes			
	Carried Forward Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G		R	

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12.1.2	Availability of construction documentation (B12.1.2)			
	Construction documentation is complete: Yes	;		
12.1.3	Interest of agents (B12.1.3)	,		
12.1.4	Defined works area (B12.1.4)			
	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			
12.1.5	Geotechnical investigation (B12.1.5)			
	otechnical report is available for viewing at the of the Principal Agent			
omood	No	,		
12.1.6	Existing premises occupied (B12.1.6)			
<i>[3.4]</i> little	Specific requirements: The contractor shall execute the works with as noise and disturbance as possible			
12.1.6	Existing premises occupied			
<i>[3.4]</i> little	Specific requirements: The contractor shall execute the works with as noise and disturbance as possible			
12.1.7 [3.5]	Previous work - Dimensional accuracy (B12.1.7) Details: No additional details			
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12.1.8	Previous work - defects		
[3.6}	Details: No additional details		
12.1.9	Services - known (B12.1.9)		
	Existing services and points of connection are shown on the site plan and/or will be pointed out on site by the principal agent		
12.1.10	Protection of trees		
[3.9] those	Specific requirements: No trees to be damaged or removed except		
liiose	specifically designated in writing by the Architect		
12.1.11	Inspection of adjoining properties		
[3.11]	Specific requirements: None		
12.1.12	Enclosure of the works		
<i>[6.2</i> } times b	Specific requirements: Areas where work is taking place shall at all e blocked off by appropriate means		
12.1.13	Offices		
[6.4.3]	Specific requirements: The contractor shall provide, maintain and remove on completion of the works an office for the exclusive use of the principal agent, minimum size $4 \times 3 \times 3m$ high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times.		
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12.1.14	Main notice board					
[6.5]	Specific requirements: The contractor shall provide, directed, maintain and remove the works a notice board size constructed of suitable boardi surface and with edging bead outer edges and projecting 12 boarding and rounded on from shall be securely fixed to hoa hoarding is provided, or fixed suitable supporting structure of posts and braces. The board ivory white and the bead and dividing lines dark green. All winscribed in dark green as per for SA. All wording shall be in green painted sans serif letter	e on completion of 3 x 3m ing with flat smooth 19mm thick round 2mm from face of at edge. The board rding, where to and including a of timber or tubular is to be painted 12mm wide wording shall be r the coat of arms uscribed in dark				
12.1.15	Subcontractors' notice boa	rd				
[6.6] NO	A notice board is required Specific requirements:	(yes/no)				
12.1.16	Water					
[7.2] YES	Option A (by contractor)	(yes/no)				
12.1.17	' Electricity					1
[7.3] YES	Option A (by contractor)	(yes/no)				

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12.1.18	8 Telecommunications				
<i>[7.4]</i> YES	Telephone	(yes/no)			
YES	Facsimile	(yes/no)			
YES	E-mail	(yes/no)			
12.1.19	9 Ablution facilities				
[7.5} YES	Option A (by contractor)	(yes/no)			
NO	Option B (by employer)	(yes/no)			
12.1.20 works	0 Protection of existing/sec	tionally occupied			
<i>[11.2]</i> YES	Protection is required	(yes/no)			
12.1.2 ⁻	1 Special attendance The contractor must obtain i subcontractors at tender sta				
	attendance that might be re nce for each and every s es special attendance				
[9.2]	Subcontractor (1) Details:				
	Subcontractor (2) Details:				
	Subcontractor (3) Details:				
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R **Brought Forward** 12.1.22 Protection of the works [11.1] Specific requirements: All work that requires protection during must be adequately protected up to construction completion by the **contractor** practical 12.1.23 Disturbance [11.5] Specific requirements: The **contractor** shall keep the site, structures, etc well watered during operations to prevent dust and shall provide and erect and remove on completion of the works all necessary temporary dust screens all to the satisfaction of the principal agent 12.1.24 Environmental disturbance [11.6] Specific requirements: None 103 Post-tender information (B12.2) All post-tender information for this section will be determined once tender is awarded Item Fixed Value Related Item Time Related Item 12.2.1 Payment of preliminaries [10.2] Option A (prorated) (yes/no) YES Option B (calculated) (yes/no) NO **Carried Forward** R Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES **CLUSTER G**

 12.2.2 Adjustment of preliminaries [10.3] Option A (three categories) YES Option B (detailed breakdown) NO 12.2.3 Additional agreed preliminaries Details: None Other post tender information (B12.3) 	(yes/no) (yes/no) es items			
NO 12.2.3 <i>Additional agreed preliminarie</i> Details: None				
Details: None	es items			
None				
Other post tender infornation (B12.3)				
• ···· [····· ··· ··· ··· (-····)				
All post-tender information for this se determined once tender is awarded	ection will be			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
SECTION C: SPECIFIC PRELIMINA	ARIES			
Section C contains specific preliminary i apply to this contract except where N/A appears against an item				
Clause C1 - Contract drawings				
	a guide only for e scope of the nimself with the			
understood by the the tenderer he shall,	before			
	Fixed	Item		
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wnth Susth SPBP	vork to enable the tenderer to acquaint I ature and extent of the works and the mey are to be executed should any part of the drawings not be of nderstood by the the tenderer he shall, ubmitting his tender, obtain clarification he principal agent ection No. 1 RELIMINARIES ill No. 1 RELIMINARIES	A cork to enable the tenderer to acquaint himself with the ature and extent of the works and the manner in which hey are to be executed should any part of the drawings not be clearly nderstood by the the tenderer he shall, before ubmitting his tender, obtain clarification in writing from he principal agent Fixed Carried Forward Rection No. 1 RELIMINARIES ill No. 1 RELIMINARIES	vork to enable the tenderer to acquaint himself with the ature and extent of the works and the manner in which hey are to be executed Item Should any part of the drawings not be clearly nderstood by the the tenderer he shall, before ubmitting his tender, obtain clarification in writing from he principal agent Item Carried Forward Rection No. 1 RELIMINARIES Item Item Item Item Item Item Item Item	vork to enable the tenderer to acquaint himself with the ature and extent of the works and the manner in which hey are to be executed Item Should any part of the drawings not be clearly nderstood by the the tenderer he shall, before ubmitting his tender, obtain clarification in writing from he principal agent Item Fixed Item Rection No. 1 Rection No. 1 RELIMINARIES Item

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	Value Related	Item		
	Time Related	Item		
106	Clause C2 - General Preambles			
	The "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the trades is deemed to be included herein and shall be read in conjuction with the bills of quantities and be referred to for the full decriptions of work to be done and materials to be used.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
107	Clause C3 - Site instructions			
	All site instructions issued on site shall be recorded in writing within seven (7) calendar days in site instruction book (A4 size and triplicate carbon format), which is to be provided and maintained by the contractor. The said site instruction book shall be kept on site at all times for the exclusive use of recording site instructions only			
	Site instructions may be issued by the architect or any of the consultants only. Copies of the site instructions are to be submitted to the architect and quantity surveyor within seven (7) calendar days of such recording in the site instruction book			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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R **Brought Forward** 108 **Clause C4 - Trade Names** Wherever a trade name for any product has been described in the bills of quantities, the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the principal agent being obtained prior to the closing date for submission of tenders If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for Fixed Item Value Related Item Time Related Item 109 Clause C5 - 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 Item Fixed Value Related Item Time Related Item 110 Clause C6 - As-built drawings 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 Fixed Item **Carried Forward** R Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES **CLUSTER G**

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Value Related	ltem		
Time Related	ltem		
r shall provide the schedule form, of tradesmen and			

	Value Related	Item		
	Time Related	Item		
111	Clause C5 - Labour record			
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
112	Clause C6 - Plant record			
	At the end of each calendar week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
113	Clause C7 - Cession of monies			
	The contractor may cede his rights or claims to any monies due or to become due to him under this contract with written approval from the employer			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G		R	
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DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
LDPW-B/20308

Brought Forward	R	
Clause C8 - Occupational Health and Safety Act		
The contractor shall comply with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993), as well as all new occupational health and safety acts requirement regarding the compliance of Covid 19		
It is required of the contractor to thoroughly study the latest Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the bills of quantities / lump sum document.		
The contractor must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the principal agent , notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.		
Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained.		
PART A-OHS ACT COMPLIANCE-IMPLEMENTATION OF THE HEALTH AND SAFETY - Construction health & safety documentation		
Carried Forward Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G	R	

	Brought Forward		R	
114	Clause C8.1.1 - Prepare and compile H&S plan as per site specification Health and safety Specifications (Section C3, Scope of Work), OHS Act & Regulations			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
115	Clause C8.1.2 - Allow for the preparation and compilation of the site specific health and safety file, and a health and safety working file			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
116	Clause C8.1.3 - Appointment of a Registered Construction health and safety officer for the duration of the Contract as per Section 8(5) of the Construction Regulations 2014			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	PART B-OHS ACT COMPLIANCE-IMPLEMENTATION OF THE HEALTH AND SAFETY - Personal Protective Clothing & Equipment			
117	Clause C8.2.1 - Foot protection (steel toe cap, gum boots, etc)			
	Fixed	Item		
	Value Related	Item		
	Carried Forward Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G		R	
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	Time Related	ltem		
118	Clause C8.2.2 - Clothing (Overalls Depicting Contractors Company name/identification)			
	Fixed	ltem		
	Value Related	ltem		
	Time Related	ltem		
119	Clause C8.2.3 - Glove (leather, PVC, Acid Resistant, etc) Item			
	Fixed	ltem		
	Value Related	ltem		
	Time Related	ltem		
120	Clause C8.2.4 - Head Protection: Hardhats with air vents Colour Coded - Supervisory (Red) Labour (Green)			
	Fixed	ltem		
	Value Related	ltem		
	Time Related	ltem		
121	Clause C8.2.5 - Ear protection (earmuffs with 30% protective value) Item			
	Fixed	ltem		
	Value Related	ltem		
	Time Related	ltem		
122	Clause C8.2.6 - Eye Protection (Face Shield, Goggles, Spectacles, etc)			
	Fixed	ltem		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

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

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

	Brought Forward		R	
	PART C-OHS ACT COMPLIANCE-IMPLEMENTATION OF THE HEALTH AND SAFETY - Occupational medical surveillance			
128	Clause C8.3.1 - Entry Medical Examinations by a SASOHN registered Occupational Health Nurse or a SASOM registered Occupational Medical Practitioner			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
129	Clause C8.3.2 - Exit Medical Examination			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
130	Clause C8.3.3 - Provision of a first aid kit			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
131	Clause C8.3.4 - Provision of a fire-fighting measures			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	Carried Forward Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G		R	
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	Brought Forward		R	
	PART D-OHS ACT COMPLIANCE-IMPLEMENTATION OF THE HEALTH AND SAFETY Education, training, signage			
132	Clause C8.4.1 - Health and safety induction site access cards			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
133	Clause C8.4.2 - Basic First Aid training level one			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
134	Clause C8.4.3 - Health and Safety representative			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
135	Clause C8.4.4 - Construction (firefighting. General information, prohibitory, mandatory, warning, hazchem, photo luminescent, etc)			
	Fixed	ltem		
	Value Related	ltem		
	Carried Forward		R	
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			

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

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

Value Related	ltem Item		
Time Related	Item		
Clause C8.5.5 Non-contact thermometers			
Fixed	Item		
Value Related	Item		
Time Related	Item		
Clause C8.5.6 Physical barriers to ensure social distancing (Compliance to Section 22 of the Covid-19 OHS Directive)			
Fixed	Item		
Value Related	Item		
Time Related	Item		
Clause C9 - Viewing of the school areas			
The site is situated in a school area and the tenderer must arrange with the responsible school staff to obtain permission to enter the site for tendering purposes			
Fixed	Item		
Value Related	Item		
Time Related	Item		
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Carried Forward Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G		R	
	Share C3.5.6 Physical barriers to ensure social distancing (Compliance to Section 22 of the Covid-19 DHS Directive) Fixed Value Related Time Related Section No. 1 Preciminants Preciminants Bill No. 1 Preciminants	Time Related Item Clause C8.5.6 Physical barriers to ensure social distancing (Compliance to Section 22 of the Covid-19 OHS Directive) Item Fixed Item Value Related Item Value Related Item Time Related Item Clause C9 - Viewing of the school areas Item The site is situated in a school area and the tenderer must arrange with the responsible school staff to obtain permission to enter the site for tendering purposes Item Value Related Item Section No. 1 Time Related Item Section No. 1 PRELIMINARIES PRELIMINARIES	Time Related Item Clause C8.5.6 Physical barriers to ensure social distancing (Compliance to Section 22 of the Covid-19 OHS Directive) Item Fixed Item Value Related Item Time Related Item Time Related Item Clause C9 - Viewing of the school areas Item The site is situated in a school area and the tenderer must arrange with the responsible school straft to obtain permission to enter the site for tendering purposes Item Fixed Item Value Related Item Time Related Item Value Related Item Time Related Item R Exection No. 1 PRELIMINARIES PRELIMINARIES

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Clause C10 - Commencement of Works in School Areas			
As the works falls within a school area the contractor must give the responsible staff member notice before commencement of the works . Should the contractor fail to make such arrangements, admission to the site may be refused and any additional costs will be for the contractor's account			
Fixed	ltem		
Value Related	ltem		
Time Related	ltem		
Clause C11 - Entrance Permits to School Areas			
As the works falls within a school area the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under the control of the Principal, or chief security officer			
Fixed	ltem		
Value Related	ltem		
Time Related	ltem		
Carried Forward Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G		R	
	Clause C10 - Commencement of Works in School Areas Ste works falls within a school area the contractor or must give the responsible staff member notice before commencement of the works. Should the contractor is a count Fixed Juane Related Time Related Toms of the works falls within a school area the contractor is a count Fixed Value Related Tom Related As the works falls within a school area the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under the control of the Principal, or chief security officer Fixed Value Related Time Related Carried Forward Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES	Clause C10 - Commencement of Works in School As the works falls within a school area the contractor must give the responsible staff member notice before commencement of the works. Should the contractor fail to make such arrangements, admission to the site may be refused and any additional costs will be for the contractor's account Fixed Item Value Related Item Value Related Item Clause C11 - Entrance Permits to School Areas As the works falls within a school area the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under the control of the Principal, or chief security officer Item Value Related Item Time Related Item Rection No. 1 Rection No. 1	Clause C10 - Commencement of Works in School Image: Clause C10 - Commencement of the works. Should the contractor must give the responsible staff member notice before commencement of the works. Should the contractor fail to make such arrangements, admission to the site may be refused and any additional costs will be for the contractor's account Item Fixed Item Value Related Item Clause C11 - Entrance Permits to School Areas Item As the works falls within a school area the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under the control of the Principal, or chief security officer Item Value Related Item Item Value Related Item Item Value Related Item Item Image: Control of the Principal, or chief security officer Fixed Item Value Related Item Item Item Value Related Item Item Item Value Related Item Item Item Fixed Item Item Item Section No. 1 Freezement Item Item PRELIMINARIES PRELIMINARIES </td

	Brought Forward		R		
148	Clause C12 - Security Check of Personnel				
	The principal agent may require the contractor to have his personnel and workmen, or a certain number of them, security classified				
	In the event of the principal agent requesting the removal of a person or persons from the works for security reasons, the contractor shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the works and the site and/or to any document or information relating to the works				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
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	Carried Forward		R		
	Section No. 1 PRELIMINARIES				
	Bill No. 1 PRELIMINARIES				
	CLUSTER G				

Brought Forward		R	
Clause C13 - HIV/Aids Awareness			
It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the bills of quantities. Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained			
The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent , notwithstanding the provisions of Clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment			
Fixed	Item		
Value Related	Item		
Time Related	Item		
Clause C13.1 - Awareness Champion			
Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification			
Fixed	Item		
Value Related	Item		
Time Related	Item		
Carried Forward		R	
Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G			
	Clause C13 - HIV/Aids Awareness It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the bills of quantities. Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of Clause A 31.0 of Section A or any other clause to the contrart, reserves the right to delay issuing any progress payment crifficate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment Exertificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment Exertificate until the contractor provides satisfactory provides compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment Exertificate until the contractor provides again and any complexity. Fixed Value Related Time Related Time Related Exertificate The contractor with the HIV/AIDS specification Fixed Value Related Time Related Time Related </td <td>Clause C13 - HIV/Aids Awareness It is required of the contractor to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the bills of quantities. Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of Clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entilled to any compensation of whatsoever nature, including interest, due to such delay of payment Fixed Item Value Related Item Value</td> <td>Clause C13 - HIV/Aids Awareness It is required of the contractor to thoroughly study the HIV/AIDS Specification (WV 1544) of the Department that must be read together with and is deemed to be incorporated under this section of the bills of quantities. Provision for pricing of HIV/AIDS swareness is made under times section of the bills of quantities. Provision for pricing of HIV/AIDS swareness is made under this section of the bills of quantities. Provision for pricing of HIV/AIDS swareness is made under this section of the bills of quantities. Provision for pricing of HIV/AIDS swareness is made under this section are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of Clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. 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Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the principal agent, notwithstanding the provisions of Clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entilled to any compensation of whatsoever nature, including interest, due to such delay of payment Fixed Item Value Related Item Value	Clause C13 - HIV/Aids Awareness It is required of the contractor to thoroughly study the HIV/AIDS Specification (WV 1544) of the Department that must be read together with and is deemed to be incorporated under this section of the bills of quantities. Provision for pricing of HIV/AIDS swareness is made under times section of the bills of quantities. Provision for pricing of HIV/AIDS swareness is made under this section of the bills of quantities. Provision for pricing of HIV/AIDS swareness is made under this section of the bills of quantities. 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The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment Item Clause C13.1 - Awareneess Champion Fixed Item Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification Item Value Related Item Value Related Item Clause C13.1 - Awarenees Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification

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151	Clause C13.2 - Awareness Workshop			
	Selection and appointment of a competent Service Provider approved by the principal agent , provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
152	Clause C13.3 - Posters, booklets, videos, etc.			
	Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the construction period , all in accordance with the HIV/AIDS Specification			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
153	Clause C13.4 - Access to Condoms			
	Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the construction period , all in accordance with the HIV/AIDS Specification			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
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	Carried Forward Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES CLUSTER G		R	

	Brought Forward		R	
154	Clause C13.5- Monitoring			
	Monitoring HIV/AIDS awareness of workers, providing the principal agent with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the construction period and close out, all in accordance with the HIV/AIDS Specification			
	Fixed	ltem		
	Value Related	ltem		
	Time Related	ltem		
	Carried to Final Summary		R	
	Section No. 1 PRELIMINARIES			
	Bill No. 1 PRELIMINARIES			
	CLUSTER G			
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ltem No		Quantity	Rate	Amount
	SECTION 2			
	BUILDING WORK			
	BILL NO 1			
	DEMOLITIONS			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades as well as Engineering Specifications attached to these documents.			
	SUPPLEMENTARY PREAMBLES			
	<u>User note</u>			
	Note:			
	All usable material from the demolitions should be kept safety and handed over to the Principal Agent who shall sign for all material received.			
	<u>View site</u>			
	Demolishing and removing			
	Before submitting his tender the tenderer shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained			
	Carried Forward Section No. 2 DEMOLITIONS OF 13 CLASSROMMS AND 13 PIT TOIL Bill No. 1 Demolitions CLUSTER G		R	

	Brought Forward			R	
	Explosives				
	No explosives whatsoever may be used for demolition purposes unless otherwise stated				
	<u>General</u>				
	Water supply pipes and other piping in ground that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings to the satisfaction of the principal agent				
	Unless otherwise described all materials are to become the property of the contractor and are to be removed from the site				
1	Single storey existing ablution structure with approximate 22m2 with mono pitched roof comprising, concrete surface bed, one brick external walls, one brick and half brick internal walls and corrugated roof covering on prefabricated timber trusses (hand over usable items to school)	No	1		
2	Single storey existing ablution structure with approximate 48m2 with mono pitched roof comprising, concrete surface bed, one brick external walls, one brick and half brick internal walls and corrugated roof covering on prefabricated timber trusses (hand over usable items to school)	No	1		
3	Single storey existing one classroom structure with approximate 60m2 with double pitched roof comprising, concrete surface bed, one brick external walls, one brick and half brick internal walls and corrugated roof covering on prefabricated timber trusses (hand over usable items to school)	No	1		
	Carried Forward			R	
	Section No. 2 DEMOLITIONS OF 13 CLASSROMMS AND 13 PIT TOIL Bill No. 1 Demolitions CLUSTER G				

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Single storey existing two classroom structure with approximate 60m2 with double pitched roof comprising, concrete surface bed, one brick external walls, one brick and half brick internal walls and corrugated roof covering on prefabricated timber trusses (hand over usable items to school)	No	1	
Single storey existing five classroom structure with approximate 380m2 with double pitched roof comprising, concrete surface bed, one brick external walls, one brick and half brick internal walls and corrugated roof covering on prefabricated timber trusses (hand over usable items to school)	No	2	

Carried to Final Summary

Section No. 2 DEMOLITIONS OF 13 CLASSROMMS AND 13 PIT TOIL Bill No. 1 Demolitions CLUSTER G

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	make good at his own expense any damage that may occur.				
	OLD USABLE MATERIALS from the alterations/demolitions are to become the property of the Client. Old materials for re-use are to be carefully removed, stored and protected from injury including making good any damaged or defective parts as required before fixing. Old reusable materials are to be handed over to the Client are to be carefully removed and neatly stacked on site where directed. The remainder of the old materials and all rubbish to be immediately carted away and the site left clean and unencumbered. The Contractor should allow for removing of rubble from site on daily basis, failing which the client might stop the construction until the site has been cleaned. None of the old stock bricks from the pulling down are to be re-used for any new work. Materials to be handed over to the Client should be kept safely and handed over to the School Governing Body or the school principal who shall sign for all materials received.				
	MATERIALS, ETC The materials to be used and work to be done to be similar in all respects to that described for new work insofar as they concur. All work in making good is to be properly jointed to the existing.				
	Unless otherwise stated, all usable material from the demolitions should be kept safely and handed over to the school governing body or the school principal who shall sign for all material received.				
	Breaking down and removing brickwork etc				
1	Half brick wall in beamfilling	m2	42		
	Taking out and removing ironmongery				
2	Locksets, etc.	No	28		
	Carried Forward Section No. 3 RENOVATIONS OF 10 ENVIROLOO TOILETS Bill No. 1 Alterations CLUSTER G			R	

	Brought Forward		I	R		I
	Taking out and removing doors, windows, etc from brickwork to be demolished					
3	Timber single door and frame 813 x 2032mm high	No	42			
	<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>					
4	Corrugated iron roof covering including timber purlins	m2	204			
5	Roof trusses size approximately 7500 x 1500mm high complete.	No	7			
6	Fibre cement fascias, barge boards, etc.	m	107			
	SERVICING OF DOORS AND WINDOWS					
7	Replace window stays, handles and pegs	No	42			
8	Replace door striker plate	No	42			
9	Cleaning existing sewer system using recommended chemicals and removing all objects in the sewer system, this should be executed without damaging the existing sewer system Cleaning the existing eniroloo system	No	26			
3			20			
	MAKING GOOD OF FINISHES ETC					
	Making good screed					
10	Floors in patches	m2	25			
	Carried to Final Summary			R		
	Section No. 3 RENOVATIONS OF 10 ENVIROLOO TOILETS Bill No. 1 Alterations CLUSTER G					
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LDPW-B/20308

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.1			
	FOUNDATIONS			
	EARTHWORKS			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Nature of ground			
	The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"			
	Excavation for working space in rock			
	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			
	Carting away of excavated material			
	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			
	Carried Forward		R	
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 1 Foundations CLUSTER G		ĸ	

	Brought Forward			R	
	Filling				
	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				
	Soil poisoning				
	Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said cerfificate to the Principal Agent				
	SITE CLEARANCE, ETC.				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	562		
	REMOVAL TREES, ETC.				
	Taking out and removing, grubbing up roots and filling holes.				
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	4		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	233		
	Extra over trench and hole excavations in earth for excavation in				
4	Soft rock	m3	54		
	Carried Forward Section No. 4 MEDIUM ADMIN BLOCK			R	
	Bill No. 1 Foundations CLUSTER G				

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

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

	Brought Forward	ĺ		R	
	FACE BRICKWORK				
	Face bricks (Purchase price of R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints				
21	Extra over brickwork for face brickwork	m2	128		
	Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
22	Coping on top of one brick wall	m	9		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 1 Foundations CLUSTER G				

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ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.2			
	<u>CONCRETE, FORMWORK AND</u> <u>REINFORCEMENT</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	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 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			
	Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G		R	

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
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	Brought Forward			R	
	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				
	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				
	20MPa/19mm concrete				
1	Surface beds	m3	2		
2	Surface beds cast in panels on waterproofing.	m3	51		
3	Aprons cast in panels to falls	m3	12		
	Carried Forward			R	
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G				

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

	Brought Forward			R	
	Smooth formwork to soffits				
11	Slabs	m2	6		
	Permanent formwork to soffits				
	TEST CUBES				
12	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	10.0		
	MOVEMENT JOINTS ETC				
	Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces				
	Saw cut joints				
3	Saw cut joints in top of concrete	m	5		
	REINFORCEMENT				
	High tensile steel reinforcement to structural concrete work				
4	12mm Diameter	t	1.20		
5	10mm Diameter bars	t	1.80		
	REINFORCEMENT (PROVISIONAL)				
	Fabric reinforcement				
16	Steeledale Mesh standard square fabric mesh, nominal mass 1,93 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 193), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.	m2	354		
	Carried Forward to Summary of Section No. 4 Section No. 4 MEDIUM ADMIN BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			R	

Quantity Rate Amount

No

Item

SECTION NO.3

BUILDING WORK

BILL NO. 3

MASONRY

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.

SUPPLEMENTARY PREAMBLES

BRICKWORK

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

Linings to concrete

Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties

Hollow walls etc

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

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

Carried Forward

Section No. 4 MEDIUM ADMIN BLOCK Bill No. 3 Masonry **CLUSTER G**

R

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

	Brought Forward	I	1	R	
	<u>Galvanised wire ties etc</u>				
10	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	56		
	FACE BRICKWORK				
	Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints				
11	Extra over brickwork for face brickwork	m2	355		
12	Extra over for facing in piers, including bonding and pointed with recesses joints on all exposed faces	m2	6		
13	Extra over for facings in beamfilling for face brickwork	m2	75		
	Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
14	Extra over brickwork for brick-on-edge header course lintel	m	28		
	Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
15	220mm Wide sill set sloping and slightly protecting outside	m	19		
16	Coping on top of one brick wall	m	8		
	NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS				
	Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 3 Masonry CLUSTER G			R	
	Masonry				

Brought Forward			R		
Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations.					
15mm x 150mm Wide sills set flat and slightly projecting	m	45			
Contried Forward to Summary of Soction No. 4			Р		
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 3 Masonry CLUSTER G			ĸ		
	Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic silp joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations. 15mm x 150mm Wide sills set flat and slightly projecting Mutec window sill and bedded in Class II wortar with plastic silp joint be sills set flat and slightly projecting from the finished face of wall, all in accordance with the manufacturer's recommendations. 15mm x 150mm Wide sills set flat and slightly projecting Mutec window sill and bedded in Class II wortar with plastic silp joint be sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations. 15mm x 150mm Wide sills set flat and slightly projecting Mutec window sill at 400mm centres more with plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations. 15mm x 150mm Wide sills set flat and slightly projecting flatter with a s	Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window sill and bedded in Class II montar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations. 15mm x 150mm Wide sills set flat and slightly projecting m Vinter with plastic slip of the sills set flat and slightly projecting m Carried Forward to Summary of Section No. 4 Section No. 4 MEDUM ADMIN BLOCK Bill No. 3 Masonry	Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic silp joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations. 15mm x 150mm Wide sills set flat and slightly projecting m 45 Carried Forward to Summary of Section No. 4 Section No. 4 MEDUM ADMIN BLOCK Bill No. 3 Masonry Masonry	Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window will window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations. 15mm x 150mm Wide sills set flat and slightly projecting m 45 Carried Forward to Summary of Section No. 4 R Section No. 4 MEDIUM ADMIN BLOCK Bill No. 3 Masonry	Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 603:2005 and installed below window with window sill ug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic silp joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations. 15mm x 150mm Wide sills set flat and slightly projecting m 45 Section No. 4 R Section No. 4 R MEDUM ADMIN BLOCK Bill No. 3 Bill No. 3 Section No. 4

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ltem No			Quantity	Rate	Amount	
	SECTION NO.3					
	BUILDING WORK					
	BILL NO.4					
	WATERPROOFING					
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.					
	SUPPLEMENTARY PREAMBLES					
	Waterproofing					
	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					
	DAMP-PROOFING OF WALLS AND FLOORS					
	One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course					
1	In walls	m2	60			
	One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"					
2	Under surface beds	m2	354			
	JOINT SEALANTS ETC					
	Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 4 Waterproofing CLUSTER G			R		_

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

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ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.5				
	ROOF COVERINGS ETC				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	General				
	All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched				
	Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use				
	Sizes				
	All items are measured net unless otherwise described				
	Flashings, trimming plates, etc.				
	Prices to include for all cutting and waste and relevant fixing material, unless otherwise described				
	All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable				
	All items are unless otherwise described measured net				
	Carried Forward		R		-
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 5 Roof Coveringss, etc CLUSTER G				

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

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.6			
	CARPENTRY AND JOINERY			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Particle board:			
	Particle board shall comply with the following specifications:			
	a) SABS 1300 Particle board: exterior and flooring type			
	b) SABS 1301 Particle board: interior type			
	Joinery:			
	Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes			
	Fixing			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
	Carried Forward		R	
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 6 Capentry and Joinery CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
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Brought Forward	R	
Decorative laminate finish:		
Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish		
PREFABRICATED ROOF TRUSSES		
Pre-fabricated metal connected timber roof trusses		
All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction		
<u>Timber</u>		
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		
Bolts		
Bolts shall be in accordance with BS 4190 or SABS 135		
Shear plates, tooth connectors and split rings		
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"		
<u>Washers</u>		
Square or round washers of the following dimensions shall be used with all bolts:		
 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness 		
Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	R	

		LDPW-B/203
Brought Forward	R	
 2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness 		
 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/m2 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 unsure 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		
<u>Truss design</u>		
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		
Carried Forward	R	
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 6 Capentry and Joinery CLUSTER G		

Brought Forward	R	
Truss pitch		
The truss pitch shall be as described in this bill for each respective truss type		
Truss loading		
Trusses shall be designed for a live load of 0,50kN/m2 and dead load as specified under the sub-heading "Specific load specifications for roof trusses"		
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		
Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	R	

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

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

Forward			R	
32mm nm rith	No	2		
<u>edges</u> hung to				

	Drought i ornalia					
	Wrought meranti doors hung to steel frames					
9	44mm Framed and ledged batten door 813 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	2			
	Solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame					
10	40mm Door 813 x 2032mm high	No	10			
	FITTINGS					
	The following in four wrot Meranti slatted benches in waiting area:					
11	32 x 69 mm Twice chamfered slat screwed from underside to steel supports with and including steel brackets.	m	44			
	Joinery Fittings, etc.					
12	Provide the amount of R595 000.00 (Five Hundred and Ninety Five Thousand Rand) for the supply and installation of Joinery Fittings by Specialists					
			Item		595,000.0)0
13	Allow for giving every facility to Specialists as described		Item			
14	Allow for profit on above if required		ltem			
	<u>Admin Furniture, etc.</u>					
15	Provide the amount of R350 000.00 (Three Hundred Fifty Thousand Rand) for the supply and installation of					
	admin furniture by Specialists		ltem		350,000.0)0
16	Allow for giving every facility to Specialists as described		Item			
17	Allow for profit on above if required		Item			
	Carried Forward to Summary of Section No. 4			R		
	Section No. 4					
	MEDIUM ADMIN BLOCK Bill No. 6					
	Capentry and Joinery					
	CLUSTER G					
			l	I		

Brought Forward

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.7			
	<u>CEILING , ETC.</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	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			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling. m2	354		
	Sawn softwood			
2	38 x 114mm Ceiling joists (Provisional) m	85		
	Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 7 Ceilings, Partitions and Access Flooring		R	
	CLUSTER G			

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

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ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.8			
	IRONMONGERY			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Descriptions			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
	Finishes to ironmongery			
	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			
	CATCHES,CABIN HOOKS, ETC			
	<u>"Solid"</u>			
	LOCKS			
	Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 8 Ironmongery CLUSTER G		R	
		I	I	I I

					LDF W-D/20300
	Brought Forward			R	
	<u>"Solid"or similar approved</u>				
1	"Code 630" padlock	No	2		
2	"Code 460/313" Blesbok four lever lockset	No	12		
	DOOR CLOSERS AND FLOOR SPRINGS				
	<u>"Dorma" or similar approved</u>				
3	Dorma TS91/EN3 slide channel door closer - Non hold open (Silver)	No	4		
4	Dorma DPH301C 150 x 19mm stainless steel "D" shaped straight bolt-through pull handle (St/Steel)	No	4		
	SUNDRIES				
	"Solid" or similar approved				
5	Dorma "Code 255" door stop plugged	No	16		
	<u>PINNING BOARDS, WRITING BOARDS,</u> <u>PROJECTION SCREENS, ETC</u>				
	<u>"Vitrex" or similar approved</u>				
6	Pinning boards 2400 x 1200mm high fixed to brickwork	No	2		
7	Pinning boards 3000 x 1200mm high fixed to brickwork	No	4		
	LETTERS, NAMEPLATES, ETC				
	<u>"Union" or similar approved</u>				
8	150 x 150mm Stainless steel plate engraved with "female" sign (St/Steel)	No	1		
9	150 x 150mm Stainless steel plate engraved with "male" sign (St/Steel)	No	1		
	Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 8 Ironmongery CLUSTER G			R	

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

	Brought Forward			R	
24	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "WAITING AREA"	No	1		
25	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "STRONG ROOM"	No	1		
	BATHROOM FITTINGS				
	"Buchel" or similar approved				
6	19mm Diameter chromium plated towel rail 600mm long including end brackets	No	2		
	"Kimberly-Clark" or similar approved				
27	Kimberly-Clark® Professional MR2 Satin finish Stainless Steel toilet tissue dispenser (code: SA426130), overall size 130 x 135 x 256mm high, installed by a Kimberly Clark® installation team.	No	2		
8	Kimberly-Clark® Professional Reflex® MK2 Stainless Steel hand towel dispenser (code: SA426125), overall size 310 x 280 x 400mm high, installed by a Kimberly Clark® installation team.	No	2		
9	Kimberly-Clark® Professional Foam soap dispenser colour stainless steel, overall size 134 x 120 x 250mm high, installed by a Kimberly Clark® installation team.	No	2		
	"Nampak" or similar approved				
0	Vandal resistant 2 roll holder complete fitments or similar approved	No	2		
	VERTICAL BLINDS				
	"Luxaflex" or similar approved				
1	Vertical blind system, not exceeding 2000mm high, consisting of 70mm wide vanes, powder coated aluminium headrail 44.8 x 26.5mm high, fitted with wheeled runners, connected by grey acetal spacer links with and including all necessary components to manufacturer's specifications	m	56		
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 8 Ironmongery CLUSTER G				

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ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO. 9			
	METALWORK			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	Descriptions			
	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			
	Drawings			
	Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc			
	WELDED SCREENS, GATES, ETC			
	Gates to external doors			
	PRESSED STEEL DOOR FRAMES			
	1,2mm Double rebated frames suitable for one brick walls			
1	Frame for door 813 x 2032mm high and fixed fanlight 305mm high No	10		
	Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 9		R	
	Metalwork CLUSTER G			

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

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

Brought Forward	R	
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)		
The following specifications are to be complied with:		
Aluminium alloy extrusion: BS 1474 Aluminium alloy sheets: SANS 903 Anodising: SANS 999 Neoprene performed seals and gaskets: SATM C542 Powder coat finishing: SANS 1274		
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		
Carried Forward	R	
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 9 Metalwork CLUSTER G		

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

ltem No		Quant	ty F	Rate	Amount
	SECTION NO.3				
	BUILDING WORK				
	BILL NO. 10				
	PLASTERING				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	GRANOLITHIC				
	Untinted granolithic on concrete				
1	25mm Thick on floors and landings m	2	68		
	SCREEDS				
	Screeds on concrete				
2	30mm Thick on floors m	2 3	310		
	INTERNAL PLASTER				
	Cement plaster on brickwork				
3	On walls n	2 8	321		
4	On narrow widths m	2	35		
	CORNER PROTECTORS, DIVIDING STRIPS,				
	ETC				
	Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 10 Plastering CLUSTER G			R	

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

ltem No			Quantity	Rate	Amount	
	SECTION NO.3					
	BUILDING WORK					
	BILL NO.11					
	TILING					
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.					
	SUPPLEMENTARY PREAMBLES					
	Descriptions					
	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					
	WALL TILING					
	<u>Glazed ceramic wall tiles (PC R110,00/m2 VAT excl.)</u> fixed with adhesive to plaster (plaster elsewhere)					
1	On walls	m2	122			
2	On narrow widths	m2	5			
	FLOOR TILING					
	Carried Forward Section No. 4 MEDIUM ADMIN BLOCK			R		-
	Bill No. 11 Tiling CLUSTER G					

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

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.12			
	PLUMBING AND DRAINAGE			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	"Polycop" polypropylene pipes:			
	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			
	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			
	All pipe diameters are nominal external			
	"Polylink" polypropylene pipes:			
	Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints			
	Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured			
	Carried Forward		R	
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G			

	I		1
Brought Forward		R	
Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers			
Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers			
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			
All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions			
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			
<u>uPVC pressure pipes and fittings:</u>			
Pipes for water supply shall be of the class stated			
			-
Carried Forward		R	
Section No. 4 MEDIUM ADMIN BLOCK			
Bill No. 12			
Plumbing and Drainage CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
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Brought Forward	R	
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		
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		
Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G	R	

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Brought Forward	R	
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 Forward	R	
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G		
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DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
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Brought Forward	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		
Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage	R	
CLUSTER G		

R **Brought Forward** 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** 0,6mm Galvanised sheet iron with "Chromadek" finish on one side 66 1 100 x 125mm Eaves gutters with beaded front edge m 8 2 Extra over eaves gutter for angle No 2 3 Extra over eaves gutter for stopped end No 4 Extra over eaves gutter for outlet for 100mm diameter No 8 pipe 25 5 100mm Diameter rainwater pipes m 6 Extra over rainwater pipe for eaves or plinth offset 450mm projection No 8 7 No 8 Extra over rainwater pipe for shoe **RAINWATER HARVEST ETC** 8 Provide the sum of R 100,000-00 for the supply and installation of Rainwater Harvest 100,000.00 Item 9 Allow for profit. Item 10 Allow for attendance on sub-contractor Item **STORMWATER CHANNELS** 15 MPa/20 mm concrete SOIL DRAINAGE **Carried Forward** R Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage **CLUSTER G**

	Brought Forward			R	
	<u>uPVC pipes</u>				
11	110mm Pipes vertically or ramped to cleaning eye etc (no excavation)	m	6		
12	110mm Pipes laid in and including trenches not exceeding 1m deep	m	150		
	Extra over uPVC pipes for fittings				
13	110mm Access bend	No	4		
14	110mm Access junction	No	3		
15	110mm Bend	No	3		
16	110mm Junction	No	3		
17	110mm uPVC rodding eye cover in end of pipe	No	2		
	Pre-cast concrete gulleys				
18	110mm Dished gulley not exceeding 1m deep with 150mm steel grate and standard concrete gulley surround	No	1		
	Concrete pipes:				
	Inspection chambers (covers elsewhere)				
19	Inspection chamber 450 x 600mm x exceeding 750mm and not exceeding 1000mm deep internally	No	1		
	<u>Covers, etc</u>				
20	450 x 600mm x 74kg Type 8A cast iron double seal manhole cover and frame	No	1		
	Sundries				
21	100mm Cast iron "ABC" cleaning eye	No	3		
	Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G			R	

Brought Forward			R	
Precast concrete inspection eye marker slab set in ground	No	4		
110mm Rodding eye	No	3		
Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	2		
Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock	m3	2		
SANITARY FITTINGS				
<u>"Vaal" or similar approved</u>				
Vaal Sanitaryware 510 x 405mm Hibiscus White vitreous china lavatory basin (Code : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code 8448Z0).	No	3		
Vaal Sanitaryware Hibiscus White vitreous china close coupled washdown suite comprising 90° outlet open rim pan (product code 772600) and matching 6/3 litre front dual flush cistern (product code 710539) including "PARKER AVANT" toilet seat	No	2		
WASTE UNIONS ETC				
"Cobra Watertech" or similar approved				
38mm "Cobra 316" unslotted waste and plug with chain	No	3		
TRAPS ETC				
<u>"Marley" or similar approved</u>				
40mm Flexi butyl rubber trap with reseal "P" trap	No	1		
Chromium plated				
32 x 40mm Bottle trap	No	3		
Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G			R	
	Precast concrete inspection eye marker slab set in ground 110mm Rodding eye Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock SANITARY FITTINGS "Vaal" or similar approved Vaal Sanitaryware 510 x 405mm Hibiscus White vitreous china lavatory basin (Code : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code 844820). Vaal Sanitaryware Hibiscus White vitreous china close coupled washdown suite comprising 90° outlet open rim pan (product code 710539) including "PARKER AVANT" toilet seat WASTE UNIONS ETC "Cobra Watertech" or similar approved 38mm "Cobra 316" unslotted waste and plug with chain TRAPS ETC "Marley" or similar approved 40mm Flexi butyl rubber trap with reseal "P" trap Chromium plated 32 x 40mm Bottle trap	Precast concrete inspection eye marker slab set in ground No 110mm Rodding eye No 110mm Rodding eye No Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock m3 Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock m3 SANITARY FITTINGS "Vaal" or similar approved Vaal Sanitaryware 510 x 405mm Hibiscus White vitreous china lavatory basin (Code : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code 844820). No Vaal Sanitaryware Hibiscus White vitreous china close coupled washdown suite comprising 00° outlet open rim pan (product code 772600) and matching 6/3 litre front dual flush cistern (product code 710539) including "PARKER AVANT" toilet seat No WASTE UNIONS ETC "Cobra Watertech" or similar approved No 38mm "Cobra 316" unslotted waste and plug with chain No TRAPS ETC "Marley" or similar approved No 40mm Flexi butyl rubber trap with reseal "P" trap No Chromium plated 32 x 40mm Bottle trap No Section No. 4 MEDIUM ADMINB BLOCK Bill No. 12 Plumbing and Drainage Section No. 4 MeDIUM ADMINB LOCK Bill No. 12	Precast concrete inspection eye marker slab set in ground No 4 110mm Rodding eye No 3 Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock m3 2 Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock m3 2 SANITARY FITTINGS m3 2 "Vaal" or similar approved Vaal Sanitaryware 510 x 405mm Hibiscus White vitreous china lavatory basin (Code : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code 844820). No 3 Vaal Sanitaryware Hibiscus White vitreous china close coupled washdown suite comprising 90° outlet open rim pan (product code 772600) and matching 6/3 litre front dual flush cistern (product code 710539) including "PARKER AVANT" toilet seat No 2 WASTE UNIONS ETC "Cobra Watertech" or similar approved 3 "Martley" or similar approved 3 3 40mm Flexi butyl rubber trap with reseal "P" trap No 3 12 Chromium plated 3 3 24 Section No. 4 MC 3 PHOLM ADMIN BLOCK Bill No. 12 No 3 3	Precast concrete inspection eye marker slab set in groundNo4110mm Rodding eyeNo3Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rockm32Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rockm32SANITARY FITTINGS"Vaal" or similar approved10Vaal Sanitaryware 510 x 405mm Hibiscus White vitreous china lavatory basin (Code : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code rode : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code rode : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code rode : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code rode : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code rode : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code rode : 7023) with two tapholes including : "Cobra Watertech" or similar approved 38mm "Cobra 316" unslotted waste and plug with chain No3TRAPS ETC "Marley" or similar approved 40mm Flexi butyl rubber trap with reseal "P" trap No1Chromium plated 32 x 40mm Bottle trapNo3Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12RPlumbing and DrainageNo3

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

	Brought Forwa	ard		R		
41	110mm Bend	No	4			
42	110mm Access bend	No	2			
43	110mm Pan Connector	No	2			
44	110mm "GI Two-way" vent valve	No	1			
	<u>Sundries</u>					
	WATER SUPPLIES					
	<u>Class 16 uPVC pressure pipes with solvent welded</u> joints					
45	32mm Pipes laid in and including trenches not exceeding 1m deep	m	30			
46	50mm Pipes laid in and including trenches not exceeding 1m deep	m	25			
	Extra over class 16 uPVC pressure pipes for fittings wit solvent welded joints	<u>h</u>				
47	32mm Bend	No	3			
48	32mm Reducer	No	2			
49	32mm Tee	No	4			
50	50mm Bend	No	3			
51	50mm Tee	No	2			
52	35 x 50 x 35mm Junction	No	1			
	Class 0 copper pipes					
53	15mm Pipes	m	85			
54	22mm Pipes	m	65			
	Carried Forwa Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G	ard		R		

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	Brought Forward			R		
	Extra over class 0 copper pipes for capillary fittings					
55	15mm Fittings	No	44			
56	22mm Fittings	No	37			
	Brass					
57	15mm Fullway gate valve	No	1			
58	22mm Fullway gate valve	No	1			
	Rainwater Tanks					
59	Provide a sum of R125 000,00 (One Hundred and Twenty Five Thousand Rand) for the supply and installation of Rainwater tanks complete by Specialists		ltem		125,000.	00
60	Allow for giving every facility to Specialists as described		Item			
61	Allow for profit on above if required		Item			
	Sundries					
	ELECTRIC WATER HEATERS					
	Carried Forward Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12			R		
	Plumbing and Drainage CLUSTER G					

	Brought Forward			R	l
	"Kwikot" or similar approved				1
62	Kwikot 150 Litre Slimline 600 Dual electric water heater (Code : ESG-100) complying with SABS 151-2002, overall size 990 x 480mm high, operating at 400kPa with temperature and pressure safety relief valve including 20mm female draincock with inlet compression. Geyser to be installed horizontally in roof space with 1160 x 560mm wide polyethylene drip tray with union and back nut connected to 20mm PVC overflow pipe taken out at eaves (Code : GSTP-1200) and 15mm pipe work including two 15mm vacuum breakers (Code : KHN4.150CX) installed on hot and cold water supply. Installation to include a 15mm 400kPa Kwikot Mono control and expansion relief valve (Code : KHN3.104), all in accordance with SANS 10254, connected to single phase electrical power supply with isolator 1m away from connection on geyser.	No	1		
	FIRE APPLIANCES ETC				l
	'Chubb' or similar approved				1
63	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	6		
64	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1		
					l
	Carried Forward to Summary of Section No. 4			R	
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G				

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ltem No			Quantity	Rate	Amount	
	SECTION NO.3			Ja A		
	BUILDING WORK					
	<u>BILL NO. 13</u>					
	GLAZING					
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.					
	GLAZING TO STEEL WITH PUTTY					
	4mm Clear float glass					
1	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	3			
2	Panes exceeding 0,5m2 and not exceeding 2m2	m2	22			
	4mm Rough cast glass					
3	Panes exceeding 0,5m2 and not exceeding 2m2	m2	4			
	TOPS, SHELVES, DOORS, MIRRORS, ETC					
	4 mm Silvered float glass copper backed mirrors with 10 mm bevelled and polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete					
4	Mirror 400 x 600mm high with four (4) screws	No	3			
						_
	Carried Forward to Summary of Section No. 4			R		_
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 13					
	Glazing CLUSTER G					

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	<u>BILL NO. 14</u>			
	PAINTWORK			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	DESCRIPTIONS			
	Descriptions of paintwork shall be deemed to include for all cutting in			
	PAINT SPECIFICATIONS			
	All painting shall be done in accordance with "Plascon- Evans" specifications			
	PAINTWORK ETC TO NEW WORK			
	ON FLOATED PLASTER			
	Carried Forward		R	
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 14 Paintwork			
	CLUSTER G			

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

					LDPW-B/203	0
	Brought Forward			R		
	Plascon Sure Coat Gloss Enamel to interior new fibre cement (NW 274).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 4 years in a C1 - inland environment.					
5	On window sills not exceeding 300 mm girth	m	99			
	ON METAL					
	Plascon Velvaglo Satin to exterior new mild steel (NW 683).Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.					
6	On door frames	m2	23			
7	On strong room doors	m2	5			
8	On windows with burglar bars	m2	69			
9	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	28			
10	On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high	m	99			
	ON WOOD					
	Carried Forward			R		
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 14 Paintwork CLUSTER G					

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

Section No. 4 MEDIUM ADMIN BLOCK **SECTION SUMMARY - MEDIUM ADMIN BLOCK** Page Amount No Foundations 82 Concrete, Formwork and Reinforcement 86 Masonry 90 Waterproofing 92 Roof Coveringss, etc 94 Capentry and Joinery 101 Ceilings, Partitions and Access Flooring 103 _ _ _ _ Ironmongery 107 Metalwork 112 Plastering 114 Tiling 116 Plumbing and Drainage 128 Glazing 129 Paintwork 133 **Carried to Final Summary** R Section No. 4 MEDIUM ADMIN BLOCK **CLUSTER G**

Bill

No

1

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ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.1			
	FOUNDATIONS			
	EARTHWORKS			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Nature of ground			
	The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"			
	Excavation for working space in rock			
	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			
	Carting away of excavated material			
	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			
	Carried Forward		R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 1 Foundations CLUSTER G			

	Brought Forward			R	
	Filling				
	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				
	Soil poisoning				
	Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said cerfificate to the Principal Agent				
	SITE CLEARANCE, ETC.				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	172		
	REMOVAL TREES, ETC.				
	Taking out and removing, grubbing up roots and filling holes.				
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	21		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	59		
	Extra over trench and hole excavations in earth for excavation in				
4	Soft rock	m3	18		
	Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 1 Foundations CLUSTER G			R	

	Brought Forward	Ĩ		R		
5	Hard rock	m3	18			
	Extra over all excavations for carting away					
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	28			
	Risk of collapse of excavations					
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	156			
	Keeping excavations free of water					
8	Keeping excavations free of all water other than subterranean water		ltem			
9	Under floors, steps, paving, etc	m3	25			
	<u>Approved G6 filling supplied and carted by the</u> <u>contractor and compacted in layers not exceeding</u> <u>150mm to 95% Mod AASHTO density</u>					
10	Backfilling to trenches, holes, etc	m3	31			
11	Under floors, steps, paving etc.	m3	24			
	Compaction of surfaces					
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	163			
	Prescribed density tests on filling					
13	"Modified AASHTO Density" test	No	5			
	SOIL POISONING					
	Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 1 Foundations CLUSTER G			R		

Brought Forward			R
Soil insecticide			
Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	163	
To bottoms and sides of trenches etc	m2	59	
CONCRETE, FORMWORK AND REINFORCEMENT			
UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES			
25MPa/19mm concrete			
Strip footings	m3	15	
TEST CUBES			
Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	5.0	
BRICKWORK			
Brickwork of NFP bricks in class II mortar			
One brick walls	m2	59	
BRICKWORK SUNDRIES			
Joint forming material in movement joints:			
12mm Fibre board built in vertically between brick skins.	m2	59	
Brickwork reinforcement			
150mm Wide reinforcement built in horizontally	m	322	
FACE BRICKWORK			
Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 1 Foundations CLUSTER G			R
	Soil insecticide Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming To bottoms and sides of trenches etc CONCRETE, FORMWORK AND REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES 25MPa/19mm concrete Strip footings TEST CUBES 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. BRICKWORK Brickwork of NFP bricks in class II mortar One brick walls BRICKWORK SUNDRIES Joint forming material in movement joints: 12mm Fibre board built in vertically between brick skins. Brickwork reinforcement 150mm Wide reinforcement built in horizontally FACE BRICKWORK Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 1 Foundations	Soil insecticide Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming m2 To bottoms and sides of trenches etc m2 CONCRETE, FORMWORK AND REINFORCEMENT UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES 25MPa/19mm concrete Strip footings m3 TEST CUBES 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. BRICKWORK BRICKWORK SUNDRIES Joint forming material in movement joints: 12mm Fibre board built in vertically between brick skins. Brickwork reinforcement 150mm Wide reinforcement built in horizontally TAC Brickwork reinforcement built in horizontally The FACE BRICKWORK Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 1 Forudations	Soil insecticide Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming m2 163 To bottoms and sides of trenches etc m2 59 CONCRETE, FORMWORK AND REINFORCEMENT UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES 25MPa/19mm concrete 53 Strip footings m3 15 TEST CUBES Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150 m, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith. Sets 5.0 BRICKWORK Brickwork of NFP bricks in class II mortar 0 59 One brick walls m2 59 Brickwork SUNDRIES Joint forming material in movement joints: 12 12mm Fibre board built in vertically between brick skins. m2 59 Brickwork reinforcement 322 59 Brickwork Reinforcement built in horizontally m 322 FACE BRICKWORK Carried Forward 59 Brickwork reinforcement built in horizontally m 322 FACE BRICKWORKS Face BRICKWORK Face BRICKWORK Face BRICKWORK

	Brought Forward			R	
	Face bricks (Purchase price of R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints				
21	Extra over brickwork for face brickwork	m2	59		
	Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
22	Coping on top of one brick wall	m	19		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 1 Foundations				
	CLUSTER G				

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ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.2				
	<u>CONCRETE, FORMWORK AND</u> <u>REINFORCEMENT</u>				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	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 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				
	Carried Forward		R		-
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
LDPW-B/20308

	Brought Forward			R	
	<u>Formwork</u>				
	Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use				
	The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself				
	Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described				
	Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described				
	Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	UNREINFORCED CONCRETE				
	20MPa/19mm concrete				
1	Surface beds	m3	5		
2	Surface beds cast in panels on waterproofing.	m3	24		
3	Aprons cast in panels to falls	m3	5		
	Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			R	

	Brought Forward	I		R	
4	Ramps	m3	1		
5	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	47		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a steel trowel				
6	Surface beds, slabs, etc	m2	163		
7	Ramp to falls	m2	4		
	<u>Finishing top surfaces of concrete smooth with a wood</u>				
8	Surface beds, slabs, etc	m2	34		
9	Aprons to falls	m2	56		
	FORMWORK				
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides				
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	22		
	TEST CUBES				
11	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	5.0		
	MOVEMENT JOINTS ETC				
	Carried Forward			R	
	1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G				

	Brought Forward			R	
	Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces			<u>-</u>	
12	15mm Joints exceeding 300mm high	m	14		
	Saw cut joints				
13	Saw cut joints in top of concrete	m	37		
	DIVIDING STRIPS, ETC.				
14	6 x 38mm Angle iron step guard cast into concrete with 3 x 6mm anchors	m	2		
	REINFORCEMENT				
	High tensile steel reinforcement to structural concrete work				
	Mild steel reinforcement to structural concrete work				
	REINFORCEMENT (PROVISIONAL)				
	Fabric reinforcement				
15	Steeledale Mesh standard square fabric mesh, nominal mass 1,93 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 193), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.	m2	163		
		1112	105		
					┣─
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 2				
	Concrete, Formwork and Reinforcement CLUSTER G				

Amount

R

Quantity Rate

MASONRY

BILL NO. 3

SECTION NO.3

BUILDING WORK

Item

No

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.

SUPPLEMENTARY PREAMBLES

BRICKWORK

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

Linings to concrete

Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties

Hollow walls etc

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

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

Carried Forward

Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 3 Masonry CLUSTER G

Brought Forward			R
Face bricks			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
Pointing			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
SUPERSTRUCTURE			
Brickwork of NFP bricks in class II mortar			
L-shaped piers	m3	2	
One brick walls	m2	265	
Joint forming material in movement joints:			
12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2	15	
Brickwork reinforcement			
75mm Wide reinforcement built in horizontally	m	56	
150mm Wide reinforcement built in horizontally	m	781	
Turning pieces			
230mm Wide turning piece to lintels etc	m	20	
"Allied Concrete" prestressed fabricated lintels			
110 x 75mm Lintels in lengths not exceeding 3m	m	2	
Galvanised wire ties etc			
4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	30	
Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 3 Masonry CLUSTER G			R

					LDPW-B/20308
	Brought Forward			R	
l	FACE BRICKWORK				
	Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints				
9	Extra over brickwork for face brickwork	m2	234		
10	Extra over for facing in piers, including bonding and pointed with recesses joints on all exposed faces	m2	6		
11	Extra over for facings in beamfilling for face brickwork	m2	27		
	Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
12	Extra over brickwork for brick-on-edge header course lintel	m	22		
	Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
13	220mm Wide sill set sloping and slightly protecting outside	m	22		
14	Coping on top of one brick wall	m	19		
	NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS				
	Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations.				
15	15mm x 150mm Wide sills set flat and slightly projecting	m	22		
	Carried Forward to Summary of Section No. 5 Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 3 Masonry CLUSTER G			R	

ltem No			Quantity	Rate	Amount
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.4				
	WATERPROOFING				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	Waterproofing				
	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				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course				
1	In walls	m2	23		
	One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
2	Under surface beds	m2	163		
	JOINT SEALANTS ETC				
	Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 4 Waterproofing CLUSTER G			R	
	Waterproofing				

	Brought Forward		R	l
	<u>Silicone sealing compound including backing cord, bond</u> breaker, primer, etc			1
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary m	37		
				1
				1
				1
				1
				1
				1
				1
				1
				1
	Corriad Forward to Summary of Section No. 5		R	
	Carried Forward to Summary of Section No. 5 Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS			
	Bill No. 4 Waterproofing CLUSTER G			I

ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.5				
	ROOF COVERINGS ETC				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	General				
	All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched				
	Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use				
	Sizes				
	All items are measured net unless otherwise described				
	Flashings, trimming plates, etc.				
	Prices to include for all cutting and waste and relevant fixing material, unless otherwise described				
	All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable				
	All items are unless otherwise described measured net				
	Carried Forward		R		
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 5 Roof Coveringss, etc CLUSTER G				

	Brought Forward			R	
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions				
1	Roof covering with pitch not exceeding 50 degrees	m2	164		
2	Ridge capping 550mm girth	m	17		
3	Hip capping 550mm girth	m	16		
4	Gable trim 550mm girth	m	8		
	STEEL LOUVRES				
	"NTY Steelworks" or similar approved				
5	Triangular steel louvre size 3000x 500mm high fixed to timber purlins including watertight heading joints, necessary sealing strips, fixing accessories, etc	No	1		
	Carried Forward to Summary of Section No. 5 Section No. 5			R	
	1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 5 Roof Coveringss, etc CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.6			
	CARPENTRY AND JOINERY			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Particle board:			
	Particle board shall comply with the following specifications:			
	a) SABS 1300 Particle board: exterior and flooring type			
	b) SABS 1301 Particle board: interior type			
	Joinery:			
	Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes			
	Fixing			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
	Carried Forward		R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
LDPW-B/20308

Brought Forward	R
Decorative laminate finish:	
Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish	
PREFABRICATED ROOF TRUSSES	
Pre-fabricated metal connected timber roof trusses	
All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction	
Timber	
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	
Bolts	
Bolts shall be in accordance with BS 4190 or SABS 135	
Shear plates, tooth connectors and split rings	
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"	
Washers	
Square or round washers of the following dimensions shall be used with all bolts:	
1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness	
Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery CLUSTER G	R

Brought Forward	R	
 2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness 		
 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/m2 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 unsure 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		
Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery CLUSTER G	R	

Brought Forward	R	
Truss pitch		
The truss pitch shall be as described in this bill for each respective truss type		
Truss loading		
Trusses shall be designed for a live load of 0,50kN/m2 and dead load as specified under the sub-heading "Specific load specifications for roof trusses"		
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		
<u>Dimensions</u>		
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		
<u>Erection</u>		
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		
<u>Design system</u>		
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		
Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery CLUSTER G	R	

Brought Forward		R	
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 10° pitch			
2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres			
ROOFS			
The following in plate nailed timber roof truss construction			
The following is applicable in respect of roof trusses			
The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes			
Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)			
Allow for the preparation and submission of the following documents in respect of all buildings			
Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication	ltem		
Design certificate indicating the licensed programme used, SANS specifications adhered to, general procedures and loadings adopted, sizes and grading of			
timber components, details, etc.	ltem		
Carried Forward		R	
Section No. 5			
1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 6			
Capentry and Joinery CLUSTER G			
OLUGIER G			

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2

	Brought Forward			R	
3	Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Principal Agent		ltem		
	Sawn softwood				
4	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for 2 classroom approximately 184m2 on plan (Refer to architect's drawings attached to these bills of quantities)	No	1		
	Sawn softwood grade 4				
5	38 x 114mm Wall plates	m	47		
6	50 x 220mm Timber Beam	m	17		
	Sundries				
7	Two coats creosote on sawn timbers	m2	15		
	EAVES, VERGES, ETC				
	"Everite FC77" pressed fibre-cement				
8	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	51		
	<u>SKIRTINGS</u>				
	Wrought meranti				
9	19 x 76mm Skirting including 19mm quadrant bead nailed	m	66		
	DOORS, ETC				
	Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery			R	
	CLUSTER G				

	Brought Forward			R		
	Wrought meranti doors hung to steel frames					
10	44mm Framed and ledged batten door 813 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	2			
	Solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame					
11	Door 813 x 2100mm high	No	10			
	FITTINGS					
	Classroom School Furnitures, etc					
12	Provide a sum of R150 000,00 (One Hundred Fifty Thousand Rand) for supply and installation of joinery works by the specialist which was not clearly defined at the time of tender		ltem		150,000.	00
13	Allow for giving every facility to Specialists as described		Item			
14	Allow for profit on above if required		ltem			
	Money Provision:					
	Out doors toys					
15	Provide a sum of R200 000,00 (Two Hundred Fifty Thousand Rand) for supply and installation of out doors toys supplied by the specialist which was not clearly defined at the time of tender		ltem		250,000.	00
	Carried Forward to Summary of Section No. 5 Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 6 Capentry and Joinery CLUSTER G			R		

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.7			
	<u>CEILING , ETC.</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	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			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling. m.	2 163		
	Sawn softwood			
2	38 x 114mm Ceiling joists (Provisional) r	n 17		
	Carried Forward		R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 7			
	Ceilings, Partitions and Access Flooring CLUSTER G			

	Brought Forward			R	
	"Rhino" gypsum plasterboard cornices				
3	75mm Coved cornices	m	66		
	NAILED UP AND SCREWED UP CEILINGS				
	<u>6mm "Everite Nutec" fibre-cement boards with H-</u> profile primed steel jointing cover strips over joints				
4	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.				
		m2	163		
5	Sloping ceilings including 38 x 38mm sawn softwood brandering at 450mm centres	m2	34		
6	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander				
	covered with ceiling board and fitted flush in opening	No	2		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS				
	Bill No. 7 Ceilings, Partitions and Access Flooring CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.8			
	IRONMONGERY			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Descriptions			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
	Finishes to ironmongery			
	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			
	CATCHES,CABIN HOOKS, ETC			
	<u>"Solid"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mmchamfered hardwood block twice oiled and pluggedNo	2		
	LOCKS			
	Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 8 Ironmongery CLUSTER G		R	

	Brought Forward			R	
	<u>"Solid"or similar approved</u>				
2	"Code 630" padlock	No	2		
3	"Code 2252-76SC" three lever upright lockset	No	3		
4	"Code 460/313" Blesbok four lever lockset	No	2		
	DOOR CLOSERS AND FLOOR SPRINGS				
	<u>"Dorma" or similar approved</u>				
	SUNDRIES				
	<u>"Solid" or similar approved</u>				
5	Dorma "Code 255" door stop plugged	No	2		
6	Chromium plated toilet roll holder plugged to brickwork	No	5		
	STEEL CUPBOARDS				
	Aproved steel lockers with standard baked enamel finish				
7	G10 Double door steel cupboard 914 x 457 x 1828mm high with five shelves bolted to brickwork	No	2		
	<u>PINNING BOARDS, WRITING BOARDS,</u> <u>PROJECTION SCREENS, ETC</u>				
	<u>"Vitrex" or similar approved</u>				
8	Pinning boards 4000 x 1200mm high fixed to brickwork	No	2		
9	2000 x 1300 mm White Porcelain magnetic marker board				
	board	No	2		
	LETTERS, NAMEPLATES, ETC				
	Carried Forward			R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS				
	Bill No. 8 Ironmongery				
	CLUSTER G				

1					
	Brought Forward			R	
	<u>"Union" or similar approved</u>				
10	150 x 150mm Stainless steel plate engraved with "female" sign (St/Steel)	No	1		
11	150 x 150mm Stainless steel plate engraved with "male" sign (St/Steel)	No	1		
12	150 x 150mm Stainless steel plate engraved with a "Fire Hose Reel" sign (St/Steel)	No	1		
13	150 x 150mm Stainless steel plate engraved with "Fire Extinguisher" sign (St/Steel)	No	2		
14	150 x 150mm Stainless steel plate engraved with a "Arrow sign" sign (St/Steel)	No	2		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 8				
	Ironmongery CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO. 9			
	METALWORK			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	Descriptions			
	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			
	Drawings			
	Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc			
	SUNDRY METALWORK			
	The following in identical steel support columns			
1	Bolts, complete with nuts and two washers each kg	9		
2	76 x 76 x 3mm Tubular section columns 3050mm high No	7		
	Carried Forward		Б	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 9 Metalwork CLUSTER G		R	

	Brought Forward			R		
3	75 x 6mm Flat section fixing plate 120mm, twice holed for bolt and welded to top end of tubular section column (Provisional)					
	(Provisional)	No	7			
4	200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section column	No	7			
5	12mm Diameter x 75mm long sleeved masonry anchor	No	7			
	WELDED SCREENS, GATES, ETC					
	Gates to external doors					
6	Gate and frame 900 x 2100mm high complete (G1)					
		No	1			
	PRESSED STEEL DOOR FRAMES					
	<u>1,2mm Double rebated frames suitable for one brick</u> walls					
7	Frame for door 813 x 2032mm high	No	1			
	STEEL WINDOWS, DOORS, ETC					
	<u>"Nty" or similar approved steel residential windows with burglar bars to all sashes</u>					
8	NTY Standard School type window "Code 5/2" size 1143 x 1332mm high (W1)	No	18			
	Carried Forward to Summary of Section No. 5			R		
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 9 Metalwork					
	CLUSTER G					

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO. 10			
	PLASTERING			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	GRANOLITHIC			
	Untinted granolithic on concrete			
	SCREEDS			
	Screeds on concrete			
1	30mm Thick on floors m2	163		
	INTERNAL PLASTER			
	Cement plaster on brickwork			
2	On walls m2	156		
3	On narrow widths m2	22		
	Carried Forward to Summary of Section No. 5		R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 10 Plastering CLUSTER G			

ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.11				
	TILING				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	Descriptions				
	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				
	WALL TILING				
	<u>Glazed ceramic wall tiles (PC R110,00/m2 VAT excl.)</u> fixed with adhesive to plaster (plaster elsewhere)				
1	On walls n	2 122			
	FLOOR TILING				
	<u>300 x 300 x 11,5mm Ceramic floor tiles (PC R120.00/m2 VAT excl.) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted waterproof jointing compound</u>				
2	On floors and landings	2 163			
	Carried Forward		R		
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 11 Tiling CLUSTER G				

	-B/20308
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1	Brought Forward		R	
3	Skirting formed of ceramic tile cut to 300 x 75mm high m	67		
	Carried Forward to Summary of Section No. 5 Section No. 5		R	
	1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 11			
	Tiling CLUSTER G			
	-167-	'	1	n I

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.12			
	PLUMBING AND DRAINAGE			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	"Polycop" polypropylene pipes:			
	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			
	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			
	All pipe diameters are nominal external			
	RAINWATER DISPOSAL			
	<u>0,6mm Galvanised sheet iron with "Chromadek" finish</u> on one side			
1	100 x 125mm Eaves gutters with beaded front edge	m 51		
2	Extra over eaves gutter for angle	No 4		
	Carried Forward		R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS			
	Bill No. 12 Plumbing and Drainage CLUSTER G			

	Brought Forward		I	R
3	Extra over eaves gutter for stopped end	No	1	
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	4	
5	100mm Diameter rainwater pipes	m	16	
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	4	
7	Extra over rainwater pipe for shoe	No	4	
	SANITARY FITTINGS			
	White Vitreous China			
8	Vaal Sanitaryware 580 x 510mm concorde vanity ceramic fireclay drop-in-vanity basin colour white with two taphole including integrated overflow and chainstay hole, fitted into opening in vanity top. Sealed silicone sealant where basin rim meets vanity top.	No	2	
		NO	2	
9	Vaal Sanitaryware 635 x 485mm Hibiscus White vitreous china vanity basin with universal half pedistal (code 715222) including two semi punched taphole and integrated overflow and chainstay hole, bolted to wall with two 10mm bolts	No	8	
10	Vaal Sanitaryware White vitreous china low level washdown suite comprising 90° outlet pan with enlarged pedestal and matching 9 litre cistern complete with lid, flushpipe and fitments	No	1	
11	Vaal Sanitaryware Protea Paraplegic white vitreous china floor mounted paraplegic washdown suite (product code 7300SC) comprising 90° outlet pan and matching 9 litre cistern, including DPE heavy duty thermoplastic A1 deluxe double flap seat, lid, fitments and purpose- made chromium plated side flush lever.	No	1	
	Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage CLUSTER G			R

	Brought Forward			R	1
	"Citimetal or Similar and approved" stainless steel				I
12	Franke Nouveau Model Nvn611 Grade 304 18/10 polished stainless steel single end bowl inset sink, size 800 x 460mm wide with one 340 x 370 x 149mm deep bowl, fitted onto cupboard (elsewhere specified) including 90mm waste fitting (Code: 300651) and PVC traps (traps elsewhere specified). Sink guaranteed for 25 years against corrosion and supplied with protective plastic coating for transport and handling and to be removed once sink is made operational.	No	4		
		INO	I		I
	WASTE UNIONS ETC				I
	"Cobra Watertech or Similar and approved"				I
13	38mm "Cobra 301" basin chrome platted unslotted waste and plug with chain	No	8		
14	38mm "Cobra 316" unslotted waste and plug with chain	No	8		I
	TRAPS, ETC				
	"Cobra Watertech or Similar and approved"				1
15	40mm Chrome plated deep seal Bottle trap with outlet of 50mm PVC pipe (Code 340)	No	8		
	"Marley or Similar and approved"				1
16	40mm Deep seal "P" or "S" trap	No	8		1
	TAPS, VALVES, ETC				
	"Cobra Watertech or Similar and approved"				1
17	"Cobra Ref. 231/350" Angle regulating valve	No	1		I
18	Cobra Ref 1111-15 CP "Stella" pillar tap	No	1		I
19	Cobra Watertech Ref. 266/041/10 sink mixer with aerated swivel spout and conceled connection	No	2		
	Carried Forward			R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage CLUSTER G				

BrassImage: Constraint of the second sec					
22 22mm Stopcock No 1 21 22mm Fullway gate valve No 1 22 22mm Non-return valve No 1 23 15mm 1050RB in-line strainer No 1 24 PA3.132 "Masterflo 1" pressure control valve with vacuum breaker No 1 25 15mm 1050RB in-line strainer No 1 26 22mm Pipes m 18 26 22mm Pipes m 11 27 28mm Pipes m 11 28 15mm Fittings No 33 29 22mm Fittings No 38 30 28mm Fittings No 11 21 110mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 No 1 31 110mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 33 1 x 2 GRADE R CLASSROOM		Brought Forward			R
21 22mm Fullway gate valve No 1 22 22mm Non-return valve No 1 23 15mm 1050RB in-line strainer No 1 24 PA3.132 "Masterfio 1" pressure control valve with vacuum breaker No 1 24 PA3.132 "Masterfio 1" pressure control valve with vacuum breaker No 1 25 15mm Pipes m 18 26 22mm Pipes m 11 27 28mm Pipes m 11 28 15mm Fittings No 3 29 22mm Fittings No 3 30 28mm Fittings No 11 PVC gulley 1 1 31 110mm Gulley trap with 0, P, O or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 33 29 200 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 34 200 x 300 x 50mm Precast concrete in		Brass			
22 22mm Non-return valve No 1 23 15mm 1050RB in-line strainer No 1 24 PA3.132 "Masterfio 1" pressure control valve with vacuum breaker No 1 24 PA3.132 "Masterfio 1" pressure control valve with vacuum breaker No 1 24 PA3.132 "Masterfio 1" pressure control valve with vacuum breaker No 1 24 PA3.132 "Masterfio 1" pressure control valve with vacuum breaker No 1 25 15mm Pipes m 11 26 22mm Pipes m 11 27 28mm Pipes m 11 28 15mm Fittings No 3 29 22mm Fittings No 8 30 28mm Fittings No 11 PVC gulley 1 10mm Gulley trap with 0, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground	20	22mm Stopcock	No	1	
23 15mm 1050RB in-line strainer No 1 24 PA3.132 "Masterflo 1" pressure control valve with vacuum breaker No 1 24 PA3.132 "Masterflo 1" pressure control valve with vacuum breaker No 1 25 15mm Pipes Moter and the strainer No 1 25 15mm Pipes m 11 26 22mm Pipes m 11 27 28mm Pipes m 11 28 15mm Fittings No 3 29 22mm Fittings No 11 20 28mm Fittings No 14 29 28mm Fittings No 11 20 28mm Fittings No 11 21 10mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 Mo 1 21 300 x 300 x 500mm Precast concrete inspection eye marker slab set in ground No 1 22 300 x 300 x 500mm Precast concrete inspection eye marker slab set in ground No 1 22 Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Blil No. 12 Plu	21	22mm Fullway gate valve	No	1	
24 PA3.132 "Masterflo 1" pressure control valve with vacuum breaker No 1 WATER SUPPLIES Class 0 copper pipes 1 25 15mm Pipes m 18 26 22mm Pipes m 11 27 28mm Pipes m 11 27 28mm Pipes m 11 28 15mm Fittings No 33 29 22mm Fittings No 8 30 28mm Fittings No 11 41 PVC gulley 11 11 31 110mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa 1 19mm, not exceeding 0.75m deep to invert No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 32 Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 No 1 33 Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 No 1	22	22mm Non-return valve	No	1	
vacuum breaker No 1 WATER SUPPLIES Class 0 copper pipes 1 25 15mm Pipes m 18 26 22mm Pipes m 11 27 28mm Pipes m 11 27 28mm Pipes m 11 28 15mm Fittings No 3 29 22mm Fittings No 11 20 28mm Fittings No 11 29 22mm Fittings No 11 20 28mm Fittings No 11 21 10mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 1 32 300 x 300 x 500mm Precast concrete inspection eye marker slab set in ground No 1 32 300 x 300 x 500mm Precast concrete inspection eye marker slab set in ground No 1 33 X 2 GRADE R CLASSROOM BLOCKS No 1 R 34 Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS No 1	23	15mm 1050RB in-line strainer	No	1	
Class 0 copper pipes Image: Class 0 copper pipes 25 15mm Pipes m 18 26 22mm Pipes m 11 27 28mm Pipes m 11 27 28mm Pipes m 11 28 15mm Fittings No 33 29 22mm Fittings No 8 30 28mm Fittings No 11 PVC gulley Informed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 1 31 110mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 33 Section No. 5 1 x 2 GRADE R CLASSROOM BLOCKS No 1 331 No 1 R 342 Section No. 5 1 x 2 GRADE R CLASSROOM BLOCKS No 1	24		No	1	
2515mm Pipesm182622mm Pipesm112728mm Pipesm11Extra over class 0 copper pipes for capillary fittingsm112815mm FittingsNo32922mm FittingsNo83028mm FittingsNo11PVC gulley110mm Gulley trap with O, P, Q or S outlet, plain gulley nead and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invertNo131SundriesNo1132300 x 300 x 50mm Precast concrete inspection eye marker slab set in groundNo132Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 Plumbing and DrainageRR		WATER SUPPLIES			
26 22mm Pipes m 11 27 28mm Pipes m 11 Extra over class 0 copper pipes for capillary fittings m 11 28 15mm Fittings No 3 29 22mm Fittings No 8 30 28mm Fittings No 11 PVC gulley 11 11 31 110mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 32 Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage R		Class 0 copper pipes			
27 28mm Pipes m 11 Extra over class 0 copper pipes for capillary fittings No 3 28 15mm Fittings No 3 29 22mm Fittings No 8 30 28mm Fittings No 11 PVC gulley No 11 91 110mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 8 Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage R	25	15mm Pipes	m	18	
Extra over class 0 copper pipes for capillary fittings No 28 15mm Fittings No 29 22mm Fittings No 30 28mm Fittings No 31 110mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 Carried Forward R Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 R	26	22mm Pipes	m	11	
28 15mm Fittings No 3 29 22mm Fittings No 8 30 28mm Fittings No 11 PVC gulley No 11 31 110mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 R Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 R Bill No. 12 Plumbing and Drainage R R	27	28mm Pipes	m	11	
29 22mm Fittings No 8 30 28mm Fittings No 11 PVC gulley 11 31 110mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 Karried Forward R R Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage R		Extra over class 0 copper pipes for capillary fittings			
30 28mm Fittings No 11 PVC gulley 110mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 1 31 Sundries 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage R	28	15mm Fittings	No	3	
PVC gulley 31 110mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 Bill No. 12 Plumbing and Drainage Plumbing and Drainage R	29	22mm Fittings	No	8	
 31 110mm Gulley trap with O, P, Q or S outlet, plain gulley head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 Carried Forward R Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage 	30	28mm Fittings	No	11	
head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15 MPa / 19mm, not exceeding 0.75m deep to invert No 1 32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 Carried Forward R Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage R		PVC gulley			
32 300 x 300 x 50mm Precast concrete inspection eye marker slab set in ground No 1 Carried Forward R Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage	31	head and grating, jointed to 110mm PVC pipe, including excavated for, bedding on and encasing in concrete 15	No	1	
Marker slab set in ground No 1 Carried Forward R Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage		<u>Sundries</u>			
Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage	32		No	1	
Bill No. 12 Plumbing and Drainage		Section No. 5			R
		Bill No. 12 Plumbing and Drainage			

	Brought Forward			R	
33	100mm Cast iron "ABC" cleaning eye	No	1		
34	Type 3B cast iron valve box	No	1		
	TESTING				
35	Testing water pipe system		Item		
	FIRE APPLIANCES ETC				
	<u>'Chubb' or similar approved</u>				
36	9kg Dry chemical powder fire extinguisher, including standard hard wood backing plugged and backing finished with one coat dark stain and two coats clear suede polyurethane varnish	No	2		
37	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1		
	Carried Forward to Summary of Section No. 5			R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 12 Plumbing and Drainage CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	<u>BILL NO. 13</u>			
	<u>GLAZING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	GLAZING TO STEEL WITH PUTTY			
	4mm Clear float glass			
1	Panes exceeding 0,5m2 and not exceeding 2m2 m2	29		
	4mm Rough cast glass			
2	Panes exceeding 0,1m2 and not exceeding 0,5m2 m2	11		
	Carried Forward to Summary of Section No. 5		R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 13 Glazing			
	CLUSTER G			

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	<u>BILL NO. 14</u>			
	PAINTWORK			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	DESCRIPTIONS			
	Descriptions of paintwork shall be deemed to include for all cutting in			
	PAINT SPECIFICATIONS			
	All painting shall be done in accordance with "Plascon- Evans" specifications			
	PAINTWORK ETC TO NEW WORK			
	ON FLOATED PLASTER			
	Carried Forward		R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 14 Paintwork CLUSTER G			

	Brought Forward			R	
	Plascon Polvin Super Acrylic to interior new cement plaster (NW 205).Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Polvin Super Acrylic (EPL) with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.				
1	On internal walls	m2	156		
	ON SMOOTH CONCRETE Prepare surfaces and remove all loose material, and rinse. Apply flexible crackfiller to holes and cracks, one coat plaster primer and two coats Plascon Professional Copolymer Acrylic paint				
	ON FIBRE-CEMENT				
	<u>One coat primer, one coat universal undercoat and two</u> coats super acrylic PVA paint				
2	On ceilings and cornices	m2	163		
	Plascon Sure Coat Gloss Enamel to exterior new fibre cement (NW 174).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.				
3	On fascias and barge boards	m2	26		
	Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 14 Paintwork CLUSTER G			R	

	Brought Forward			R	
	Plascon Sure Coat Gloss Enamel to interior new fibre cement (NW 274).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 4 years in a C1 - inland environment.				
4	On window sills not exceeding 300 mm girth	m	22		
	ON METAL				
	Plascon Velvaglo Satin to exterior new mild steel (NW 683).Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.				
5	On door frames	m2	2		
6	On windows with burglar bars	m2	57		
7	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	8		
8	On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high	m	102		
	ON WOOD				
	Three coats matt varnish				
9	On doors	m2	8		
	Carried Forward Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 14 Paintwork CLUSTER G			R	

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Brought Forward			R	
On skirtings, rails, cornices etc not exceeding 300 mm girth	m	67		
Carried Forward to Summary of Section No. 5 Section No. 5			R	
1 X 2 GRADE R CLASSROOM BLOCKS Bill No. 14 Paintwork				
CLUSTER G				
-177-		I	l	

	Section No. 5			
	1 X 2 GRADE R CLASSROOM BLOCKS			
	SECTION SUMMARY - 1 X 2 GRADE R CLASSROOM BLOCKS			
Bill No		Page No		Amount
1	Foundations	139		
2	Concrete, Formwork and Reinforcement	143		
3	Masonry	146		
4	Waterproofing	148		
5	Roof Coveringss, etc	150		
6	Capentry and Joinery	157		
7	Ceilings, Partitions and Access Flooring	159		
8	Ironmongery	162		
9	Metalwork	164		
10	Plastering	165		
11	Tiling	167		
12	Plumbing and Drainage	172		
13	Glazing	173		
14	Paintwork	177		
	Carried to Final Summary		R	
	Section No. 5 1 X 2 GRADE R CLASSROOM BLOCKS			
	CLUSTER G			
	-178-			

ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.1				
	FOUNDATIONS				
	EARTHWORKS				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	Nature of ground				
	The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"				
	Excavation for working space in rock				
	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				
	Carting away of excavated material				
	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				
	Carried Forward		R		-
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 1 Foundations CLUSTER G				

ĺ	Brought Forward			R	
	Filling				
	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				
	Soil poisoning				
	Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent				
	SITE CLEARANCE, ETC.				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	1,080		
	REMOVAL TREES, ETC.				
	Taking out and removing, grubbing up roots and filling holes.				
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	12		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	266		
	Extra over trench and hole excavations in earth for excavation in				
4	Soft rock	m3	53		
	Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 1 Foundations CLUSTER G			R	

	Brought Forward	I	1	R	
5	Hard rock	m3	53		
	Extra over all excavations for carting away				
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	138		
	Risk of collapse of excavations				
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	708		
	Keeping excavations free of water				
8	Keeping excavations free of all water other than subterranean water		Item		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
9	Under floors, steps, paving, etc	m3	162		
	<u>Approved G6 filling supplied and carted by the</u> <u>contractor and compacted in layers not exceeding</u> <u>150mm to 95% Mod AASHTO density</u>				
10	Backfilling to trenches, holes, etc	m3	266		
11	Under floors, steps, paving etc.	m3	162		
	Compaction of surfaces				
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				
	density	m2	1,080		
	Prescribed density tests on filling				
13	"Modified AASHTO Density" test	No	30		
	Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 1 Foundations CLUSTER G			R	

LDPW-B/20308

	Brought Forward			R	
	SOIL POISONING				
	Soil insecticide				
14	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	1,080		
15	To bottoms and sides of trenches etc	m2	974		
	<u>CONCRETE, FORMWORK AND</u> <u>REINFORCEMENT</u>				
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	25MPa/19mm concrete				
16	Strip footings	m3	66		
	TEST CUBES				
17	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	30.0		
	BRICKWORK				
	Brickwork of NFP bricks in class II mortar				
18	One brick walls	m2	354		
	BRICKWORK SUNDRIES				
	Joint forming material in movement joints:				
19	12mm Fibre board built in vertically between brick skins.	m2	30		
	Brickwork reinforcement				
20	150mm Wide reinforcement built in horizontally	m	1,041		
	Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 1 Foundations CLUSTER G			R	

	Brought Forward			R	
	FACE BRICKWORK				
	Face bricks (Purchase price of R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints				
21	Extra over brickwork for face brickwork	m2	266		
	Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
22	Coping on top of one brick wall	m	87		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 1 Foundations CLUSTER G				

LDPW-B/20308

ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	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 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				
	Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G		R		

I	Prought Forward		1	R	1 1	
	Brought Forward			R		
	<u>Formwork</u>					
	Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use					
	The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself					
	Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described					
	Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described					
	Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"					
	UNREINFORCED CONCRETE					
	20MPa/19mm concrete					
1	Surface beds	m3	14			
2	Surface beds cast in panels on waterproofing.	m3	162			
3	Aprons cast in panels to falls	m3	13			
	Carried Forward			R		
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G					
					1	

	Brought Forward	1	I	R		
4	Ramps	m3	9			
5	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	228			
	REINFORCED CONCRETE					
	25MPa/19mm concrete					
	CONCRETE SUNDRIES					
	Finishing top surfaces of concrete smooth with a steel trowel					
6	Surface beds, slabs, etc	m2	1,080			
7	Ramp to falls	m2	25			
	<u>Finishing top surfaces of concrete smooth with a wood</u> <u>float</u>					
8	Surface beds, slabs, etc	m2	156			
9	Aprons to falls	m2	274			
	FORMWORK					
	ROUGH FORMWORK (DEGREE OF ACCURACY <u>II)</u>					
	Rough formwork to sides					
10	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	90			
	Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			R		

	Brought Forward			F
	TEST CUBES			
11	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	30.0	
	MOVEMENT JOINTS ETC			
	Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces			
12	15mm Joints exceeding 300mm high	m	30	
	Saw cut joints			
13	Saw cut joints in top of concrete	m	186	
	REINFORCEMENT (PROVISIONAL)			
	<u>High tensile steel reinforcement to structural concrete</u> <u>work</u>			
14	12mm Diameter	t	6.00	
15	10mm Diameter bars	t	4.77	
	Fabric reinforcement			
16	Steeledale Mesh standard square fabric mesh, nominal mass 1,93 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 193), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.	m2	1,080	
	Carried Forward to Summary of Section No. 6 Section No. 6			R
	3 X 4 CLASSROOM BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			

Quantity Rate Amount **SECTION NO.3 BUILDING WORK** For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in SUPPLEMENTARY PREAMBLES BRICKWORK 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 Linings to concrete Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties

Hollow walls etc

BILL NO. 3

MASONRY

the Trades.

Item

No

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

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

Carried Forward

R

Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 3 Masonry **CLUSTER G**

	Brought Forward			R	
	Face bricks				
	Bricks shall be ordered timeously to obtain uniformity in size and colour				
	Pointing				
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
	SUPERSTRUCTURE				
	Brickwork of NFP bricks in class II mortar				
1	L-shaped piers	m3	5		
2	One brick walls	m2	1,204		
	Joint forming material in movement joints:				
3	12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2	245		
	Brickwork reinforcement				
4	150mm Wide reinforcement built in horizontally	m	3,539		
	Turning pieces				
5	230mm Wide turning piece to lintels etc	m	97		
	"Allied Concrete" prestressed fabricated lintels				
6	110 x 75mm Lintels in lengths not exceeding 3m	m	9		
	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	No	138		
	FACE BRICKWORK				
	Carried Forward			R	
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 3 Masonry CLUSTER G				

	Brought Forward	1	1	R	
	Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints				
8	Extra over brickwork for face brickwork	m2	1,062		
9	Extra over for facing in piers, including bonding and pointed with recesses joints on all exposed faces	m2	37		
10	Extra over for facings in beamfilling for face brickwork	m2	120		
	Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
11	Extra over brickwork for brick-on-edge header course lintel	m	97		
	Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
12	220mm Wide sill set sloping and slightly protecting outside	m	97		
13	Coping on top of one brick wall	m	87		
	NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS				
	Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations.				
14	15mm x 150mm Wide sills set flat and slightly projecting	m	97		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 3 Masonry CLUSTER G				

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ltem No			Quantity	Rate	Amount
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.4				
	WATERPROOFING				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	<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				
	DAMP-PROOFING OF WALLS AND FLOORS				
	One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course				
1	In walls	m2	104		
	One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
2	Under surface beds	m2	1,080		
	JOINT SEALANTS ETC				
	Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 4 Waterproofing CLUSTER G			R	

	Brought Forward			R	
	<u>Silicone sealing compound including backing cord, bond</u> <u>breaker, primer, etc</u>				
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary	m	186		
	Carried Ferward to Summary of Section No. 6			R	
	Carried Forward to Summary of Section No. 6 Section No. 6 3 X 4 CLASSROOM BLOCK			ĸ	
	Bill No. 4 Waterproofing CLUSTER G				

LDPW-B/20308

ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.5				
	ROOF COVERINGS ETC				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	General				
	All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched				
	Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use				
	Sizes				
	All items are measured net unless otherwise described				
	Flashings, trimming plates, etc.				
	Prices to include for all cutting and waste and relevant fixing material, unless otherwise described				
	All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable				
	All items are unless otherwise described measured net				
	Carried Forward		R		_
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 5 Roof Coveringss, etc CLUSTER G				

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m2	1,785	
m	78	
m	96	
m	24	
No	6	
		R

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.6			
	CARPENTRY AND JOINERY			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Particle board:			
	Particle board shall comply with the following specifications:			
	a) SABS 1300 Particle board: exterior and flooring type			
	b) SABS 1301 Particle board: interior type			
	Joinery:			
	Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes			
	Fixing			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
	Carried Forward		R	
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 6 Capentry and Joinery CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
LDPW-B/20308

Brought Forward	R	
Decorative laminate finish:		
Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish		
PREFABRICATED ROOF TRUSSES		
Pre-fabricated metal connected timber roof trusses		
All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction		
<u>Timber</u>		
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		
Bolts		
Bolts shall be in accordance with BS 4190 or SABS 135		
Shear plates, tooth connectors and split rings		
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"		
<u>Washers</u>		
Square or round washers of the following dimensions shall be used with all bolts:		
 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness 		
Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	R	

	LDF	W-D/2030
Brought Forward	R	
 2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness 	1	
 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/m2 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 unsure 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		
<u>Truss design</u>		
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		
Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	R	

Brought Forward	R		
Truss pitch			
The truss pitch shall be as described in this bill for each respective truss type			
Truss loading			
Trusses shall be designed for a live load of 0,50kN/m2 and dead load as specified under the sub-heading "Specific load specifications for roof trusses"			
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			
<u>Design system</u>			
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			
			-
Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	R		

Brought Forward		R	
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 10° pitch			
2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres			
ROOFS			
The following in plate nailed timber roof truss construction			
The following is applicable in respect of roof trusses			
The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes			
Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)			
Allow for the preparation and submission of the following documents in respect of all buildings			
Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication	ltem		
Design certificate indicating the licensed programme used, SANS specifications adhered to, general procedures and loadings adopted, sizes and grading of			
timber components, details, etc.	Item		
Carried Forward		R	
Section No. 6 3 X 4 CLASSROOM BLOCK			
Bill No. 6 Capentry and Joinery			
CLUSTER G			

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	Brought Forward			R	
3	Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Principal Agent		ltem		
	Sawn softwood				
4	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for 4 classroom block 370m2 on plan (Refer to architect's drawings attached to these bills of quantities)	No	0.3		
	Sawn softwood grade 4				
5	38 x 114mm Wall plates	m	228		
6	50 x 220mm Timber Beam	m	78		
	<u>Sundries</u>				
7	Two coats creosote on sawn timbers	m2	69		
	EAVES, VERGES, ETC				
	"Everite FC77" pressed fibre-cement				
8	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	228		
	SKIRTINGS				
	Wrought meranti				
9	19 x 76mm Skirting including 19mm quadrant bead nailed	m	336		
	DOORS, ETC				
	Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 6 Capentry and Joinery			R	
	CLUSTER G				

	Brought Forward			R		
	Wrought meranti doors hung to steel frames					
10	44mm Framed and ledged batten door 813 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	9			
	<u>FITTINGS</u>					
	Classroom School Furnitures, etc					
11	Provide the sum of R400 000,00 (Four Hundred Thousand Rands) for classroom school furniture by Specialists		Item		400,000.0)0
12	Allow for giving every facility to Specialists as described		ltem			
13	Allow for profit on above if required		ltem			
	Carried Forward to Summary of Section No. 6			R		
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 6 Capentry and Joinery					
	CLUSTER G					

Quantity Rate Amount **SECTION NO.3 BUILDING WORK**

CEILING, ETC. For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades. 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 100mm glass fibre insulation blanket to manufacturer's 1 specification, laid on ceiling. 1,080 m2 Sawn softwood 78 2 38 x 114mm Ceiling joists (Provisional) m **Carried Forward** R Section No. 6 **3 X 4 CLASSROOM BLOCK** Bill No. 7 Ceilings, Partitions and Access Flooring **CLUSTER G** -202-Page 239 of 477

Item

No

BILL NO.7

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	Brought Forward			R	
	"Rhino" gypsum plasterboard cornices				
3	75mm Coved cornices	m	336		
	NAILED UP AND SCREWED UP CEILINGS				
	<u>6mm "Everite Nutec" fibre-cement boards with H-</u> profile primed steel jointing cover strips over joints				
4	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.				
		m2	1,080		
5	Sloping ceilings including 38 x 38mm sawn softwood brandering at 450mm centres	m2	150		
6	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander				
	covered with ceiling board and fitted flush in opening	No	9		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 7				
	Ceilings, Partitions and Access Flooring CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.8			
	IRONMONGERY			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Descriptions			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
	Finishes to ironmongery			
	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			
	CATCHES,CABIN HOOKS, ETC			
	<u>"Solid"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mmchamfered hardwood block twice oiled and pluggedNo	9		
	LOCKS			
	Operated Forewood			
	Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 8 Ironmongery CLUSTER G		R	

		_	<u>.</u>	<u>.</u>	<u>-</u>
	Brought Forward			R	
	"Solid"or similar approved			Ĩ	
2	"Code 630" padlock	No	9		
3	"Code 460/313" Blesbok four lever lockset	No	9		
	DOOR CLOSERS AND FLOOR SPRINGS				
	"Dorma" or similar approved				
	<u>SUNDRIES</u>				
	<u>"Solid" or similar approved</u>				
4	Dorma "Code 255" door stop plugged	No	9		
	STEEL CUPBOARDS				
	Aproved steel lockers with standard baked enamel finish				
5	G10 Double door steel cupboard 914 x 457 x 1828mm high with five shelves bolted to brickwork	No	9		
	PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC				
	"Vitrex" or similar approved				
6	Pinning boards 4000 x 1200mm high fixed to brickwork	No	9		
7	2000 x 1300 mm White Porcelain magnetic marker board				
	board	No	9		
	LETTERS, NAMEPLATES, ETC				
	<u>"Union" or similar approved</u>				
8	150 x 150mm Stainless steel plate engraved with a "Fire Hose Reel" sign (St/Steel)	No	3		
	Carried Forward			R	
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 8 Ironmongery CLUSTER G				
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	Brought Forward			R	
9	150 x 150mm Stainless steel plate engraved with "Fire Extinguisher" sign (St/Steel)	No	9		
10	150 x 150mm Stainless steel plate engraved with a "Arrow sign" sign (St/Steel)	No	9		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 8 Ironmongery				
	CLUSTER G				

LDPW-B/20308

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO. 9			
	METALWORK			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	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			
	SUNDRY METALWORK			
	The following in identical steel support columns			
1	Bolts, complete with nuts and two washers each	g 42		
2	76 x 76 x 3mm Tubular section columns 3050mm high N	o 33		
	Carried Forward			
	Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 9 Metalwork CLUSTER G		R	

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	Brought Forward			R	
3	75 x 6mm Flat section fixing plate 120mm, twice holed for bolt and welded to top end of tubular section column (Provisional)				
		No	33		
4	200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section	No	33		
	column	INO	33		
5	12mm Diameter x 75mm long sleeved masonry anchor	No	33		
	WELDED SCREENS, GATES, ETC				
	Gates to external doors				
6	Gate and frame 900 x 2100mm high complete (G1)				
		No	9		
	PRESSED STEEL DOOR FRAMES				
	<u>1,2mm Double rebated frames suitable for one brick</u> walls				
7	Frame for door 813 x 2032mm high	No	9		
	STEEL WINDOWS, DOORS, ETC				
	<u>"Nty" or similar approved steel residential windows with burglar bars to all sashes</u>				
8	NTY Standard School type window "Code 5/2" size 1143 x 1332mm high (W1)	No	81		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 9 Metalwork				
	CLUSTER G				
		I	I	Ш	I

ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO. 10				
	PLASTERING				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	<u>GRANOLITHIC</u>				
	Untinted granolithic on concrete				
	<u>SCREEDS</u>				
	Screeds on concrete				
1	30mm Thick on floors m2	1,080			
	INTERNAL PLASTER				
	Cement plaster on brickwork				
2	On walls m2	1,416			
3	On narrow widths m2	30			
	Carried Forward to Summary of Section No. 6		R		
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 10 Plastering CLUSTER G				

ltem No			Quantity	Rate	Amount	
	SECTION NO.3					
	BUILDING WORK					
	BILL NO.11					
	TILING					
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.					
	SUPPLEMENTARY PREAMBLES					
	Descriptions					
	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					
	FLOOR TILING					
	<u>300 x 300 x 11,5mm Ceramic floor tiles (PC R120.00/m2 VAT excl.) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted waterproof jointing compound</u>					
1	On floors and landings	m2	1,080			
2	Skirting formed of ceramic tile cut to 300 x 75mm high	m	336			
	Carried Forward to Summary of Section No. 6			R		
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 11 Tiling CLUSTER G					

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO. 13			
	GLAZING			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	GLAZING TO STEEL WITH PUTTY			
	4mm Clear float glass			
1	Panes exceeding 0,5m2 and not exceeding 2m2 m2	129		
	4mm Rough cast glass			
2	Panes exceeding 0,1m2 and not exceeding 0,5m2 m2	49		
	Carried Forward to Summary of Section No. 6		R	
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 12 Glazing CLUSTER G			

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.12			
	PLUMBING AND DRAINAGE			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	"Polycop" polypropylene pipes:			
	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			
	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			
	All pipe diameters are nominal external			
	RAINWATER DISPOSAL			
	0,6mm Galvanised sheet iron with "Chromadek" finish on one side			
1	100 x 125mm Eaves gutters with beaded front edge	m 228		
2	Extra over eaves gutter for angle	lo 18		
	Carried Forward		R	
	Section No. 6 3 X 4 CLASSROOM BLOCK			
	Bill No. 13 Plumbing and Drainage CLUSTER G			

	Brought Forward			R	
3	Extra over eaves gutter for stopped end	No	6		
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	18		
5	100mm Diameter rainwater pipes	m	72		
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	18		
7	Extra over rainwater pipe for shoe	No	18		
	STORMWATER CHANNELS				
	<u>15 MPa/20 mm concrete</u>				
8	Stormwater channel cast in panels	m3	45		
	FIRE APPLIANCES ETC				
	'Chubb' or similar approved				
9	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	12		
10	"Everyway" hose reel complete with 30m plastic hose,				
	chromium plated stopcock, shut-off nozzle and wall bracket	No	3		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 13 Plumbing and Drainage CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	<u>BILL NO. 14</u>			
	PAINTWORK			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	DESCRIPTIONS			
	Descriptions of paintwork shall be deemed to include for all cutting in			
	PAINT SPECIFICATIONS			
	All painting shall be done in accordance with "Plascon- Evans" specifications			
	PAINTWORK ETC TO NEW WORK			
	ON FLOATED PLASTER			
	Carried Forward		R	
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 14 Paintwork CLUSTER G			

	Brought Forward			R	
	Plascon Polvin Super Acrylic to interior new cement plaster (NW 205).Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Polvin Super Acrylic (EPL) with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.				
1	On internal walls	m2	1,416		
	ON FIBRE-CEMENT				
	<u>One coat primer, one coat universal undercoat and two</u> coats super acrylic PVA paint				
2	On ceilings and cornices	m2	1,080		
	Plascon Sure Coat Gloss Enamel to exterior new fibre cement (NW 174).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.				
3	On fascias and barge boards	m2	114		
	Plascon Sure Coat Gloss Enamel to interior new fibre cement (NW 274).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 4 years in a C1 - inland environment.				
4	On window sills not exceeding 300 mm girth	m	97		
	Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 14 Paintwork CLUSTER G			R	

	Brought Forward			R	
	ON METAL				
	Plascon Velvaglo Satin to exterior new mild steel (NW 683).Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.				
5	On door frames	m2	17		
6	On windows with burglar bars	m2	259		
7	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area)	m2	34		
8	On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high	m	456		
	ON WOOD				
	Plascon Velvaglo Satin to interior new wood (NW 571).Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.				
9	On doors	m2	16		
	Carried Forward Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 14 Paintwork CLUSTER G			R	

	Brought Forward			R	
	Three coats matt varnish				
10	On doors	m2	34		
11	On skirtings, rails, cornices etc not exceeding 300 mm girth	m	336		
	Carried Forward to Summary of Section No. 6			R	
	Section No. 6 3 X 4 CLASSROOM BLOCK Bill No. 14 Paintwork CLUSTER G				
					I

	Section No. 6				
	3 X 4 CLASSROOM BLOCK				
	SECTION SUMMARY - 3 X 4 CLASSROOM BLOCK				
Bill No		Page No		Amount	
1	Foundations	183			
2	Concrete, Formwork and Reinforcement	187			
3	Masonry	190			
4	Waterproofing	192			
5	Roof Coveringss, etc	194			
6	Capentry and Joinery	201			
7	Ceilings, Partitions and Access Flooring	203			
8	Ironmongery	206			
9	Metalwork	208			
10	Plastering	209			
11	Tiling	210			
12	Glazing	211			
13	Plumbing and Drainage	213			
14	Paintwork	217			
	Carried to Final Summary		R		
	Section No. 6 3 X 4 CLASSROOM BLOCK				
	CLUSTER G				
					J

	Quantity	Rate	Amour
SECTION NO.7			
BUILDING WORK			
BILL NO.1			
FOUNDATIONS			
EARTHWORKS			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
SUPPLEMENTARY PREAMBLES			
Nature of ground			
The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"			
Excavation for working space in rock			
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			
Carting away of excavated material			
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			
Carried Forward		R	
Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 1 Foundations CLUSTER G			

	Brought Forward			R	
	Filling				
	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				
	Soil poisoning				
	Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said cerfificate to the Principal Agent				
	SITE CLEARANCE, ETC.				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	73		
	REMOVAL TREES, ETC.				
	Taking out and removing, grubbing up roots and filling holes.				
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	3		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	7		
	Extra over trench and hole excavations in earth for excavation in				
4	Soft rock	m3	1		
	Carried Forward			R	
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 1 Foundations CLUSTER G				

Brought Forward vations for carting away om excavations on site to a dumping y the contractor excavations d hole excavations not exceeding as free of water has free of all water other than d from the excavations and /or les on site including compacted to o density	m3 m3 m2	0.4 7 39 Item	R		
om excavations on site to a dumping y the contractor <u>excavations</u> d hole excavations not exceeding <u>hs free of water</u> hs free of all water other than <u>d from the excavations and /or</u> <u>les on site including compacted to</u>		39			
om excavations on site to a dumping y the contractor <u>excavations</u> d hole excavations not exceeding <u>hs free of water</u> hs free of all water other than <u>d from the excavations and /or</u> <u>les on site including compacted to</u>		39			
excavations I hole excavations not exceeding <u>as free of water</u> as free of all water other than <u>d from the excavations and /or</u> <u>les on site including compacted to</u>		39			
hole excavations not exceeding <u>as free of water</u> as free of all water other than <u>ad from the excavations and /or</u> <u>les on site including compacted to</u>	m2				
ns free of water ns free of all water other than nd from the excavations and /or les on site including compacted to	m2				
ns free of all water other than d from the excavations and /or les on site including compacted to		Item			
<u>d from the excavations and /or</u> les on site including compacted to		ltem			
es on site including compacted to					
, paving, etc	m3	11			
supplied and carted by the pacted in layers not exceeding d AASHTO density					
nes, holes, etc	m3	35			
, paving etc.	m3	11			
aces					
and surface under floors etc including th of 150mm, breaking down adding suitable material where apacting to 93% Mod AASHTO					
	m2	73			
tests on filling					
Density" test	No	6			
					\bot
Carried Forward	d		R		
		Carried Forward	Carried Forward	Carried Forward R	Carried Forward R

	Brought Forward			R	
	SOIL POISONING				
	Soil insecticide				
14	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	73		
15	To bottoms and sides of trenches etc	m2	52		
	<u>CONCRETE, FORMWORK AND</u> <u>REINFORCEMENT</u>				
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	<u>15MPa/19mm concrete</u>				
16	Blinding	m3	2		
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	25MPa/19mm concrete				
17	Foundation beams	m3	7		
18	Surface beds on waterproofing	m3	3		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a steel trowel				
19	Surface beds, slabs, etc	m2	27		
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 1 Foundations CLUSTER G			R	

	Brought Forward			R	
	Rough formwork to sides				
20	Edges, risers, ends and reveals exceeding 300mm not exceeding 700mm high or wide	m	23		
	REINFORCEMENT				
	High tensile steel reinforcement to structural concrete work				
21	10mm Diameter bars	t	0.11		
22	12mm Diameter bars	t	0.09		
23	20mm Diameter bars	t	0.27		
	TEST CUBES				
24	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	12.5		
	BRICKWORK				
	Brickwork of NFP bricks in class II mortar				
25	Half brick walls	m2	12		
	BRICKWORK SUNDRIES				
	Brickwork reinforcement				
26	75mm Wide reinforcement built in horizontally	m	46		
	FACE BRICKWORK				
	Face bricks (Purchase price of R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints				
27	Extra over brickwork for face brickwork	m2	13		
	Carried Econyard to Summary of Section No. 7			R	
	Carried Forward to Summary of Section No. 7 Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 1 Foundations CLUSTER G				

	Quantity	Rate	Amount	
SECTION NO7				
BUILDING WORK				
BILL NO.2				
<u>CONCRETE, FORMWORK AND</u> <u>REINFORCEMENT</u>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
SUPPLEMENTARY PREAMBLES				
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 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				
Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G		R		
	BUILDING WORK BILL NO.2 CONCRETE, FORMWORK AND EINFORCEMENT To preambles see "Model Preambles for Trades (2008 Editor)" and Supplementary preambles as specified in the Trades. SUPPLEMENTARY PREAMBLES Cost of tests The costs of making, storing and testing of concrete test of shall include the cost of providing cube moulds necessary for the purpose, for testing 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 nisticution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately) Breeze concrete shall consist of twelve parts clean dry may and the ash added afterwards and thoroughly incorporated Carried Forward Section No. 7 1 × 5 WATERBORINE TOILET BLOCK BIN 0. 2 Concrete, Formwork and Reinforcement	SECTION NOT BUILDING WORK BULLONG BULLONG BULLONG BULLONG CONCRETE, FORMWORK AND CONCRETE, FORMWORK AND CONCRETE, FORMWORK AND CONCRETE, FORMWORK AND Softion, and Supplementary preambles for Trades (2008 Edition, and Supplementary preambles as specified in the Trades.	SECTION NOT BUILDING WORK BILL NO.2 CONCRETE, FORMWORK AND REINFORCEMENT For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades. SUPPLEMENTARY PREAMBLES 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) Brease 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 R Section No. 7 1 x SWATERBORNE TOILET BLOCK BIIN. 2 Concrete, Formwork and Reinforcement R	SECTION NO7 BUILDING WORK BILL NO.2 CONCRETE, FORMWORK AND REINFORCEMENT For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades. SUPPLEMENTARY PREAMBLES 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 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 invixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated R Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 2 R

	Brought Forward			R	
	<u>Formwork</u>				
	Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use				
	The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself				
	Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described				
	Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described				
	Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	UNREINFORCED CONCRETE				
	20MPa/19mm concrete				
1	Aprons cast in panels to falls	m3	4		
2	Ramps	m3	1		
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	35		
	Carried Forward			R	
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G				

[Brought Forward			R	
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a steel trowel				
4	Surface beds, slabs, etc	m2	56		
5	Ramp to falls	m2	4		
	Finishing top surfaces of concrete smooth with a wood float				
6	Aprons to falls	m2	44		
	FORMWORK				
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides				
7	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	39		
	TEST CUBES				
8	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	6.3		
	MOVEMENT JOINTS ETC				
	Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces				
	Saw cut joints				
9	Saw cut joints in top of concrete	m	18		
	REINFORCEMENT				
	Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			R	

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
LDPW-B/20308

	Brought Forward		R	
	REINFORCEMENT (PROVISIONAL)			
	Fabric reinforcement			
10	Eabric reinforcement Steeledale Mesh standard square fabric mesh, nominal mass 1,93 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 193), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long. m2	56		
	Carried Forward to Summary of Section No. 7 Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G		R	

Amount

R

Quantity Rate

MASONRY

BILL NO. 3

SECTION NO.7

BUILDING WORK

Item

No

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.

SUPPLEMENTARY PREAMBLES

BRICKWORK

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

Linings to concrete

Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties

Hollow walls etc

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

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

Carried Forward

Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 3 Mansory CLUSTER G

	Brought Forward			R
	Face bricks			P
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	Pointing			
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
	SUPERSTRUCTURE			
	Brickwork of NFP bricks in class II mortar			
1	Half brick walls	m2	57	
2	One brick walls	m2	96	
	Brickwork reinforcement			
3	75mm Wide reinforcement built in horizontally	m	167	
ł	150mm Wide reinforcement built in horizontally	m	283	
	Turning pieces			
5	230mm Wide turning piece to lintels etc	m	3	
	"Allied Concrete" prestressed fabricated lintels			
6	110 x 75mm Lintels in lengths not exceeding 3m	m	3	
	Galvanised wire ties etc			
,	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	15	
	FACE BRICKWORK			
	Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 3 Mansory CLUSTER G			R

	Brought Forward			R	
	Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints				
8	Extra over brickwork for face brickwork	m2	96		
9	Extra over for facings in beamfilling for face brickwork	m2	9		
	Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
10	Extra over brickwork for brick-on-edge header course lintel	m	3		
11	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	10		
	Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
12	220mm Wide sill set sloping and slightly protecting outside	m	3		
13	Coping on top of one brick wall	m	5		
	NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS				
	Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations.				
14	15mm x 150mm Wide sills set flat and slightly projecting	m	3		
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 3 Mansory CLUSTER G				

ltem No			Quantity	Rate	Amount	
	SECTION NO.7					
	BUILDING WORK					
	BILL NO.4					
	WATERPROOFING					
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.					
	SUPPLEMENTARY PREAMBLES					
	Waterproofing					
	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					
	DAMP-PROOFING OF WALLS AND FLOORS					
	One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course					
1	In walls	m2	8			
	<u>One layer of 250 micron "Consol Plastic USB Green"</u> waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"					
2	Under surface beds	m2	53			
	Carried Forward to Summary of Section No. 7			R		
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 4 Waterproofing CLUSTER G					

ltem No		Quantity	Rate	Amount	
	SECTION NO.7				
	BUILDING WORK				
	BILL NO.5				
	ROOF COVERINGS ETC				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	General				
	All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched				
	Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use				
	Sizes				
	All items are measured net unless otherwise described				
	Flashings, trimming plates, etc.				
	Prices to include for all cutting and waste and relevant fixing material, unless otherwise described				
	All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable				
	All items are unless otherwise described measured net				
	Carried Forward		R		-
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 5 Roof Covering, etc CLUSTER G				

	Brought Forward			R	
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions				
1	Roof covering with pitch not exceeding 50 degrees	m2	70		
	STEEL LOUVRES				
	"NTY Steelworks" or similar approved				
2	Triangular steel louvre size 1500x 500mm high fixed to timber purlins including watertight heading joints, necessary sealing strips, fixing accessories, etc	No	3		
					_
	Carried Forward to Summary of Section No. 7			R	_
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 5 Roof Covering, etc CLUSTER G				

ltem No		Quantity	Rate	Amount	
	SECTION NO.7				
	BUILDING WORK				
	BILL NO.6				
	CARPENTRY AND JOINERY				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	Particle board:				
	Particle board shall comply with the following specifications:				
	a) SABS 1300 Particle board: exterior and flooring type				
	b) SABS 1301 Particle board: interior type				
	Joinery:				
	Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc				
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes				
	Fixing				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete				
	Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 6 Capentry and Joinery CLUSTER G		R		

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
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Brought Forward	R	
Decorative laminate finish:		
Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish		
PREFABRICATED ROOF TRUSSES		
Pre-fabricated metal connected timber roof trusses		
All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction		
<u>Timber</u>		
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		
Bolts		
Bolts shall be in accordance with BS 4190 or SABS 135		
Shear plates, tooth connectors and split rings		
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"		
Washers		
Square or round washers of the following dimensions shall be used with all bolts:		
1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness		
Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	R	

Brought Forward	R	
 2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness 		
 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/m2 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 unsure 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		
Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	R	

Brought Forward	R	
Truss pitch		
The truss pitch shall be as described in this bill for each respective truss type		
Truss loading		
Trusses shall be designed for a live load of 0,50kN/m2 and dead load as specified under the sub-heading "Specific load specifications for roof trusses"		
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		
<u>Dimensions</u>		
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		
<u>Erection</u>		
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		
<u>Design system</u>		
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		
Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	R	

Brought Forward		R	1
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 10° pitch			
2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres			
ROOFS			
The following in plate nailed timber roof truss construction			
The following is applicable in respect of roof trusses			
The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes			
Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)			
Allow for the preparation and submission of the following documents in respect of all buildings			
Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication	Item		
Design certificate indicating the licensed programme used, SANS specifications adhered to, general procedures and loadings adopted, sizes and grading of			
timber components, details, etc.	ltem		
Carried Forward		R	
Section No. 7			
1 x 5 WATERBORNE TOILET BLOCK Bill No. 6			
Capentry and Joinery CLUSTER G			

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	Brought Forward			R	
3	Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Principal Agent		Item		
	Sawn softwood				
4	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for waterborne toilet block approximately 22m2 on plan (Refer to architect's drawings attached to these bills of quantities)	No	1		
	Sawn softwood grade 4				
5	38 x 114mm Wall plates	m	35		
	Sundries				
6	Two coats creosote on sawn timbers	m2	8		
	EAVES, VERGES, ETC				
	"Everite FC77" pressed fibre-cement				
7	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	35		
	DOORS, ETC				
	Wrought meranti doors hung to steel frames				
8	44mm Framed and ledged batten door 813 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	5		
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 6 Capentry and Joinery CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.7			
	BUILDING WORK			
	BILL NO.7			
	<u>CEILING , ETC.</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	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			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.			
	m O	2 56		
2	Sawn softwood	n 9		
2	38 x 114mm Ceiling joists (Provisional)	n 9		
	Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 7		R	
	Ceiling, Partitions and Access Flooring CLUSTER G			

	Brought Forward			R	
	"Rhino" gypsum plasterboard cornices				
3	75mm Coved cornices	m	35		
	NAILED UP AND SCREWED UP CEILINGS				
	<u>6mm "Everite Nutec" fibre-cement boards with H-</u> profile primed steel jointing cover strips over joints				
4	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.				
		m2	56		
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	1		
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK				
	Bill No. 7 Ceiling, Partitions and Access Flooring				
	CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.7			
	BUILDING WORK			
	BILL NO.8			
	IRONMONGERY			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Descriptions			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
	Finishes to ironmongery			
	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			
	CATCHES,CABIN HOOKS, ETC			
	<u>"Solid"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mmchamfered hardwood block twice oiled and pluggedNo	5		
	LOCKS			
	Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 8 Ironmongery CLUSTER G		R	

	Brought Forward			R
	<u>"Solid"or similar approved</u>			
2	"Code 630" padlock	No	2	
3	"Code 460/313" Blesbok four lever lockset	No	5	
4	293/E41 WC indicator bolt with keep fixed to metal	No	5	
	LETTERS, NAMEPLATES, ETC			
	<u>"Union" or similar approved</u>			
5	150 x 150mm Stainless steel plate engraved with "female" sign (St/Steel)	No	6	
6	150 x 150mm Stainless steel plate engraved with "male" sign (St/Steel)	No	1	
	BATHROOM FITTINGS			
	"Nampak" or similar approved			
7	Vandal resistant 2 roll holder complete fitments or similar approved	No	5	
	Carried Forward to Summary of Section No. 7			R
	Section No. 7			ĸ
	1 x 5 WATERBORNE TOILET BLOCK Bill No. 8			
	Ironmongery CLUSTER G			

ltem No		Quantity	Rate	Amount
	SECTION NO.7			
	BUILDING WORK			
	BILL NO. 9			
	METALWORK			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	Descriptions			
	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			
	WELDED SCREENS, GATES, ETC			
	Gates to external doors			
1	Gate and frame 900 x 2100mm high complete (G1)			
	No	2		
	PRESSED STEEL DOOR FRAMES			
	Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 9 Metalwork CLUSTER G		R	

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	Brought Forward			R	
	<u>1,2mm Double rebated frames suitable for half brick</u> walls				
2	Frame for door 813 x 2032mm high	No	5		
	<u>1,2mm Double rebated frames suitable for one brick</u> walls				
3	Frame for door 813 x 2032mm high	No	5		
	STEEL WINDOWS, DOORS, ETC				
	<u>"Nty" or similar approved steel residential windows with burglar bars to all sashes</u>				
4	Window type NC 1, size 533 x 949mm high	No	5		
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 9 Metalwork CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.7			
	BUILDING WORK			
	<u>BILL NO. 10</u>			
	PLASTERING			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	GRANOLITHIC			
	Untinted granolithic on concrete			
	SCREEDS			
	Screeds on concrete			
1	30mm Thick on floors m2	2 56		
	INTERNAL PLASTER			
	Cement plaster on brickwork			
2	On walls m2	2 263		
	Carried Forward to Summary of Section No. 7		R	
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 10 Plastering CLUSTER G			

ltem No		Quantity	Rate	Amount
	SECTION NO.7			
	BUILDING WORK			
	BILL NO.11			
	TILING			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Descriptions			
	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			
	FLOOR TILING			
	<u>300 x 300 x 11,5mm Ceramic floor tiles (PC R120.00/m2 VAT excl.) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted waterproof jointing compound</u>			
1	On floors and landings m2	56		
2	Skirting formed of ceramic tile cut to 300 x 75mm high m			
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	Carried Forward to Summary of Section No. 7		R	
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 11 Tiling CLUSTER G			

ltem No		Quantity	Rate	Amount
	SECTION NO.7			
	BUILDING WORK			
	BILL NO.12			
	PLUMBING AND DRAINAGE			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	"Polycop" polypropylene pipes:			
	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			
	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			
	All pipe diameters are nominal external			
	"Polylink" polypropylene pipes:			
	Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints			
	Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured			
	Carried Forward Section No. 7		R	
	1 x 5 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G			

Brought Forward	l	R	I
Brought i of ward			
Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers			
Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers			
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			
All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions			
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			
<u>Vitrified clay pipes:</u>			
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			
Carried Forward		R	
Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G			

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RUNNYMEDE PRIMARY SCHOOL
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Brought Forward	R	
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		
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		
Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G	R	

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Brought Forward	R	
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 Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G	R	

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Brought Forward	I	R	I
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			
Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G		R	
OLUGIER U			

R **Brought Forward** 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** 0,6mm Galvanised sheet iron with "Chromadek" finish on one side 35 1 100 x 125mm Eaves gutters with beaded front edge m 5 2 Extra over eaves gutter for angle No 3 3 Extra over eaves gutter for stopped end No 4 Extra over eaves gutter for outlet for 100mm diameter No 5 pipe 20 5 100mm Diameter rainwater pipes m 6 Extra over rainwater pipe for eaves or plinth offset 450mm projection No 5 5 7 No Extra over rainwater pipe for shoe SOIL DRAINAGE uPVC pipes 8 110mm Pipes vertically or ramped to cleaning eye etc 13 (no excavation) m 9 110mm Pipes laid in and including trenches not 88 exceeding 1m deep m Extra over uPVC pipes for fittings 10 110mm Access bend No 5 11 110mm Access junction 5 No **Carried Forward** R Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage **CLUSTER G**

	Brought Forward			R	
12	110mm Bend	No	10		
13	110mm Junction	No	3		
14	110mm uPVC rodding eye cover in end of pipe	No	5		
	Sundries				
15	100mm Cast iron "ABC" cleaning eye	No	1		
16	Precast concrete inspection eye marker slab set in ground	No	1		
17	110mm Rodding eye	No	1		
18	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	3		
19	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock	m3	3		
	SANITARY FITTINGS				
	"Vaal" or similar approved				
20	Vaal Sanitaryware 510 x 405mm Hibiscus White vitreous china lavatory basin (Code : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code 8448Z0).	No	4		
21	Vaal Sanitaryware Hibiscus White vitreous china close coupled washdown suite comprising 90° outlet open rim pan (product code 772600) and matching 6/3 litre front dual flush cistern (product code 710539) including "PARKER AVANT" toilet seat	No	5		
	WASTE UNIONS ETC				
	"Cobra Watertech" or similar approved				
22	38mm "Cobra 316" unslotted waste and plug with chain	No	4		
	Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G			R	

	Brought Forward			R	
	TRAPS ETC				
	<u>"Marley" or similar approved</u>				
	Chromium plated				
23	32 x 40mm Bottle trap	No	4		
	CATCH PITS ETC				
	<u>The following in stormwater catchpits, junction boxes</u> and inlet manholes				
	TAPS, VALVES, ETC				
	"Cobra Watertech" or similar approved				
24	Cobra Watertech 15mm chrome plated hi-waste elbow action pillartap with blue indicator for cold water (Code: 504-21B), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412).	No	5		
25	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	5		
	SANITARY PLUMBING				
	<u>uPVC pipes</u>				
26	50mm Pipes	m	13		
27	50mm Pipes laid in and including trenches not exceeding 1m deep	m	33		
28	110mm Pipes	m	15		
	Extra over uPVC pipes for fittings				
29	50mm Bend	No	50		
30	50mm Access bend	No	5		
	Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 12			R	
	Plumbing and Drainage CLUSTER G				

	Brought Forward			R	
31	50mm BSP adaptor	No	3		
32	50mm "GI Two-way" vent valve	No	1		
33	110mm Bend	No	5		
34	110mm Access bend	No	5		
35	110mm Pan Connector	No	5		
36	110mm "GI Two-way" vent valve	No	1		
	Sundries				
	WATER SUPPLIES				
	<u>Class 16 uPVC pressure pipes with solvent welded</u> joints				
37	32mm Pipes laid in and including trenches not exceeding 1m deep	m	29		
	Extra over class 16 uPVC pressure pipes for fittings with solvent welded joints				
38	32mm Bend	No	5		
	Class 0 copper pipes				
39	15mm Pipes	m	30		
40	22mm Pipes	m	29		
	Extra over class 0 copper pipes for capillary fittings				
41	15mm Fittings	No	43		
42	22mm Fittings	No	31		
	Brass				
43	15mm Fullway gate valve	No	1		
	Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK			R	
	Bill No. 12 Plumbing and Drainage CLUSTER G				

	Brought Forward			R		
44	22mm Fullway gate valve	No	1			
	Carried Forward to Summary of Section No. 7			R		
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK					
	Bill No. 12 Plumbing and Drainage					
	CLUSTER G					
I			I	l		

ltem No		Quantity	Rate	Amount	
	SECTION NO.7				
	BUILDING WORK				
	BILL NO. 13				
	GLAZING				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	GLAZING TO STEEL WITH PUTTY				
	<u>4mm Clear float glass</u>				
1	Panes exceeding 0,5m2 and not exceeding 2m2 m2	54			
	<u>4mm Rough cast glass</u>				
2	Panes exceeding 0,1m2 and not exceeding 0,5m2 m2	3			
	TOPS, SHELVES, DOORS, MIRRORS, ETC				
	<u>4 mm Silvered float glass copper backed mirrors with 10</u> <u>mm bevelled and polished edges holed for and fixed</u> <u>with chromium plated dome capped mirror screws with</u> <u>rubber buffers to plugs in brickwork or concrete</u>				
3	Mirror 400 x 600mm high with four (4) screws No	3			
					_
	Carried Forward to Summary of Section No. 7 Section No. 7		R		=
	1 x 5 WATERBORNE TOILET BLOCK Bill No. 13 Glazing CLUSTER G				

ltem No			Quantity	Rate	Amount
	SECTION NO.7				
	BUILDING WORK				
	BILL NO. 14				
	PAINTWORK				
	For preambles see "Model Preambles for Trade Edition)" and Supplementary preambles as spe the Trades.				
	SUPPLEMENTARY PREAMBLES				
	DESCRIPTIONS				
	Descriptions of paintwork shall be deemed to in all cutting in	clude for			
	PAINT SPECIFICATIONS				
	All painting shall be done in accordance with "F Evans" specifications	lascon-			
	PAINTWORK ETC TO NEW WORK				
	ON FLOATED PLASTER				
	Carrie	d Forward		R	
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 14 Paintwork CLUSTER G				

	Brought Forward			R	
	Plascon Polvin Super Acrylic to interior new cement plaster (NW 205).Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Polvin Super Acrylic (EPL) with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.				
1	On internal walls	m2	209		
	ON FIBRE-CEMENT One coat primer, one coat universal undercoat and two coats super acrylic PVA paint				
2	On ceilings and cornices <u>Plascon Sure Coat Gloss Enamel to exterior new fibre</u> <u>cement (NW 174).Surface to be dry, sound and clean,</u> <u>with a moisture content, measured with a Doser</u> <u>Hygrometer (or equivalent), of BD 2 scale - 8% or less.</u> <u>Prime with one coat of Plascon Plaster Primer (UC 56)</u> <u>with an overcoating time of 16 hours and finish with two</u> <u>coats of Sure Coat Gloss Enamel (SGE) with 16 hours</u> <u>drying time between coats, for a maintenance cycle of 2</u> <u>years in a C1 - inland environment.</u>	m2	56		
3	On fascias and barge boards Plascon Sure Coat Gloss Enamel to interior new fibre cement (NW 274).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 4 years in a C1 - inland environment. ON METAL	m2	4		
	Carried Forward Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 14 Paintwork CLUSTER G			R	

Brought Forward R Plascon Velvaglo Satin to exterior new mild steel (NW 683).Surface to be clean and dry. Remove surface containinus using Plascon Aquasolo Degresser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water utill surface is water break free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988. Sa2/2 or by hand/mechanical wire brushing to St30f the same standard. Allow to dry completely and prime within 1.4 hours of cleaning. Prime with one coal of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coals of Velvalo Satin (VLO) with 16 hours drying time between coats. for a maintenance coyle of 3 years in a C1 - inland environment. 6 On door frames m2 6 To on door frames m2 5 O no door frames m2 5 To no utside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high m 70 ON WOOD Elascon Velvaglo Satin to interior new wood (NW 521) Surface as the dry, so coals of Velvaglo Satin (VLO) with 16 hours drying time between coats. for a maintenance oxide of Sati fix 11 hand coat with Woodrate Knobs coating. If water and maintenance to the Velvaglo Satin to interior new wood (NW 521) Surface as the dry so coating drive and so the Mice coating Plascon Velvaglo Satin to interior new wood (NW 521) Surface as the dry so cleas (Private Cleaning Hill coating With 20 Sole (PCL) and apply one coating Plascon Woodrate Plance Satin (WWP 11) coating drive With a Dosen Hyurometer (or equivalent), of be 2 socie (A1-A5) < 14 Ko cleas. For a maintenance cycle of 7 years in a C1 - inland environment. R 8 On doors m2 16						
683).Surface to be clean and dry. Remove surface contaminants using Plasson Aquasoly Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water unil surface is water break-tree. Remove rust and millscale by abrasive blassing to ISO 8501. 01:1982. Sa22/s or by hand/mechanical wire brushing to SI3of the same standard. Allow to dry completely and prime with one coat of Metal Pinner (UC 501) with an overceating time of 16 hours adving time between coasting time of 16 hours adving time between coasts. for a maintenance cycle of 3 years in a C1 - inland environment. 4 On door frames m2 3 6 On qates, griles, burgler screens, balustrading, etc (both sides measured over the full flat area) m2 5 7 On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high m 70 ON WOOD Plascon Velvagio Satin to interior new wood (NW 571).Surface to be dry. Sound and dean. Mash knots and resions areas with Lacquer Thinners (LL 3) and coast with used care Freiteather (WW P 1), overceaded with a Board Play one coast of the same ster Play one to cast, for a maintenance cycle of 7 years in a C1 - inland environment. R 8 On doors m2 16 Carried Forward R Plascon Velvagio Satin to interior new wood (NW 571).Surface to be dry. Sound and dean. Mash knots and resions areas with Lacquer Thinners (LL 3) and coast with Wooderse Knot Seal (PK 2) and apply one coat with Wooderse Freetsethere (WW 2		Brought Forward			R	
5 On windows with burglar bars m2 3 6 On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area) m2 5 7 On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high m 70 ON WOOD Plascon Velvaglo Satin to interior new wood (NW 571).Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 40 bours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment. m2 16 8 On doors m2 16 Carried Forward R Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 14 Paintwork		683).Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland				
6 On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area) m2 5 7 On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high m 70 ON WOOD Plascon Velvaglo Satin to interior new wood (NW 571).Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a 20 ser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment. m2 16 8 On doors m2 16 Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 14 Paintwork	4	On door frames	m2	6		
(both sides measured over the full flat area) m2 5 7 On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high m 70 ON WOOD Plascon Velvaglo Satin to interior new wood (NW 571).Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (NWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat of Mode Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.	5	On windows with burglar bars	m2	3		
fixing not exceeding 300mm high m 70 ON WOOD Plascon Velvaglo Satin to interior new wood (NW 571).Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (LS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.	6		m2	5		
Plascon Velvaglo Satin to interior new wood (NW \$711.Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat	7		m	70		
571).Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment. m2 16 8 On doors m2 16 Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 14 Paintwork		<u>ON WOOD</u>				
Carried Forward R Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 14 Paintwork		571).Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland				
Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 14 Paintwork	8	On doors	m2	16		
		Section No. 7 1 x 5 WATERBORNE TOILET BLOCK Bill No. 14 Paintwork			R	

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	Brought Forward			R	
	Three coats matt varnish				1
9	On doors	m2	9		1
					1
					1
					1
					1
					1
					1
					1
					1
					1
					1
					1
					1
					1
					1
					1
					1
					1
					1
					1
					1
	Carried Forward to Summary of Section No. 7			R	
	Section No. 7 1 x 5 WATERBORNE TOILET BLOCK				
	Bill No. 14 Paintwork				1
	CLUSTER G				1
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	Section No. 7	Í		
	1 x 5 WATERBORNE TOILET BLOCK			
	SECTION SUMMARY - 1 x 5 WATERBORNE TOILET BLOCK			
Bill No		Page No		Amount
1	Foundations	223		
2	Concrete, Formwork and Reinforcement	227		
3	Mansory	230		
4	Waterproofing	231		
5	Roof Covering, etc	233		
6	Capentry and Joinery	239		
7	Ceiling, Partitions and Access Flooring	241		
8	Ironmongery	243		
9	Metalwork	245		
10	Plastering	246		
11	Tiling	247		
12	Plumbing and Drainage	257		
13	Glazing	258		
14	Paintwork	262		
	Carried to Final Summary Section No. 7		R	
	1 x 5 WATERBORNE TOILET BLOCK CLUSTER G			
	-263-	I		

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ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.1				
	FOUNDATIONS				
	EARTHWORKS				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	Nature of ground				
	The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"				
	Excavation for working space in rock				
	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				
	Carting away of excavated material				
	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				
	Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK		R		
	Bill No. 1 Foundations CLUSTER G				

	Brought Forward			R	
	Filling			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				
	Soil poisoning				
	Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said cerfificate to the Principal Agent				
	SITE CLEARANCE, ETC.				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	80		
	REMOVAL TREES, ETC.				
	Taking out and removing, grubbing up roots and filling holes.				
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	3		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
3	Trenches	m3	6		
4	Holes for tanks, etc.	m3	24		
	Carried Forward			Р	
	Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 1 Foundations CLUSTER G			R	

	Brought Forward			R	
	Extra over trench and hole excavations in earth for excavation in				
5	Soft rock	m3	5		
6	Hard rock	m3	3		
	Extra over all excavations for carting away				
7	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	15		
	Risk of collapse of excavations				
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	181		
	Keeping excavations free of water				
9	Keeping excavations free of all water other than subterranean water		Item		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
10	Backfilling to trenches, holes, etc	m3	6		
11	Under floors, steps, paving, etc	m3	10		
	Compaction of surfaces				
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	31		
	Prescribed density tests on filling				
13	"Modified AASHTO Density" test	No	13		
	Carried Forward			R	
	Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 1 Foundations CLUSTER G				

R **Brought Forward** SOIL POISONING Soil insecticide 14 Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming m2 31 15 To bottoms and sides of trenches etc m2 40 CONCRETE, FORMWORK AND REINFORCEMENT UNREINFORCED CONCRETE CAST AGAINST **EXCAVATED SURFACES** 25MPa/19mm concrete 3 16 Strip footings m3 4 17 Strip footing cast in pit latrines holes m3 **TEST CUBES** 18 Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying Sets 12.5 all charges in connection therewith. BRICKWORK Brickwork of NFP bricks in class II mortar One brick walls - in holes 50 19 m2 20 One brick walls 18 m2 21 115mm Brick corbelling in septic tank m2 54 **BRICKWORK SUNDRIES Carried Forward** R Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 1 Foundations **CLUSTER G**

			<u>.</u>	_	
	Brought Forward			R	
	Brickwork reinforcement			Ĭ	
22	75mm wide reinforcement built in horizontally.	m	149		
23	150mm Wide reinforcement built in horizontally	m	48		
	FACE BRICKWORK				
	Face bricks (Purchase price of R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints				
24	Extra over brickwork for face brickwork	m2	9		
	INTERNAL PLASTER				
	Steel troweled cement plaster on brickwork				
25	On walls in septic tank	m2	50		
	FLOOR AND WALL SEALERS				
	Minimum two coats 'approved' black epoxy coat				
26	On internal textured plaster walls	m2	50		
	Carried Forward to Summary of Section No. 8			R	
	Section No. 8				
	1 x 4 ENVIROLOO TOILETS BLOCK				
	Bill No. 1 Foundations				
	CLUSTER G				
					I

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ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	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 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				
	Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G		R		

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
LDPW-B/20308

Brought Forward	[R	l	
<u>Formwork</u>					
Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use					
The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself					
Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described					
Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described					
Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"					
UNREINFORCED CONCRETE					
20MPa/19mm concrete					
Surface beds	m3	1			
Surface beds cast in panels on waterproofing.	m3	3			
Aprons cast in panels to falls	m3	4			
Carried Forward			D		
Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G					
	and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" UNREINFORCED CONCRETE Surface beds Surface beds cast in panels on waterproofing. Aprons cast in panels to falls Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 2 Concrete, Formwork and Reinforcement	Eormwork 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 reuse The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks" UNREINFORCED CONCRETE 20MPa/19mm concrete Surface beds cast in panels on waterproofing. m3 Aprons cast in panels to falls m3 Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 2 Concrete, Formwork and Reinforcement	Eormwork 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 reuse The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. 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I		I	I		I
	Brought Forward			R	
	REINFORCED CONCRETE				
	25MPa/19mm concrete				
4	Slabs including beams and inverted beams	m3	5		
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a steel trowel				
5	Surface beds, slabs, etc	m2	31		
	<u>Finishing top surfaces of concrete smooth with a wood</u>				
6	Surface beds, slabs, etc	m2	31		
7	Aprons to falls	m2	38		
	FORMWORK				
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides				
8	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	38		
	<u>SMOOTH FORMWORK (DEGREE OF</u> <u>ACCURACY II)</u>				
	Smooth formwork to soffits				
9	Slabs	m2	31		
	Permanent formwork to soffits				
10	Slabs propped up not exceeding 1.5m high	m2	31		
	Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			R	

	Brought Forward			R	
11	Form 500mm radius opening in floor slab	No	13		
	TEST CUBES				
12	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	12.5		
	REINFORCEMENT				
	High tensile steel reinforcement to structural concrete work				
13	12mm Diameter	t	2.50		
14	10mm Diameter bars	t	1.25		
	Mild steel reinforcement to structural concrete work				
	REINFORCEMENT (PROVISIONAL)				
	Fabric reinforcement				
15	Steeledale Mesh standard square fabric mesh, nominal mass 1,93 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 193), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.	m2	31		
			-		
	Carried Forward to Summary of Section No. 8			R	
	Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 2				
	Concrete, Formwork and Reinforcement CLUSTER G				

Amount

R

Quantity Rate

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.

SUPPLEMENTARY PREAMBLES

BRICKWORK

SECTION NO.3

BILL NO. 3

MASONRY

BUILDING WORK

Item

No

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

Linings to concrete

Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties

Hollow walls etc

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

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

Carried Forward

Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 3 Masonry CLUSTER G

	Brought Forward			R	
	Face bricks				
	Bricks shall be ordered timeously to obtain uniformity in size and colour				
	Pointing				
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
	SUPERSTRUCTURE				
	Brickwork of NFP bricks in class II mortar				
1	Half brick walls	m2	70		
2	One brick walls	m2	130		
	Brickwork reinforcement				
3	75mm Wide reinforcement built in horizontally	m	258		
4	150mm Wide reinforcement built in horizontally	m	478		
	Turning pieces				
5	230mm Wide turning piece to lintels etc	m	56		
	"Allied Concrete" prestressed fabricated lintels				
6	110 x 75mm Lintels in lengths not exceeding 3m	m	5		
	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	No	19		
	FACE BRICKWORK				
	Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 3 Masonry CLUSTER G			R	

	Brought Forward			R	
	Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints				
8	Extra over brickwork for face brickwork	m2	184		
	Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
9	Fair raking cutting	m	10		
10	Extra over brickwork for brick-on-edge header course lintel	m	5		
11	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	5		
	Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
12	110mm Wide sills set sloping and slightly projecting	m	5		
13	220mm Wide sill set sloping and slightly protecting outside	m	5		
	Carried Forward to Summary of Section No. 8 Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 3 Masonry CLUSTER G			R	

LDPW-B/20308

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LDPW-B/20308

ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.5				
	ROOF COVERINGS ETC				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	General				
	All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched				
	Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use				
	Sizes				
	All items are measured net unless otherwise described				
	Flashings, trimming plates, etc.				
	Prices to include for all cutting and waste and relevant fixing material, unless otherwise described				
	All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable				
	All items are unless otherwise described measured net				
	Carried Forward		R		
	Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 5 Roof Coveringss, etc CLUSTER G				

	Brought Forward			R	
	 2 - Admin Block 3 - Nutrition Centre 5 - 1 x 4 Classrooms Block B - 1 x 4Waterborne Toilet Block C - 2 x 4 Seats Enviroloo Toilet Block D - Gate House G - Provisional Amounts H - Preliminaries I - Demolitions K - 2 x 2 Classroom Block L - 1 x10 Seats Enviroloo Toilet Block 				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions				
1	Roof covering with pitch not exceeding 50 degrees	m2	35		
2	Ridge capping 550mm girth	m	3		
3	Hip capping 550mm girth	m	2		
4	Gable trim 550mm girth	m	2		
					 ╞
	Carried Forward to Summary of Section No. 8 Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 5 Roof Coveringss, etc CLUSTER G			R	

ltem No		Quantity	Rate	Amount	
	SECTION NO.3		JP		
	BUILDING WORK				
	BILL NO.6				
	CARPENTRY AND JOINERY				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	Particle board:				
	Particle board shall comply with the following specifications:				
	a) SABS 1300 Particle board: exterior and flooring type				
	b) SABS 1301 Particle board: interior type				
	Joinery:				
	Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc				
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes				
	<u>Fixing</u>				
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete				
	Carried Forward		R		
	Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 6 Capentry and Joinery				
	CLUSTER G				

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
LDPW-B/20308

Brought Forward	R	
Decorative laminate finish:		
Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish		
PREFABRICATED ROOF TRUSSES		
Pre-fabricated metal connected timber roof trusses		
All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction		
<u>Timber</u>		
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		
Bolts		
Bolts shall be in accordance with BS 4190 or SABS 135		
Shear plates, tooth connectors and split rings		
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"		
Washers		
Square or round washers of the following dimensions shall be used with all bolts:		
 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness 		
Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	R	

		LDF W-D/2030
Brought Forward	R	
 2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness 		
 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/m2 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 unsure 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		
<u>Truss design</u>		
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		
Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	R	

Brought Forward	R	
Truss pitch		
The truss pitch shall be as described in this bill for each respective truss type		
Truss loading		
Trusses shall be designed for a live load of 0,50kN/m2 and dead load as specified under the sub-heading "Specific load specifications for roof trusses"		
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		
<u>Dimensions</u>		
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		
Carried Forward	R	
Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	ĸ	

Brought Forward		R	
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 10° pitch			
2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres			
ROOFS			
The following in plate nailed timber roof truss construction			
The following is applicable in respect of roof trusses			
The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes			
Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)			
Allow for the preparation and submission of the following documents in respect of all buildings			
Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication	ltem		
Design certificate indicating the licensed programme used, SANS specifications adhered to, general procedures and loadings adopted, sizes and grading of			
timber components, details, etc.	Item		
Carried Forward		Р	
Section No. 8		R	
1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 6			
Capentry and Joinery CLUSTER G			

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	Brought Forward			R
3	Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Principal Agent		Item	
	Sawn softwood			
4	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for enviroloo toilet block approximately 68m2 on plan (Refer to architect's drawings attached to these bills of quantities)	No	1	
	Sawn softwood grade 4			
5	38 x 114mm Wall plates	m	11	
6	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	100	
7	50 x 220mm Timber Beam	m		
	<u>Sundries</u>			
8	Two coats creosote on sawn timbers	m2	24	
	EAVES, VERGES, ETC			
	"Everite FC77" pressed fibre-cement			
9	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	25	
	SKIRTINGS			
	Wrought meranti			
0	19 x 76mm Skirting including 19mm quadrant bead nailed	m	78	
	DOORS, ETC			
	Carried Forward			R
	Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 6 Capentry and Joinery CLUSTER G			ĸ

	Brought Forward			R	
	Wrought meranti doors hung to steel frames				
11	44mm Framed and ledged batten door 813 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	3		
	Solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame				
12	40mm Door 813 x 2032mm high	No	5		
	Carried Forward to Summary of Section No. 8 Section No. 8			R	
	1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 6				
	Capentry and Joinery CLUSTER G				
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ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.7			
	CEILING , ETC.			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	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			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	n2 31		
	Sawn softwood			
2	38 x 114mm Ceiling joists (Provisional)	m 38		
	Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 7		R	
	Ceilings, Partitions and Access Flooring CLUSTER G			

	Brought Forward			R	
	"Rhino" gypsum plasterboard cornices				
3	75mm Coved cornices	m	19		
	NAILED UP AND SCREWED UP CEILINGS				
	<u>6mm "Everite Nutec" fibre-cement boards with H-</u> profile primed steel jointing cover strips over joints				
4	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.				
		m2	31		
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 Forward to Summary of Section No. 8			R	
	Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK				
	Bill No. 7 Ceilings, Partitions and Access Flooring CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.8			
	IRONMONGERY			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Descriptions			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
	Finishes to ironmongery			
	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			
	LOCKS			
	<u>"Solid"or similar approved</u>			
1	"Code 630" padlock N	o 3		
2	"Code 2252-76SC" three lever upright lockset N	o 3		
	Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 8 Ironmongery CLUSTER G		R	

	Brought Forward			R	
3	293/E41 WC indicator bolt with keep fixed to metal	No	5		
	SUNDRIES				
	"Solid" or similar approved				
4	Dorma "Code 255" door stop plugged	No	8		
5	Chromium plated toilet roll holder plugged to brickwork	No	5		
	LETTERS, NAMEPLATES, ETC				
	<u>"Union" or similar approved</u>				
6	150 x 150mm Stainless steel plate engraved with "female" sign (St/Steel)	No	1		
7	150 x 150mm Stainless steel plate engraved with "male" sign (St/Steel)	No	1		
	Carried Forward to Summary of Section No. 8			R	
	Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 8				
	Ironmongery CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO. 9			
	METALWORK			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	Descriptions			
	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			
	Drawings			
	Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc			
	WELDED SCREENS, GATES, ETC			
	Gates to external doors			
1	Gate and frame 900 x 2100mm high complete (G1)			
		3		
	PRESSED STEEL DOOR FRAMES			
	Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 9 Metalwork CLUSTER G		R	

	Brought Forward			R	
	<u>1,2mm Double rebated frames suitable for half brick</u> walls				
2	Frame for door 813 x 2032mm high	No	5		
3	Frame for door 813 x 2032mm high	No	3		
	STEEL WINDOWS, DOORS, ETC				
	<u>"Nty" or similar approved steel residential windows with burglar bars to all sashes</u>				
4	Type NE7 size 1022 x 654mm high	No	3		
5	Window type NE1, size 533 x 654mm high	No	5		
	Carried Forward to Summary of Section No. 8			R	
	Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 9 Metalwork CLUSTER G			_	

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	<u>BILL NO. 10</u>			
	PLASTERING			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SCREEDS			
	Screeds on concrete			
1	30mm Thick on floors m2	31		
	Carried Forward to Summary of Section No. 8 Section No. 8		R	
	1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 10			
	Plastering CLUSTER G			

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.11			
	TILING			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Descriptions			
	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			
	FLOOR TILING			
	300 x 300 x 11,5mm Ceramic floor tiles (PC R120.00/m2 VAT excl.) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted waterproof jointing compound			
1	On floors and landings m2	31		
2	Skirting formed of ceramic tile cut to 300 x 75mm high m			
	Carried Forward to Summary of Section No. 8		R	
	Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 11 Tiling CLUSTER G			

ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.12				
	PLUMBING AND DRAINAGE				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	"Polycop" polypropylene pipes:				
	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				
	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				
	All pipe diameters are nominal external				
	"Polylink" polypropylene pipes:				
	Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints				
	Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured				
	Carried Forward Section No. 8		R		
	1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 12				
	Plumbing and Drainage CLUSTER G				
		l			

Brought Forward	R	
Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers		
Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers		
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		
All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions		
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		
<u>Vitrified clay pipes:</u>		
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		
Carried Forward	R	
Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G		

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
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Brought Forward	R
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	
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	
Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G	R

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Brought Forward	R	
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		
<u>Wire gratings</u>		
Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings		
<u>Septic tanks</u>		
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 Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G	R	

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
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Brought Forward	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		
Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G	R	

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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		
TOILET TANKS		
Plumbing and drainage		
Erect toilet tanks set up and fixed complete as per manufacturers instruction - manufacturer to supply and delivery arrangements	5	
SUPERVISION OF INSTALLATION OF TOILET TANKS		
<u>The following nominated sub - contractor amounts are</u> <u>for work to be carried out by nominated sub-</u> <u>contractors:Supervision of installation of toilet tanks,</u>		
Four site visits to be made by the toilet tanks suppliers to assist/support the contractor in the installation of the toilet tanks and a final inspection to be ascertain the tanks has been installed correctly at which time a Certificate of Compliance should be issued between the Department Public Works,Roads & Infrastructure and Toilet tanks suppliers	Item	

Brought Forward

Carried Forward to Summary of Section No. 8

Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 12 Plumbing and Drainage **CLUSTER G**

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ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	<u>BILL NO. 13</u>				
	GLAZING				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	 2 - Admin Block 3 - Nutrition Centre 5 - 1 x 4 Classrooms Block B - 1 x 4Waterborne Toilet Block C - 2 x 4 Seats Enviroloo Toilet Block D - Gate House G - Provisional Amounts H - Preliminaries I - Demolitions K - 2 x 2 Classroom Block L - 1 x10 Seats Enviroloo Toilet Block 				
	GLAZING TO STEEL WITH PUTTY				
	4mm Clear float glass				
1	Panes exceeding 0,1m2 and not exceeding 0,5m2 m2	4			
	Carried Forward to Summary of Section No. 8		R		
	Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 13 Glazing CLUSTER G				

ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	<u>BILL NO. 14</u>				
	PAINTWORK				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	DESCRIPTIONS				
	Descriptions of paintwork shall be deemed to include for all cutting in				
	PAINT SPECIFICATIONS				
	All painting shall be done in accordance with "Plascon- Evans" specifications				
	PAINTWORK ETC TO NEW WORK				
	ON FIBRE-CEMENT				
	<u>One coat primer, one coat universal undercoat and two</u> coats super acrylic PVA paint				
1	On ceilings and cornices m2	31			
	Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 14 Paintwork CLUSTER G		R		

	Brought Forward			R	
	Plascon Sure Coat Gloss Enamel to exterior new fibre cement (NW 174).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.				
2	On fascias and barge boards	m2	6		
	ON METAL				
	Plascon Velvaglo Satin to exterior new mild steel (NW 683).Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.				
3	On door frames	m2	15		
4	On windows with burglar bars	m2	4		
	<u>ON WOOD</u>				
	Carried Forward Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 14 Paintwork CLUSTER G			R	

	Durwick Forward	1	I	l R	l	1
	Brought Forward Plascon Velvaglo Satin to interior new wood (NW 571).Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.					
5	On doors	m2	28			
	Carried Forward to Summary of Section No. 8			R		
	Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK Bill No. 14 Paintwork CLUSTER G					

	Section No. 8			
	1 x 4 ENVIROLOO TOILETS BLOCK			
	SECTION SUMMARY - 1 x 4 ENVIROLOO TOILETS BLOCK			
Bill No		Page No		Amount
1	Foundations	268		
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3	Masonry	275		
4	Waterproofing	276		
5	Roof Coveringss, etc	278		
6	Capentry and Joinery	285		
7	Ceilings, Partitions and Access Flooring	287		
8	Ironmongery	289		
9	Metalwork	291		
10	Plastering	292		
11	Tiling	293		
12	Plumbing and Drainage	299		
13	Glazing	300		
14	Paintwork	303		
	Carried to Final Summary		R	
	Section No. 8 1 x 4 ENVIROLOO TOILETS BLOCK CLUSTER G			

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.1			
	FOUNDATIONS			
	EARTHWORKS			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Nature of ground			
	The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"			
	Excavation for working space in rock			
	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			
	Carting away of excavated material			
	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			
	Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK		R	
	Bill No. 1 Foundations CLUSTER G			

	Brought Forward			R	
	Filling				
	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				
	Soil poisoning				
	Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said cerfificate to the Principal Agent				
	SITE CLEARANCE, ETC.				
	<u>Site clearance</u>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	160		
	REMOVAL TREES, ETC.				
	Taking out and removing, grubbing up roots and filling holes.				
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
2	Trenches	m3	13		
3	Holes for tanks, etc.	m3	48		
	Extra over trench and hole excavations in earth for excavation in				
4	Soft rock	m3	10		
	Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 1 Foundations CLUSTER G			R	

					-
	Brought Forward			R	
5	Hard rock	m3	5		
	Extra over all excavations for carting away				
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	55		
	Risk of collapse of excavations				
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	105		
	Keeping excavations free of water				
8	Keeping excavations free of all water other than subterranean water		ltem		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
9	Backfilling to trenches, holes, etc	m3	13		
	Approved G6 filling supplied and carted by the contractor and compacted in layers not exceeding 150mm to 95% Mod AASHTO density				
	Compaction of surfaces				
10	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	55		
	Prescribed density tests on filling				
	SOIL POISONING				
	Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 1 Foundations CLUSTER G			R	

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	Brought Forward			R		
	Soil insecticide					
11	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	55			
12	To bottoms and sides of trenches etc	m2	80			
	<u>CONCRETE, FORMWORK AND</u> <u>REINFORCEMENT</u>					
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES					
	25MPa/19mm concrete					
13	Strip footings	m3	5			
14	Strip footing cast in pit latrines holes	m3	8			
	TEST CUBES					
	BRICKWORK					
	Brickwork of NFP bricks in class II mortar					
15	One brick walls - in holes	m2	100			
16	One brick walls	m2	35			
17	115mm Brick corbelling in septic tank	m2	108			
	BRICKWORK SUNDRIES					
	Joint forming material in movement joints:					
	Brickwork reinforcement					
18	150mm Wide reinforcement built in horizontally	m	96			
	FACE BRICKWORK					
	Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 1 Foundations CLUSTER G			R		
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	Brought Forward			R	
	Face bricks (Purchase price of R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints				
19	Extra over brickwork for face brickwork	m2	18		
	Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces				
	INTERNAL PLASTER				
	Steel troweled cement plaster on brickwork				
20	On walls in septic tank	m2	100		
	FLOOR AND WALL SEALERS				
	Minimum two coats 'approved' black epoxy coat				
21	On internal textured plaster walls	m2	100		
	Carried Forward to Summary of Section No. 9			R	
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 1 Foundations				
	CLUSTER G				

ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.2				
	<u>CONCRETE, FORMWORK AND</u> <u>REINFORCEMENT</u>				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	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 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				
	Carried Forward		R		-
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G				

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	Brought Forward			R	
	<u>Formwork</u>				
	Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re- use				
	The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself				
	Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described				
	Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described				
	Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"				
	UNREINFORCED CONCRETE				
	20MPa/19mm concrete				
1	Surface beds	m3	3		
2	Surface beds cast in panels on waterproofing.	m3	5		
3	Aprons cast in panels to falls	m3	8		
	Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			R	

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	Brought Forward			R	
	REINFORCED CONCRETE				
	25MPa/19mm concrete				
	CONCRETE SUNDRIES				
	Finishing top surfaces of concrete smooth with a steel trowel				
4	Surface beds, slabs, etc	m2	55		
	Finishing top surfaces of concrete smooth with a wood float				
5	Surface beds, slabs, etc	m2	63		
6	Aprons to falls	m2	30		
	FORMWORK				
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides				
7	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	63		
	SMOOTH FORMWORK (DEGREE OF ACCURACY II)				
	Smooth formwork to soffits				
	Permanent formwork to soffits				
8	Slabs propped up not exceeding 1.5m high	m2	10		
9	Form 500mm radius opening in floor slab	No	10		
	Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G			R	
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	Brought Forward			R	
	TEST CUBES			P.	
10	Making and testing a set of four 150 x 150 150mm concrete strength test cubes per concrete pour, one crushed at 7 days and 3 at 26 days	No	13		
	REINFORCEMENT (PROVISIONAL)				
	High tensile steel reinforcement to structural concrete work				
11	12mm Diameter	t	5.00		
12	10mm Diameter bars	t	2.50		
	Fabric reinforcement				
13	Steeledale Mesh standard square fabric mesh, nominal mass 1,93 kg/m ² with nominal 5,6mm thick wires and 200 x 200mm pitch (code 193), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.	m2	55		
	Carried Forward to Summary of Section No. 9			R	
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 2 Concrete, Formwork and Reinforcement CLUSTER G				
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ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO. 3			
	MASONRY			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	BRICKWORK			
	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			
	Linings to concrete			
	Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties			
	Hollow walls etc			
	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			
	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			
	Carried Forward		R	
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 3 Masonry CLUSTER G			

	Brought Forward			R	
	Face bricks				
	Bricks shall be ordered timeously to obtain uniformity in size and colour				
	Pointing				
	Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
	SUPERSTRUCTURE				
	Brickwork of NFP bricks in class II mortar				
1	Half brick walls	m2	38		
2	Half brick walls in beamfilling.	m2	3		
3	One brick walls	m2	140		
	Brickwork reinforcement				
	75mm Wide reinforcement built in horizontally	m	113		
	150mm Wide reinforcement built in horizontally	m	420		
	Turning pieces				
5	230mm Wide turning piece to lintels etc	m	10		
	"Allied Concrete" prestressed fabricated lintels				
,	110 x 75mm Lintels in lengths not exceeding 3m	m	30		
	Galvanised wire ties etc				
3	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	45		
	FACE BRICKWORK				
	Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 3 Masonry CLUSTER G			R	

	Brought Forward			R
	Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints			
9	Extra over brickwork for face brickwork	m2	368	
10	Extra over for facings in beamfilling for face brickwork	m2	9	
	Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces			
11	Extra over brickwork for brick-on-edge header course lintel	m	10	
12	Fair cutting and fitting around pipe not exceeding 100mm diameter	No	10	
	Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces			
13	110mm Wide sills set sloping and slightly projecting	m	10	
14	220mm Wide sill set sloping and slightly protecting outside	m	10	
	Carried Forward to Summary of Section No. 9			R
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 3 Masonry CLUSTER G			

ltem No			Quantity	Rate	Amount	
	SECTION NO.3					
	BUILDING WORK					
	BILL NO.4					
	WATERPROOFING					
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.					
	SUPPLEMENTARY PREAMBLES					
	Waterproofing					
	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					
	DAMP-PROOFING OF WALLS AND FLOORS					
	One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course					
1	In walls	m2	13			
	<u>One layer of 250 micron "Consol Plastic USB Green"</u> waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"					
2	Under surface beds	m2	55			
	Carried Forward to Summary of Section No. 9			R		
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 4 Waterproofing CLUSTER G					

ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.5				
	ROOF COVERINGS ETC				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	General				
	All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched				
	Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use				
	Sizes				
	All items are measured net unless otherwise described				
	Flashings, trimming plates, etc.				
	Prices to include for all cutting and waste and relevant fixing material, unless otherwise described				
	All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable				
	All items are unless otherwise described measured net				
	Carried Forward		R		
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 5 Roof Coveringss, etc CLUSTER G				

	Brought Forward			R	
	PROFILED METAL SHEETING AND ACCESSORIES				
	0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions				
1	Roof covering with pitch not exceeding 50 degrees	m2	70		
2	Ridge capping 550mm girth	m	5		
3	Hip capping 550mm girth	m	4		
4	Gable trim 550mm girth	m	4		
	STEEL LOUVRES				
	"NTY Steelworks" or similar approved				
5	Triangular steel louvre size 1500x 500mm high fixed to timber purlins including watertight heading joints, necessary sealing strips, fixing accessories, etc	No	10		
	Carried Forward to Summary of Section No. 9			R	
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 5 Roof Coveringss, etc CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.6			
	CARPENTRY AND JOINERY			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Particle board:			
	Particle board shall comply with the following specifications:			
	a) SABS 1300 Particle board: exterior and flooring type			
	b) SABS 1301 Particle board: interior type			
	Joinery:			
	Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc			
	Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes			
	<u>Fixing</u>			
	Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete			
	Carried Forward		R	
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 6 Capentry and Joinery CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
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Brought Forward	R	
Decorative laminate finish:		
Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish		
PREFABRICATED ROOF TRUSSES		
Pre-fabricated metal connected timber roof trusses		
All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction		
Timber		
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		
Bolts		
Bolts shall be in accordance with BS 4190 or SABS 135		
Shear plates, tooth connectors and split rings		
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"		
Washers		
Square or round washers of the following dimensions shall be used with all bolts:		
1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness		
Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	R	

Brought Forward	R	
 2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness 		
 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/m2 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 unsure 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		
<u>Truss design</u>		
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		
Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	R	

Brought Forward	R	
Truss pitch		
The truss pitch shall be as described in this bill for each respective truss type		
Truss loading		
Trusses shall be designed for a live load of 0,50kN/m2 and dead load as specified under the sub-heading "Specific load specifications for roof trusses"		
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		
<u>Dimensions</u>		
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		
<u>Erection</u>		
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		
<u>Design system</u>		
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		
Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 6 Capentry and Joinery CLUSTER G	R	

Brought Forward		R	1
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 10° pitch			
2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres			
ROOFS			
The following in plate nailed timber roof truss construction			
The following is applicable in respect of roof trusses			
The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes			
Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)			
Allow for the preparation and submission of the following documents in respect of all buildings			
Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication	ltem		
Design certificate indicating the licensed programme used, SANS specifications adhered to, general			
procedures and loadings adopted, sizes and grading of timber components, details, etc.	ltem		
Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 6 Capentry and Joinery CLUSTER G		R	

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2

	Brought Forward			R	
3	Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Principal Agent		ltem		
	Sawn softwood				
4	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for waterborne toilet block approximately 28m2 on plan (Refer to architect's drawings attached to these bills of quantities)	No	2		
	Sawn softwood grade 4				
5	38 x 114mm Wall plates	m	23		
6	50 x 76mm Purlins in lengths exceeding 3,9m and not exceeding 6,6m	m	200		
	<u>Sundries</u>				
7	Two coats creosote on sawn timbers	m2	48		
	EAVES, VERGES, ETC				
	"Everite FC77" pressed fibre-cement				
8	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	50		
	DOORS, ETC				
	Wrought meranti doors hung to steel frames				
9	44mm Framed and ledged batten door 813 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	4		
	Carried Forward			R	
	2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 6 Capentry and Joinery CLUSTER G				

	Brought Forward	I		R	
	Solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame				
10	40mm Door 813 x 2032mm high	No	10		
	Corriginal Engineering to Summary of Spotian No. 0			R	
	Carried Forward to Summary of Section No. 9 Section No. 9				
	2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 6				
	Capentry and Joinery CLUSTER G				
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ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	BILL NO.7				
	<u>CEILING , ETC.</u>				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	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				
	Sawn softwood				
1	38 x 114mm Ceiling joists (Provisional) m	18			
	"Rhino" gypsum plasterboard cornices				
2	75mm Coved cornices m	38			
	NAILED UP AND SCREWED UP CEILINGS				
	Carried Forward		R		
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK				
	Bill No. 7 Ceilings, Partitions and Access Flooring CLUSTER G				

	Brought Forward			R	
	<u>6mm "Everite Nutec" fibre-cement boards with H-</u> profile primed steel jointing cover strips over joints				
3	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.		55		
		m2	55		
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	5		
	Carried Forward to Summary of Section No. 9			R	
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 7				
	Ceilings, Partitions and Access Flooring CLUSTER G				

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ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.8			
	IRONMONGERY			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Descriptions			
	Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
	Finishes to ironmongery			
	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			
	LOCKS			
	<u>"Solid"or similar approved</u>			
1	"Code 630" padlock	No 5		
2	"Code 2252-76SC" three lever upright lockset	No 5		
	Carried Forward Section No. 9		R	
	2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 8 Ironmongery CLUSTER G			

	Brought Forward			R	
3	293/E41 WC indicator bolt with keep fixed to metal	No	10		
	SUNDRIES				
	"Solid" or similar approved				
4	Dorma "Code 255" door stop plugged	No	15		
5	Chromium plated toilet roll holder plugged to brickwork	No	10		
	STEEL CUPBOARDS				
	Aproved steel lockers with standard baked enamel finish				
	<u>PINNING BOARDS, WRITING BOARDS,</u> <u>PROJECTION SCREENS, ETC</u>				
	"Vitrex" or similar approved				
	LETTERS, NAMEPLATES, ETC				
	<u>"Union" or similar approved</u>				
6	150 x 150mm Stainless steel plate engraved with "female" sign (St/Steel)	No	3		
7	150 x 150mm Stainless steel plate engraved with "male" sign (St/Steel)	No	3		
	Carried Forward to Summary of Section No. 9			R	
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 8				
	Ironmongery CLUSTER G				

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	Quantity	Rate	Amount
SECTION NO.3			
BUILDING WORK			
BILL NO. 9			
METALWORK			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
Descriptions			
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			
Drawings			
Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc			
WELDED SCREENS, GATES, ETC			
Gates to external doors			
Gate and frame 900 x 2100mm high complete (G1)			
No	5		
PRESSED STELL DOOR TRAMES			
Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 9 Metalwork CLUSTER G		R	
	BUILDING WORK BLL NO. 9 METALWORK For preambles see "Model Preambles for Trades (2008 Editor)" and Supplementary preambles as specified in the Trades.	SECTION NO.3 BUILDING WORK BILL NO. 9 METALWORK For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades. Descriptions 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 motices in brickwork or concrete Metalwork described as"holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described Drawings Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc. WELDED SCREENS, GATES, ETC Gates to external doors Gate and frame 900 x 2100mm high complete (G1) No 5 PRESSED STEEL DOOR FRAMES Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 9	SECTION NO.3 BUILDING WORK BILL NO. 3 METALWORK For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.

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	Brought Forward			R	
	<u>1,2mm Double rebated frames suitable for half brick</u> walls				
2	Frame for door 813 x 2032mm high	No	10		
	<u>1,2mm Double rebated frames suitable for one brick</u> walls				
3	Frame for door 813 x 2032mm high	No	5		
	STEEL WINDOWS, DOORS, ETC				
	<u>"Nty" or similar approved steel residential windows with burglar bars to all sashes</u>				
4	Type NE7 size 1022 x 654mm high	No	5		
5	Window type NE1, size 533 x 654mm high	No	10		
	Carried Forward to Summary of Section No. 9			R	
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 9				
	Metalwork CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	<u>BILL NO. 10</u>			
	PLASTERING			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SCREEDS			
	Screeds on concrete			
1	30mm Thick on floors m2	55		
	Carried Forward to Summary of Section No. 9 Section No. 9		R	
	2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 10 Plastering CLUSTER G			
	OLUGIER O			

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ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.11			
	TILING			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	Descriptions			
	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			
	FLOOR TILING			
	<u>300 x 300 x 11,5mm Ceramic floor tiles (PC R120.00/m2 VAT excl.) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted waterproof jointing compound</u>			
1	On floors and landings	2 55		
		_		
	Carried Forward to Summary of Section No. 9		R	
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 11 Tiling CLUSTER G			

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	BILL NO.12			
	PLUMBING AND DRAINAGE			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	SUPPLEMENTARY PREAMBLES			
	"Polycop" polypropylene pipes:			
	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			
	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			
	All pipe diameters are nominal external			
	TOILET TANKS			
	Plumbing and drainage			
1	Erect toilet tanks set up and fixed complete as per manufacturers instruction - manufacturer to supply and delivery arrangements No	15		
	Carried Forward		R	
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G			

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	Brought Forward		R		
	SUPERVISION OF INSTALLATION OF TOILET TANKS				
	The following nominated sub - contractor amounts are for work to be carried out by nominated sub- contractors:Supervision of installation of toilet tanks,				
2	Four site visits to be made by the toilet tanks suppliers to assist/support the contractor in the installation of the toilet tanks and a final inspection to be ascertain the tanks has been installed correctly at which time a Certificate of Compliance should be issued between the Department Public Works,Roads & Infrastructure and Toilet tanks suppliers	Item		20,000.	00
	Carried Forward to Summary of Section No. 9 Section No. 9		R		
	2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 12 Plumbing and Drainage CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.3			
	BUILDING WORK			
	<u>BILL NO. 13</u>			
	<u>GLAZING</u>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	GLAZING TO STEEL WITH PUTTY			
	<u>4mm Clear float glass</u>			
1	Panes exceeding 0,1m2 and not exceeding 0,5m2 m2	8		
	Carried Forward to Summary of Section No. 9 Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 13 Glazing CLUSTER G		R	

ltem No		Quantity	Rate	Amount	
	SECTION NO.3				
	BUILDING WORK				
	<u>BILL NO. 14</u>				
	PAINTWORK				
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.				
	SUPPLEMENTARY PREAMBLES				
	DESCRIPTIONS				
	Descriptions of paintwork shall be deemed to include for all cutting in				
	PAINT SPECIFICATIONS				
	All painting shall be done in accordance with "Plascon- Evans" specifications				
	PAINTWORK ETC TO NEW WORK				
	ON FIBRE-CEMENT				
	<u>One coat primer, one coat universal undercoat and two</u> coats super acrylic PVA paint				
1	On ceilings and cornices m2	55			
	Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 14 Paintwork CLUSTER G		R		

	Brought Forward			R	
	Plascon Sure Coat Gloss Enamel to exterior new fibre cement (NW 174).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.				
2	On fascias and barge boards	m2	13		
	Plascon Sure Coat Gloss Enamel to interior new fibre cement (NW 274).Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 4 years in a C1 - inland environment.				
	ON METAL				
	Plascon Velvaglo Satin to exterior new mild steel (NW 683).Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.				
3	On door frames	m2	30		
4	On windows with burglar bars	m2	8		
	Carried Forward Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 14 Paintwork CLUSTER G			R	

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	Brought Forward		ĺ	R	
	ON TIMBER				
5	Stop, fill, sand down and prepare wood surfaces. Apply one coat Plascon Wood Primer, one coat Plascon Universal Undercoat and two coats Plascon Super Universal Enamel paint				
6	On doors	m2	53		
	Carried Forward to Summary of Section No. 9			R	
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK Bill No. 14 Paintwork CLUSTER G				

	Section No. 9			
	2 X 5 ENVIROLOO TOILETS BLOCK			
	SECTION SUMMARY - 2 X 5 ENVIROLOO TOILETS BLOCK			
Bill No		Page No		Amount
1	Foundations	309		
2	Concrete, Formwork and Reinforcement	313		
3	Masonry	316		
4	Waterproofing	317		
5	Roof Coveringss, etc	319		
6	Capentry and Joinery	326		
7	Ceilings, Partitions and Access Flooring	328		
8	Ironmongery	330		
9	Metalwork	332		
10	Plastering	333		
11	Tiling	334		
12	Plumbing and Drainage	336		
13	Glazing	337		
14	Paintwork	340		
	Carried to Final Summary		R	
	Section No. 9 2 X 5 ENVIROLOO TOILETS BLOCK			
	CLUSTER G			

ltem No		Quantity	Rate	Amount
	SECTION NO.9			
	EXTERNAL WORK			
	<u>BILL NO. 1</u>			
	EARTHWORKS (PROVISIONAL)			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades as well as Engineering Specifications attached to these documents.			
	EARTHWORKS (PROVISIONAL)			
	SUPPLEMENTARY PREAMBLES			
	NOTE			
	All earthworks shall comply with the requirements of the latest relevant SABS 1200 Specifications: 1200C; 1200D;1200DM			
	Nature of ground			
	The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with soft rock			
	Specific Requirements of imported G6 material			
	The imported material must conform to the following criteria:			
	(1) Minimum CBR at 93% Mod. AASHTO Density: 15 (2) Minimum swell at 100% Mod. AASHTO Density: 1,5%			
	 (3) Maximum PI: 12 (4) Maximum size particles in material: 63mm (5) Grading modulus: 2,7 ≥ GM ≥ 0,75 			
	Carried Forward		R	
	Section No. 10 EXTERNAL WORKS Bill No. 1 Bulk Earthworks CLUSTER G			

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	Brought Forward			R	
	Carting away of excavated material				
	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				
	BULK EXCAVATION, FILLING, ETC				
	Excavations				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc for paving and bulk site clearance	m2	808		
	Open face excavation in earth over sloping site				
2	Open face excavation	m3	469		
	Extra over bulk excavation in earth for excavation in				
3	Soft rock	m3	47		
4	Hard rock	m3	23		
	Extra over all excavations for carting away				
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	125		
	Risk of collapse of excavations				
6	Sides of trench and hole excavations not exceeding 1 500mm deep	m2	78		
	Keeping excavations free of water				
7	Keeping excavations free of all water other than subterranean water		Item		
	Carried Forward Section No. 10 EXTERNAL WORKS Bill No. 1 Bulk Earthworks			R	
	CLUSTER G				

	Brought Forward			R	
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
8	Earth filling obtained from excavations compacted to 95% Mod AASHTO density				
		m3	121		
	Earth filling supplied by the contractor compacted to 95% Mod AASHTO density				
	The following to be natural selected gravel layers evenly spread and consolidated in layers and dimensions as specified and on the drawings. All thicknesses to be consolidated thicknesses.				
	Where described as "imported" the gravel to be supplied and carted on by the contractor from an approved borrow pit				
9	150mm Imported C4 material with and including 3% 32,50 BV cement and consolidated to 97% mod. AASHTO density				
		m3	105		
10	150mm Imported G6 material compacted to 95% mod. AASHTO density	m3	121		
11	150mm Imported G7 material compacted to 95% mod. AASHTO density	m3	121		
	Prescribed density tests on filling				
12	"Modified AASHTO Density" test	No	5		
13	Maximum dry density and optimum moisture content (MOD)	No	5		
	Carried Forward to Summary of Section No. 10			R	
	Section No. 10 EXTERNAL WORKS Bill No. 1 Bulk Earthworks CLUSTER G				

ltem No		Quantity	Rate	Amount	
	SECTION NO.9				
	EXTERNAL WORKS				
	<u>BILL NO. 2</u>				
	PARKING AND PAVINGS				
	Materials and workmanship must be in accordance to the following SABS 1200 specifications:				
	 C - Site clearance D - Earthworks DM - Earthworks (Roads, subgrade) M - Roads (General) ME - Sub-base MF - Base MK - Kerb and Channeling MM - Ancillary Roadworks 				
	ACCESS ROAD AND VEHICLE PARKING				
	EARTHWORKS				
	Excavations				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc for paving and bulk site clearance	m2 411			
2	Rip and scarify ground level to a depth of 150mm and consolidate to 90% mod. AASHTO density (minimum CBR 3)	m2 411			
3	Excavate in pickable earth to reduce ground level below paving and set aside for later use	m3 247	,		
	Carried Forward		R		
	Section No. 10 EXTERNAL WORKS Bill No. 2 Paving and Carports CLUSTER G				

	Brought Forward			R		
4	Ditto, but cart away excavated material to a dumping place to be found by the contractor (cut to spoil)	m3	185			
5	Extra over excavation for excavation in soft rock	m3	25			
6	Ditto, but in hard rock	m3	12			
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density					
7	Under floors, steps, paving, etc	m3	62			
	Earth filling supplied by the contractor under pavings etc					
	The following to be natural selected gravel layers evenly spread and consolidated in layers and dimensions as specified and on the drawings. All thicknesses to be consolidated thicknesses.					
	Where described as "imported" the gravel to be supplied and carted on by the contractor from an appoved borrow pit					
8	Over site of G7 material in accordance with SABS 1200 DM compacted to 95% Mod AASHTO density	m3	62			
9	150mm Imported G6 material compacted to 95% mod. AASHTO density	m3	62			
10	150mm Imported C4 material with and including 3% 32,50 BV cement and consolidated to 97% mod.					
	AASHTO density	m3	62			
	Compaction of surfaces					
11	Compaction of ground surface under parking areas etc by wetting and compacting	m2	411			
						_
	Carried Forward			R		
	Section No. 10 EXTERNAL WORKS Bill No. 2					
	Paving and Carports CLUSTER G					
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					LDF W-D/2030	10
	Brought Forward			R		
	Prescribed density tests on filling					
12	In-situ dry density (sand replacement) test in accordance with method A10 (a) of TMH 1	No	5			
13	25mm Thick layer clean,dry, riversand layer treated with an approved weed killer at the rate of 50 grams per square metre,spread and levelled to receive paving blocks (elsewhere measured)	m2	489			
14	Tests to determine the degree of comapction, etc of ground filling	No	5			
	PAVING					
	Interlocking Pavings					
15	80mm Thick double interlocking (DZZ) precast grey coloured concrete paving blocks laid in a herringbone pattern on and including 20mm sand founding layer with and covered with sand layer sweep into joints	m2	411			
16	Circular cutting to paving	m	43			
	<u>Kerbs, etc</u>					
17	Precast concrete figure 7 mountable kerb (SABS 927), levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs	m	164			
18	Precast concrete figure 7 kerb (SABS 927), circular on plan n.e 4m area levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs	m	144			
	Carried Forward			R		
	Carried Forward Section No. 10 EXTERNAL WORKS Bill No. 2 Paving and Carports CLUSTER G			ĸ		

R **Brought Forward** Sundries 19 Mass concrete (25MPa) in 300 x 150mm edge filler strip finished smooth on top with a wood float, including all excavation, formwork, etc 4 m PAINTWORK Prepare and paint one coat reflective road marking paint on concrete paving block surfaces 20 Lines 100mm wide 35 m 21 Disable persons pictorial 1000mm high No 1 Sign Faces with Painted or Galvanised (as stated) Background, with Painted Symbols, Characters, Legend and Borders, and with Signboardings **Constructed from:** 22 Steel tubing 76mm diameter x 2,5mm thick CHS sections 3m long, with two coats bitumen tar below ground and zinc phosphate primer and two coats metal No paint above ground 1 **ASSEMBLY AREA AND WALKWAYS EARTHWORKS Excavations** Site clearance 23 Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, 758 bush, etc for paving and bulk site clearance m2 24 Rip and scarify ground level to a depth of 150mm and consolidate to 90% mod. AASHTO density (minimum 758 CBR 3) m2 25 Excavate in pickable earth to reduce ground level below paving and set aside for later use m3 114 **Carried Forward** R Section No. 10 **EXTERNAL WORKS** Bill No. 2 Paving and Carports **CLUSTER G**

	Brought Forward			R	
26	Ditto, but cart away excavated material to a dumping place to be found by the contractor (cut to spoil)	m3	114		
27	Extra over excavation for excavation in soft rock	m3	11		
28	Ditto, but in hard rock	m3	6		
	Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
29	Under floors, steps, paving, etc	m3	114		
	Earth filling supplied by the contractor under pavings etc				
	The following to be natural selected gravel layers evenly spread and consolidated in layers and dimensions as specified and on the drawings. All thicknesses to be consolidated thicknesses.				
	Where described as "imported" the gravel to be supplied and carted on by the contractor from an appoved borrow pit				
30	150mm Imported G6 material compacted to 95% mod. AASHTO density	m3	114		
	Compaction of surfaces				
31	Compaction of ground surface under parking areas etc by wetting and compacting	m2	758		
	Prescribed density tests on filling				
32	In-situ dry density (sand replacement) test in accordance with method A10 (a) of TMH 1	No	5		
33	25mm Thick layer clean,dry, riversand layer treated with an approved weed killer at the rate of 50 grams per square metre,spread and levelled to receive paving				
	blocks (elsewhere measured)	m2	758		
	Carried Forward			R	
	Section No. 10 EXTERNAL WORKS Bill No. 2				
	Paving and Carports CLUSTER G				

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	Brought Forward			R	
34	Tests to determine the degree of comapction, etc of ground filling	No	5		
	PAVING				
	Interlocking Pavings				
35	60mm Thick double interlocking (DZZ) precast grey coloured concrete paving blocks laid in a herringbone pattern on and including 20mm sand founding layer with and covered with sand layer sweep into joints	m2	758		
36	Circular cutting to paving	m	303		
	<u>Kerbs, etc</u>				
37	Precast concrete figure 7 mountable kerb (SABS 927), levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs	m	303		
38	Precast concrete figure 7 kerb (SABS 927), circular on plan n.e 4m area levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs	m	227		
	<u>Sundries</u>				
39	Mass concrete (25MPa) in 300 x 150mm edge filler strip finished smooth on top with a wood float, including all excavation, formwork, etc	m	8		
	<u>CARPORTS</u>				
40	Provide the amount of R250 000,00 (Two Hundred Fifty Thousand Rand) for the supply and installation of Carports by Specialists		Item		250,000.00
	Carried Forward Section No. 10			R	
	EXTERNAL WORKS Bill No. 2 Paving and Carports CLUSTER G				

	Brought Forward		R		
41	Allow for profit on above if required	Item			
42	Allow for giving every facility to Specialists as described	Item			
	Carried Forward to Summary of Section No. 10		R		
	Section No. 10 EXTERNAL WORKS				
	Bill No. 2 Paving and Carports CLUSTER G				
	GLUSIER G				
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ltem No		Quantity	Rate	Amount
	SECTION NO.9			
	EXTERNAL WORKS			
	BILL NO.3			
	STORMWATER DRAINAGE			
	Materials and workmanship must be in accordance to the following SABS 1200 specifications:			
	 C - Site clearance D - Earthworks DM - Earthworks (Roads, subgrade) M - Roads (General) ME - Sub-base MF - Base MK - Kerb and Channeling MM - Ancillary Roadworks 			
	ACCESS ROAD AND VEHICLE PARKING			
	EARTHWORKS			
	Excavations			
	Site clearance			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc for paving and bulk site clearance m2	97		
2	Rip and scarify ground level to a depth of 150mm and consolidate to 90% mod. AASHTO density (minimum CBR 3)	97		
3	Excavate in pickable earth to reduce ground level below paving and set aside for later use m3	15		
	Carried Forward Section No. 10 EXTERNAL WORKS Bill No. 3		R	
	Stormwater Drainage CLUSTER G			

Brought Forward Ditto, but cart away excavated material to a dumping place to be found by the contractor (cut to spoil) Extra over excavation for excavation in soft rock Ditto, but in hard rock Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density Under floors, steps, paving, etc Earth filling supplied by the contractor under pavings etc Compaction of surfaces Compaction of ground surface under parking areas etc by wetting and compacting Prescribed density tests on filling	m3 m3 m3 m3	8 1 1 16 97	
place to be found by the contractor (cut to spoil) Extra over excavation for excavation in soft rock Ditto, but in hard rock Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density Under floors, steps, paving, etc Earth filling supplied by the contractor under pavings etc Compaction of surfaces Compaction of ground surface under parking areas etc by wetting and compacting Prescribed density tests on filling	m3 m3 m3	1 1 16	
Ditto, but in hard rock Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density Under floors, steps, paving, etc Earth filling supplied by the contractor under pavings etc Compaction of surfaces Compaction of ground surface under parking areas etc by wetting and compacting Prescribed density tests on filling	m3 m3	1	
Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density Under floors, steps, paving, etc Earth filling supplied by the contractor under pavings etc Compaction of surfaces Compaction of ground surface under parking areas etc by wetting and compacting Prescribed density tests on filling	m3	16	
<pre>prescribed stock piles on site including compacted to 93% Mod AASHTO density Under floors, steps, paving, etc Earth filling supplied by the contractor under pavings etc Compaction of surfaces Compaction of ground surface under parking areas etc by wetting and compacting Prescribed density tests on filling</pre>			
Under floors, steps, paving, etc Earth filling supplied by the contractor under pavings etc Compaction of surfaces Compaction of ground surface under parking areas etc by wetting and compacting Prescribed density tests on filling			
pavings etcCompaction of surfacesCompaction of ground surface under parking areas etcby wetting and compactingPrescribed density tests on filling	m2	97	
Compaction of ground surface under parking areas etc by wetting and compacting <u>Prescribed density tests on filling</u>	m2	97	
by wetting and compacting Prescribed density tests on filling	m2	97	
In site day density (cand would compare t) to st in			
In-situ dry density (sand replacement) test in accordance with method A10 (a) of TMH 1	No	5	
REINFORCED CONCRETE			
<u>30MPa/19mm concrete</u>			
Stormwater channels cast in panels	m3	10	
CONCRETE SUNDRIES			
Finishing top surfaces of concrete smooth with a steel trowel			
Surface beds, slabs, etc	m2	97	
FORMWORK			
Carried Forward Section No. 10			R
	Finishing top surfaces of concrete smooth with a steel trowel Surface beds, slabs, etc FORMWORK Carried Forward	Finishing top surfaces of concrete smooth with a steel trowel Surface beds, slabs, etc m2 FORMWORK Carried Forward Section No. 10 EXTERNAL WORKS Bill No. 3 Stormwater Drainage	Finishing top surfaces of concrete smooth with a steel trowel Surface beds, slabs, etc m2 97 FORMWORK Carried Forward Section No. 10 EXTERNAL WORKS Bill No. 3

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	Brought Forward			R	
	ROUGH FORMWORK (DEGREE OF ACCURACY II)				
	Rough formwork to sides				
12	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	97		
	TEST CUBES				
13	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	2.5		
	MOVEMENT JOINTS ETC				
	Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces				
14	Saw cut joints in top of concrete	m	97		
	REINFORCEMENT				
	REINFORCEMENT (PROVISIONAL)				
	Fabric reinforcement				
15	Type 311 fabric reinforcement in concrete slabs etc	m2	97		
	Carried Forward to Summary of Section No. 10			R	
	Section No. 10 EXTERNAL WORKS Bill No. 3 Stormwater Drainage CLUSTER G				

ltem No			Quantity	Rate	Amount
	SECTION NO.9				
	EXTERNAL WORKS				
	<u>BILL NO. 4</u>				
	WATER SUPPLIES				
	Materials and workmanship must be in accordance to the following SABS 1200 specifications:				
	 C - Site clearance D - Earthworks DM - Earthworks (Roads, subgrade) M - Roads (General) ME - Sub-base MF - Base MK - Kerb and Channeling MM - Ancillary Roadworks 				
	Class 6 black uPVC pipes including "Plasson" compression fittings				
1	75mm Pipes laid in and including trenches not exceeding 1m deep	m	215		
2	25mm Pipes laid in and including trenches not exceeding 1m deep	m	13		
	Extra over class 6 uPVC pressure pipes for fittings with solvent welded joints				
3	25mm Junction	No	2		
4	25mm Bend	No	4		
5	75 x 25mm Reducer	No	6		
6	25 x 15 x 25mm Tee	No	6		
7	25 x 22mm Reducer	No	2		
	Carried Forward Section No. 10 EXTERNAL WORKS Bill No. 4 Water Supply CLUSTER G			R	

	Brought Forward			R	
8	25mm Tee	No	3		
9	75mm Elbow	No	2		
10	75mm Junction	No	4		
11	75 x 32mm reducer	No	4		
12	75 x 32 x 63mm Tee	No	2		
				_	
	Carried Forward to Summary of Section No. 10 Section No. 10			R	—
	EXTERNAL WORKS Bill No. 4				
	Water Supply CLUSTER G				

ltem No		Quantity	Rate	Amount
	SECTION NO.9		<u>1</u> 2	
	<u>BILL NO. 5</u>			
	SOIL DRAINAGE			
	SUPPLEMENTARY PREAMBLES			
	"Polycop" polypropylene pipes:			
	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			
	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			
	All pipe diameters are nominal external			
	"Polylink" polypropylene pipes:			
	Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints			
	Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured			
	Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers			
	Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers			
	Carried Forward Section No. 10 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G		R	

Brought Forward	R	
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		
All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions		
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		
Carried Forward Section No. 10 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G	R	

R

Brought Forward

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

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

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

Carried Forward

Section No. 10 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G R

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
I DPW-B/20308

Brought Forward	R	
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"		
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		
<u>Stainless steelbasins, sinks, wash troughs, urinals, etc.</u>		
Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable		
Carried Forward Section No. 10 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G	R	

Brought Forwar	d		R
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			
SOIL DRAINAGE			
<u>uPVC pipes</u>			
160mm Pipes laid in and including trenches	m	140	
Extra over "Corflo" double walled radial ribbed uPVC pipes with integral moulded cuff joints and rubber seal rings for uPVC fittings			
160mm Bend	No	2	
160mm Junction	No	2	
160mm End cap	No	1	
SUNDRIES			
Carried Forwar	d		R
Section No. 10 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G			

R

Precast concrete circular inspection chambers, with and including manhole cover and frame all as per Engineer's drawings no.?????			
Inspection chamber 1000mm diameter and not exceeding 750mm deep internally			
	No	2	
Inspection chamber 1000mm diameter and exceeding 750mm and not exceeding 1000mm deep internally	No	2	
Inspection chamber 1000mm diameter and exceeding 1000mm and not exceeding 2000mm deep internally			
	No	2	
Covers etc			
Lifting key for manhole cover	No	6	
<u>SEPTIC TANKS, ETC.</u>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
SITE CLEARANCE ETC			
Site clearance			
Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	48	
EXCAVATION, FILLING, ETC			
Excavation in earth not exceeding 2m deep			

m3

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Brought Forward

10 Holes

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Section No. 10 EXTERNAL WORKS Bill No. 5 Sewer Drainage **CLUSTER G**

Carried Forward

Brought Forward			R	
Excavation in earth exceeding 2m and not exceeding 4m deep				
Holes	m3	5		
Extra over all excavations for carting away				
Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor	m3	21		
Risk of collapse of excavations				
Sides of trench and hole excavations not exceeding 1,5m deep	m2	34		
Sides of trench and hole excavations exceeding 1,5m deep and not exceeding not exceeding 3m deep	m2	16		
Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density				
Backfilling to trenches, holes, etc	m3	25		
Keeping excavations free of water				
Keeping excavations free of all water other than subterranean water		Item		
REINFORCED CONCRETE				
20MPa/19mm concrete				
Surface beds cast in panels	m3	1		
Slab over septic tank	m3	1		
Concrete haunch formed below pipes	m3	0.05		
CONCRETE SUNDRIES				
Carried Forward			R	
Section No. 10 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G				

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Brought i officia				
Finishing top surfaces of concrete smooth with a steel trowel				
Surface beds, slabs, etc to falls	m2	23		
<u>Grooves, channels, mortice , sinkings, etc in concrete</u>				
Form 25 x 25mm chamfer to edges of concrete	m	16		
Permanent formwork to soffits				
Slab over septic tank	m2	8		
Smooth formwork to form				
Opening not exceeding 1m girth through 150mm slab	No	3		
SMOOTH FORMWORK (DEGREE OF ACCURACY I)				
Smooth formwork to sides				
Edges, risers, ends and reveals not exceeding 300mm high or wide	m	18		
REINFORCEMENT				
Mild steel reinforcement to structural concrete work				
10mm Diameter bars	t	0.05		
Fabric reinforcement				
Steeledale Mesh standard square fabric mesh, nominal mass 3,95 kg/m ² with nominal 8mm thick wires and 200 x 200mm pitch (code 395), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.(septic tank bottoms)				
	m2	11		
MASONRY				
Carried Forward			R	
Section No. 10 EXTERNAL WORKS Bill No. 5 Sewer Drainage				

Brought Forward

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CLUSTER G

	Brought Forward			R	
l	Brickwork of NFP bricks in class II mortar				
26	One brick walls	m2	29		
	Brickwork reinforcement				
27	150mm Wide reinforcement built in horizontally	m	90		
	BRICKWORK SUNDRIES				
28	Leave of form 450 x 150mm high opening through a one brick wall	No	1		
29	Leave or form opening through one brickwall for pipe exceeding 100mm and n.e 200mm diameter	No	3		
	PLASTERING				
	Watertight cement plaster on brickwork				
30	On walls	m2	29		
	PLUMBING AND DRAINAGE				
	<u>uPVC pipes</u>				
31	110mm Pipes	m	1		
	Extra over uPVC pipes for fittings				
32	110mm Tee	No	3		
	<u>Cover, etc</u>				
33	600 x 600mm Type 2A cast iron single seal manhole cover and frame	No	3		
34	Lifting key for manhole cover	No	3		
	FRENCH DRAINS				
	SITE CLEARANCE ETC				
	Carried Forward Section No. 10 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G			R	

	Brought Forward			R	
l	Site clearance				
35	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	56		
	EXCAVATION, FILLING, ETC				
	Excavation in earth not exceeding 2m deep				
36	Holes	m3	24		
	Extra over trench and hole excavations in earth for excavation in				
37	Soft rock	m3	1		
38	Hard rock	m3	3		
	Extra over all excavations for carting away				
39	Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor	m3	20		
	Risk of collapse of excavations				
40	Sides of trench and hole excavations not exceeding 1,5m deep	m2	44		
	Keeping excavations free of water				
41	Keeping excavations free of all water other than subterranean water		Item		
	Earth filling obtained from the excavations and/or prescribed stock piles on site (not compacted)				
42	On top of french drain as soil cover	m3	4		
	FILTER FABRIC				
	Carried Forward Section No. 10 EXTERNAL WORKS Bill No. 5 Sewer Drainage CLUSTER G			R	

	Brought Forward			R	
	"Kaytech Engineered Fabric" or similar approved laid in strict accordance to the manufacturer's instructions				
43	"Kaymat U14" around stone filling in sub-soil drain trenches	m2	48		
	20mm Graded stone filling or similar approved				
44	In holes	m3	6		
	200 - 300mm Diameter clean washed stone filling or similar approved by engineer		0		
45	In holes	m3	14		
	WATERPROOFING				
	<u>One layer of 250 micron "Tarkon USB Green"</u> waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"				
46	On top of pipes as protection of joints	m2	11		
	<u>uPVC pipes</u>				
47	110mm Inspection pipes	m	10		
	Extra over uPVC pipes for fittings				
48	110mm End cap	No	1		
	Carried Forward to Summary of Section No. 10			R	
	Section No. 10 EXTERNAL WORKS				
	Bill No. 5 Sewer Drainage				
	CLUSTER G				

LDPW-B/20308

ltem No		Quantity	Rate	Amount	
	SECTION NO. 9				
	BILL NO.6				
	FENCING				
	SITE CLEARANCE, ETC.				
	Site clearance				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc m2	170			
	Steel palisade fencing				
2	Steel palisade fence 2100mm high above ground level over flat or sloping terrain including all posts, excavation, backfilling, concrete bases, etc m	284			
3	Single gate gate 1200 x 2100m high including heavy duty hasp and staple, padlock and two barrel bolts with two keeps in and including concrete anchor blocks with Spot primer defects in pre-primed surfaces with zinc chromate primer UC 53, one universal undercoat and two coats approved enamel paint No	1			
4	Single gate gate 2982 x 2100m high including heavy duty hasp and staple, padlock and two barrel bolts with two keeps in and including concrete anchor blocks with Spot primer defects in pre-primed surfaces with zinc chromate primer UC 53, one universal undercoat and two coats approved enamel paint No	1			
	Carried Forward to Summary of Section No. 10 Section No. 10 EXTERNAL WORKS Bill No. 6 Fencing CLUSTER G		R		

Section No. 10 EXTERNAL WORKS **SECTION SUMMARY - EXTERNAL WORKS** Amount Page No 1 **Bulk Earthworks** 344 2 Paving and Carports 351 3 Stormwater Drainage 354 4 Water Supply 356 5 Sewer Drainage 367 6 Fencing 368 **Carried to Final Summary** R Section No. 10 EXTERNAL WORKS **CLUSTER G**

Bill

No

ltem No		Quantity	Rate	Amount
	SECTION NO. 4			
	BILL NO.1			
	PROVISIONAL SUMS			
	SUPPLEMENTARY PREAMBLES			
	NOTE: Tenderers are referred to the definition of general attendance on nominated sub-contractors given in Clause 9 of the Preliminaries			
	NOTE: Under no circumstances may any Prime Cost - Provisional Amount, etc be extended at an amount lower than the amount given in the Bill			
	Carried Forward Section No. 11 PROVISIONAL SUMS		R	
	Bill No. 1 PROVISIONAL SUMS CLUSTER G			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE
PROVISIONAL BILLS OF QUANTITIES
RUNNYMEDE PRIMARY SCHOOL
I DPW-R/20308

	Brought Forward		R	
	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			
	Community Liaison Officer			
1	Provide the sum of R190,000.00 (One Hundred Ninety Thousand Rand) for community liaison officer	Item		190,000.00
2	Allow for giving every facility to Specialists as described	Item		
	Carried Forward Section No. 11		R	
	PROVISIONAL SUMS Bill No. 1			
	PROVISIONAL SUMS CLUSTER G			

LDPW-B/20308

	Brought Forward		R	
3	Allow for profit on above if required	Item		
	Project Steering Committee			
4	Provide a sum of R50 000,00 (Fifty Thousand Rand) for the provision of a Project Steering Committee	Item		50,000.00
5	Allow for profit on above if required	Item		
6	Allow for giving every to specialist as described	Item		
	Borehole, Bulk Water Storage and Water pipe line			
7	Provide the amount of R800 000.00 (Eight Hundred Thousand Rand) for equipping of borehole , elevated water storage and Water pipe reticulation by Specialists			
	approved by the civil engineer	Item		800,000.00
8	Allow for profit on above if required	Item		
9	Allow for giving every facility to Specialists as described	Item		
	Mobile Classroom Relocation			
10	Provide the sum of R 300,000-00(Three Hundred Thousand Rand) for mobile relocations	Item		300,000.00
11	Allow for profit.	Item		
12	Allow for attendance on sub-contractor	Item		
	CONTRACT PARTICIPATION GOALS			
13	Provide the sum of R 50 000.00 (Fifty Thousand Rand) for contract participation goals for targeted enterprises in accordance to CIDB Competence Standard for Contractors Gazette No. 41237, 10 November 2017.	Item		50,000.00
14	Allow for profit.	Item		
	Carried Forward Section No. 11 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS CLUSTER G		R	

LDPW-B/20308

	Brought Forward		R	
15	Allow for attendance on sub-contractor	Item		
	ELECTRICAL, ELECTRONICAL AND MECHANICAL INSTALLATION			
	Electrical Installation, etc			
	Electrical Installation			
16	Provide the amount of R2,350,000.00 (Two Million Three Hundred Fifty Thousand Rand) for electrical installation to the buildings and site by Specialists	ltem		2,350,000.00
17	Allow for giving every facility to Specialists as described	ltem		
18	Allow for profit on above if required	Item		
	WORK EXECUTED BY SEPARATE DIRECT SERVICE PROVIDERS			
	The following work will be executed by service providers under direct agreement with the employer. The contractor is to accommodate these services providers and allow them to execute their work unhindered and allow them the usage of water and toilet facilities. Damage caused by these service provider to work completed by the principal contractor to be recorded in detail to enable the employer to counter-charge the direct service provider the cost of making good such damages			
	Occupation Health and Safety			
19	Provide the sum of R500,000.00 Five Hundred Thousand Rand) for Health and Safety Consultant to be appointed as nominated sub contractor from the client	Item		500,000.00
20	Allow for profit on above if required	ltem		
21	Allow for giving every to specialist as described	ltem		
	Carried Forward Section No. 11		R	
	PROVISIONAL SUMS Bill No. 1			
	PROVISIONAL SUMS CLUSTER G			

	Brought Forward		R	
	Social Facilitator			
22	Provide the sum of R 250,000.00 (Two Hundred Fifty Thousand Rand) for the social facilitator	Item		250,000.00
23	Allow for profit.	Item		
24	Allow for attendance on sub-contractor	Item		
	Carried to Final Summary		R	
	Section No. 11 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS CLUSTER G			
	-374-			

	FINAL SUMMARY				
Section No		Page No		Amount	
1	PRELIMINARIES	71			
2	DEMOLITIONS OF 13 CLASSROMMS AND 13 PIT TOILETS	74			
3	RENOVATIONS OF 10 ENVIROLOO TOILETS	77			
4	MEDIUM ADMIN BLOCK	134			
5	1 X 2 GRADE R CLASSROOM BLOCKS	178			
6	3 X 4 CLASSROOM BLOCK	218			
7	1 x 5 WATERBORNE TOILET BLOCK	263			
8	1 x 4 ENVIROLOO TOILETS BLOCK	304			
9	2 X 5 ENVIROLOO TOILETS BLOCK	341			
10	EXTERNAL WORKS	369			
11	PROVISIONAL SUMS	374			
	Sub Total		R		
	<u>CONTINGENCIES</u>				
	Contingencies:				
	Provide the amount of R1 000 000.00 (One Million Rand) for contingencies to be used by the architect in terms of clause 17 of the principal Building Agreement.	Item		1,000,000.0)0
	SPECIAL CONDITIONS				
	Provide the sum of R 850 000.00 (Eight Hundred Fifty Thousand Rand) for fluctuations in cost	Item		850,000.0)0
	Sub Total		R		
	Carried Forward		R		

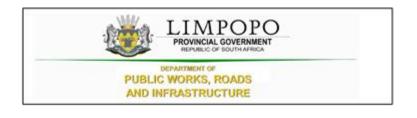
	FINAL SUMMARY			
Section No		Page No		Amount
	Brought Forward		R	
	Add: Value Added Tax at 15%		R	
	Carried to Form of Tender		R	
	CLUSTER G			
		1 1		I

PART C3 SCOPE OF WORKS

SCOPE OF WORKS

BID NUMBER: LDPWRI-B/20308

APPOINTMENT OF A CONTRACTOR FOR THE DEMOLITIONS OF 13 CLASSROOMS AND 13 PIT TOILETS, RENOVATIONS TO 10 ENVIROLOO TOILETS AND THE CONSTRUCTION OF MEDIUM ADMIN, 12 CLASSROOMS, 2 GRADE R CLASSROOMS, 14 ENVIROLOO TOILET SEATS AND 1 x 5 SEATER WATERBORNE TOILET BLOCK AT RUNNYMEDE PRIMARY SCHOOL IN MOPANI DISTRICT

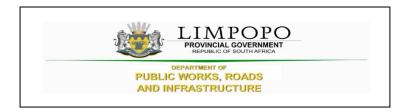


PART C3.1: SPECIAL NOTES TO BIDDERS

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

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

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PART C3.2: OHS SPECIFICATIONS

	OHS Specificatio REFURBISHMENT ANI	
	ADDITIONS A	i age i tullioci
INFRA STRUCTURE	RUNNEYMEDE PRIMAR' SCHOOL IN MOPAN DISTRICT	

OCCUPATIONAL HEALTH AND SAFETY SPECIFICATION FOR REFURBISHMENT AND ADDITIONS AT RUNNEYMEDE PRIMARY SCHOOL IN MOPANI DISTRICT

PREPARED BY: LIMPOPO PROVINCIAL GOVERNMENT REPUBLIC OF SOUTH AFRICA DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE **DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE** LIMPOPO **43 Church Street** Polokwane 0700

Project Name: REFURBISHMENT AND ADDITIONS AT RUNNEYMEDE PRIMARY SCHOOL IN MOPANI DISTRICT

This specification has been prepared, in accordance with the requirements of the Occupational Health and Safety Act (Act 85 of 1993) along with the Construction Regulations 2014, to assist all Contractors in providing for a Health and Safety management system which is in line with The Client requirements, without derogating from the legal obligations of the responding parties. Contractors however will remain responsible for ensuring the health and safety of their employees and must comply with Construction Regulations 2014.

The project has as its driving force the creation of a construction environment in which the achievement of "Zero Harm" is not only possible, but very real. To this end this specification will be the benchmark against which all Contractors' Safety Management Plans will be measured. Safety Management Plans which are not in line with the requirements contained in this specification will be rejected and Contractors will not be allowed to commence with any works until such time as these have been modified.

Health and safety on the **DEPARTMENT OF PUBLIC WORKS ROADS AND INFRASTRUCTURE LIMPOPO** construction site can only be assured if all stakeholders buy into a singular management approach, integrating the line accountability of all management staff and workers on site. The management systems provided for in this specification are designed to encourage open and unfettered participation, which will in turn provide for continuous improvement, resulting in the completion of a zero-harm project.

Accidents and injuries are preventable and all safety management plans must have as its basis the comprehensive identification, assessment and reduction of risk. This Project Health and Safety Specification is built on the following safety principles:

- All incidents are preventable
- Visible leadership is implemented and imperative at all levels
- Sound non-negotiable world class procedures and standards
- Zero tolerance for unsafe conditions or behaviors

This document sets out the responsibilities, processes and methods that must be complied with to ensure the pro-active management of Contractor's occupational health and safety during the construction and commissioning phases of the Project.

In view of the above mentioned, you are herewith presented with the Client Safety Specification for the Project; upon the successful awarding of the tender to yourself, you will be required to present the Occupational Health & Safety (OH&S) Agent with your written Health and Safety Plan indicating how you plan to conform to the SafetySpecification on site. Once we have satisfied ourselves that your plan will ensure compliance with the requirements as set out in this specification, Acts and Regulations and Municipal by-laws, approval thereofwill be granted and work may commence. (Please note that generic Safety Plans or a Safety Plan that do not address the requirements as per the Client's Safety Specification will not be approved).

Thereafter the OH&S Agent will conduct regular monthly audits to ensure on-going adherence to the presented Safety Plan. The Construction Regulations requires of the Client, or the Client's Agent, to halt construction if the Safety Plan is not adhered to.

Refer to Annexure "C" of this document for package specific requirements which may be required as part of the tender submission.

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1. INTRODUCTION AND BACKGROUND

In terms of Construction Regulation 5(1)(b) of the Occupational Health and Safety Act, No.85 of 1993 the Client, is required to compile a Health & Safety Specification for any intended project and provide such specification to any prospective Contractor who, on appointment shall submit a Health and Safety Plan which shall address the requirements of this specification.

This specification's objective is to ensure that any Contractor entering into a Contract with **DEPARTMENT OF PUBLIC WORKS** achieves an acceptable level of OH&S performance. This document forms an integral part of the Contract. Principal and other Contractors should make it part of any Contract that they may have with their Contractors and/or Suppliers. The requirements, as contained in this specification, along with the inherent responsibilities associated with the Occupational Health and Safety Act and its associated Regulations should be taken into account when costing your portion of the works.

This document does not absolve the Client from complying with minimum legal requirements and the Client remains responsible for the Health & Safety of his employees and those of his Mandataries. Client or his appointed Agent, reserves the right to audit, monitor and where necessary regulate the site work activities of any Principal Contractor or Principal-appointed Sub-contractor as per Construction Regulation 5(1)(k) and 7(1)(c)(v).

OMISSIONS FROM THIS SHE SPECIFICATION

By compiling this Safety, Health and Environmental Specification, the Client has endeavored to address the most critical aspects relating to Safety, Health and Environmental issues in order to assist the Contractor in adequately providing for the health and safety of employees on site. Should the Client not have addressed all health and safety aspects pertaining to the work that is tendered for, the Contractor needs to include it in the Safety, Health and Environmental Plan and inform Client of such issues when submitting the tender.

2. REFERENCES

The Contractor shall in respect of all matters arising in the fulfilment of this Safety and Health Specification comply at his own expense with all laws, regulations, by-laws and requirements of local and or other authorities that may be applicable to the Contract Works. In this regard, special reference is made to the following safety, health and labour legislation, which does not constitute an exhaustive list:

- Occupational Health and Safety Act, Act No 85 of 1993
- Compensation for Occupational Injuries and Diseases Act, Act No 130 of 1993
- Hazardous Substances Act, Act No 85 of 1973
- Project and Construction Professions Act, Act 48 of 2000
- National Road Traffic Act, Act No 93 of 1996
- Prevention of Environmental Pollution Ordinance 21 of 1981
- Water Services Act, Act No 108 of 1997

Or any other Act passed in substitution of the abovementioned

3. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM ELEMENTS

3.1 Interpretations

3.1.1 Application

This specification document is a legal compliance document drawn up in terms of the OHS Act and is therefore binding. All Contractors entering into a Contract with the Client shall, as a minimum, comply with the;

- Occupational Health & Safety Act and Regulations (Act 85 of 1993). A current, up-to-date copy of the OHS Act and Construction Regulations must be available on site at all times
- **Compensation for Occupational Injuries & Diseases Act (Act 130 of 1993).** The Principal Contractor will be required to submit a letter of Registration and "good-standing" from the Compensation Insurer before being awarded the Contract.
- All Contractors shall comply with the "Integration Labour Law Act" and regulations
- All relevant Municipal by-laws and National Building Regulations
- **The Immigrations Act 2002** as amended and shall further ensure that no illegal aliens are employed on the construction site.

3.1.2 New Construction Regulations 2014

New construction Regulations 2014 have been promulgated on the 7th August 2014.

4. DUTIES OF THE DESIGNER

1) The designer of a structure must —

- Ensure that the applicable safety standards incorporated into these Regulations, under section 44 of the Act, are complied with in the design;
- Take into consideration the Health and Safety Specification submitted by the Client;
- Before the contract is put out to tender, make available in a report to the Client—
- All relevant Health and Safety information about the design of the relevant structure that may affect the pricing of the construction work;
- The geotechnical-science aspects, where appropriate; and
- The loading that the structure is designed to withstand;
- Inform the Client in writing of any known or anticipated dangers or hazards relating to the construction work, and make available all relevant information required for the safe execution of the work upon being designed or when the design is subsequently altered;
- Refrain from including anything in the design of the structure necessitating the use of dangerous procedures or materials hazardous to the health and safety of persons, which can be avoided by modifying the design or by substituting materials;
- Take into account the hazards relating to any subsequent maintenance of the relevant structure and must make provision in the design for that work to be performed to minimize the risk;

- When mandated by the Client to do so, carry out the necessary inspections at appropriate stages to verify that the construction of the relevant structure is carried out in accordance with his design: Provided that if the designer is not so mandated, the Client's appointed Agent in this regard is responsible to carry out such inspections;
- When mandated as contemplated in paragraph (g), stop any Contractor from executing any construction work which is not in accordance with the relevant design's health and safety aspects: Provided that if the designer is not so mandated, the Client's appointed Agent in that regard must stop that Contractor from executing that construction work;
- When mandated as contemplated in paragraph (g), in his or her final inspection of the completed structure in accordance with the National Building Regulations, include the health and safety aspects of the structure as far as reasonably practicable, declare the structure safe for use, and issue a completion certificate to the Client and a copy thereof to the Contractor; and
- During the design stage, take cognisance of ergonomic design principles in order to minimize ergonomic related hazards in all phases of the life cycle of a structure.

(2) The designer of temporary works must ensure that—

- All temporary works are adequately designed so that it will be capable of supporting all anticipated vertical and lateral loads that may be applied;
- The designs of temporary works are done with close reference to the structural design drawings issued by the Contractor, and in the event of any uncertainty consult the Contractor;
- All drawings and calculations pertaining to the design of temporary works are kept at the office of the temporary works designer and are made available on request by an inspector; and
- The loads caused by the temporary works and any imposed loads are clearly indicated in the design.
- A geo science technical report where appropriate
- The load the structure is designed to withstand
- The methods and sequence of construction the construction process

5. PRINCIPAL CONTRACTOR

The Principal Contractor carries prime accountability & responsibility for the health and safety of his/her employees & his/her Sub-contractors within his/her working area, as contemplated by Section 37(2) of the OHS Act. None of the additional safety requirements specified by the Client/Agent reduces the Principal Contractor's accountability and responsibility for the health and safety of his employees and Sub-contractor employees within his working area. The Principal Contractor remains an employer in their own right and consequently responsible for the implementation and management of all requirements as per the applicable legislation.

5.1 Principal Contractor and Contractor Supervision

- (1) A Principal Contractor must—
- Provide and demonstrate to the Client a suitable, sufficiently documented and coherent sitespecific Health and Safety Plan, based on the Client's documented Health and Safety Specifications contemplated in regulation 5(1)(b), which plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the Principal Contractor as work progresses;
- Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, which must be made available on request to an inspector, the Client, the Client's Agent or a Contractor; and
- On appointing any other Contractor, in order to ensure compliance with the provisions of the Act—
 - Provide Contractors who are tendering to perform construction work for the Principal Contractor, with the relevant sections of the Health and Safety Specifications contemplated in regulation 5(1)(b) pertaining to the construction work which has to be performed;
 - Ensure that potential Contractors submitting tenders have made sufficient provision for health and safety measures during the construction process;
 - Ensure that no Contractor is appointed to perform construction work unless the Principal Contractor is reasonably satisfied that the Contractor that he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely;
 - Ensure prior to work commencing on the site that every Contractor is registered and in good standing with the Compensation Fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993;
 - Appoint each Contractor in writing for the part of the project on the construction site;
 - Take reasonable steps to ensure that each Contractor's health and safety plan contemplated in sub-regulation (2)(a) is implemented and maintained on the construction site;
 - Ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the Principal Contractor and any Contractor, but at least once every 30 days;
 - Stop any Contractor from executing construction work which is not in accordance with the Client's Health and Safety Specification and the Principal Contractor's Health and Safety Plan for the site or which poses a threat to the health and safety of persons;
 - Where changes are brought about to the design and construction, make available sufficient health and safety information and appropriate resources to the Contractor to execute the work safely; and
 - Discuss and negotiate with the Contractor the contents of the Health and Safety Plan contemplated in sub-regulation (2)(a), and must thereafter finally approve that plan for implementation;
 - Ensure that a copy of his or her health and safety plan contemplated in paragraph (a), as well as the Contractor's Health and Safety Plan contemplated in sub-regulation (2)(a), is available on request to an employee, an inspector, a Contractor, the Client or the Client's Agent;
 - Hand over a consolidated health and safety file to the Client upon completion of the construction work and must, in addition to the documentation referred to in subregulation (2)(b), include a record of all drawings, designs, materials used and other similar

information concerning the completed structure;

- In addition to the documentation required in the health and safety file in terms of paragraph (c)(v) and sub-regulation (2)(b), include and make available a comprehensive and updated list of all the Contractors on site accountable to the Principal Contractor, the agreements between the parties and the type of work being done; and
- Ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.
- (2) A Contractor must prior to performing any construction work —
- Provide and demonstrate to the Principal Contractor a suitable and sufficiently documented health and safety plan, based on the relevant sections of the Client's Health and Safety Specification contemplated in regulation 5(1)(b) and provided by the Principal Contractor in terms of sub-regulation (1)(a), which plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the Contractor as work progresses;
- Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, and which must be made available on request to an inspector, the Client, the Client's Agent or the Principal Contractor;
- Before appointing another Contractor to perform construction work, be reasonably satisfied that the Contractor that he or she intends to appoint has the necessary competencies and resources to perform the construction work safely;
- Co-operate with the Principal Contractor as far as is necessary to enable each of them to comply with the provisions of the Act; and
- As far as is reasonably practicable, promptly provide the Principal Contractor with any information which might affect the health and safety of any person at work carrying out construction work on the site, any person who might be affected by the work of such a person at work, or which might justify a review of the Health and Safety Plan.
- (3) Where a Contractor appoints another Contractor to perform construction work, the duties determined in sub-regulation (1)(b) to (g) that apply to the Principal Contractor apply to the Contractor as if he or she were the Principal Contractor.
- A Contractor must take reasonable steps to ensure co-operation between all Contractors appointed by the Principal Contractor to enable each of those Contractors to comply with these Regulations.
- No Contractor may allow or permit any employee or person to enter any site, unless that employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.
- A Contractor must ensure that all visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site and must ensure that such visitors have the necessary personal protective equipment.
- A Contractor must at all times keep on his or her construction site records of the health and safety induction training contemplated in sub-regulation (6) and such records must be made available on request to an inspector, the Client, the Client's Agent or the Principal Contractor;.
- A Contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.
- Description of the objective / scope of work
- Sequence of work / method statements

- Hazard identification & risk assessment (prior to commencement of work)
- Precautionary / preventative measures that are to be taken.
- Identification of sensitive features that may be impacted upon by the project.

5.2 Management and Supervision

- (1) A Principal Contractor must in writing appoint one full-time competent person as the construction manager with the duty of managing all the construction work on a single site, including the duty of ensuring occupational health and safety compliance, and in the absence of the construction manager an alternate must be appointed by the Principal Contractor.
- (2) A Principal Contractor must upon having considered the size of the project, in writing appoint one or more assistant construction managers for different sections thereof: Provided that the designation of any such person does not relieve the construction manager of any personal accountability for failing in his or her management duties in terms of this regulation.
- (3) Where the construction manager has not appointed assistant construction managers as contemplated in sub-regulation (2), or, in the opinion of an inspector, a sufficient number of such assistant construction managers have not been appointed, that inspector must direct the construction manager in writing to appoint the number of assistant construction managers indicated by the inspector, and those assistant construction managers must be regarded as having been appointed under sub-regulation (2).
- (4) No construction manager appointed under sub-regulation (1) may manage any construction work on or in any construction site other than the site in respect of which he or she has been appointed.
- (5) A Contractor must, after consultation with the Client and having considered the size of the project, the degree of danger likely to be encountered or the accumulation of hazards or risks on the site, appoint a full-time or part-time construction health and safety officer in writing to assist in the control of all health and safety related aspects on the site: Provided that, where the question arises as to whether a construction health and safety officer is necessary, the decision of an inspector is decisive.
- (6) No Contractor may appoint a construction health and safety officer to assist in the control of health and safety related aspects on the site unless he or she is reasonably satisfied that the construction health and safety officer that he or she intends to appoint is registered with a statutory body approved by the Chief Inspector and has necessary competencies and resources to assist the Contractor
- (7) A construction manager must in writing appoint construction supervisors responsible for construction activities and ensuring occupational health and safety compliance on the construction site.
- (8) A Contractor must, upon having considered the size of the project, in writing appoint one or more competent employees for different sections thereof to assist the construction supervisor contemplated in sub-regulation (7), and every such employee has, to the extent clearly defined by the Contractor in the letter of appointment, the same duties as the construction supervisor: Provided that the designation of any such employee does not relieve the construction supervisor of any personal accountability for failing in his or her supervisory duties in terms of this regulation.

- (9) Where the Contractor has not appointed an employee as contemplated in sub-regulation (8), or, in the opinion of an inspector, a sufficient number of such employees have not been appointed, that inspector must instruct the employer to appoint the number of employees indicated by the inspector, and those employees must be regarded as having been appointed under sub- regulation (8).
- (10) No construction supervisor appointed under sub-regulation (7) may supervise any construction work on or in any construction site other than the site in respect of which he or she has been appointed: Provided that if a sufficient number of competent employees have been appropriately designated under sub-regulation (7) on all the relevant construction sites, the appointed construction supervisor may supervise more than one site.

5.3 Principal Contractor and Contractor HSE Practitioner

The appointment of a full time / part-time Health and Safety Officer will be required for the duration of the contracted work. It is incumbent on the Principal Contractor during the tender process to evaluate the scope and nature of risk related to the work in order to objectively determine the need for such an appointment. (The Client reserves the right to insist on the appointment of a Health and Safety Officer where it deems the exposure to be of such a nature that a dedicated Health and Safety Officer is required). The Contractors Health and Safety Officer shall assist and support the Contractors Construction Manager to ensure that the Contractors Health and Safety responsibilities are fulfilled and compliance to the Health and Safety specifications and Health and Safety plan are met.

5.4 Principal and Contractor employees on the Project

The Principal Contractor is responsible for adequately informing his employees and Contractors of all relevant information with regard to the Client issued Health and Safety specifications and the Principal Contractors Health and Safety plan.

Employees are responsible for their own health and safety and that of their co-workers in their area. They must be made aware of their responsibilities during induction and awareness sessions some of which are:

- Familiarizing themselves with their workplaces and health and safety procedures.
- Working in a manner that does not endanger them or cause harm to others.
- Keeping their work area tidy.
- Reporting all incidents / accidents and near misses.
- Protecting fellow workers from injury.
- Reporting unsafe acts and unsafe conditions.
- Reporting any situation that may become dangerous.
- Carrying out lawful orders and obeying health and safety rules.
- Ensuring as far as possible no interaction with the public.

Every employee must undergo site induction provided by the Principal Contractor before commencement of the contracted work. Only once this induction has been received, will each employee receive a site access permit. The Client will provide induction to all professional team members as well as Principal Contractor management pertaining to the management of safety on the site.

It must be highlighted to all employees, that anyone who becomes aware of any person disregarding a safety notice, instruction or regulation shall immediately report this to the person concerned. If the person persists, stop the person from working and report the matter to the Project Manager and the Principal Contractor Supervisor immediately.

No person shall damage, alter, remove, render ineffective, or interfere with anything that has been provided for the protection of the site, or for the health and safety of persons.

No person under the influence of alcohol, drugs or medication (in state of intoxication) or any other condition that may render him incapable of controlling himself or of other persons under his charge shall be allowed to enter the site.

All safety and warning signs must be obeyed at all times.

Entering or leaving the Site may only be done via the official designated walkways, do not take short cuts. Follow designated walkways to and from your work place. Walk, do not run, and be alert for motor vehicle traffic and mobile equipment.

All employees must adhere to the HSE and other site-specific rules which may be issued by the Client or his designated Agent.

If any of the Principal Contractor's employees or his Sub-contractor's employees have transgressed any of the requirements of the HSE Specification; HSE plan or site rules, then the employee may be removed from site and his/her site access revoked. The Principal Contractor must follow a process of disciplinary action which shall include re-training / inducting the employee (at the cost of the Principal Contractor) and provide proof thereof to the Client's site / Project Manager and only upon the satisfaction of the Client's Site / Project Manager will the employee be allowed back on site.

6. MINIMUM ADMINISTRATIVE REQUIREMENTS

6.1 Notification to Commence Construction Work (CR4)

The Principal Contractor must notify the Provincial Director of the Department of Labour in writing before construction work commences. A copy of this notification must be held in the Principal Contractor's health & safety file on site. A copy is also to be provided to the Client.

6.2 Assignment of the Principal Contractor's / Contractors' Responsible Persons to Manage Supervise Health and Safety on Site (CR8 and Section 16)

The Principal Contractor and all Contractors must make supervisory appointments as well as other relevant appointments in writing (as stipulated by the OHSA and Construction Regulations 2014). See attached Annexure 'A' for more detail and relevant appointments.

6.3 Competence of the Principal Contractor's / Contractors' Appointed Competent Persons

The Principal Contractor's and all Contractors' competent persons for the various risk management portfolios must fulfil the criteria as stipulated under the definition of 'Competent' in accordance with the Construction Regulations (2014). It is required that Principal Contractors submit written declarations confirming the competency of all persons deployed on the project as well as the

mechanical soundness of all construction related equipment and plant.

6.4 Compensation for Occupational Injuries and Diseases Act 130 of 1993 (COIDA)

The Principal Contractor and Contractors must also hold proof of workman's compensation assurance registration in the form of a letter of good standing and forward a copy to the Principal Contractor before they begin work on site. A copy should also be available on site. No work will be permitted on the project unless these documents are in place.

6.5 Health and Safety Organogram

The Principal Contractor must prepare an organogram, outlining the site health & safety management structure and appointed competent persons. In cases where appointments have not been made, the organogram shall reflect the intended positions. The organogram must be updated when there are changes in the Site Management Structure, and dated accordingly. All HSE appointments are to be indicated on the organogram, clearly identifying the individual as well as providing contact details.

6.6 Preliminary Hazard Identification and Risk Assessments (CR 9)

Every Contractor performing construction work shall, before the commencement of any construction work or work associated with the aforesaid construction work and during such work, cause a Risk Assessment to be performed by a competent person, appointed in writing, and the Risk Assessment shall form part of the Health and Safety Plan and be implemented and maintained as contemplated in the Construction Regulation 9(1).

The following risk management process is to be adopted on the project:

- (1) A Contractor must, before the commencement of any construction work and during such construction work, have Risk Assessments performed by a competent person appointed in writing, which Risk Assessments form part of the health and safety plan to be applied on the site, and must include—
 - (a) The identification of the risks and hazards to which persons may be exposed to;
 - (b) An analysis and evaluation of the risks and hazards identified based on a documented method;
 - (c) A documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
 - (d) A monitoring plan; and
 - (e) A review plans.
- (2) A Contractor must ensure that as far as is reasonably practicable, ergonomic related hazards are analyzed, evaluated and addressed in a Risk Assessment.
- (3) A Contractor must ensure that all employees under his or her control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures and or control measures before any work commences, and thereafter at the times determined in the Risk Assessment monitoring and review plan of the relevant site.
- (4) A Principal Contractor must ensure that all Contractors are informed regarding any hazard

that is stipulated in the Risk Assessment before any work commences, and thereafter at the times that may be determined in the risk assessment monitoring and review plan of the relevant site.

- (5) A Contractor must consult with the health and safety committee or, if no health and safety committee exists, with a representative trade union or representative group of employees, on the monitoring and review of the risk assessments of the relevant site.
- (6) A Contractor must ensure that copies of the Risk Assessments of the relevant site are available on site for inspection by an inspector, the Client, the Client's Agent, any Contractor, any employee, a representative trade union, a health and safety representative or any member of the health and safety committee.
- (7) A Contractor must review the relevant Risk Assessment—
 - (a) Where changes are effected to the design and or construction that result in a change to the risk profile; or
 - (b) When an incident has occurred.

The Issue Based Risk Assessment shall include, at least:

- The identification of the risks and hazards to which persons may be exposed to
- The analysis and evaluation of the risks and hazards identified
- A documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified
- A monitoring plan
- A documented review plan
- Based on the Risk Assessments, the Contractor must develop a set of site-specific OH&S rules and operating procedures that will be applied to regulate the OH&S aspects of the construction. (See annexure "B" for SWMS minimum requirements)
- A copy of the Risk Assessment must be provided to the Client for review.
- The Contractor has consulted with the Health & Safety Committee and in the absence thereof, a representative group of employees, in conducting the risk assessments, monitoring as well as during the review process.
- The Contractor will ensure that no person or employee may enter the site without undergoing comprehensive induction training (proof of which must be retained by the employee) in respect to the risks and hazards present at the time, and where required, will ensure the appropriate use of the correct PPE.
- The Principal Contractor or Contractor has ensured that all employees under his control have been informed, instructed and trained by a competent person in respect to the hazards and risks identified.
- The process as contemplated above is included in the Health & Safety Plan.
- No Generic Risk Assessments will be accepted and approved.

6.7 General Record Keeping

The Principal Contractor and all Contractors must keep and maintain Health and Safety records to demonstrate compliance with these Specifications, with the OHS Act 85/1993, and with the Construction Regulations (2014). The Principal Contractor must also ensure that all records of incidents/injuries, emergency procedures, training, planned maintenance inspections, monthly

Contractor audits, etc. are kept in the health & safety file(s) held in the site office. The Principal Contractor must ensure that every Contractor keeps its own health & safety file, maintains the file and makes it available on request (the file must include the Contractor's health & safety plan). Such Contractor safety files must be audited by the Principal Contractor.

6.8 Injury /Incident Reporting and Investigation

Injuries are to be categorized into first aid; medical; lost time injury (LTI); and fatal injuries. When reporting injuries to the Client, these categories shall be used.

The Principal Contractor must investigate all injuries, and where applicable with an Annexure 1 report being completed and filed. All Contractors must report on the 4 categories of injuries to the Principal Contractor at least monthly. Contractors must investigate injuries and incidents involving their employees and forward a copy of the annexure 1 investigation report to the Principal Contractor forthwith. The Principal Contractor must report all injuries to the Client in the form of an injury report, at least monthly. The Contractor must submit his incident reporting and investigation protocols for review by the Client.

All incidents reportable in terms of the provisions of Section 24 of the OHS Act, 1993 must be reported to the local Dept. of Labour in the prescribed manner within 14 days. (Note: No reports will be made to third parties without the Client being notified of such intentions)

(Department of Labour contact number Polokwane Office: $015\ 299\ 5000$)



All Contractors must immediately report all incidents where an employee is injured on duty to the extent that he/she

- Dies
- Becomes unconscious
- Loses a limb or part of a limb
- Is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed

Or where:

- A major incident occurred
- The health or safety of any person was endangered
- Where a dangerous substance was spilled
- The uncontrolled release of any substance under pressure took place
- Machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects
- Machinery ran out of control

The Contractor is required to provide the Client with copies of all internal and external accident/incident investigation reports including the reports contemplated above within 7 days of the incident occurring

6.9 Permits and way leaves

Permits may include the following:

- Closing of public roadways and walkways
- Demolition
- Way Leaves
- Permit to work night Shift
- Hot work Permits

The Principal Contractor must manage and co-ordinate these permit procedures.

6.10 Preparation of Health & Safety Documentation (CR 7)

It is the duty of the Principal Contractor to ensure that all documentation that is required are kept or generated during the construction process and must be consolidated into one set of documents that must be handed over to the Client upon completion of the construction work. This should include instructions from the design team that will be required for the continued safe operation and maintenance of this new structure(s).

The following health and safety deliverables should be reviewed during the tender submission process:

	REQUIREMENT	TIMING
H&S	S DELIVERABLES	
•	The Contractor must submit all deliverables as per the attached list of deliverables. These must be submitted individually under separate cover sheets for review and approval by the Client's project manager or designate.	Prior to commencement with construction.
•	The submissions will be commented on and returned to the Contractor for updating and re-submission. Access to site will not be granted unless these submissions have been provisionally approved.	
•	On approval of deliverables the Contractor may gain access to the works, buthas a period of 2 weeks in which to have the submissions finally approved forconstruction.	
•	If this does not occur in the 2 week period the Client reserves the right to suspend all work until such time as the Safety Agent is satisfied with all H&S submissions.	

(See annexure "C" with regard to detailed compliance submissions)

6.11 Offences and Penalties

Penalties may be imposed for on-going non-compliance with the provisions of the Client's health & safety specifications and the Principal Contractor's Health & Safety Plan. Non-compliances noted during safety agent audits and visits will be categorized into three levels based on severity. These will be as follows:

- Life threatening situations -a prohibition notice will be issued. This activity must be seized immediately and corrective measures taken.
- Serious injury possible a contravention notice will be issued with a time frame for compliance

stipulated. Failure to comply within the time frame may result in a financial penalty per non-compliance item per day that the non-compliance persists.

• Minor or no injury may result – an improvement notice will be issued. The corrective measures stipulated in the report / notice must be taken.

The methodology used to decide the above levels will be directly linked to the Risk Assessments of the Principal Contractor and Contractors (i.e. high, medium and low). In the absence of a Risk Assessment the decision of the Safety Agent will be final.

6.13 Principal Contractor / Contractor - Competency Assessment

In order to ensure this, the Principal Contractor must demonstrate to the Client that it has a suitable and sufficiently documented OHS Plan and that its Contractors have the necessary competencies and resources to perform the construction work safely.

The Principal Contractor and Contractors must therefore submit the following documentation for perusal and verification by the Client and Principal Contractor respectively:

- Management Structure as envisaged at tender (organogram);
- Registration certificate with the Compensation Commissioner or FEM;
- Proof of management training on the Occupational Health & Safety Act and other related training;
- Example copy of previous Safety Committee Meeting Minutes and Incident Investigation report (from a previous project);
- Any previous convictions under the OHS-Act;
- Your Company's previous two years injury claims as reported to your workman's compensation insurer;
- Your company's approach to co-ordination of health & safety do you employ safety officers, etc.? If not, what alternative arrangements are used?

The Principal Contractor and all Trade Contractors' competent persons for the various risk management portfolios will fulfill the criteria as stipulated under the definition of 'Competent' in accordance with the Construction Regulations 2014. This will be specific to the following appointments. (Refer to annexure "D" for an outline of legal assignments)

The Principal Contractor shall ensure that all their appointees are made aware of their accountabilities & responsibilities in terms of their appointment, and to advise and assist these appointees in the execution of their duties.

Appointment letters and competency certificates which is signed by the 16.2 appointee, which refers to the relevant training certificates and proof of experience of appointees must be submitted with the Health and Safety Plan.

All minimum required training is to be provided by accredited training service providers. Where legislation requires formal certification in lieu of experience then such proof of competency is to be provided by the Contractor.

6.14 Costs for OHS -Compliance (CR 7)

All parties bidding to work on this construction project must ensure that they have made adequate

provision for the cost of complying with these specifications as well as with the OHS-Act 1993 and incorporated Regulations as a minimum requirement in their tender documentation. It must also be taken into consideration that time is money.

That implies that sufficient time must be allowed for the implementation of the minimum OHS standards. No additional claims will be entertained at a later stage if a compliance requirement was prescribed in the OHS-Act, 1993 and incorporated regulations or this specifications document. Refer to annexure "E" of this document for a breakdown of possible safety costs.

6.15 Contractors' Health & Safety Plans [Construction Regulations 7(1)]

6.15.1 Introduction:

Under the Construction Regulations (2014), the Principal Contractor is required to develop the Health and Safety Plan before work commences on site and to keep it up to date throughout the Construction Phase. The degree of detail required in the Health and Safety Plan for the Construction Phase and the time and effort in preparing it should be in proportion to the nature, size and level of Health and Safety risks involved in the project. Projects involving minimal risks will call for simple, straightforward plans. Large projects or those involving significant risks will need more detail.

All registers and Agreements with Mandatary documents must be signed before commencement on site. Should any Contractor or Sub-Contractor not be able to comply with all the necessary site safety documentation, an independent Safety Consultant will be appointed by the Client to assist at their own cost?

6.15.2. What should the construction Health & Safety plan cover?

The Construction Health and Safety Plan should set out the arrangement for ensuring the Health and Safety of everyone carrying out the construction work and all others who may be affected by it. The Plan must demonstrate Management's commitment to safety and must include how safety responsibilities are assigned to different roles within the organization.

6.15.3 What should be addressed as key requirements in the Construction Health & Safety Plan?

- Provide a systematic method of managing hazards according to risk priority, and must include all mobilization and site set up activities as per the Baseline Risk Assessment.
- Methodology/ Scope of Works of what work is to be undertaken on site.
- Anticipated risks and hazards and mitigating controls to be implemented to reduce the risk.
- Competency of Employees and proof of training
- Resources/ Equipment to be used on site

6.16 Communication and Management of the work

Site Safety committee meetings will be held monthly or as determined by the associated risks on site. This does not preclude the requirement that each Contractor will implement and maintain their own safety meetings where applicable.

- In addition to the above, communication may be directly to the Client or his appointed Agent, verbally or in writing, as and when the need arises.
- Consultation with the workforce on OH&S matters will be through their Supervisors, OH&S

Representatives, the OH&S committee and their elected Trade Union Representatives, if any.

- The Site Manager or his Site Safety Officer will be responsible for the dissemination of all relevant OH&S information to the other Contractors e.g. design changes agreed with the Client and the Designer, instructions by the Client and/or his/her agent, exchange of information between Contractors, the reporting of hazardous/dangerous conditions/situations etc.
- A due diligence, one page report must be completed (and retained on file) by the Contractor every week after he has performed a site inspection. This document will be referenced at each formal site safety meeting and should be communicated via e mail with Vunwe sherq services.
- The Contractors will be required to conduct Toolbox Talks with their employees on a weekly basis and records of these must be kept on the OH&S File. Employees must acknowledge the receipt of Toolbox Talks which record must, likewise be kept on the OH&S File.
- The Contract Manager or suitable designate of each appointed Contractor will be required to attend all Site OH&S meetings.

7. CLIENT IDENTIFIED HAZARDS AND POTENTIALLY HAZARDOUS SITUATIONS

7.1 Client identified Hazards

7.2

The following items have been identified by the Client as potential hazards for this construction work and must be incorporated in the Contractor's site-specific Risk Assessments.

- Wind and dust. (Site is in a build up area)
- Working with, around and above other Contractors
- Working on and from scaffolding and ladders
- Working at Heights
- Edge Barricading (Deck Edges and openings)
- Roof work structural and roof covering. Placement of roof sheeting.
- Lifting operations including mobile plant use, lifting tackle and other fixtures
- Electrical installation (temporary and permanent)
- Deep excavation
- Bulk earth work
- Slip, trip and fall
- Manual handling
- Collapsing trenches
- Electrocution
- Moving objects
- Heat stress
- Interface with the public roads and pavements
- Portable electrical tools and extension leads
- Explosive powered tools
- Power tools (jackhammers, core drilling, high pressure air and water jets, etc.)

7.3 Unforeseeable Hazards

The Principal Contractor must immediately notify other Contractors as well as the Client, in writing, of any hazardous or potentially hazardous situations that may arise during the performance of construction activities so that the necessary precautions may be taken.

During the course of the Project, the Client or appointed Agent may advise of any new exposures relating to change of scope or design. These will be communicated in writing.

8. SITE OPERATIONAL REQUIREMENTS

8.1 Construction Health & Safety Officer (CR8.5)

- A Contractor must, after consultation with the Client and having considered the size of the project, the degree of danger likely to be encountered or the accumulation of hazards or risks on the site, appoint a full-time or part-time registered construction health and safety officer with **SACPCMP** in writing to assist in the control of all health and safety related aspects on the site: Provided that, where the question arises as to whether a construction health and safety officer is necessary, the decision of an inspector is decisive.
- No Contractor may appoint a construction health and safety officer to assist in the control of health and safety related aspects on the site unless he or she is reasonably satisfied that the construction health and safety officer that he or she intends to appoint has the necessary competencies and resources to assist the Contractor to conduct at least the following duties:
- Health & safety audits and inspections including administrative and physical audits of all Contractors' health & safety plans, files and activities, and record findings in the form of audit reports to be kept in the health & safety file;
- Maintain the Principal Contractor's Health & Safety Plan and file;
- Investigate near misses, incidents and injuries;
- Co-ordinate the function of reviewing the hazard identifications and risk assessments;
- Assisting with Method Statements and checking whether the responsible persons follow the safe work procedures.

8.2 Health and Safety Representative(s) (Section 17)

The Principal Contractor and all Contractors must ensure that Health and Safety Representative(s) are appointed under consultation with the employees and trained/informed to carry out their functions. The appointments must be in writing. The Health and Safety Representatives could carry out monthly inspections, keep records and report all findings to the responsible person or safety officer forthwith and at monthly health & safety meetings. At least one Health & Safety Representative is required by all Employers. (Appoint one for the first 20 employees and an additional one for each group of up to 50 employees on sit.

8.3 Health and Safety Committees (Section 19)

The Principal Contractor must ensure that project health and safety committee meetings are held monthly with minutes kept. Meetings must be chaired by the Principal Contractor's Responsible Person [CR 8 (1)]. All Contractors' Responsible Persons and Health & Safety Representatives must attend the Principal Contractor's monthly health & safety meetings. The Principal Contractor's appointed supervisors must attend health & safety meetings.

The following topics must be tabled at meetings: management appointments; Sub-contractor legal issues; injuries and incidents; hazards and Risk Assessments (present and foreseen); method statements; planned inspections and registers/record keeping, leading and lagging indicators etc. The committee chairperson must sign off minutes.

8.4 Health and Safety Training

8.4.1 Induction

The Principal Contractor must ensure that all site personnel undergo a site-specific health & safety induction training session before any worker starts work. A record of attendance shall be kept in the health & safety file. The Principal Contractor will be required to induct all Contractors' employees. Workers must carry some sort of proof of inductions on their person.

8.4.2 Awareness

The Principal Contractor must ensure that, on site, periodic toolbox health & safety talks take place at least once every week. These talks should deal with risks relevant to the construction work at hand. Records of attendance must be kept in the health & safety file. Daily pre-task crew talks and DSTI's are to be conducted by the appointed CR 8(7) supervisors.

8.4.3 Competence

All competent persons must have the knowledge, experience, training, and qualifications specific to the work they have been appointed to supervise, control, and carry out. This must to be assessed on a regular basis e.g. training, evaluation, and periodic audits by the Client, progress meetings, etc. The Principal Contractor is responsible to ensure that competent Contractors are appointed tocarry out construction work.

8.5 Health & Safety Audits, Monitoring and Reporting

A monthly compliance audit will be done by Client (Construction Regulation 5.1(O), through their appointed safety agent.

OH&S Agent will be conducting the audit to comply with Construction Regulations to ensure that the Contractor has implemented, and is maintaining the agreed and approved OH&S Plan.

The Principal Contractor is obligated to conduct monthly audits on all Contractors appointed by him and keep audit reports in its health & safety file. Contractors have to audit their sub- Contractors and keep records of these audits in *their* health & safety files, made available on request.

8.6 Emergency Procedures

The Principal Contractor must prepare a detailed Emergency Procedure / Evacuation Plan prior to commencement on site. The procedure/plan must take into consideration the risks and potential incidents posed by work to be carried out on this project.

The procedure must detail the response plan including the following key elements:

- 8.6.1 List of key competent personnel;
- 8.6.2 Details of emergency services;
- 8.6.3 Actions or steps to be taken in the event of the specific types of emergencies;

Emergency procedure(s) shall include, but shall not be limited to: fire; chemical spills; injury to employees; damage to material/equipment/plant; use of hazardous substances; bomb threats;

major incidents/injuries; evacuation; etc. The Principal Contractor must advise the Client in writing forthwith, of any emergency situations, together with a record of action taken/action to be taken. A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc.) must be maintained and made available to site personnel.

8.7 First Aid Boxes and First Aid Equipment (GSR 3)

The Principal Contractor and all Contractors shall appoint First Aider(s) in writing. The Principal Contractor must appoint at least one First Aider who must be certificated. Copies of valid certificates are to be kept on site. The Principal Contractor must provide at least 1 (one) first aid box, adequately stocked at all times. All Contractors with more than 5 employees shall supply their own first aid box. Contractors with more than 10 employees must have their own trained, certified first aider on site at all times.

The Contingency Plan of the Contractor must include the arrangements for speedily and promptly transporting injured persons to a medical facility or securing emergency medical help to persons that may require it.

8.8 Personal Protective Equipment (PPE) and Clothing

The Principal Contractor and Contractors must ensure that all site workers are issued with and wear the appropriate PPE as indicated in their Risk Assessments.

The Principal Contractor and Contractors must make provision and keep adequate quantities of SABS approved PPE on site at all times according to their Risk Assessments. The above procedure applies to Contractors and their Sub-contractors, as they are all Employers in their own right and must therefore supply their own PPE.

Labour only Contractors appointed by the Principal Contractor become the responsibility of the Principal Contractor unless otherwise instructed. The Contractor must compile a detailed PPE matrix for the various disciplines and tasks.

8.9 Occupational Health and Safety (OHS) Signage

The Principal Contractor must provide adequate on-site OHS signage. Including but not limited to: 'no unauthorized entry', 'report to site office', direction to site office, 'beware of overhead work', 'hard hat area' – to be posted up at all site entrances. Signage must also be posted up on site in strategic locations e.g. access routes, stairways, entrances to structures and buildings, scaffolding, and other potential risk areas/operations such as exposed edges and openings and trenches/excavations where persons are at work. Health & safety signage must be well maintained including weekly inspections, cleaning, replacement and repair.

8.10 Public and Site Visitor Health & Safety

Public walkways and roadways must be kept clean and free of excessive construction materials so as to prevent a negative impact on the public. Roadways and walkways will have to be cleaned on a regular basis – daily inspections to be conducted by the Principal Contractor with action to be taken without delay.

Site visitors must be briefed on the hazards they may be exposed to as well as what measures are in place or should be taken to control these hazards. As per the Construction Regulations, a record

of these 'inductions' must be kept on site. It is advised that a visitor book with a site rules leaflet be kept at the gate or at reception/site office and all visitors to be directed to such point where they must read through the site safety information and sign the visitor book. All hoarding lay out drawing are to be strictly adhered to.

8.11 Minimum Environmental Requirements

All Contractors shall, comply with the following environmental protection procedures and requirements:

8.11.1 Water Use and Disposal:

- 8.11.1.1 No water hoses may be used on site unless they are fitted with nozzles that can prevent flow when not being used. Leaks in hoses are not permitted.
- 8.11.1.2 Water from fire hydrants may not be used without prior authorization from the Client.
- 8.11.1.3 Contaminated water may not be disposed of into the effluent drainage system without the prior authorization of the Engineer.
- 8.11.1.4 Contaminated water may not be discharged into storm water drains under any circumstances.
- 8.11.1.5 Contaminated water that cannot be disposed of via the site effluent system must be removed from site by a recognized waste disposal company and disposed of as per relevant legislation.

8.11.1 Storm Water Drains:

- 8.11.1.1 Nothing other than clean uncontaminated water may be discharged into the site storm water drains.
- 8.11.1.2 In the event of pollutants accidentally entering the storm water drains, the Supervisor shall be notified immediately and the removal of the contaminants from the storm water system and their proper disposal shall be commenced without delay.
- 8.11.1.3 In the event that contamination has reached the outside of the site, the appropriate local authorities shall be notified and full scale cleanup operations shall be commenced immediately.

8.11.2 Sewerage System

- 8.11.2.1 Nothing shall be discharged into the site sewerage systems except domestic waste water.
- 8.11.2.2 Authorization shall be obtained from the site manager before connecting any temporary toilet or ablution facilities into the site sewerage system.

8.11.3 Solid Waste Disposal

- 8.11.3.1 Contractors shall be responsible for the safe and proper disposal of solid waste generated by their activities.
- 8.11.3.2 Hazardous waste material shall only be disposed of via approved and recognized

waste disposal companies. Disposal certificates shall be obtained and copies keptin the safety file.

8.11.4 Discharges to Atmosphere

- 8.11.4.1 Nothing will be burnt on site.
- 8.11.4.2 Any process which causes dust will be assessed prior to the work starting and authorization to work obtained before starting work.

8.11.5 Reporting of Environmental Incidents

- 8.11.5.1 Environmental Incidents shall be reported without delay and at the latest before the end of the shift during which the incident occurred.
- 8.11.5.2 Spillages or incidents that could cause pollution outside of the boundaries of site shall be reported immediately in order for prompt preventative measures to prevent or reduce contamination of the environment.

8.12 Access to Site

The Principal Contractor or Site Manager will establish site access rules and implement and maintain these throughout the construction period. Access control must include the rule that non-employees will not be allowed on site unaccompanied.

Access to site will be restricted to persons working on site that attended a site specific safety induction BEFORE starting work on site. Safety induction cards must be issued and carried by all persons at all times while on site. Visitors to site must be inducted and accompanied by a safety representative during their visit on site.

8.12.1 Security on Site

Both the Client and the Principal Contractor have a duty in terms of the OHS Act 85/1993 to do all that is reasonably practicable to prevent members of the public and site visitors from being affected by the construction activities. The site must be suitably hoarded at all times with a limited number of access points which must be controlled to ensure safe access and egress.

The access points must be kept closed and must have the adequate notices displayed.

8.13 Hours of Work

Weekend and after-hours work may only be done with the prior approval of the Clients Agent. Approval shall be subject to:

- 8.13.1 Competent supervision being on site throughout the duration of the weekend/afterhours work.
- 8.13.2 The Contractor having a demonstrated history of adequate, problem free control and supervision of the work during normal working hours.
- 8.13.3 Have fatigue management plan is in place

8.14 Lighting

The Contractor is to ensure that wherever work is performed where the lighting conditions are less than the minimum requirement as defined in Environmental Regulation 3 and relative schedules, that this is supplemented with additional lighting capacity to ensure that all works contemplated can be conducted safely. Portable Lights must be fitted with a robust non- hygroscopic nonconducting handle and the lamp must be protected by a robust and weather proof guard. The cable lead-in must withstand rough handling. Registers must be maintained for each piece of equipment and findings of regular inspections must be entered into a register. Inspections must concentrate on plug, cord, switch and any obvious faults. When used in wet/damp conditions, it must be protected as for portable electrical tools, above.

9 PHYSICAL REQUIREMENTS

9.1 Erection of Hoarding

- All hoarding operations on site are to comply with the issued drawings.
- A detailed hoarding maintenance plan is to be drafted and submitted for approval.

9.2 Traffic Diversions

Provision by means of a method statement must be made for any traffic diversions to conduct your construction activities as well as any loading and off-loading of materials and waste.

The method statement must include a drawing indicating traffic signage and the like. Please refer to paragraph 4.9 – Permits, of this specification. Permission must be obtained from the local Metropolitan Council's Traffic Department to use the site entrance for heavy vehicles on site.

9.3 Edge Protection, Barricading and Penetrations (CR 10)

A Contractor must ensure that-

- All unprotected openings in floors, edges, slabs, hatchways and stairways are adequately guarded, fenced or barricaded or that similar means are used to safeguard any person from falling through such openings;
- No person is required to work in a fall risk position, unless such work is performed safely as contemplated in sub-regulation (2);
- A detailed Fall Rescue Plan will be drafted and implemented on site.
- The above-mentioned plan will be demonstrated on instruction of the Clients Agent.

Note: Danger tape does not represent barricading.

9.4 Housekeeping (CR 27)

The Contractor to ensure that:

- Housekeeping is continuously implemented
- Scrap, waste & debris are removed regularly
- Materials placed for use are placed safely and not allowed to accumulate or cause obstruction to free movement of pedestrian and vehicle traffic

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- Waste & debris not to be removed by disposing from heights, but by chute or crane
- Where practicable, construction sites are fenced off to prevent access of unauthorised persons
- An unimpeded work space is maintained for every employee
- Every workplace is kept clean, orderly and free of tools etc. that are not required for the work being done.
- As far as is practicable, every floor, walkway, stair, passage and gangway is kept in good state of repair, slip and trip, skid-free and free of obstruction, waste and materials
- The walls and roof of every indoor workplace is sound and leak-free
- Openings in floors, hatchways, stairways and open sides of floors or buildings are barricaded, fences, boarded over or provided with protection to prevent persons from falling.

9.5 Stacking & Storage (Construction Regulation 28)

- The Contractor/Employer must ensure that a competent person is appointed in writing to supervise all stacking and storage on a construction site.
- Adequate storage areas are provided and demarcated
- The base of any stack is level and capable of sustaining the weight exerted on it by the stack
- The items in the lower layers can support the weight exerted by the top layers.
- Cartons and other containers that may become unstable due to wet conditions are kept dry
- Pallets and containers are in good condition and no material is allowed to spill out.
- The height of any stack does not exceed 3X the base unless stepped back at least half the depth of a single container at least every fifth tier or the approval of an inspector has been obtained to build the stacks higher with the aid of an appropriate machine.
- The articles that make up a single tier are consistently of the same size, shape and mass
- Structures for supporting stacks are structurally sound and able to support the mass of the stack
- No articles are removed from the bottom of the stack, but from the top tier first
- anybody climbing onto a stack can and does so safely and that the stack is sufficiently stable to support him/her
- Stacks that are in danger of collapsing are broken down and restacked
- Stability of stacks are not threatened by vehicles or other moving plant and machinery
- Stacks are built in a header and stretcher fashion and that corners are securely bonded
- Persons climbing onto stacks do not approach unguarded moving machinery or electrical installations

9.6 Fire Extinguishers and Fire Fighting Equipment (CR 29)

The Principal Contractor and relevant Contractors shall provide adequate, regularly serviced firefighting equipment located at strategic points on site, specific to the classes of fire likely to occur. The appropriate notices and signs must be posted up as required. A minimum of four 9kg dry chemical powder fire extinguishers must be available in and around the site office establishment and stores. Wherever 'hot work' is taking place, additional fire extinguishers must be on hand. Contractors are responsible for ensuring compliance with hot work procedures and must be in possession of method statements detailing the safe working procedures. 'Hot work' includes all work that generates a spark or flame and may therefore result in a fire.

9.7 Fall Protection – Fall Risk Positions (Construction regulation 10.)

A Contractor must—

- Designate a competent person to be responsible for the preparation of a fall protection plan; ensure that the fall protection plan contemplated in paragraph (a) is implemented, amended where and when necessary and maintained as required; and take steps to ensure continued adherence to the fall protection plan.
- A fall protection plan contemplated in sub regulation (1), must include—
- A Risk Assessment of all work carried out from a fall risk position and the procedures and methods used to address all the risks identified per location;
- The processes for the evaluation of the employees' medical fitness necessary to work at a fall risk position and the records thereof;
- A programme for the training of employees working from a fall risk position and the records thereof;
- The procedure addressing the inspection, testing and maintenance of all fall protection equipment; and
- A rescue plan detailing the necessary procedure, personnel and suitable equipment required to affect a rescue of a person in the event of a fall incident to ensure that the rescue procedure is implemented immediately following the incident.

A Contractor must ensure that a construction manager appointed under regulation 8(1) is in possession of the most recently updated version of the Fall Protection Plan. Fall prevention and fall arrest equipment are —

- Approved as suitable and of sufficient strength for the purpose for which they are being used, having regard to the work being carried out and the load, including any person, they are intended to bear; and
- Securely attached to a structure or plant, and the structure or plant and the means of attachment thereto is suitable and of sufficient strength and stability for the purpose of safely supporting the equipment and any person who could fall; and
- Fall arrest equipment is used only where it is not reasonably practicable to use fall prevention equipment.

9.8 Scaffolding (CR 16 / SANS 10085 - 1)

The Principal Contractor must ensure that all scaffolding operations are carried out under the supervision of a competent person and that all erectors, team leaders and inspectors are competent to carry out their work. The Principal Contractor must ensure that scaffolding when used and erected, complies with the safety standards as per SANS 10085-1:2004

9.9 Roof work

Where roof work is being performed on a construction site, the Contractor must ensure that; in addition to the requirements set out in sub-regulations (2) and (4), it is indicated in the fall protection plan that—

- The roof work has been properly planned;
- The roof erectors are competent to carry out the work;
- No employee is permitted to work on roofs during inclement weather conditions or if any conditions are hazardous to the health and safety of the employee;

- All covers to openings and fragile material are of sufficient strength to withstand any imposed loads;
- Suitable and sufficient platforms, coverings or other similar means of support have been provided to be used in such a way that the weight of any person passing across or working on or from fragile material is supported; and
- Suitable and sufficient guard-rails, barriers and toe-boards or other similar means of protection prevent, as far as is reasonably practicable, the fall of any person, material or equipment.
- That no work is carried out during inclement weather (Strong wind and rain)
- What safety measures will be implemented, to ensure the safety of roof workers as well as persons working below the roof work (due to removal/placement of roof tiles)

9.10 Severe Weather Plan

- 9.10.1 When high wind creates a hazard to craftsmen or work being performed, i.e., instability in elevated areas, limited visibility due to dust or particles in the air, unmanageable materials, etc., supervision will stop work activities, re-assign work and area, properly store and secure material which might blow away, injure or damage, lower/tie down crane booms and obtain further instruction from Site Management.
- 9.10.2 When rain creates a hazard to craftsmen on work being performed, i.e., un-stable footing conditions due to slippery structural steel, muddy and flooded work environments, unstable trenches or excavations, poor visibility due to rain or eye protection, supervision will stop specific work due to hazard, re-assign work duties and/or areas, and obtain further instructions from Project Management.
- 9.10.3 All scaffolding equipment and lifting equipment to be inspected and proclaimed safe to use or rectified as to be safe to use after any inclement weather. Signage must be posted to indicate the status of the scaffolding.

9.11 Structures (Construction Regulation 11)

The Contractor will ensure that in terms of the Construction Regulations

- (1) A Contractor must ensure that—
 - (a) All reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work;
 - (b) No structure or part of a structure is loaded in a manner which would render it unsafe; and
 - (c) All drawings pertaining to the design of the relevant structure are kept on site and are available on request to an inspector, other Contractors, the Client and the Client's Agent or employee.
- (2) An owner of a structure must ensure that—
 - (a) Inspections of that structure are carried out periodically by competent persons in order to render the structure safe for continued use;
 - (b) That the inspections contemplated in paragraph (a) are carried out at least once every six months for the first two years and thereafter yearly;
 - (c) The structure is maintained in such a manner that it remains safe for continued use;
 - (d) The records of inspections and maintenance are kept and made available on request to an inspector.

That the structure on/in, which works, are to be performed has been inspected by a certified structural engineer declaring the structure to be safe for construction, demolition or renovations work processes.

Steps are taken to ensure that no structure becomes unstable or poses a threat of collapse due to demolition and construction work being performed on it, or in the vicinity of it. No structure is overloaded to the extent where it becomes unsafe He/she has received from the designer the following information:

- Information on known or anticipated hazards relating to the construction/demolition work and the relevant information required for the safe execution of the construction/demolition work
- A geo-scientific report (where applicable)
- The loading the structure is designed to bear
- The methods and sequence of the construction/demolition process
- All drawings pertaining to the design are on site and available for inspection
- The structural engineer shall carry out inspections at appropriate and sufficient intervals of the construction work involving the design of the relevant structure to ensure compliance with the design and record the results of these inspections in writing. These records shall be maintained on the relevant site safety files as per Construction regulation 11(2)(d).

10 PLANT, MACHINERY AND EQUIPMENT

10.1 Construction Vehicles & Mobile Plant (CR 23)

"Construction Plant" includes all types of plant including but not limited to, cranes, piling rigs, excavators, construction vehicles, compaction plant, batch plants and lifting equipment.

The Principal Contractor must ensure that such plant complies with the requirements of the OHS Act, Construction Regulations 2014 and any manufacturer's specifications. The Principal Contractor and all relevant Contractors must inspect and keep records of inspections on construction vehicles and mobile plant used on site. Only authorised/competent persons in the possession of the necessary training certificates and in possession of a certificate of medical fitness may operate construction vehicles and mobile plant. Appropriate PPE and clothing must be provided and maintained in good condition at all times. Reverse alarms must be installed on construction vehicles i.e. trucks, digger loaders, etc. Vehicles and pedestrian traffic must be safely separated, preventing any unnecessary interfacing.

All construction vehicles and mobile plant has to be tagged and a full-service history of thesevehicles and plant must be available on site.

Any vehicle or mobile plant using any public road must be roadworthy and carry a certificate proving this, likewise any operator of such construction vehicle or mobile plant will have to carry the necessary driver's license.

10.2. Bulk Earthworks and the Haulage of ground

Site preparation for earthworks shall be designed, planned and executed in accordance with engineers' design.

The effect of earthworks on neighbouring structures, services, etc., shall be analysed (for both shortand long-term effects) and detrimental effects shall be avoided or appropriate measures taken to safeguard the integrity of the item in question. Similarly, the effects of dewatering or disturbance of the existing geohydrological conditions as a result of earthworks on neighbouring structures, services, etc., shall be taken into account.

Examples are:

- Change in horizontal earth pressure on foundations (especially piled foundations) may turn out to be unacceptable
- Damage to foundations and structures as a result of differential settlements caused by lowering and raising of ground water level, placement of fill or other surcharge excavation and horizontal soil movement
- Damage to foundations and structures by vibrations caused by earth moving equipment and heavy traffic.
- Care shall be taken in removing/planting trees and shrubs which could affect the water table, which in turn may affect adjacent structures.

10.3 Pressure Equipment and Gas Bottles (PE Regulations and CR 23)

The Principal Contractor and all relevant Contractors shall comply with the Pressure Equipment Regulations, including:

- Providing competency and awareness training to the operators/users;
- Providing the relevant PPE and clothing;
- Inspect equipment regularly (every month) and keep records of inspections;
- Providing appropriate firefighting equipment (Fire Extinguishers) on hand;
- Oxygen and acetylene bottles must be secured in an upright position, must not show signs of corrosion or damage and must have flash back arrestors fitted on both bottle and torch.

10.4 Hired Plant and Machinery

The Principal Contractor shall ensure that any hired plant and machinery used on site is safe for use and complies with the minimum legislated requirements. The necessary requirements as stipulated by the OHS Act and Construction Regulations 2014 shall apply.

The Principal Contractor shall ensure that operators hired with machinery are competent and that certificates are kept on site in the health & safety file.

Any load test requirements and inspections in terms of legislation must be complied with and copies of load test certificates and inspections must be kept in the health & safety file. All relevant Contractors must ensure the same.

10.5 Formwork and Support Work

- The Principal/sub- Contractor to ensure that all form- & support work operations are carried out under the supervision of a competent person who has been appointed in writing.
- The Principal/Sub-I Contractor to ensure that all form / support work drawings pertaining to their design is kept on site and are available if / when requested.
- The Principal/Sub- Contractor to ensure that all form /support work structures are inspected by a

competent person (appointed in writing), immediately before, during & after the placement of concrete and the result of such inspection recorded in a register.

- The Principal /Sub-Contractor to ensure that form- / support work is erected in such a way that oncompletion of the deck, a solid handrail is also in place for the safety of persons who has to carry out work on the deck. I.e. steel fixers etc.
- Equipment and material should be handled and transported in such a manner that noise is limited as much as possible i.e. the throwing of equipment from heights will not be tolerated

10.6 Lifting Machines, Tackle and Lifting Operations/ Tower Cranes (DMR 18 / CR 22)

The Principal Contractor and all Contractors shall ensure that lifting machinery and tackle are inspected before use and thereafter in accordance with the Driven Machinery Regulations and the Construction Regulations (Regulation 22).

There must be a competent lifting machines inspector (registered with the Department of Labour, Gazette number 27305) and a competent lifting tackle inspector who must inspect the equipment, taking into account that:

- All lifting machinery and tackle has a safe working load clearly indicated;
- Regular inspection and servicing is carried out (3-monthly inspections and records for tackle and 6-monthly inspections and records for lifting machines);
- Records are kept of inspections and of service certificates;
- There is proper supervision in terms of guiding the loads that includes a trained banks man to direct lifting operations and check lifting tackle and attachments daily;
- Rigging of loads to be done in accordance with acceptable safe work practices;
- Tower crane bases have been designed and finally approved by an engineer before loading such base;
- Annual load test certificates for lifting machines are in place;
- Tower cranes are fitted with wind speed meters and audible alarm/warning lights, crane hooters, and that the crane's load chart is posted up in the crane cab;
- The operators are certified to operate the specific machine (valid certificate to be on site);
- The operators are physically and psychologically fit to work and are in possession of a medical certificate of fitness that is to be available on site.

The Principal Contractor must ensure that safe lifting operations are adhered to. This must include the following:

- Pallets of bricks being lifted by a tower crane or mobile crane may only be lifted when secured in a brick cage or brick net, securing the entire load of bricks to the crane hook;
- Mortar bins, waste bins and any other receptacle must be deemed to be a lifting attachment and must be designed to carry the required load. Such attachments must be on register and inspected every 3 months by the competent lifting tackle inspector;
- Temporary Works may only be lifted by using purpose designed and manufactured lifting tackle eight-gauge wire and the like is prohibited;
- A competent banks man must be in control of all rigging, slinging and lifting operations and must wear a high visibility vest, be in possession of a two-way radio and make use of a whistle, warning persons of overhead loads. The crane operator may only take commands and signals from the designated bank men;
- Guide ropes (tag lines) must be used when lifting large shutters, long bundles of re-bar and other similar loads. This must be detailed in the Principal Contractor's and Contractors' fall prevention plans.

• Lifting operations must be re-evaluated once wind speeds reach 40 km/h unless otherwise specified by the lifting machine manufacturer.

10.7 Ladders (GSR 13)

The Principal Contractor must ensure that all ladders are inspected daily with monthly records kept; in good safe working order; the correct height for the task; extend at least 1m above the landing; fastened and secured; and at a safe angle. Stepladders must be safe for use, must be the correct height for the task and the top two rungs may not be used. Records of inspections must be kept in a register on site. Contractors using their own ladders must ensure the same.

10.8 Driven Machinery

The Principal Contractor and relevant Contractors must ensure compliance with the Driven Machinery Regulations, which includes carrying out risk assessments on the machines, inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE and relevant clothing, and training those who use machinery.

10.9 Electrical Installations and Portable Electrical Tools (CR 24)

The Client will ensure as far as possible that the Principal Contractor is made aware of the positions of all electrical power lines. The Principal Contractor must notify the Client should it not be sure of the location of any electrical power lines. The Principal Contractor must comply with the Electrical Installation Regulations, the Electrical Machinery Regulations and the Construction Regulations (CR 24).

The Principal Contractor must keep a copy of the Certificate of Compliance (COC) for its electrical power supply. A revised COC is required whenever the installation is altered or changed in any way. All temporary electrical installations must be inspected at least weekly by a competent person appointed in writing.

Portable electrical tools and equipment must be visually inspected daily. Records of inspections must be kept on site (monthly inspection records to be kept after a competent inspector has carried out the monthly check).

10.10 Electrical & Mechanical Lockout

A system of control shall be established in order that no unauthorized person can energize a circuit, open a valve, or activate a machine on which people are working or doing maintenance, even if equipment, plant or machinery is out of commission for any period, thus eliminating injuries and damage to people and equipment as far as is reasonably practicable.

Physical/mechanical lock-out systems shall be part of the safety system and included in training. Lockouts shall be tagged and the system tested before commencing with any work or repairs.

10.11 Cantilever Loading Platforms

Should these platforms be used, they must carry a design drawing issued by a competent person

indicating the maximum safe workload and the erection and maintenance procedures. The platform must be complete with guardrails and toe boards and must carry a notice indicating the maximum safe workload. Access routes under the loading platforms must be diverted and persons must be protected from the potential material and objects falling. These platforms must be placed on a register and inspected on a weekly basis.

10.12 Waste Chutes

The disposal of rubble and other waste from elevated positions may only be conducted under controlled conditions. Waste chutes must be secured to a scaffold structure, which must in turn be secured to the main building. A person must be designated to take control of waste chute operations, which must include the inspection of the chute on a daily basis. Waste must discharge into an enclosed area (ready fence panels to be used), eliminating the risk of persons being struck by waste material.

10.13 Explosive Actuated Fastening Devices (CR 21)

- (1) No Contractor may use or permit any person to use an explosive actuated fastening device, unless—
 - The user is provided with and uses suitable protective equipment;
 - The user is trained in the operation, maintenance and use of such a device;
 - The explosive actuated fastening device is provided with a protective guard around the muzzle end, which effectively confines any flying fragments or particles; and
 - The firing mechanism is so designed that the explosive actuated fastening device, will not function unless
 - It is held against the surface with a force of at least twice its weight; and
 - The angle of inclination of the barrel to the work surface is not more than 15 degrees from a right angle.

A Contractor must ensure that -

- 10.13.1 Only cartridges suited for the relevant explosive actuated fastening device, and the work to be performed, are used;
- 10.13.2 An explosive actuated fastening device is cleaned and examined daily before use and as often as may be necessary for its safe operation by a competent person who has been appointed for that purpose;
- 10.13.3 The safety devices of an explosive actuated fastening device are in good working order prior to use;
- 10.13.4 When not in use, an explosive actuated fastening device and its cartridges are locked up in a safe place, which is inaccessible to unauthorized persons;
- 10.13.5 An explosive actuated fastening device is not stored in a loaded condition;
- 10.13.6 A warning notice is displayed in a conspicuous manner in the immediate vicinity wherever an explosive actuated fastening device is used; and
- 10.13.7 The issuing and collection of cartridges and nails or studs of an explosive actuated fastening device are—
 - 10.13.7.1 Controlled and done in writing by a person having been appointed in writing for that purpose; and
 - 10.13.7.2 Recorded in a register by a competent person and that the recipient has accordingly signed for the receipt thereof as well as the returning of any spent and unspent cartridges.

11. OCCUPATIONAL HEALTH

11.1 Industrial Hygiene (exposure to physical and chemical stress factors)

Exposure of workers to occupational health hazards and risks is very common in any work environment, especially in construction. Occupational exposure is a major problem and all Contractors must ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards. Prevent inhalation, ingestion, and adsorption through the skin of hazardous chemical substances.

11.2 Noise Induced Hearing Loss (GNR 307 7th March 2003) refers

Occupational noise emitted by construction machinery and power tools must be controlled as far as possible by implementing engineering solutions such as noise dampening, regular maintenance, servicing and inspection, screening off the noise, and reducing the number of persons exposed. It is generally accepted that all employees on a construction site will be exposed to varying degrees of noise.

In view of this, the Contractor shall ensure full compliance with the above-mentioned regulation; furthermore, provide proof of the relative management process. The Contractor is advised to pay particular attention to section 12 of the "Noise-Induced Hearing Loss Regulation"

11.3 Ergonomics

Ergonomics is the study of how workers relate to their workstations. We advise the Principal Contractor and Contractors to take this into consideration when conducting risk assessments, thereby improving the worker-task relationship, which will in turn improve productivity and reduce chronic conditions such as back strains, joint problems and mental fatigue, amongst others.

11.4 Hazardous Chemical Substances (HCS)

The Principal Contractor must ensure that the use, transport, and storage of HCS are carried out as prescribed in the HCS Regulations. The Principal Contractor and Contractors must ensure that all hazardous chemicals on site have Material Safety Data Sheets (MSDS) on site and the users are made aware of the hazards and precautions that need to be taken when using the chemicals. The First Aiders must be made aware of the MSDS's and how to treat HCS incidents appropriately. Copies of the MSDS's must be kept in the first aid box and in the store. All containers must be clearly labeled. Flammable substances must be stored separately, away from other materials, and in a well-ventilated area (appropriate cross ventilation). A competent person should be appointed to be in control of this portfolio. Fuel storage tanks must conform to the general environmental legislation and Environmental Management Plan. The necessary safety signage must to be posted up on the tanks – 'no naked flames', 'no smoking'. Two 9kg DCP fire extinguishers must be placed near to fuel tanks, but not within 5m of the tanks. These extinguishers are over and above the minimum four required for the offices and stores.

11.5 Construction Employees' Facilities (CR 30)

The Principal Contractor must supply sufficient toilets (1 toilet per 30 workers), clean, lockable

changing facilities, hand washing facilities, soap, toilet paper, and hand drying material. Waste bins must be strategically placed around site and emptied regularly. Workers must not be exposed to hazardous materials/substances while eating and must be provided with adequate, sheltered eating areas complete with benches and tables. Stores may not double up a change rooms or mess areas.

11.6 Alcohol and other Drugs

No alcohol and drugs will be allowed on site. No person may be under the influence of alcohol or any drug while on the construction site. Any person on prescription medication must inform his/her superior, who shall in turn report this to the Principal Contractor forthwith. Any person suffering from any illness/condition that may have a negative effect on his/her /anyone else's health or safety performance must report this to his/her superior. Any person suspected of being under the influence of alcohol or other drugs must be sent home immediately.

11.7 Reporting on occupational health issues

As per the incident reporting and investigation requirements, it is essential that the Contractor advise the Client on any condition or occurrence where the health of any worker has been affected. Where an occupational health concern has been raised such incident is to be investigated as any other incident.

11.8 Occupational health medicals

Although not a requirement, Contractors are advised to consider the possibility of providing for both entry and exit medicals for all employees. It is however the responsibility of the Principal Contractor to ensure that where legislation requires a medical fitness certificate that such medicals are conducted and records kept in the site safety file. Medicals must be issued as per Annexure 3 document.

12. ANNEXURES

- Annexure A List of possible legal appointments and assignments
- Annexure B Safe Work Method Statements, minimum requirement
- Annexure C Compliance submissions in terms of the Specification
- Annexure D Sample site safety file index

Annexure A - Assignment of responsible persons

The Principal Contractor must make all management appointments. Below is a list of possible appointments for this project. (Further appointments could become necessary as the project progresses).

No	OHS Act Ref.	Appointment	Name of Appointee
1	Section 16	Overall Authority and Accountability	
2	Section 16(2)	Assignment of Duties	
3	CR 8(1)	Construction Manager	
4	CR 8(2)	Assistant Construction Manager	
5	CR 8(7)	Construction Supervisor	
6	CR 8(8)	Assistant Construction Supervisor	
7	GMR 2(1)	Supervision of Machinery (not for construction sites)	
8	Section 17	Health and Safety Representative	
9	CR 16(2)	Scaffold Erector, Inspector (separate appointments)	
10	CR 13(1)	Excavation Inspector	
11	GSR 3(4)	First Aiders	
12	CR 29(h)	Fire Equipment Inspector	
13	EMR 10(4)	Portable Electrical Tool Inspector	
14	CR 19(8)(a)	Materials Hoist Inspector	
15	DMR 18(5)	Lifting Machinery and Equipment Inspector	
16	DMR 18(6)	Lifting Tackle Inspector	
17	GSR 13(a)	Ladder Inspector	
18	HCS Reg	Hazardous Chemical Substances Inspector	
19	CR 21(2)(b)	Explosive Actuated Fastening Device Inspector	
20	GSR 3	Emergency Procedure Coordinator	
23	CR 23(j)	Construction Vehicle and Mobile Plant Inspector	
24	CR24(e)	Electrical Installation and Machinery Responsible Person	
25	CR 28(a)	Stacking and Storage Supervisor	
29	DMR 18(11)	Banksman	

CR	=	Construction	Construction Regulations		
EMR	=	Electrical Ma	Electrical Machinery Regulations		
DMR	=	Driven Machi	inery Regulatior	IS	
GMR	=	General Mac	General Machinery Regulations		
ER	=	Environment	Environmental Regulations		
GSR	=	General Safe	General Safety Regulations		
HCS	=	Hazardous Regulations	Chemical	Substances	

Annexure B - Safe work procedures/method statements required

The hazardous operations listed below have been identified by the Client and must be managed by the Principal Contractor in the form of preparation of method statements / SWP's before such work begins. The onus remains on the Principal Contractor to conduct Risk Assessments and compile method statements for hazardous tasks (Construction Regulations). Contractors appointed by the Principal Contractor will be required to conduct the necessary Risk Assessments and method statements and forward these to the Principal Contractor before such work begins.

Due to the fact that various structures will be constructed with varying engineering designs, structure specific method statements will be required.

No.	METHOD STATEMENT / SWP	DATE APROVED	DATE LAST REVIEWED
1	Demolition, method statements and demolition plans including the safety thereof		
2	Scaffolding Erection, alteration, dismantling Work thereon Inspections – when and who		
3	Lifting machines and related equip. Erection of equipment, operational procedures (slinging, control of various lifting operations)		
4	Roof work installation/removal of roof tiles, including worker safety methods and procedures while conducting this work		
5	Temporary barricading of exposed edges andelevated walkways (concrete floors, stairways and other)		
6	Movement of construction vehicles and mobile plant across/on public roadways and walkways (including cleaning procedures and road signage)		
7	Temporary Works Erection and dismantling Inspections – when and who. Edge protection strategy		
8	Major concrete work		
9	Cladding, sheeting and other structural steelwork including hot works		
10	Brickwork		
11	Traffic Management		

Annexure C - Compliance submission requirements

The Principal Contractor and Contractors must comply with [where applicable] but not be limited to the requirements tabled below: Prove compliance at audits conducted by the safety agent.

OHS Act	Subject	Requirements
Section/Regulation		
Construction.	Notification of intent to	Department of Labour notified
Regulation 4	commence	Copy of Notice available on Site
	Construction work	
General Admin.	Copy of OH&S Act (Act	Updated copy of Act & Regulations on site.
Regulation 4	85 of 1993)	Readily available for perusal by employees.
COID Act	Registration with	Written proof of registration/Letter of good standing
Section 80	Compensation Insurer	available on site
Construction.	H&S Specification	H&S Spec received from Client and/or its Agent on its behalf
Regulation 5		OH&S programme developed & updated regularly
Section 8(2)(d)	Hazard Identification &	Hazard Identification carried out/Recorded Risk
Construction.	Risk Assessment	Assessment and – Plan drawn up/Updated RA
Regulation 9		Plan available on Site
		Employees/Sub-Contractors informed/trained
Section 16(2)	Assigned duties	Responsibility of complying with the OH&S Act assigned to
	(Managers)	other person/s by CEO.
Construction	Designation of Person	Competent person appointed in writing as
Regulations 8(1)	Responsible for	Construction Manager with job description
	Managing of Site	
Construction	Designation of Assistant	Competent person appointed in writing as
Regulations 8(2)	for above	Assistant Construction Manager with job description
Construction.	Designation of Person	Competent person appointed in writing as
Regulation 8(7)	Responsible on Site	Construction Supervisor with job description
Construction.	Designation of Assistant	Competent person appointed in writing as
Regulation 8(8)	for above	Assistant Construction Supervisor with job description
Section 17 & 18	Designation of Health &	More than 20 employees - one H&S Representative, one
General	Safety Representatives	additional H&S Rep. for each 50 employees or part thereof.
Administrative		Designation in writing, period and area of responsibility
Regulations 6 & 7		specified in terms of GAR 6 & 7
		Meaningful H&S Rep. reports.
		Reports actioned by Management.
Section 19 & 20 General	Health & Safety	H&S Committee/s established.
Administrative	Committee/s	All H&S Reps shall be members of H&S Committees
Regulations 5		Additional members are appointed in writing.
		Meetings held monthly, Minutes kept. Actioned by Management.
		Actioned by Management.

Section 2	4	&	Reporting	of	Incident Reporting Procedure displayed.
General	Admi	in.	Incidents (Dept.	of	All incidents in terms of Sect. 24 are reported to the Provincial
Regulation	8 CO	ID	Labour)		Director, Department of Labour, within 3 days. (Annexure
Act Sect.38,			1)(WCL 1or 2) and to the Client and/or its Agent on its behalf		
& 41			Copies of Reports available on		
					SiteRecord of First Aid injuries
					kept

General Admin. Regulation 9	Investigation and Recording of Incidents	All injuries which resulted in the person receiving medical treatmentother than first aid, recorded and investigated by investigator designated in writing.
Regulation 9	Incidents	Copies of Reports (Annexure 1) available on SiteTabled at H&S Committee meeting
Construction. Regulation	Fall Prevention &Protection	Competent person appointed to draw up and supervise the Fall Protection Plan
10		Proof of appointees competence available on
		Site Risk Assessment carried out for work at heights
		Fall Protection Plan drawn up/updated and workers
		trainedAvailable on Site
Construction.	Roof work	Competent person appointed to plan & supervise Roof
Regulation		work.Proof of appointees competence available on Site
10(5)		Risk Assessment carried out and workers
		trainedRoof work Plan drawn up/updated Roof work inspect before each shift. Inspection register kept
		Employees medically examined for physical & psychological
		fitness.Written proof on site
Construction.	Structures	Information re. the structure being erected received
Regulation		from the Designer including:
11		- Geo-science technical report where relevant
		- The design loading of the structure
		- The methods & sequence of construction
		- Anticipated dangers/hazards/special measures to
		constructsafely Risk Assessment carried out
		Method statement drawn up All above available on
		Site
Construction.	Scaffolding	Competent persons appointed in writing to:
Regulation		 Erect scaffolding (Scaffold Erector/s)
16		- Inspect Scaffolding weekly and after inclement weather
		(ScaffoldInspector/s)
		Written Proof of Competence of above appointees
		available onSite Risk Assessment carried out
		Inspected weekly/after bad weather. Inspection register/s kept
Construction.	Materials Hoist	Competent person appointed in writing to inspect the
Regulation		MaterialHoist
19		Written Proof of Competence of above appointee available on
		Site. Materials Hoist to be inspected weekly by a competent
		person. Inspections register kept.
Construction.	Explosive	Competent person appointed to control the issue of the
Regulation	Actuated	Explosive Actuated Fastening Devices & cartridges and the
21	fastening	service, maintenance and cleaning. Register kept of above
	devices	Empty cartridge cases/nails/fixing bolts returns
		recorded Cleaned daily after use Work areas are
		demarcated.

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Construction.	Lifting	Competent person appointed in writing to inspect Lifting	
Regulation 22/	Machines	Machines& Equipment	
Driven Machinery	Equipment	Written Proof of Competence of above appointee available on	
Regulations 18 &		Site.Lifting tackle identified/numbered	
19		Register kept for Lifting Tackle	
		Log Book kept for each individual Crane	
		Inspection: Lifting tackle(slings/ropes/chain slings etc.) -	
		daily orbefore every new application	

Construction.	Increation 9	Competent person appointed in writing to
Regulation	Inspection & Maintenance of	Competent person appointed in writing to
U	Electrical Installation &	inspect/test theinstallation and equipment.
24/Electrical		Written Proof of Competence of above appointee available on
Machinery	Equipment (including	Site.Inspections:
Regulations 9 &	portable electrical	- Electrical Installation & equipment inspected after
10/ Electrical	tools)	installation, after alterations and quarterly. Inspection
Installation		Registers kept Portable electric tools, electric lights and
Regulations		extension leads must beuniquely identified and numbered. Weekly visual inspection by User/Issuer/Storeman. Register
		kept.
Construction.	Stacking &	Competent Person/s with specific knowledge and experience
Regulation	Storage	designated to supervise all Stacking & Storage
28/	Supervisor.	Written Proof of Competence of above appointee available on
General Safety		Site
Regulation		
8(1)(a)	Designation of a Dama s	Demons (a with an arifin lungwood at a start and a start at the start of
Construction.	Designation of a Person	Person/s with specific knowledge and experience designated
Regulation	to Co-ordinate	to co- ordinate emergency contingency planning and
29/	Emergency Planning	execution and fire prevention measures
	And Fire Protection	Emergency Evacuation Plan developed:
al Regulation		- Drilled/Practiced
9		- Plan & Records of Drills/Practices available on
		SiteFire Risk Assessment carried out
		All Fire Extinguishing Equipment identified and on
		register.Inspected weekly. Inspection Register kept Serviced annually
General	First Aid	Every workplace provided with sufficient number of First
Safety		Aid boxes. (Required where 5 persons or more are
Regulation 3		employed) First Aid freely available
		Equipment as per the list in the OH&S Act.
		One qualified First Aider appointed for every 50 employees.
		(Required where more than 10 persons are employed)
		List of First Aid Officials and Certificates
		Name of person/s in charge of First Aid box/es displayed.
		Location of First Aid box/es clearly indicated.
		Signs instructing employees to report all Injuries/illness
		includingfirst aid injuries
General	Personal Safety	Items of PSE prescribed/use
Safety	Equipment	enforcedRecords of Issue kept
Regulation 2	(PSE)	Undertaking by Employee to use/wear PSE
		PSE remain property of Employer, not to be removed from premises GSR 2(4)

General	Inspection & Use of	Competent Person/s with specific knowledge and experience
Safety	Welding/Flame	designated to Inspect Electric Arc, Gas Welding and Flame
Regulation 9	CuttingEquipment	Cutting Equipment
		Written Proof of Competence of above appointee available
		on SiteAll new vessels checked for leaks, leaking vessels NOT
		taken into stock but returned to supplier immediately
		Equipment identified/numbered and entered into a register
		Equipment inspected weekly. Inspection Register kept
Hazardous	Control of Storage	Competent Person/s with specific knowledge and experience
Chemical	& Usage of HCS	designated to Control the Storage & Usage of HCS (including
Substances (HCS)	and Flammables	Flammables)
Regulations		Risk Assessment carried out
Constructio		Register of HCS kept/used on Site
nRegulation		
25		

Pressure Equipment Regulations	Pressure Equipment	Competent Person/s with specific knowledge and experience designated to supervise the use, storage, maintenance, statutory inspections & testing of VUP's Written Proof of Competence of above appointee available on Site Risk Assessment carried out Register of Pressure Equipment on Site	
Construction. Regulation 23	Construction Vehicles &Earth Moving Equipment	Operators/Drivers appointed to: - Carry out a daily inspection prior to use - Drive the vehicle/plant that he/she is competent tooperate/drive Written Proof of Competence of above appointee available on Site. Medical Report available for each operator available on siteRecord of Daily inspections kept	
General Safety Regulation 13A	Inspection of Ladders	Competent person appointed in writing to inspect Ladders Ladders inspected at arrival on site and weekly thereafter.Inspections register kept	

Annexure D - Typical safety file index and registers

Please note: Site File contents may vary depending on the type of trade. (Typical Site File Contents)

- 1. SHE Policy
- 2. Notification of Construction Work
- 3. Client Safety Spec
- 4. SHE Plan
- 5. Environmental Management Plan
- 6. Organogram
- 7. Mandatory Appointments
- 8. General Appointments
- 9. Drivers Licenses and Certificates of Training
- 10. Medical Certificates & Psychiatric Evaluations
- 11. Method Statements
- 12. Risk Assessments
- 13. Risk Assessment Review Plan
- 14. Proof of Risk Assessment Training
- 15. Safe Works Procedures
- 16. Fall Protection Plan
- 17. Proof of Fall Protection Training
- 18. Demolition Plan
- 19. MSDS
- 20. Emergency Procedure
- 21. Emergency Tel List
- 22. Accident and Incident Procedures
- 23. Annexure 1 Forms
- 24. Severe Weather Plan
- 25. Heat Stress Procedure
- 26. Lock Out Procedure
- 27. Equipment list and Test Certifications
- 28. Minutes Safety Meetings
- 29. Audits and Notifications
- 30. WCA Certificate of Good Standing & Claim Forms
- 31. Site Rules
- 32. Inductions
- 33. Toolbox Talks
- 34. Copy of the Act
- 35. Copy of Construction Regulation

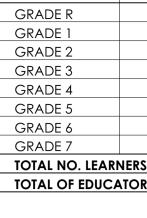


PART C4 SITE INFORMATION



TABLE 2B: RENOVATION REFURBISHMENT	AREA	TABLE
BLOCK EX-ET2: 4 SEAT ENVIRO-LOO	22.00 m ²	
BLOCK EX-ET3: 2 SEAT ENVIRO-LOO	22.00 m ²	GRADE
BLOCK EX-ET4: 4 SEAT ENVIRO-LOO	22.00 m ²	GRADE
		GRADE
TOTAL AREA : EXISTING BUILDINGS FOR REFURB	66.00m ²	GRADE
		GRADE
		GRADE
TABLE 2E: CLASSROOMS SUMMARY		GRADE
TOTAL NUMBER FOR ALL CURRENTLY PROVIDED CLASSROOMS	00	GRADE
TOTAL NUMBER FOR ALL REFURBISHED CLASSROOMS	00	TOTAL N

TABLE 2E: CLASSROOMS SUMMARY	
TOTAL NUMBER FOR ALL CURRENTLY PROVIDED CLASSROOMS	00
TOTAL NUMBER FOR ALL REFURBISHED CLASSROOMS	00
TOTAL NUMBER FOR ALL NEW CLASSROOMS	10



	BOYS	GIRLS	TOTAL			
GRADE R	18	35	53			
GRADE 1	21	28	49			
GRADE 2	24	23	47			
GRADE 3	24	31	55			
GRADE 4	22	22	44			
GRADE 5						
GRADE 6	26	25	<u>49</u> 51			
GRADE 7	25	25	50			
TOTAL NO. LEAR	NERS		398			
TOTAL OF EDUC			12			
TABLE 2A: DE	MOLITION WO	RKS	AREA			
	5 CLASSROOM B		380.00 m ²			
BLOCK EX-C2: 0	2 CLASSROOM B	LOCK	60.00 m ²			
BLOCK EX-C3: 0	1 CLASSROOM B	LOCK	60.00 m ²			
BLOCK EX-C4: 0	5 CLASSROOM B	LOCK	380.00 m ²			
BLOCK EX-ET1: A	ABLUTION BLOCK		48.00 m ²			
BLOCK EX-ET5: A	ABLUTION BLOCK		22.00 m ²			
BLOCK EX-MC1	: MOBILE CLASSE	ROOM	50.00 m			
BLOCK EX-MC2	: MOBILE CLASSE	ROOM	50.00 m			
BLOCK EX-MC3	: MOBILE CLASSE	ROOM	50.00 m			
BLOCK EX-MC4	: MOBILE CLASSE	ROOM	50.00 m			
BLOCK EX-MC5	: MOBILE CLASSE	ROOM	50.00 m			
BLOCK EX-MC6	: MOBILE CLASSE	ROOM	50.00 m			
BLOCK EX-MC7	: MOBILE CLASSE	ROOM	50.00 m			
BLOCK EX-MC8	: MOBILE CLASSE	ROOM	50.00 m			
BLOCK EX-MC9	: MOBILE CLASSE	ROOM	50.00 m			
BLOCK EX-MC1	0 : MOBILE CLASS	SROOM	50.00 m ²			
BLOCK EX-MC1	1 : MOBILE CLASS	SROOM	50.00 m			
TOTAL AREA OF	DEMOLITION		1450.00 m			
TABLE 2C: NE			AREA			
	INISTRATION BLC		304.00 m			
	CLASSROOM BL		370.00 m			
	CLASSROOM BL		370.00 m			
	CLASSROOM BL		370.00 m			
	CLASSROOM BL		260.00 m			
	EAT ENVIRO-LOC		22.00 m			
BLOCK X2 - 04 S	EAT ENVIRO-LOC)	22.00 m			
<u>BLOCK X3 - 04 S</u>	EAT WATERBORN	IE TOILET - STAFF	22.00 m			
<u>BLOCK Z - 10 SE</u>	AT ENVIRO-LOO		68.00 m			
	NEW BUILDINGS		 1808.00 m ²			

X 2617200

X 2617300

	BOYS	GIRLS	TOTAL				
GRADE R	18	35	53				
GRADE 1	21	28	49				
GRADE 2	24	23	47				
GRADE 3	24	31	55				
GRADE 4	22	22	44				
GRADE 5	49						
GRADE 6							
GRADE 7	25	25	<u>51</u> 50				
IOTAL NO. LEA			398				
IOTAL OF EDUC			12				
TABLE 2A: DI	EMOLITION WO	RKS	AREA				
	05 CLASSROOM E		380.00 m ²				
	02 CLASSROOM E		60.00 m ²				
	01 CLASSROOM E		60.00 m ²				
	05 CLASSROOM E		380.00 m ²				
	ABLUTION BLOCK		48.00 m ²				
	ABLUTION BLOCK		22.00 m ²				
BLOCK EX-MC	1 : MOBILE CLASSE	ROOM	50.00 m ²				
	2 : MOBILE CLASS		50.00 m ²				
	3 : MOBILE CLASS		50.00 m ²				
	4 : MOBILE CLASS		50.00 m ²				
	5 : MOBILE CLASS		50.00 m ²				
	6 : MOBILE CLASS		50.00 m ²				
	7 : MOBILE CLASS		50.00 m ²				
	8 : MOBILE CLASS		50.00 m ²				
	9 : MOBILE CLASS		50.00 m ²				
BLOCK EX-MC	10 : MOBILE CLAS	Sroom	50.00 m ²				
BLOCK EX-MC	11 : MOBILE CLAS	Sroom	50.00 m ²				
TOTAL AREA O	F DEMOLITION		1450.00 m				
TABLE 2C: N	EW WORKS		AREA				
BLOCK A - ADI	MINISTRATION BLC	DCK	304.00 m ²				
BLOCK PJ 01 -	4 CLASSROOM BL	.OCK	370.00 m ²				
BLOCK PJ 02 -	4 CLASSROOM BL	.OCK	370.00 m ²				
BLOCK PJ 03 -	4 CLASSROOM BL	.OCK	370.00 m ²				
BLOCK G3 A -	2 CLASSROOM BL	.OCK	260.00 m ²				
BLOCK X1 - 04	SEAT ENVIRO-LOC)	22.00 m ²				
BLOCK X2 - 04	SEAT ENVIRO-LOC		22.00 m ²				
BLOCK X3 - 04	SEAT WATERBORN	IE TOILET - STAFF	22.00 m ²				
BLOCK Z - 10 S	EAT ENVIRO-LOO		68.00 m ²				
			1909 00				
	F NEW BUILDINGS		1808.00 m ²				

TABLE 2D: FUTURE WORKS	
BLOCK B - NUTRITION CENTER	183.36 m ²
BLOCK F - GATE HOUSE	13.70 m ²
BLOCK L & CL: LIBRARY & COMPUTER LAB	253.00 m ²
BLOCK MPC: MULTI-PURPOSE CLASSROOM	104.00 m ²
BLOCK PSL: SCIENCE LABORATORY	91.00 m ²
BLOCK PH 01: 03 CLASSROOM BLOCK	287.00 m ²
BLOCK PG 04 - 2 CLASSROOM BLOCK	185.00 m ²
BLOCK PG 05 - 2 CLASSROOM BLOCK	185.00 m ²
BLOCK PG 06 - 2 CLASSROOM BLOCK	185.00 m ²
BLOCK PG 07 - 2 CLASSROOM BLOCK	185.00 m ²
TOTAL AREA : FUTURE BUILDINGS	1672.00 m ²

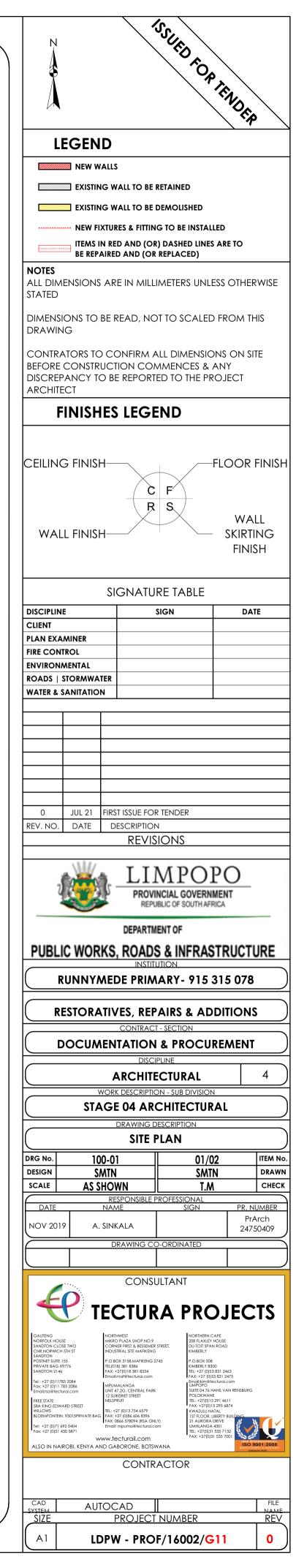
SANS 10400 CLIMATIC ZONE	ZONE
SANS 10400 BUILDING CLASSIFICATION	A
TOTAL AREA OF EXISTING BUILDINGS	1678.00m
TOTAL AREA OF BUILDINGS TO BE DEMOLISHED	1058.00 m
TOTAL AREA OF PROPOSED WALKWAYS	2893.31 m
TOTAL AREA OF DRIVEWAY & PARKING	1056.89 m
TOTAL PARKING PROVISION	21 BAY
TOTAL PLOT AREA	19,715.8 m
TOTAL PLOT PERIMETER	683.92 m
PLOT AREA COVERAGE	7.66 %
TREE	
ТАР	<u> </u>
5000 mm BUILDING LINE	
BENCHMARK	\square
ELECTRICAL POLE	
BOREHOLE	
BOREHOLE BUILDINGS TO BE RENOVATED	
BOREHOLE BUILDINGS TO BE RENOVATED BUILDING TO BE DEMOLISHED	
BOREHOLE BUILDINGS TO BE RENOVATED	
BOREHOLE BUILDINGS TO BE RENOVATED BUILDING TO BE DEMOLISHED PROPOSED BUILDING PAVED PEDESTRIAN WALKWAY	
BOREHOLE BUILDINGS TO BE RENOVATED BUILDING TO BE DEMOLISHED PROPOSED BUILDING PAVED PEDESTRIAN WALKWAY PAVED DRIVE-WAY	
BOREHOLE BUILDINGS TO BE RENOVATED BUILDING TO BE DEMOLISHED PROPOSED BUILDING PAVED PEDESTRIAN WALKWAY PAVED DRIVE-WAY FUTURE CONCRETE WALKWAY	
BOREHOLE BUILDINGS TO BE RENOVATED BUILDING TO BE DEMOLISHED PROPOSED BUILDING PAVED PEDESTRIAN WALKWAY PAVED DRIVE-WAY FUTURE CONCRETE WALKWAY TRANSFORMER	
BOREHOLE BUILDINGS TO BE RENOVATED BUILDING TO BE DEMOLISHED PROPOSED BUILDING PAVED PEDESTRIAN WALKWAY PAVED DRIVE-WAY FUTURE CONCRETE WALKWAY	

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BIN

BLOCK P.

E	BUILDINGS	1672.





C4.1 DRAWINGS

FLOORS:

F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery) 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.

F2: PORCELAIN TILES -MATT

600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPET TILES

500mm x 500mm , 100% PFX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54324 on wira test and ISO body test at less than 2Kv at 25% RH on static electricity. Colour and pattern to architects approval.

F4: CEMENT SAND SCREED

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

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

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

F6: GRANOLITHIC FINISH

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

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINLY SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self -Levelled Smooth Screed glued with conducive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

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

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

"Ex 75mm x 20mm Moulded Hardwood Skirting" to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred coners with screws and plugs at centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant beading. The skirting to be vanished with 3No. coats of egg shell clear vanish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

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

S3: CEMENT SAND SCREED

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

WALL FINISHES:

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

R2: EMULSION (PVA) PAINT – FULL HEIGHT 2 no. coats of PVA matt finish emulsion paint to SABS 1586 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681

grade1, in accordance to manufacturer's instructions.

R3:ALKYD (ENAMEL) PAINT 2 no. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant plaster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of; 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5:CERAMIC WALL TILES - FULL HEIGHT

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

CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

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

C2: FIBRE CEMENT BOARDS (H-JOINTED)

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

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

1200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, 2150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

"Emulsion (PVA) Paint on Skimmed Plastered Slab" 3No. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

ROOF COVERING AND INSULATION:

ER1: EMBOSSED ROOFING SHEET (TWO SIDES)

Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel

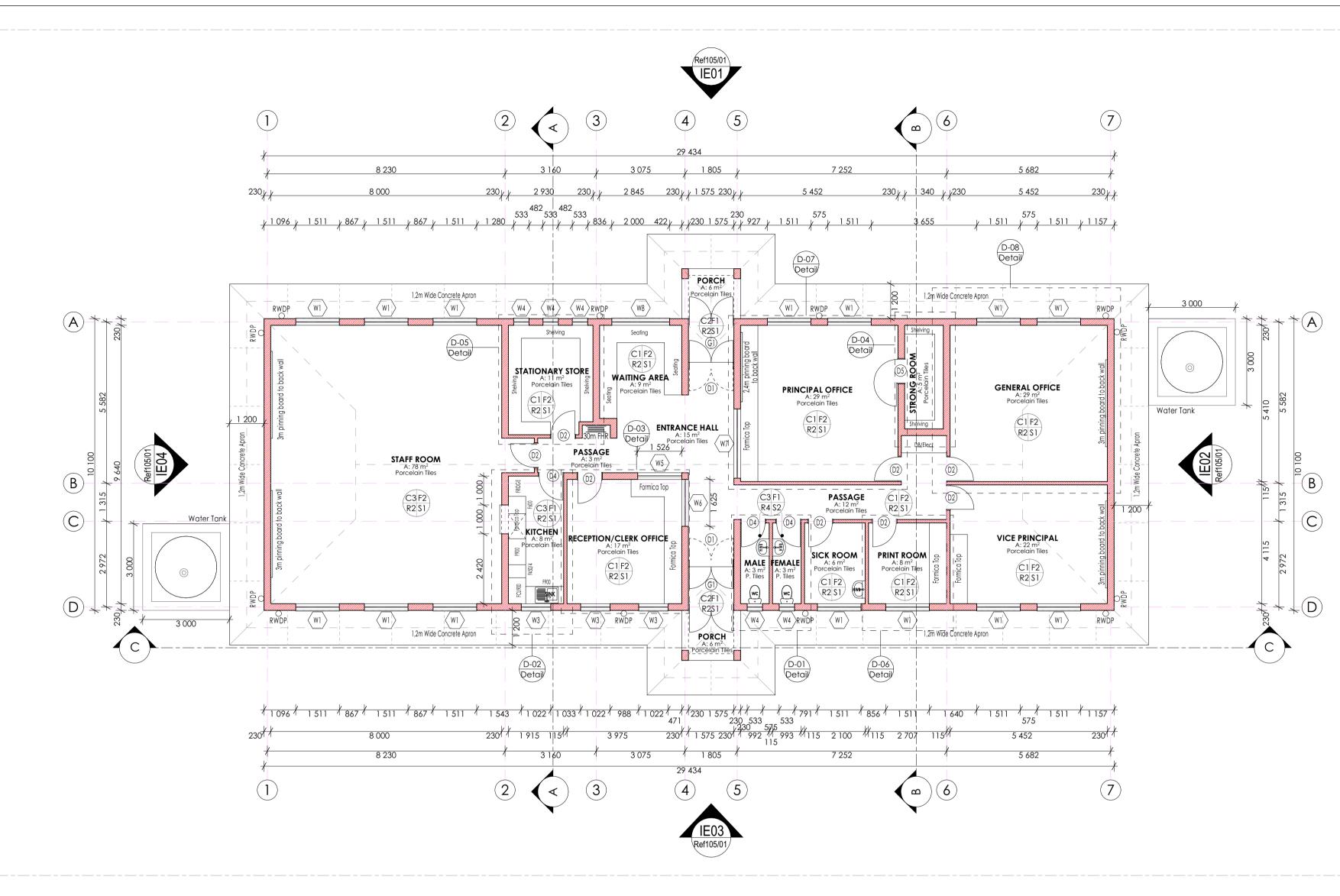
complying with ISQ 550 (3T). The profile shall have three trapezoidal ribs at 203mm centers giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofsheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instructions.

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

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

Downpipe: 110 x110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class Z275 Galvanising To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-taping screws To Manufacturer Installation Instructions.

<u>Fascia board:</u> 250 x 10 mm Fibre- Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

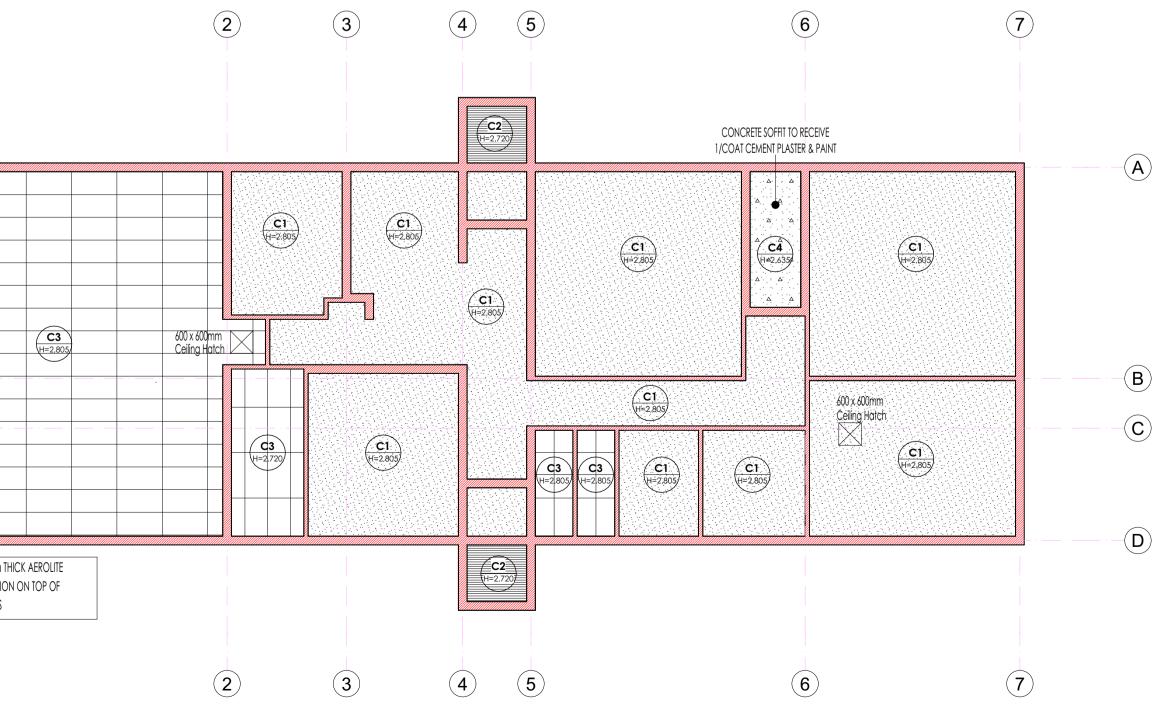


FLOOR PLAN:



CEILING PLAN: Scale 1:100.

scale 1:1



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SCHEDULE.

EILING LEGEND:

CEILING TYPE **C1** GYPSUM BOARDS AS PER FINISHES SCHEDULE.

CEILING TYPE **C2** FIBRE-CEMENT BOARDS AS PER FINISHES SCHEDULE.

CEILING TYPE **C3** PATENT ACOUSTIC

TILES PER FINISHES SCHEDULE. CEILING TYPE **C4** EMULSION PAINT ON SKIMMED SOFFIT AS PER FINISHES

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FLOORS: F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)

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.

F2: PORCELAIN TILES -MATT

600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPET TILES

500mm x 500mm , 100% PFX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54324 on wira test and ISO body test at less than 2Kv at 25% RH on static electricity. Colour and pattern to architects approval.

F4: CEMENT SAND SCREED

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

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

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

F6: GRANOLITHIC FINISH

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

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINLY SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self -Levelled Smooth Screed glued with conducive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

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

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

"Ex 75mm x 20mm Moulded Hardwood Skirting" to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred coners with screws and plugs at centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant beading. The skirting to be vanished with 3No. coats of egg shell clear vanish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

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

S3: CEMENT SAND SCREED

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

WALL FINISHES:

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

R2: EMULSION (PVA) PAINT – FULL HEIGHT 2 no. coats of PVA matt finish emulsion paint to SABS 1586 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681

grade1, in accordance to manufacturer's instructions.

R3:ALKYD (ENAMEL) PAINT 2 no. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant plaster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of; 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5:CERAMIC WALL TILES - FULL HEIGHT

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

CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

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

C2: FIBRE CEMENT BOARDS (H-JOINTED)

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

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

1200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, Z150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

"Emulsion (PVA) Paint on Skimmed Plastered Slab" 3No. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

ROOF COVERING AND INSULATION:

ER1: EMBOSSED ROOFING SHEET (TWO SIDES)

Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISQ 550 (31). The profile shall have three trapezoidal ribs at 203mm centers giving a net cover of 406mm. The rib height shall

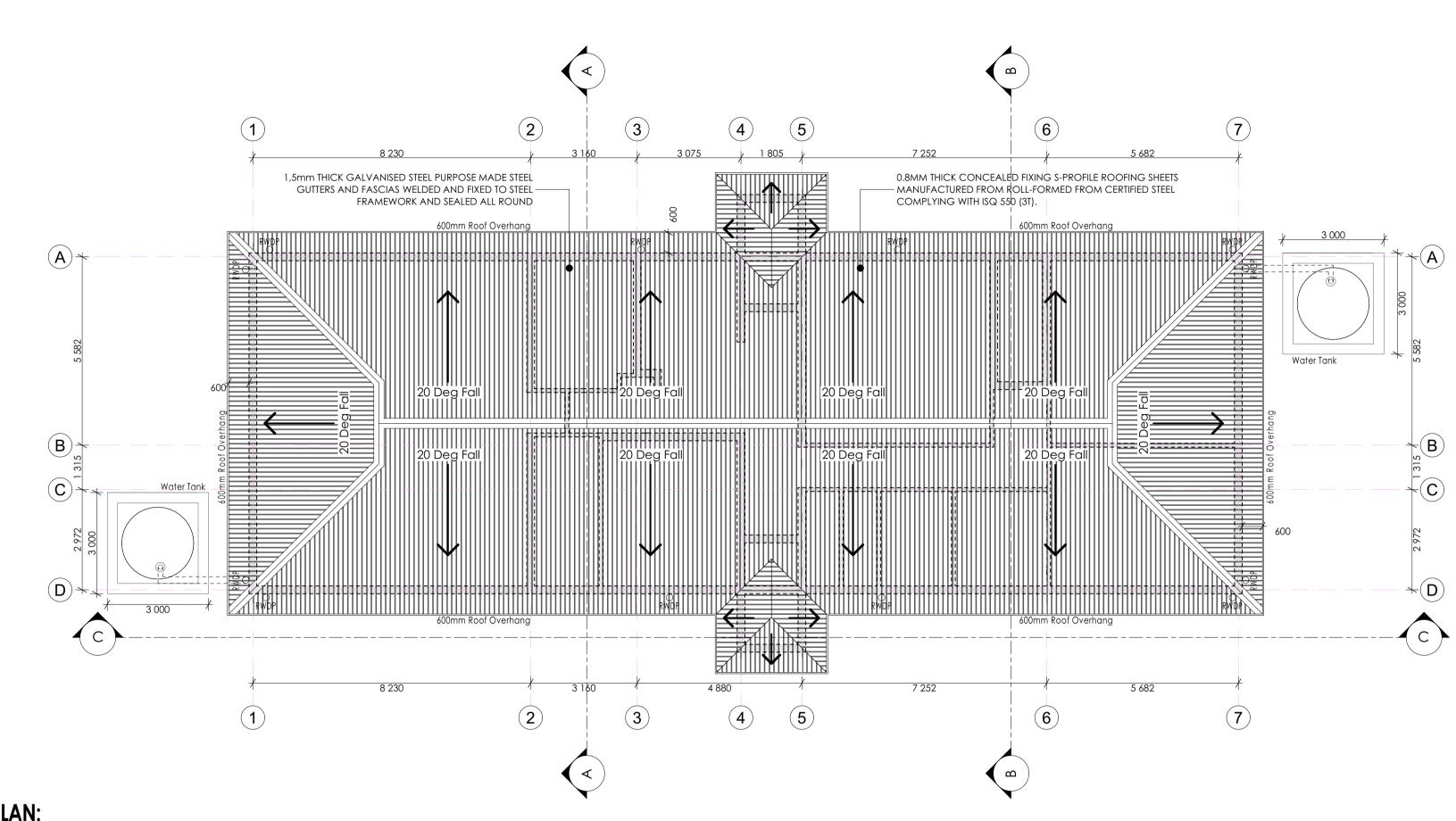
be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofsheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instructions.

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

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

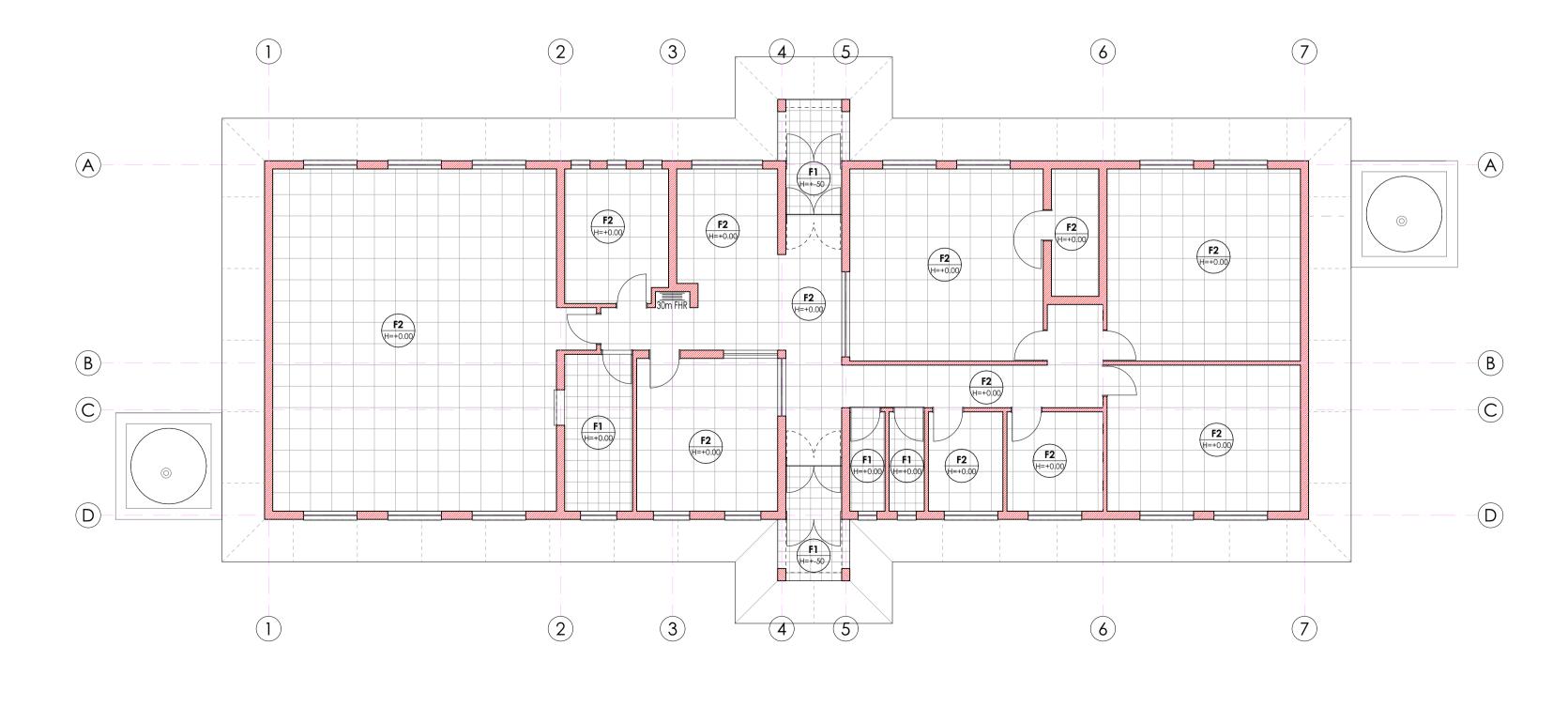
Downpipe: 110 x110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class Z275 Galvanising To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-taping screws To Manufacturer Installation Instructions.

<u>Fascia board:</u> 250 x 10 mm Fibre- Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



ROOF PLAN:

Scale 1:100.



FLOOR FINISHES PLAN: Scale 1:100.

FLOOR	FINISHES	LEGEND:



CERAMIC TILES TYPE F1 AS PER FINIS SCHEDULE.	SI
PORCELAIN TILES TYPE F2 AS PER FINISHES SCHEDULE.	

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FLOORS: F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)

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.

F2: PORCELAIN TILES -MATT

600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPET TILES

500mm x 500mm , 100% PFX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire ratina, and DIN 54324 on wira test and ISO body test at less than 2Kv at 25% RH on static electricity. Colour and pattern to architects approval.

F4: CEMENT SAND SCREED

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

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

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

F6: GRANOLITHIC FINISH

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

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINLY SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self -Levelled Smooth Screed glued with conducive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

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

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

"Ex 75mm x 20mm Moulded Hardwood Skirting" to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred coners with screws and plugs at centres not exceeding 600mm , and fixed with a 19mm x 19mm quadrant beading. The skirting to be vanished with 3No. coats of egg shell clear vanish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

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

S3: CEMENT SAND SCREED

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

WALL FINISHES: R1: FACE BRICK

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

R2: EMULSION (PVA) PAINT - FULL HEIGHT no. coats of PVA matt finish emulsion paint to SABS 1586 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681

grade1, in accordance to manufacturer's instructions.

R3:ALKYD (ENAMEL) PAINT no. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant plaster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

ombination of; 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5:CERAMIC WALL TILES - FULL HEIGHT

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

CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

GypCeil Classic" gypsum plasterboard ceilingor EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Ecospecifier listing) fixed to timber brandering installed at maximum 300mm centers using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centers. Apply . Gyproc RhinoTape to all joints and skim he ceiling using Gyproc RhinoLite.

C2: FIBRE CEMENT BOARDS (H-JOINTED)

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

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, Z150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

Emulsion (PVA) Paint on Skimmed Plastered Slab" 3No. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

ROOF COVERING AND INSULATION:

ER1: EMBOSSED ROOFING SHEET (TWO SIDES)

Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISQ 550 (3T). The profile shall have three trapezoidal ribs at 203mm centers giving a net cover of 406mm. The rib height shall

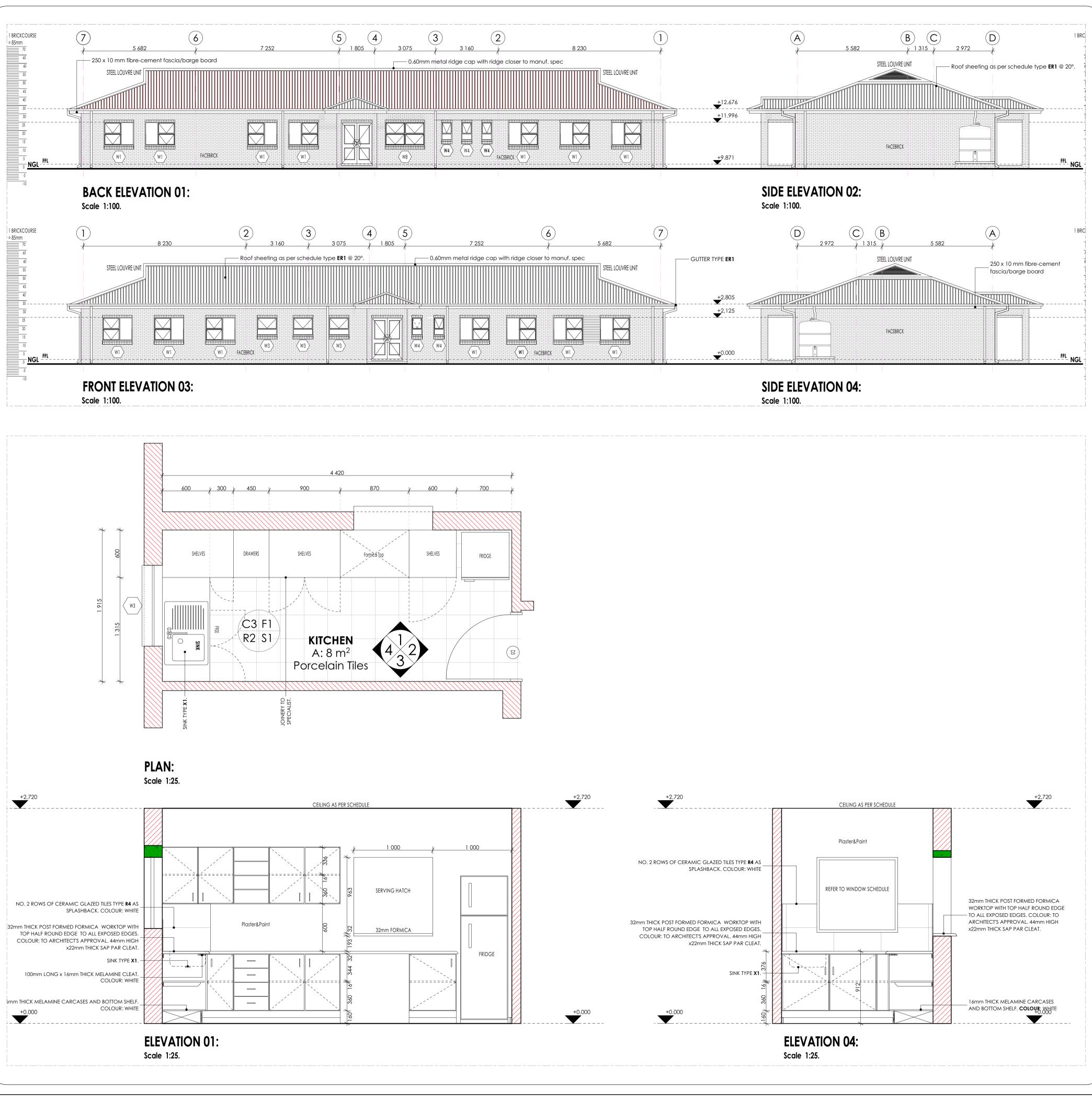
be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofsheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instructions.

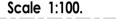
Insulation: SHALL EITHER BE: 1: where there are acoustic ceilings susspeded board, a heavy duty "Aluminium sisalation foil" shall be installed AND 2: where the steel work is exposed, a 50mm "FactoryBoard" manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm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

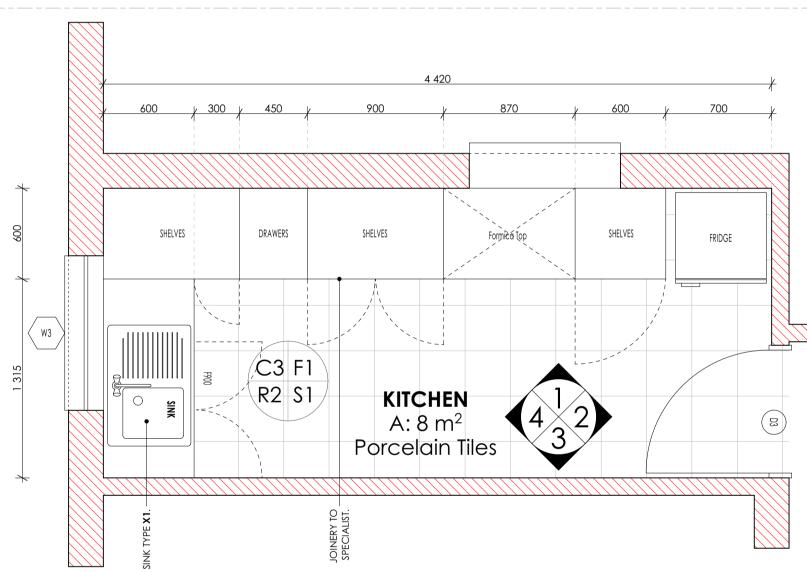
Galvanised Steel (G) Gutter: 150mm Wide x 100mm Deep x 0.6mm Eaves Gutter of Commercial Grade Steel With Class Z275 Galvanising To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Fascia Board Together with standard accessories discharging into Rainwater Downpipes.

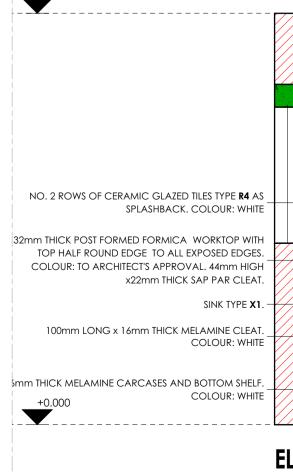
Downpipe: 110 x110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class Z275 Galvanising To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-taping screws To Manufacturer Installation Instructions.

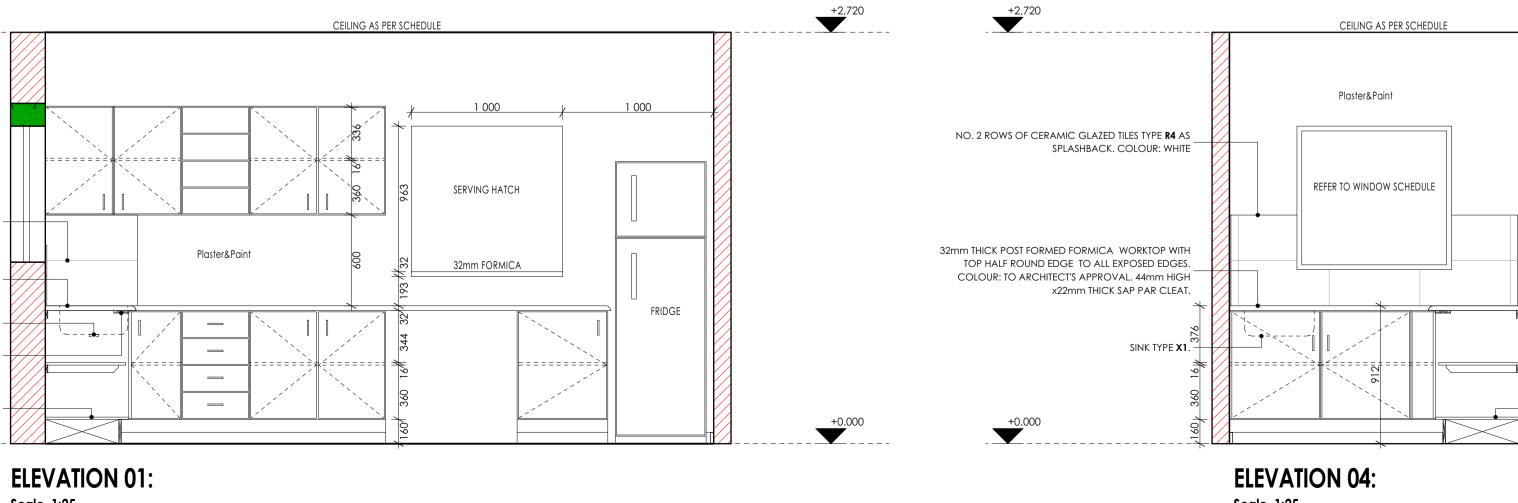
Fascia board: 250 x 10 mm Fibre- Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.













FLOORS:

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

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.

F2: PORCELAIN TILES -MATT

600 x 600 x10mm thick matt porcelain tile to comply with \$AB\$ 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPET TILES

500mm x 500mm , 100% PFX staple fibre carpet files To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire ratina, and DIN 54324 on wira test and ISO body test at less than 2Kv at 25% RH on static electricity. Colour and pattern to architects approval.

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

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

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

F6: GRANOLITHIC FINISH

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

7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINLY SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self -Levelled Smooth Screed glued with conducive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

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

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

"Ex 75mm x 20mm Moulded Hardwood Skirting" to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and nitred coners with screws and plugs at centres not exceeding 600mm , and fixed with a 19mm x 19mm quadrant beading. The skirting to be anished with 3No. coats of egg shell clear vanish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

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

S3: CEMENT SAND SCREED

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

WALL FINISHES:

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

R2: EMULSION (PVA) PAINT - FULL HEIGHT no. coats of PVA matt finish emulsion paint to SABS 1586 applied on plastered surface primed and with 1 no. coat undercoat to SABS 68

grade1, in accordance to manufacturer's instructions.

R3:ALKYD (ENAMEL) PAINT no. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant laster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

ombination of; 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

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CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

GypCeil Classic" gypsum plasterboard ceilingor EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, 30 9001 & 14001 certification, recycled paper content, Ecospecifier listing) fixed to timber brandering installed at maximum 300mm centers using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centers. Apply . Gyproc RhinoTape to all joints and skim he ceiling using Gyproc RhinoLite.

C2: FIBRE CEMENT BOARDS (H-JOINTED)

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

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200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured to place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, Z150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 entres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed o the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

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complying with ISQ 550 (3T). The profile shall have three trapezoidal ribs at 203mm centers giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofsheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instructions.

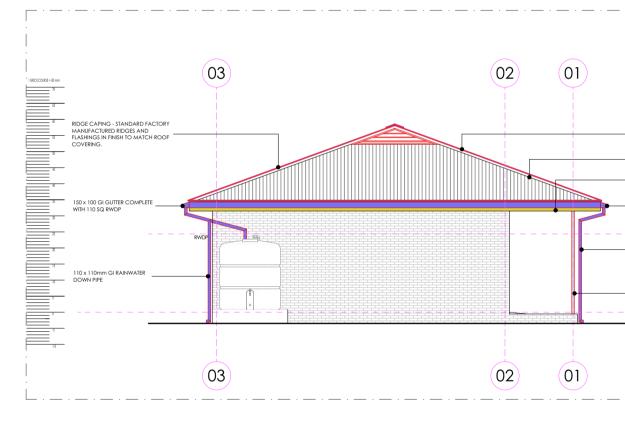
Insulation: SHALL EITHER BE: 1: where there are acoustic ceilings susspeded board, a heavy duty "Aluminium sisalation foil" shall be installed AND 2: where the steel work is exposed, a 50mm "FactoryBoard" manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm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

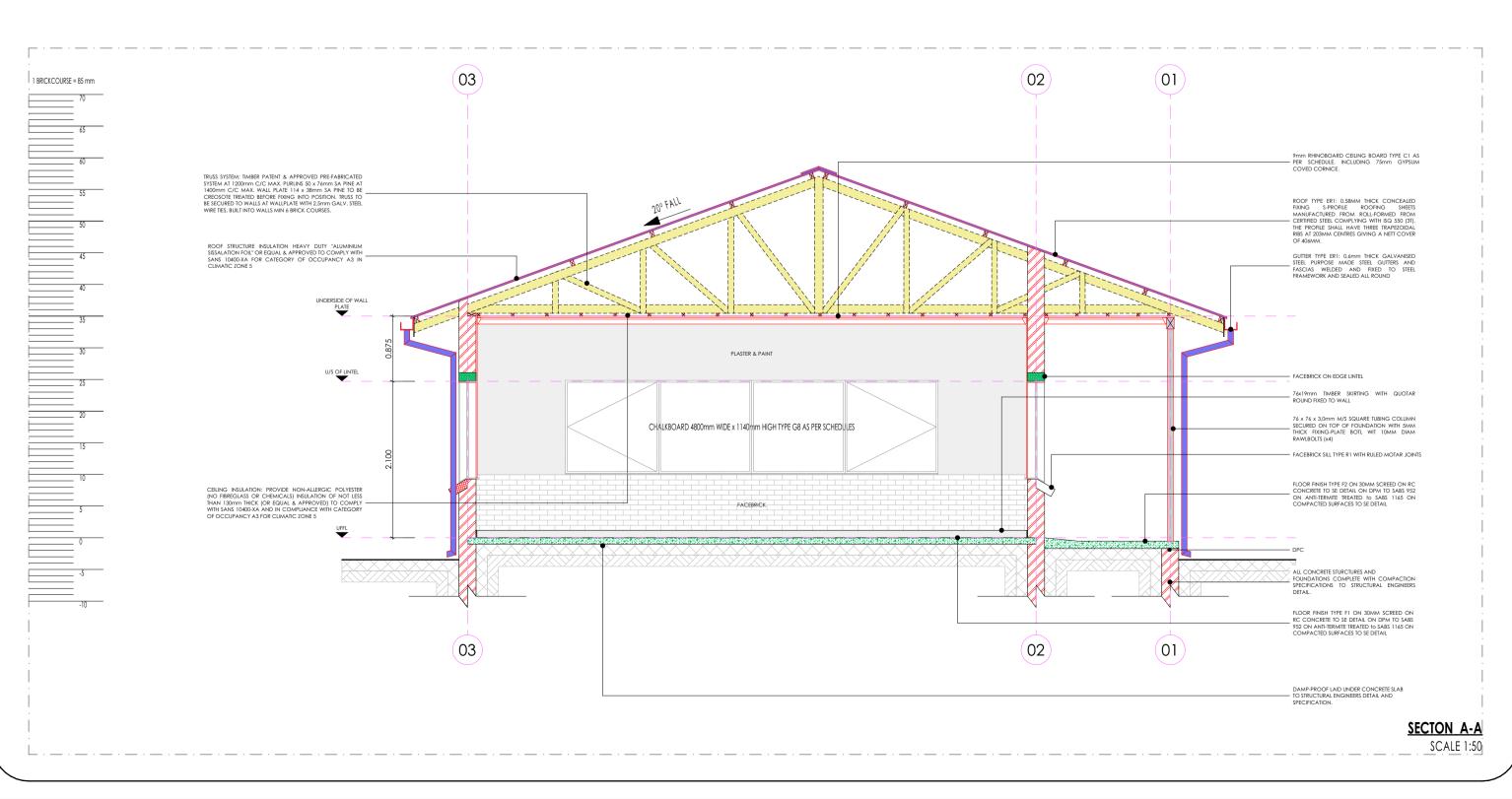
Galvanised Steel (G) Gutter: 150mm Wide x 100mm Deep x 0.6mm Eaves Gutter of Commercial Grade Steel With Class Z275 Galvanising To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Fascia Board Together with standard accessories discharging into Rainwater Downpipes.

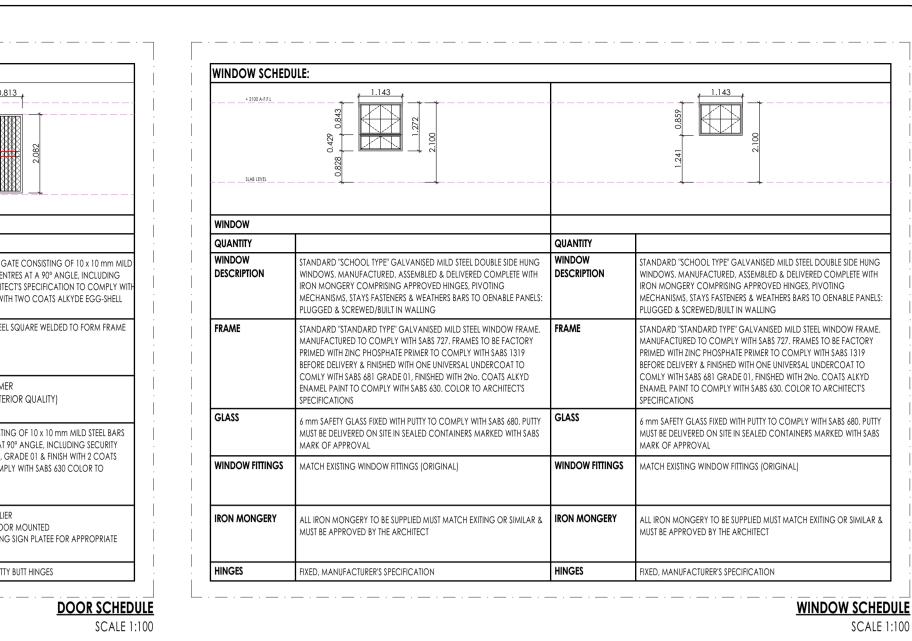
Downpipe: 110 x110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class Z275 Galvanising To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-taping screws To Manufacturer Installation Instructions.

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

DOOR SCHEDULE			
	+ 2100 A-F.F.L		, 0.81
EXTERIOR DOOR		BURGLAR DOOR (SINC	GLE)
QUANTITY		QUANTITY	
DOOR DESCRIPTION	813 x 2032 x 44 mm THICK HEAVY DUTY EXTERIOR QUALIY HORIZONTALLY SLATTED DOUBLE SIDED SALIGNA DOOR FITTED TO COMPLY WITH SABS 545 EXTERIOR GRADE OR LATEST REVISION.	DOOR DESCRIPTION	PAINTED GALVANISED MILD STEEL GA STEEL BARS PLACED AT 100 mm CENT SECURITY MESH. COLOR TO ARCHITE(SABS 681, GRADE 01 AND FINISH WITH PAINT TO COMPLY WITH SABS 630
FRAME	STANDARD 1.6 mm IN DOUBLE REBATE PRESSED MILD STEEL DOOR FRAME WITH WALL MATCHING PROFILE IN COMPLIANCE WITH SABS 1129 OR THE LATEST VERSION COMPLETE WITH LUGS & FIXTURES TO ACCOMODATE 840 x 1910 DOOR LEAF	FRAME	50 x 50 mm GALVANISED MILD STEEL
FRAME FINISH	WASHABLE ENAMEL PAINT FINISH AS PER SABS 723 FOR PRIMER, SABS 681 FOR UNDERCOAT & SABS 630 TYPE 02 FOR FINISH COAT. COLOR TO ARCHITECT'S APPROVAL	FRAME FINISH	1 x COAT ZINC CHROMATE PRIMEI 2 x COATS GLOSS ENAMEL (EXTER
DOOR FINISH	APPLY 3NO. CLEAR EGGSHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, THIN DOWN FIRST COART WITH MINERAL TURPENTINE AS PER MANUFACTURER INSTRUCTIONS, ALLOWING EACH COAT TO DRY OVERNIGHT, APPLY WOOD PRESERVATIVE TO EXPOSED EXTERIOR WOOD TO SATURTE THE SURFACE, WITH EACH COAT SOAKING IN BEFORE FURTHER COATS, APPLY UNTIL NO FURTHER SOAKING TAKES PLACE	FRAME FINISH	PAINTED MILD STEEL GATE CONSISTIN PLACED AT 100 mm AT CENTRES AT 9 MESH, TO COMPLY WITH SABS 681, G ALKYDE EGG-SHELL PAINT TO COMPL ARCHITECT'S SPECIFICATION
IRON MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATEE FOR APPROPRIATE ROOMS	IRON MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOI APPROVED ALUMINIUM ENGRAVING ROOMS
HINGES	3 No. STAINLESS STEEL MEDIUM DUTTY BUTT HINGES	HINGES	3 No. STAINLESS STEEL MEDIUM DUTTY









SANITARY SCHEDULE

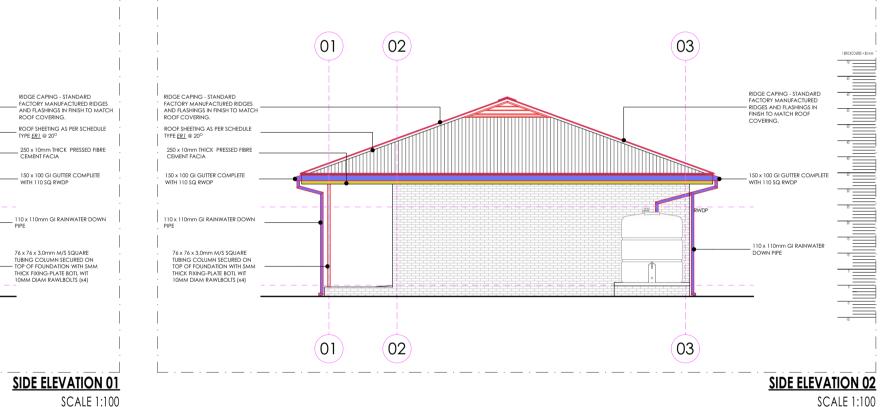
WC'S URINALS & SHOWER

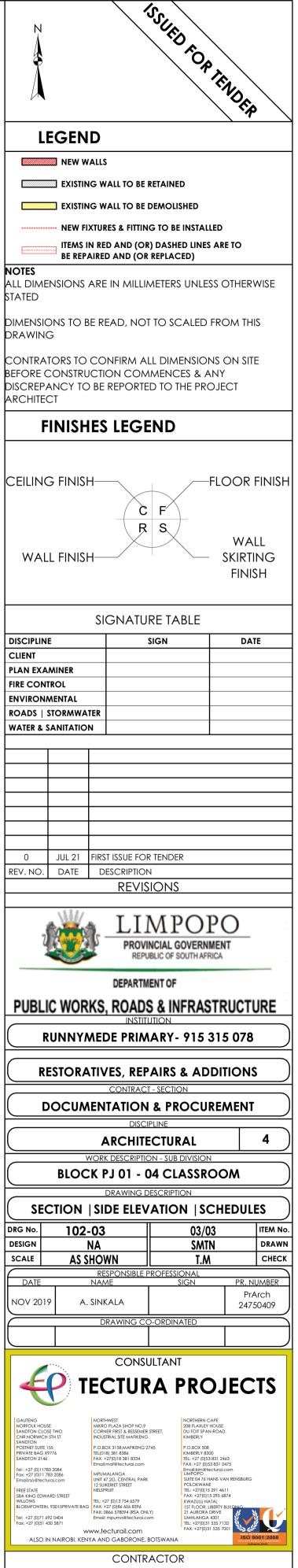
Z1: CERAMIC STANDARD WC (CC)- CONCEALED CISTERN Vitreous ching 90° outlet WC or equal and approved top inlet closed rim back-to-wall pan, Floor Mounted to comply with SABS 497 & Fitted with "Jo Thermoset Plastic Seat". Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valv Installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with blank flush plate. Z2: CERAMIC PARAPLEGIC WC itreous china 900 outlet or equal and approved, top inlet closed rim back-to-wall pan to comply with SABS 497. Fitted with Cistern Installed complete with c necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever **Z3: CERAMIC PARAPLEGIC WC** (CC)- CONCEALED CISTERN Vitreous china 900 outlet WC or equal and approved top inlet closed rim back-to-wall pan, Floor Mounted to comply with SABS 497 & Fitted with "Jac Thermoset Plastic Seat". Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve Installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever, blank flush plate & offset push button for parapleaic access Z4: CERAMIC STANDARD WC (BACK INLET) Vitreous china 900 outlet, back inlet pan to comply with SABS 497. Fitted complete with Back inlet exposed flush-valve complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. Flush valve to be fitted with suitable extension lever. **Z5: CERAMIC STANDARD WC (CC)** Vitreous china 900 outlet, back inlet pan to comply with SABS 497. Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermoset lid, seat and complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. 74: CERAMIC WALL HUNG URINAL wall hang bowl urinal to comply with SABS 497. Supplied with suitable 38mmCP domical grating, CP top inlet spreader an two hanger brackets and fitted with exposed flush-valve, and suitable bottle trap chrome finish as per manufacturer's specifications and applicable SABS NOTES SO1: SHOWER mm thick Enamelled steel shower tray size 900x900x160 mm manufactured with anti slip pattern, with rounded internal corners, and 38 mm BSP grated waste STATED fittina in corner position fitted with Shower set and complying with SABS 226 comprising of approved: • Glazed Shower Cubicle with access door as per standard supply from manufacturer and sized to fit space configuration Overhead shower arm with wall flange. Chrome Plated Shower Head with ball jointed connector DRAWING • Chrome Plated Bath/shower diverter mixer-wall type with sliding wall flanges and concealed connections adjustable from 178 mm to 203 mm centres. Shower tray to be recessed 50 mm into a 100mm high concrete plinth with exposed plinth face tiled. WASH-HAND BASIN B1: WHB & MIXER TAP eous china size 560 x 415mm rounded 'Tuscany', OR EQUAL AND APPROVE basin to comply with SABS 497 with single tapho ARCHITECT configuration supplied with integrated overflow and chainstay hole through the centre semi-punched supplied with a 'Tuscany' pedestal and fitted with 1N 'Cobra Watertech' 15mm chrome pushbutton demand pillar tap with flanged backnut (code KM2.102) metering tap, 309-32 CP anti-theft plug with spindle, 308 basin waste, 365/40 CP Bottle Trap, mounting kit and angle valves. B2: DISABLED BASIN 420mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with; 2 No.chrome plated Elbow action pillar-tap, with 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged backnut, chrome plated waste, chrome plated 32 mm standing overflow tube, chrome plated Bottle Trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to th B3: WHITE GLAZED PORCELAIN WHB (VANITY) **CEILING FINISH**imic fireclay size 450x350mm oval self-rimming vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with INo. chrome plated tap with flanged backnut (code KM2.102) metering tap, mounting kit and angle valves 400mm long flexible inlets and chrome plated bottle trap supplied with all necessary pipe connections. Basin mounted on cabinet or vanity slab with silicon sealant between contact areas in stric accordance to manufacture's specifications. B4: SMALL BASIN & 2 TAPSTRAY & SHOWER SET (FOR WORKSHOPS) Vitreous china size 455x290mm wash basin to comply with SABS 497 in 2-tap hole configuration supplied with integrated overflow and chainstay hole with; 2Nc pillar taps, chrome plated anti-theft plug with spindle plug, slotted basin waste, chrome plated Bottle Trap, mounting kit and angle valves with 400mm lor flexible inlets supplied with all necessary pipe connections. All brackets and fixing accessories in strict accordance to the manufacturer's specifications. WALL FINISH pillar tap, Chrome Plated anti-theft plug with spindle plug, slotted basin waste, chrome plated Bottle Trap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Fitted to wall using 2No. Semi-concealed cast iron brackets in accordance to the manufacturer B6: MEDIC BASIN & FITTINGS (SICK BAY) Vitreous china 510 x 420mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with; 2 No.chrome plated Elbow actior pillar-tap, with . turn ceramic disc head and blue & Red indicators water applications and flanged backnut, chrome plated waste, chrome plated 32mn standing overflow tube, chrome plated Bottle Trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to the DISCIPLINE manufacturer's specifications. CLIENT Combination of sanitaryware, accessories and general fittings comprising of: • Mirror type K2. • Paper towel dispenser K8 and bin type K3. • Soap dispenser type K9. PLAN EXAMINER • Splashback comprising 2no. rows of wall tile finish type R5 as per finishes schedule FIRE CONTROL and grout in compliance to manufacturer's specifications and government standard specifications. Installation heights as indicated in the drawings. ENVIRONMENTAL ROADS | STORMWATER SINKS: WATER & SANITATION X1: STAINLESS STEEL SINK Stainless steel 1000 x 457mm inset single end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsewh measured), Grade 304 (18/10) Stainless Steel sink to comply with SABS 906 fitted with: Approved Sink mixer- wall type, chrome plated swivel Outlet, adjustab and supplied with suitable assessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL. X2: STAINLESS STEEL SINK Stainless steel 1500 x 457mm inset double end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsewhere measured), Grade 304 (18/10) Stainless Steel sink to comply with SABS 906 fitted with: Approved Sink mixer- wall tape, with chrome plated overarm swivel Outlet, adjustable wall flanges and supplied with suitable acesories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFI X3: CERAMIC SINK Ceramic fireclay 435 x 335 x 180 mm rectangular laboratory sink without overflow, with a centre end waste outlet, fitted to the wall on two semi-concealer brackets supplied with all necessary accessories (all to be acid resistant X4: SINGLE WASH TROUGH (inset) & 2 no. TAPS x 500mm Inset washtrough, manufactured from grade 18/10 SS, stainless steel with radiused internal corners and provision for a 40mm dia, outlet. Fitter with Approved 2No. CP bibtaps - plain extended chrome plated, complete with sliding wall flanges, Un-slotted sink waste with back nut, plug with stirrup, cha and stay. CP, 'P' trap, with deep seal and cleaning eye. Rough brass. Sink installation height = 900mm AFFL. Cut out size 535 x 425mm. X5: DOUBLE WASH TROUGH (inset) & 2 no. TAPS 0 x 553 x 260mm Double bowl wall hung washtub manufactured from grade 304 (18/10) SS, radiused internal corners and provision for a 40mm dia. outlet fitted with: Approved 2no wall type bibtaps, with Swivel Outlet, adjustable wall flanges and exposed adjustable connections. CP. Un-slotted sink waste with bac nut and plug with stirrup. CP, Double drain black rubber deep seal 'P'-Trap. Sink mounted on 2no. 25mm square SS gallow brackets, front leg and adjustable fo piece at height of 915mm AFFL SANITARY ACCESSORIES K1: SS TOILET ROLL HOLDER- 2 ROLL ndard stainless steel toilet roll holder (2 roll) 153mm width x 270mm high 275mm depth Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Sat finish, including screws and dowels and all other necessary accessories in accordance to manufacturer's specifications. K2: GLASS MIRROR 5mm thick clear float glass silver-backed mirror, size 450x900mm height with polished bevelled edges 4 times holed for and fixed, with chromium plated dome headed mirror screws K3: SS WASTE BIN 328W x 826H x 203D Waste bin manufactured From 18/10 Stainless steel, Surface Satin Finish, Material Thickness 1.5mm, includina Screws, dowels and all necessar accessories in accordance to manufacturer's specifications. K4: SANITARY BIN (PLASTIC) x 320mm x 600mm Plastic Sanitary Pedal Bin with capacity of 100 Liners per pack Complete with all necessary accessories and installed in accordance to manufacturer's specifications. K5: SOAP HOLDER Single semi-recessed ceramic soap dish Complete with all necessary accessories and installed in accordance to manufacturer's specifications. K6: WALL GRAB RAILS-PARAPLEGIC Stainless steel 914 x 90 x 32mm diameter wall (rear) grab rail, in satin polished finish complete with SS fixing screws and plastic wall plugs. Installed as per manufacturer's instructions. K7: GRAB RAILS (RIGHT/LEFT HAND)-PARAPLEGIC stainless steel 1018 x 90 x 32mm diameter right/left hand side toilet grab rail with 450mm high centre flange, in satin polished finish complete with \$\$ fixing screw and plastic wall plugs. Installed as per manufacturer's instructions K8: PAPER TOWEL DISPENSER 350mmWx365mmHx230mmD tear and dry paper hand towel dispenser in stainless steel. Complete with screws, locking key, and all necessary accessories and installed in accordance to manufacturer's specification K9: SOAP DISPENSER/DISH- WALL MOUNTED 115W x 270H x 110D Stailess steel Hands Free soap dispenser. Complete with screws, locking key, and all necessary accessories and installed in accordance manufacturer's specifications. DRG No. K10: ALUMINIUM COAT HOOKS (Multirack) DESIGN 820mm Wide x 220mm High x 90mm High Aluminium Multi-rack Hat and Coat Hook in multi-track two Hooks Configuration With Anodised Silver Finish Complete with Screws SCALE K11: HAND DRYER (Hands free) As per Electrical Engineers specification K12: TOWEL RAIL 55mm dia. Polished 900mm long towel rail complete with all necessary accessories in accordance to manufacturer's specifications. Installation height as per NOV 201 architect's drawing. K13: SHOWER CURTAIN RAIL (straight) 20mm dia. standard chromium plated shower curtain rail 1300mm long with flanged ends and screws CP fixing height as per PA's drawing. CENEDAL EIVTIDES <u>GI: DOOR PROTECTOR</u> Pinboard size 1000mm H x 1500mm W comprising of laminated soft board core pinning material beaded all round with anodised aluminium channel surrour Pinboard size 1200mm H x 3000mm W comprising of laminated soft board core pinning material beaded all round with anodised aluminium channel surrour mitred at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level 27 mm vertical deco blinds with anodised aluminium headrail fitted with colour coordinated insert. All runners o be wheeled and fitted with individual clut cap. Blinds to be face fixed (fixed over the window opening) by means of concealed type fixing brackets. Cast iron flat type full-flow outlets size 110 mm diameter with centre bolt, , including connections to downpipes. Co-extruded heavy-duty stainless steel movement joint strip, with polyurethane infill (colour grey). To be installed within the tile surface over the 20mm expansion G8: CHALKBOARDS- GREEN SURFACE COLOUR AUTOCAD system 1000 standard WRITEBOARD or EQUAL & APPROVED vitreous enamelled steel utility school chalkboards wall-mounted size 4800mm x 1140mm higt PROJECT NUMBER manufactured in accordance with SABS Standard CKS 36/2004 Edition 4 and suitable for Class 1: Heavy Duty applications, as defined therein. Enamel steel Utili chalk board surfaces to be matt and finely structured, olive green in colour (Vitrex Colour Reference - Chalk Board Green LM1797/2), supplied complete with

B5: H/DUTY BASIN & 1No. TAP (FOR LABS) Ceramic fire day 300x400mm rectangular heavy duty basin in one taphole configuration to comply with SABS 497 and RHS hole plugged and fitted with;1Nc 200mm wide uPVC Door Protector manufactured in high impact resistant rigid uPVC (Colour Grey) and cut to suit door width from 3m length, installed strictly in accordance to manufacturer's specifications. Installation height 900mm above FFL, or as specified. G2: PROJECTOR SCREEN Pull down PVC screen size 2440 x 1850mm (viewing area 2340 x 1750mm) with wall-mounted code \$C0400 Keystone Brackets Adjustable Set of 2, size 300mm. To be supplied complete with all accessories, and fitted in strict accordance with manufactures instructions. G3: PINBOARD 1500W X 1000H mitred at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level. G4: PINBOARD 3000W X 1200H G5: WINDOW NORMAL BLINDS(vertical fabric) mechanism. All runners to be connected by stainless steel links. Tilt mechanism to be operated by a nylon ball chain with a reduction gear inside a fully enclose G6: FLOOR DRAIN G7: SS FLOOR EXPANSION JOINT COVER joints, in accordance to the manufacturer's specifications.

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LDPW - PROF/16002/G11 ntegral anodised aluminium chalk rail (ACR), fixing components and secured in position to brickwork. The Chalk boards are to be fixed in position strictly ir accordance with the manufacturer's instruction





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FLOORS:

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

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.

F2: PORCELAIN TILES -MATT

600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPET TILES

500mm x 500mm , 100% PFX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54324 on wira test and ISO body test at less than 2Kv at 25% RH on static electricity. Colour and pattern to architects approval.

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

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

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

F6: GRANOLITHIC FINISH

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

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINLY SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self -Levelled Smooth Screed glued with conducive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

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

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

"Ex 75mm x 20mm Moulded Hardwood Skirting" to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred coners with screws and plugs at centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant beading. The skirting to be vanished with 3No. coats of egg shell clear vanish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

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

S3: CEMENT SAND SCREED

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

WALL FINISHES:

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

R2: EMULSION (PVA) PAINT – FULL HEIGHT 2 no. coats of PVA matt finish emulsion paint to \$AB\$ 1586 applied on plastered surface primed and with 1 no. coat undercoat to \$AB\$ 681

grade1, in accordance to manufacturer's instructions.

R3:ALKYD (ENAMEL) PAINT 2 no. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant plaster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of; 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5:CERAMIC WALL TILES - FULL HEIGHT

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

CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

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

C2: FIBRE CEMENT BOARDS (H-JOINTED)

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

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

1200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, Z150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

"Emulsion (PVA) Paint on Skimmed Plastered Slab" 3No. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

ROOF COVERING AND INSULATION:

ER1: EMBOSSED ROOFING SHEET (TWO SIDES)

Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel

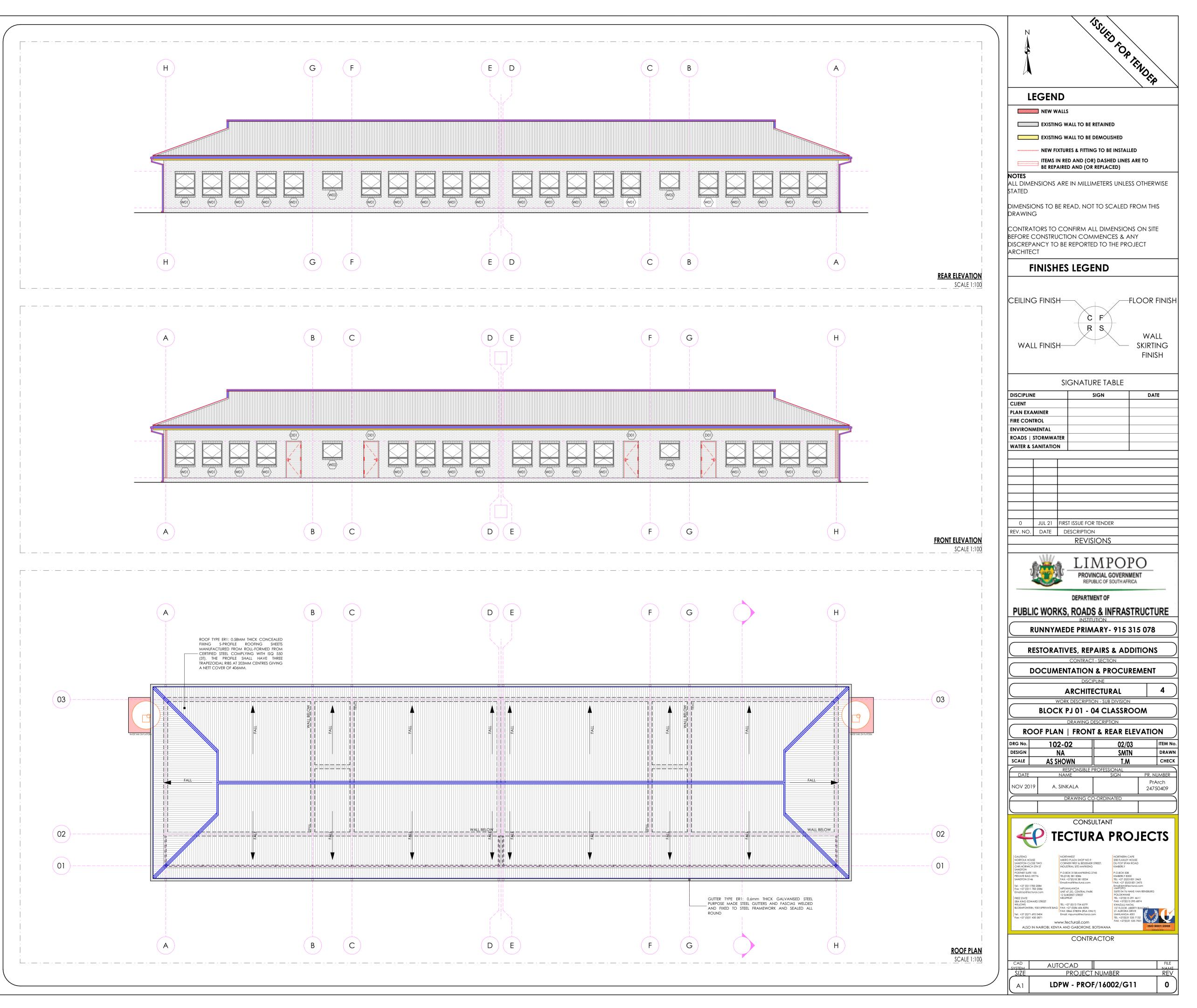
complying with ISQ 550 (3T). The profile shall have three trapezoidal ribs at 203mm centers giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofsheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instructions.

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

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

Downpipe: 110 x110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class Z275 Galvanising To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-taping screws To Manufacturer Installation Instructions.

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



FLOORS:

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

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.

F2: PORCELAIN TILES -MATT

600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPET TILES

500mm x 500mm , 100% PFX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54324 on wira test and ISO body test at less than 2Kv at 25% RH on static electricity. Colour and pattern to architects approval.

F4: CEMENT SAND SCREED

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

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

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

F6: GRANOLITHIC FINISH

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

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINLY SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self -Levelled Smooth Screed glued with conducive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

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

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

"Ex 75mm x 20mm Moulded Hardwood Skirting" to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred coners with screws and plugs at centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant beading. The skirting to be vanished with 3No. coats of egg shell clear vanish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

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

S3: CEMENT SAND SCREED

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

WALL FINISHES:

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

R2: EMULSION (PVA) PAINT – FULL HEIGHT 2 no. coats of PVA matt finish emulsion paint to SABS 1586 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681

grade1, in accordance to manufacturer's instructions.

R3:ALKYD (ENAMEL) PAINT 2 no. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant plaster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of; 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5:CERAMIC WALL TILES - FULL HEIGHT

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

CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

"GypCeil Classic" gypsum plasterboard ceilingor **EQUAL & APPROVED** consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Ecospecifier listing) fixed to timber brandering installed at maximum 300mm centers using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centers. Apply . Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.

C2: FIBRE CEMENT BOARDS (H-JOINTED)

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

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

1200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, Z150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

"Emulsion (PVA) Paint on Skimmed Plastered Slab" 3No. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

ROOF COVERING AND INSULATION:

ER1: EMBOSSED ROOFING SHEET (TWO SIDES)

Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISQ 550 (31). The profile shall have three trapezoidal ribs at 203mm centers giving a net cover of 406mm. The rib height shall

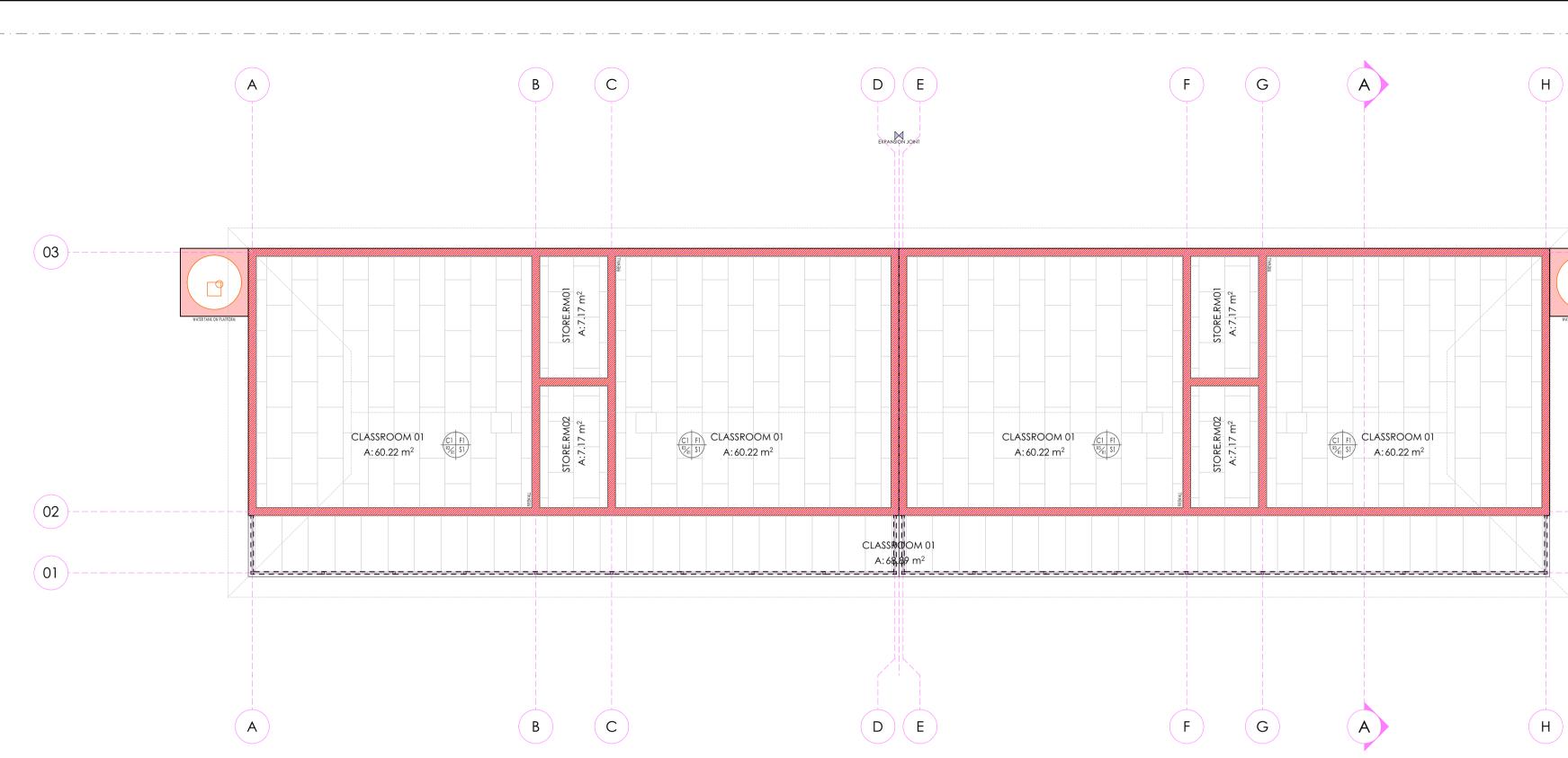
be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofsheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instructions.

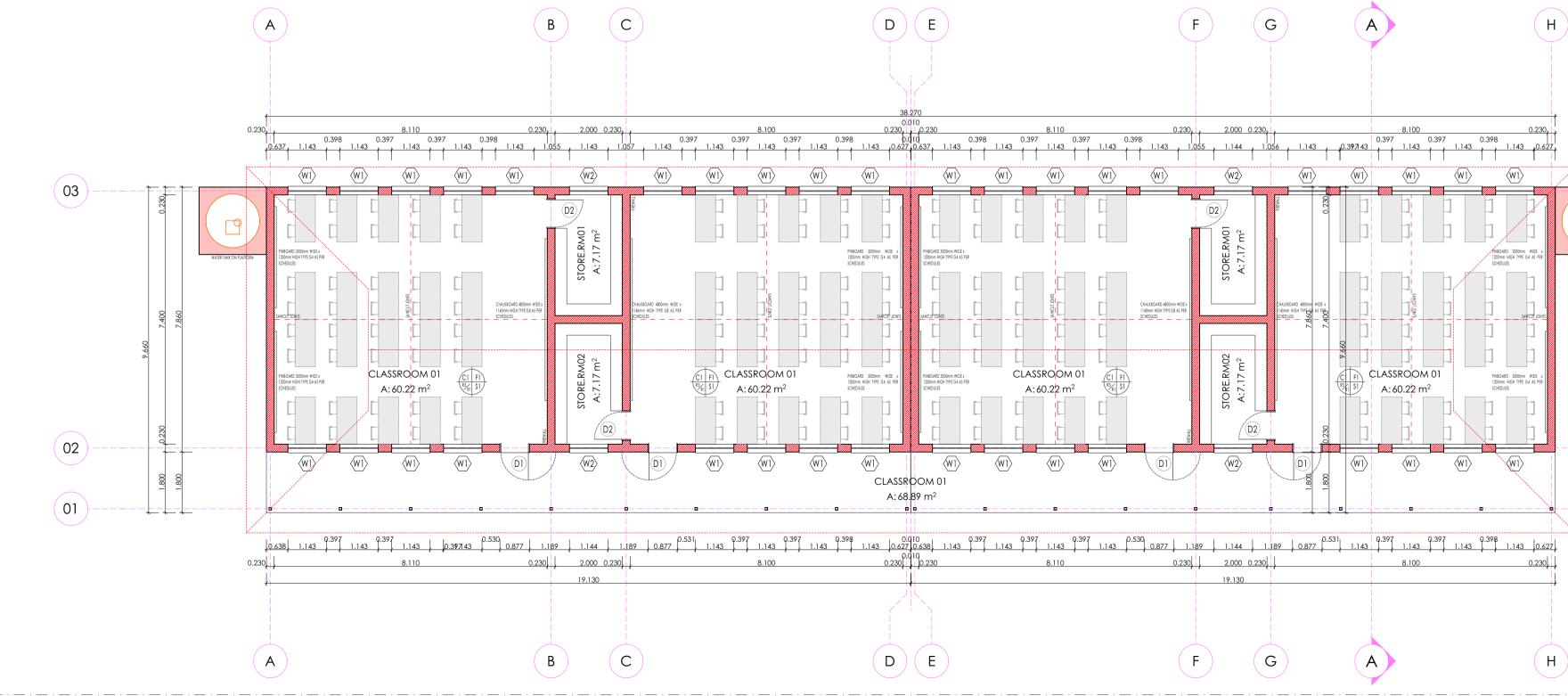
Insulation: SHALL EITHER BE: 1: where there are acoustic ceilings susspeded board, a heavy duty "Aluminium sisalation foil" shall be installed AND 2: where the steel work is exposed, a 50mm "FactoryBoard" manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm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

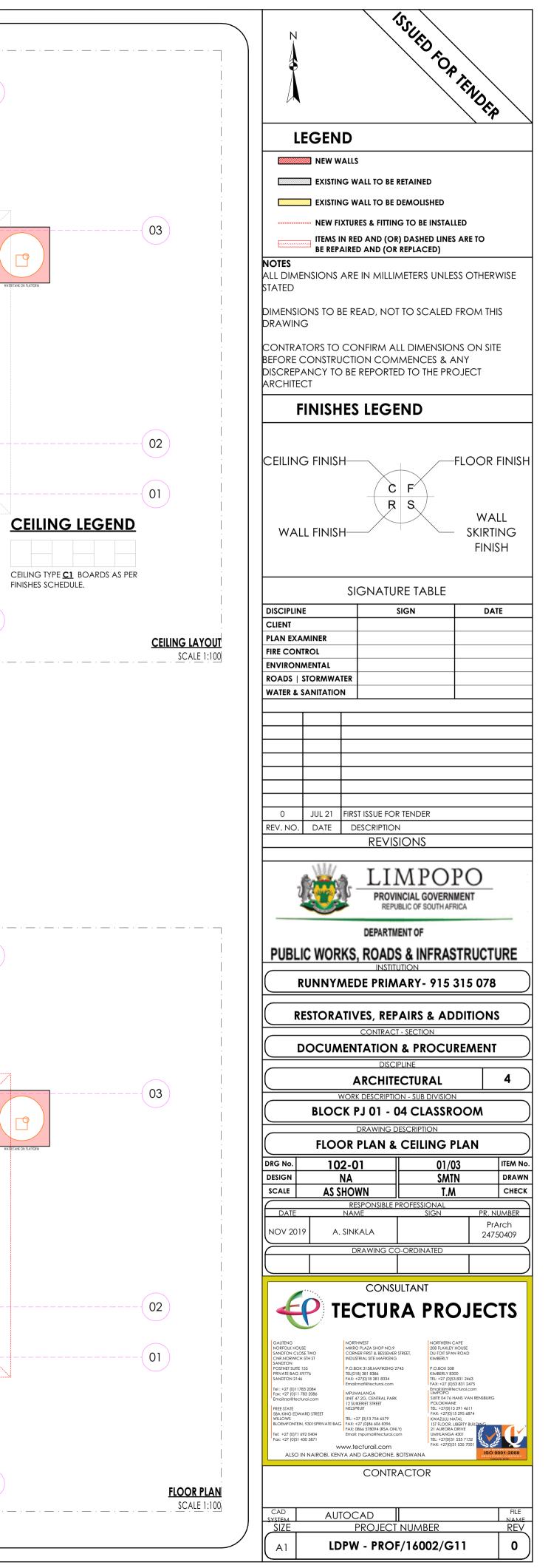
Galvanised Steel (GI) Gutter: 150mm Wide x 100mm Deep x 0.6mm Eaves Gutter of Commercial Grade Steel With Class Z275 Galvanising To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Fascia Board Together with standard accessories discharging into Rainwater Downpipes.

Downpipe: 110 x110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class Z275 Galvanising To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-taping screws To Manufacturer Installation Instructions.

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







FLOORS:

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

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.

F2: PORCELAIN TILES -MATT

600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPET TILES

500mm x 500mm , 100% PFX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement creeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54324 on wira test and ISO body test at less than 2Kv at 25% RH on static electricity. Colour and pattern to architects approval.

F4: CEMENT SAND SCREED

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

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

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

F6: GRANOLITHIC FINISH

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

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINLY SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self -Levelled Smooth Screed glued with conducive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity, Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

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

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

"Ex 75mm x 20mm Moulded Hardwood Skirting" to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred coners with screws and plugs at centres not exceeding 600mm , and fixed with a 19mm x 19mm quadrant beading. The skirting to be anished with 3No. coats of egg shell clear vanish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

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

S3: CEMENT SAND SCREED

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

WALL FINISHES:

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

R2: EMULSION (PVA) PAINT - FULL HEIGHT no, coats of PVA matt finish emulsion paint to SABS 1586 applied on plastered surface primed and with 1 no, coat undercoat to SABS 681

grade1, in accordance to manufacturer's instructions.

R3:ALKYD (ENAMEL) PAINT no. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant plaster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

ombination of; 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5:CERAMIC WALL TILES – FULL HEIGHT

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

CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

GypCeil Classic" gypsum plasterboard ceilingor EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Ecospecifier listing) fixed to timber brandering installed at maximum 300mm centers using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centers. Apply . Gyproc RhinoTape to all joints and skim he ceiling using Gyproc RhinoLite.

C2: FIBRE CEMENT BOARDS (H-JOINTED)

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

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured to place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, Z150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

Emulsion (PVA) Paint on Skimmed Plastered Slab" 3No. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

ROOF COVERING AND INSULATION:

ER1: EMBOSSED ROOFING SHEET (TWO SIDES)

Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel

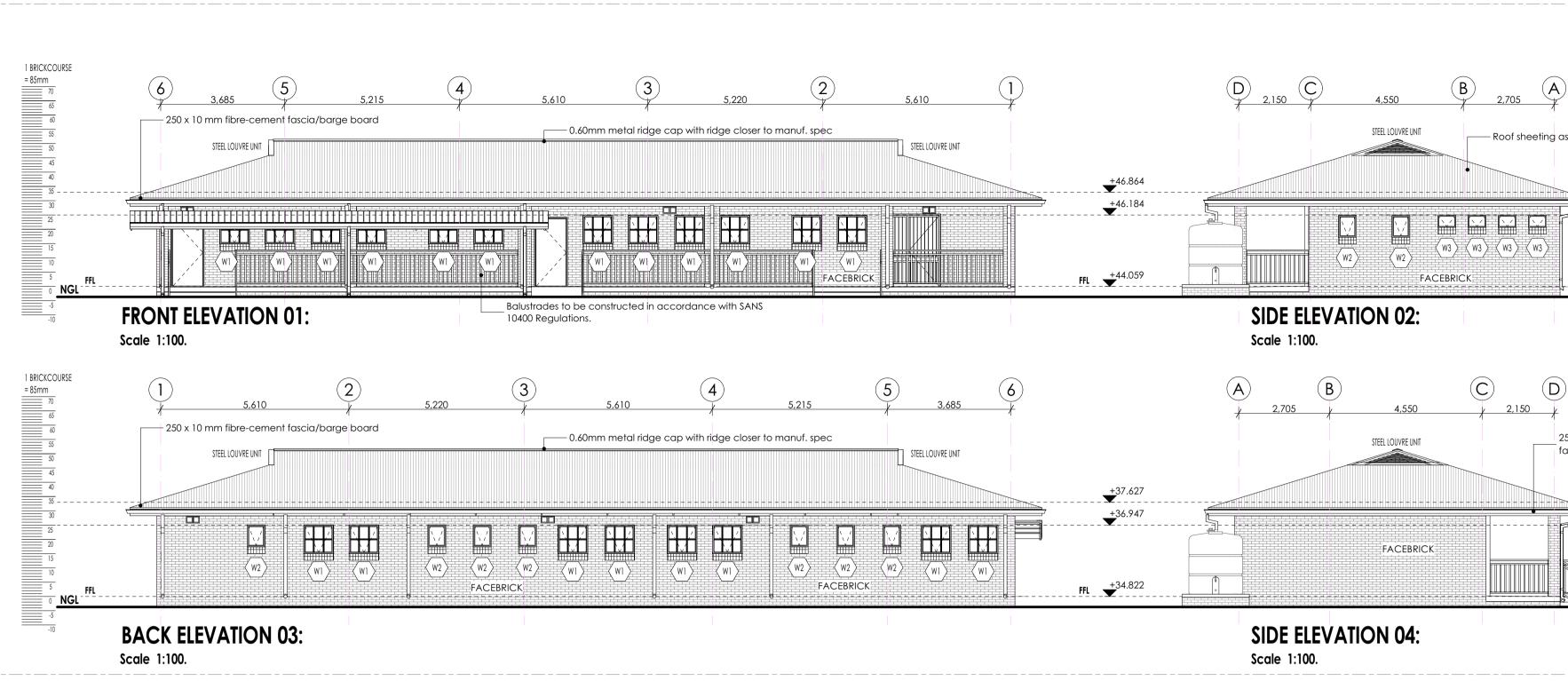
complying with ISQ 550 (3T). The profile shall have three trapezoidal ribs at 203mm centers giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofsheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instructions.

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

Galvanised Steel (GL) Gutter: 150mm Wide x 100mm Deep x 0.6mm Eaves Gutter of Commercial Grade Steel With Class Z275 Galvanising To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Fascia Board Together with standard accessories discharging into Rainwater Downpipes.

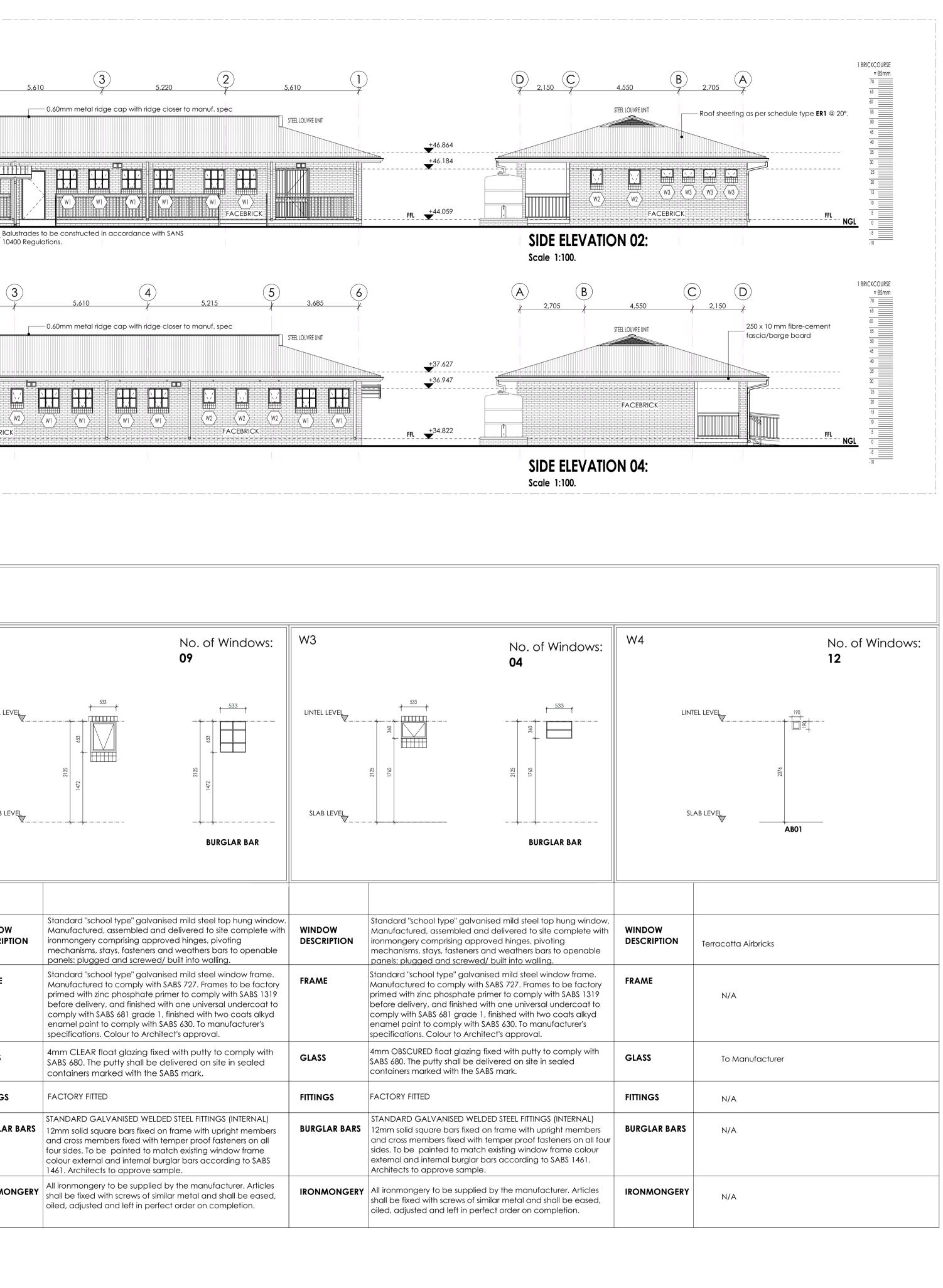
Downpipe: 110 x110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class Z275 Galvanising To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-taping screws To Manufacturer Installation Instructions

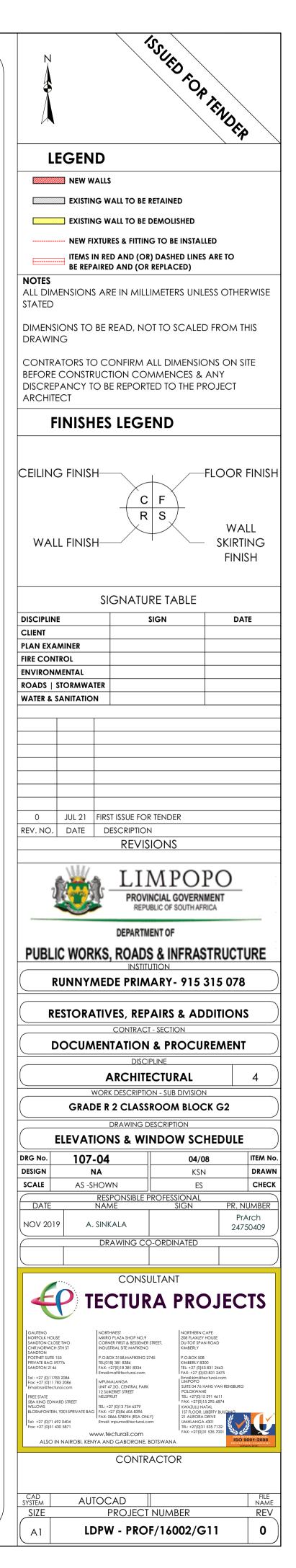
Fascia board: 250 x 10 mm Fibre- Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

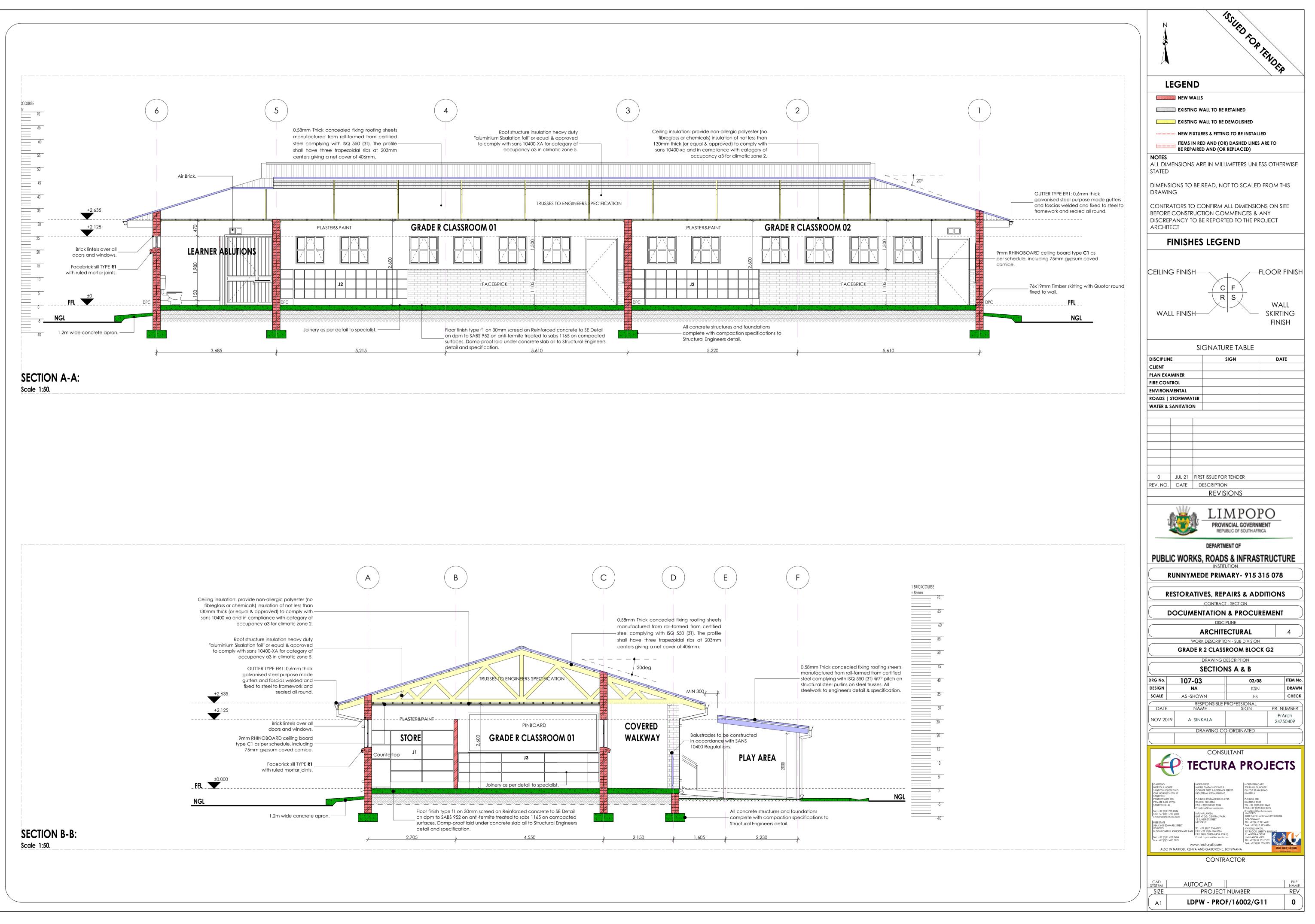


WINDOW SCHEDULE:

W1	No. of Windows: 20	W2
LINTEL LEVEL		LINTEL LE
SLAB LEVEL	1272	SLAB L
WINDOW DESCRIPTION	Standard "school type" galvanised mild steel top hung window. Manufactured, assembled and delivered to site complete with ironmongery comprising approved hinges, pivoting mechanisms, stays, fasteners and weathers bars to openable panels: plugged and screwed/ built into walling.	WINDOV DESCRIP
FRAME	Standard "school type" galvanised mild steel window frame. Manufactured to comply with SABS 727. Frames to be factory primed with zinc phosphate primer to comply with SABS 1319 before delivery, and finished with one universal undercoat to comply with SABS 681 grade 1, finished with two coats alkyd enamel paint to comply with SABS 630. To manufacturer's specifications. Colour to Architect's approval.	FRAME
GLASS	4mm CLEAR float glazing fixed with putty to comply with SABS 680. The putty shall be delivered on site in sealed containers marked with the SABS mark.	GLASS
FITTINGS	FACTORY FITTED	FITTINGS
BURGLAR BARS	STANDARD GALVANISED WELDED STEEL FITTINGS (INTERNAL) 12mm solid square bars fixed on frame with upright members and cross members fixed with temper proof fasteners on all four sides. To be painted to match existing window frame colour external and internal burglar bars according to SABS 1461. Architects to approve sample.	BURGLA
IRONMONGERY	All ironmongery to be supplied by the manufacturer. Articles shall be fixed with screws of similar metal and shall be eased, oiled, adjusted and left in perfect order on completion.	IRONMO







FLOORS:

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

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.

F2: PORCELAIN TILES -MATT

600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPET TILES

500mm x 500mm , 100% PFX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54324 on wira test and ISO body test at less than 2Kv at 25% RH on static electricity. Colour and pattern to architects approval.

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

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

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

F6: GRANOLITHIC FINISH

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

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINLY SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self -Levelled Smooth Screed glued with conducive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

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

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

"Ex 75mm x 20mm Moulded Hardwood Skirting" to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred coners with screws and plugs at centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant beading. The skirting to be vanished with 3No. coats of egg shell clear vanish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

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

S3: CEMENT SAND SCREED

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

WALL FINISHES:

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

R2: EMULSION (PVA) PAINT – FULL HEIGHT 2 no. coats of PVA matt finish emulsion paint to SABS 1586 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681

grade1, in accordance to manufacturer's instructions.

R3:ALKYD (ENAMEL) PAINT 2 no. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant plaster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of; 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5:CERAMIC WALL TILES - FULL HEIGHT

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

CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

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

C2: FIBRE CEMENT BOARDS (H-JOINTED)

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

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

1200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, Z150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

"Emulsion (PVA) Paint on Skimmed Plastered Slab" 3No. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

ROOF COVERING AND INSULATION:

ER1: EMBOSSED ROOFING SHEET (TWO SIDES)

Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel

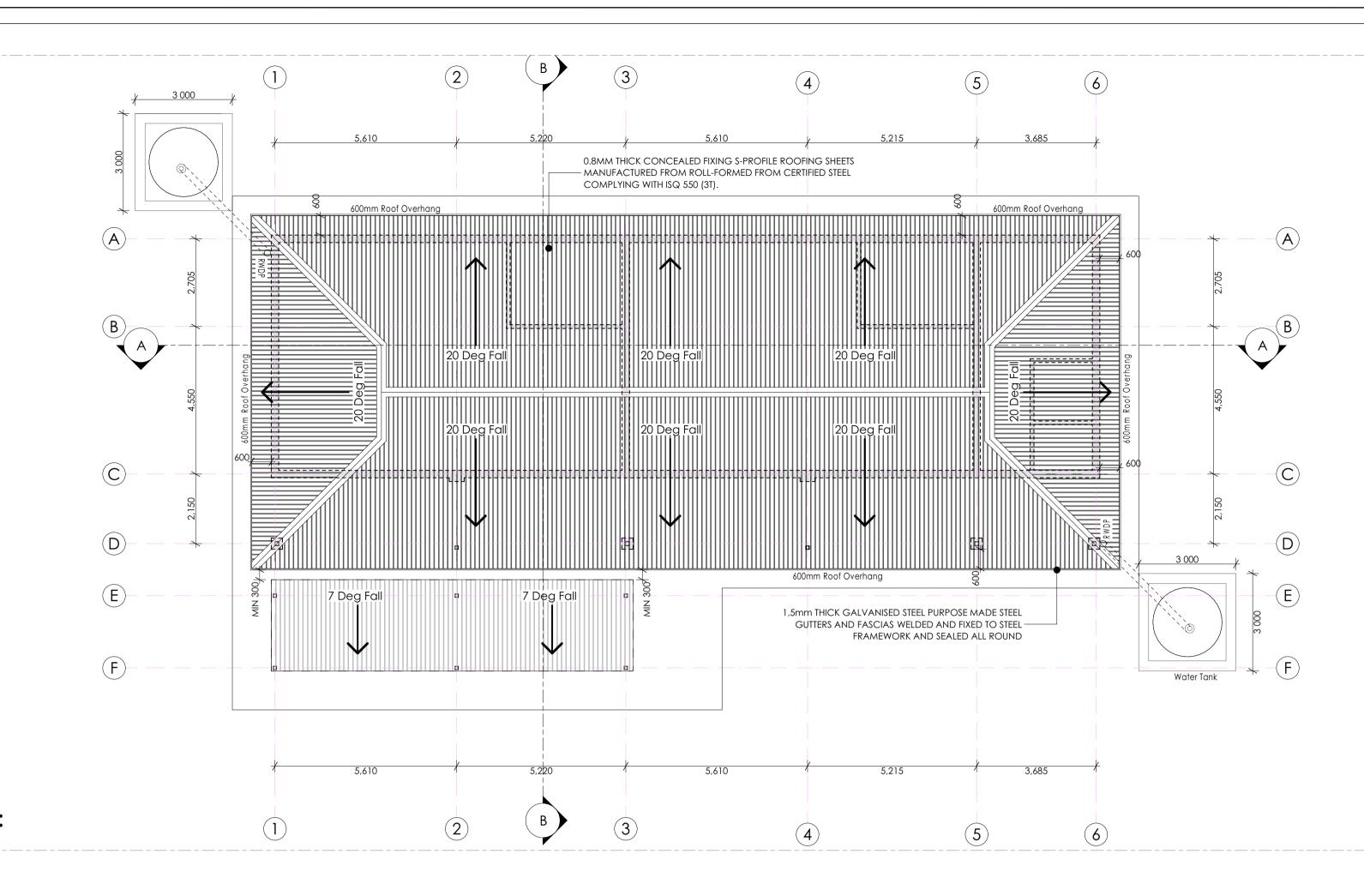
complying with ISQ 550 (3T). The profile shall have three trapezoidal ribs at 203mm centers giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofsheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instructions.

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

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

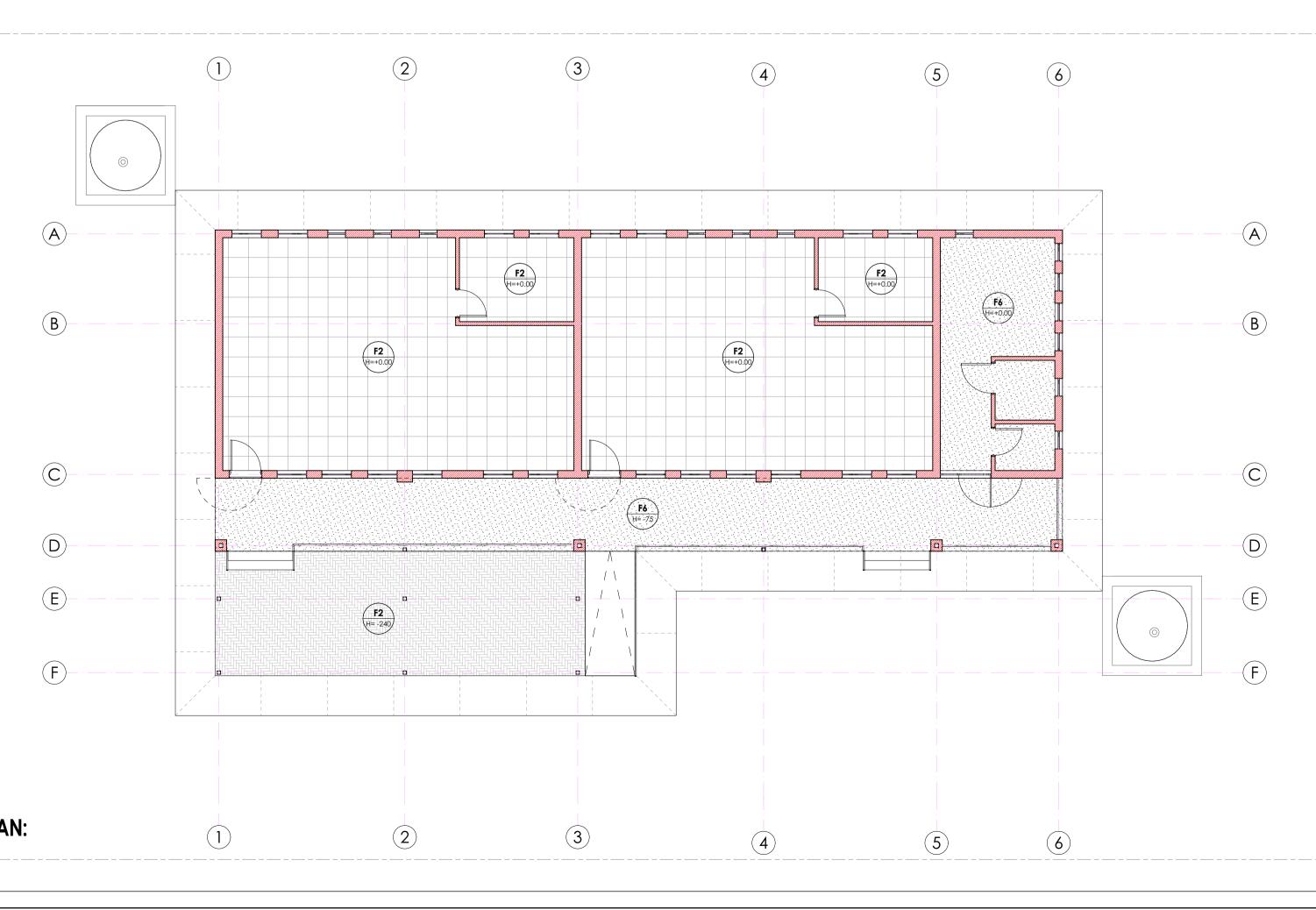
Downpipe: 110 x110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class Z275 Galvanising To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-taping screws To Manufacturer Installation Instructions.

<u>Fascia board:</u> 250 x 10 mm Fibre- Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.









FLOOR FINISHES PLAN:

Scale 1:100.

FLOOR FINISHES LEGEND:					
	CERAMIC TILES TYPE F1 AS PER FINISHES SCHEDULE.				
	GRANOLITHIC FINISH TYPE F6 AS PER FINISHES SCHEDULE.				
	INTERLOCKING PAVERS TYPE F5 AS PER FINISHES SCHEDULE.				

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FLOORS:

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

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.

F2: PORCELAIN TILES -MATT

600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPET TILES

500mm x 500mm , 100% PFX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54324 on wira test and ISO body test at less than 2Kv at 25% RH on static electricity. Colour and pattern to architects approval.

F4: CEMENT SAND SCREED

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

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

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

F6: GRANOLITHIC FINISH

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

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINLY SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self -Levelled Smooth Screed glued with conducive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

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

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

"Ex 75mm x 20mm Moulded Hardwood Skirting" to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred coners with screws and plugs at centres not exceeding 600mm , and fixed with a 19mm x 19mm quadrant beading. The skirting to be vanished with 3No. coats of egg shell clear vanish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

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

S3: CEMENT SAND SCREED

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

WALL FINISHES:

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

R2: EMULSION (PVA) PAINT - FULL HEIGHT 2 no. coats of PVA matt finish emulsion paint to SABS 1586 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681

grade1, in accordance to manufacturer's instructions.

R3:ALKYD (ENAMEL) PAINT 2 no. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant plaster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

ombination of; 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "RS", laid on 15 mm thick plaster prepared t receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5:CERAMIC WALL TILES - FULL HEIGHT

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

CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

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

C2: FIBRE CEMENT BOARDS (H-JOINTED)

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

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured to place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, Z150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

Emulsion (PVA) Paint on Skimmed Plastered Slab" 3No. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

ROOF COVERING AND INSULATION:

ER1: EMBOSSED ROOFING SHEET (TWO SIDES)

Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel

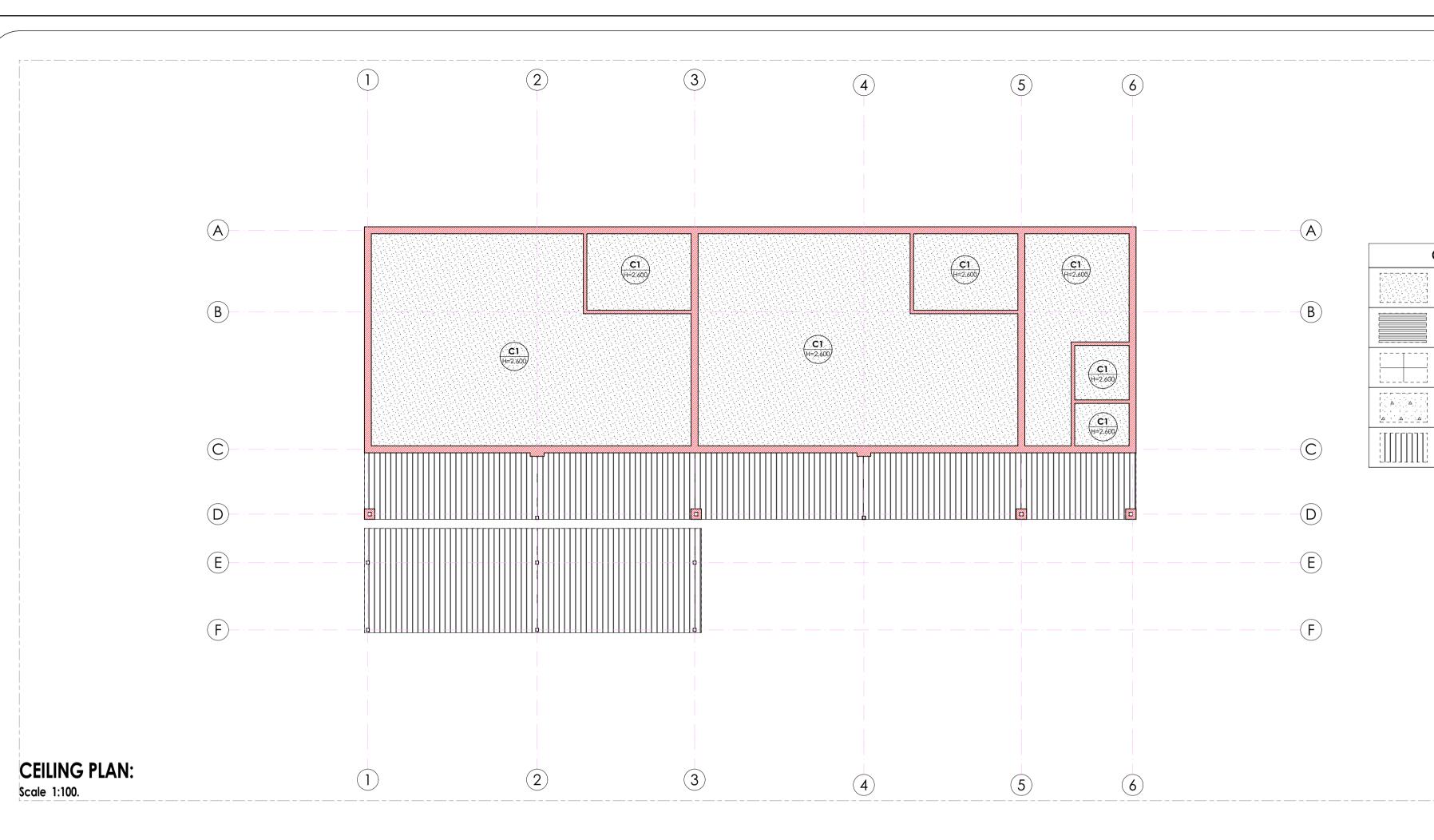
complying with ISQ 550 (3T). The profile shall have three trapezoidal ribs at 203mm centers giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofsheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instructions.

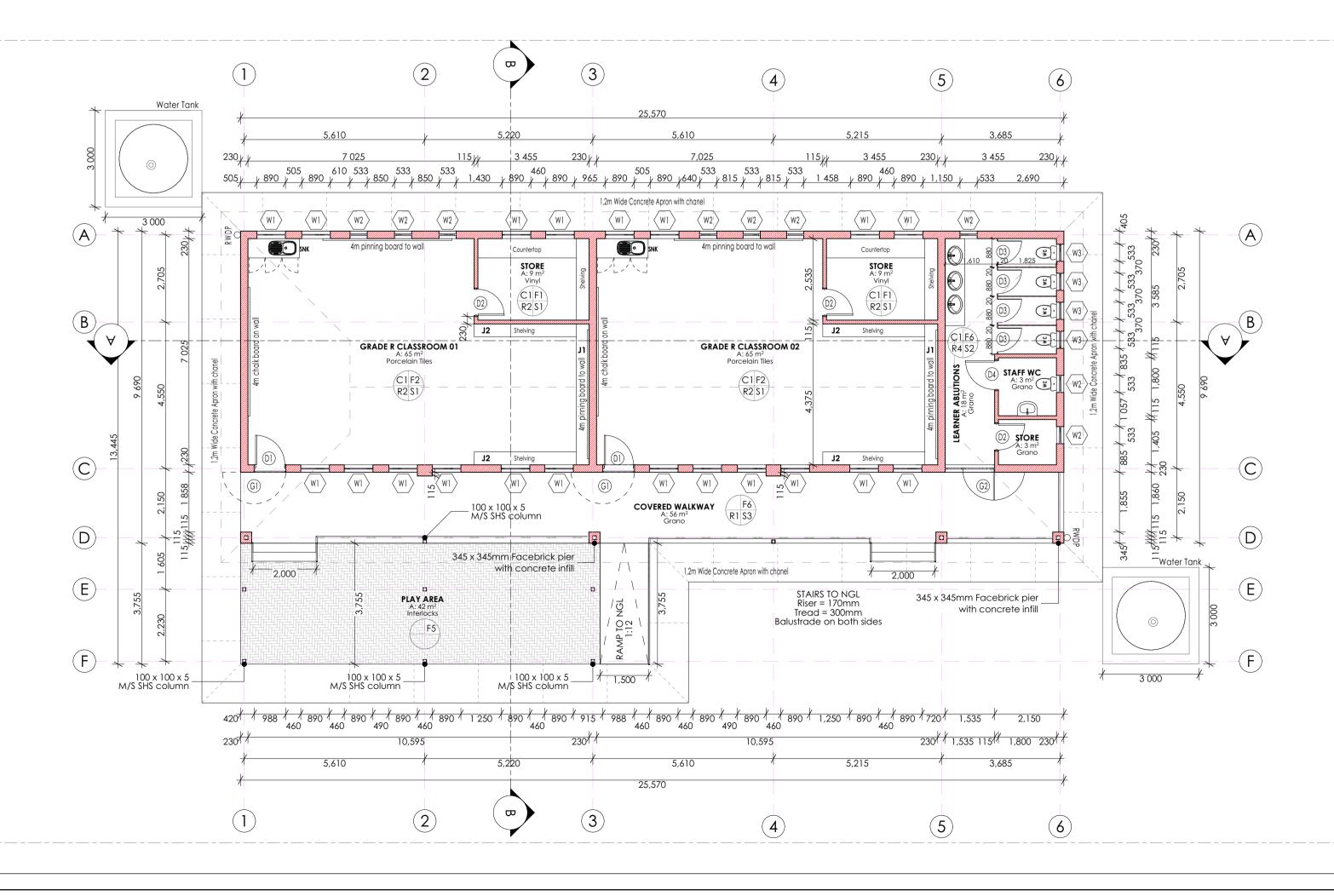
Insulation: SHALL EITHER BE: 1: where there are acoustic ceilings susspeded board, a heavy duty "Aluminium sisalation foil" shall be installed AND 2: where the steel work is exposed, a 50mm "FactoryBoard" manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm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

Galvanised Steel (GL) Gutter: 150mm Wide x 100mm Deep x 0.6mm Eaves Gutter of Commercial Grade Steel With Class Z275 Galvanising To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Fascia Board Together with standard accessories discharging into Rainwater Downpipes.

Downpipe: 110 x110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class Z275 Galvanising To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-taping screws To Manufacturer Installation Instructions.

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







Scale 1:100.

CEILING LEGEND:

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	CEILING TYPE C1 GYPSUM BOARDS AS PER FINISHES SCHEDULE.
	CEILING TYPE C2 FIBRE-CEMENT BOARDS AS PER FINISHES SCHEDULE.
	CEILING TYPE C3 PATENT ACOUSTIC TILES PER FINISHES SCHEDULE.
	CEILING TYPE C4 EMULSION PAINT ON SKIMMED SOFFIT AS PER FINISHES SCHEDULE.
	EXPOSED ROOFING SHEETS AS PER FINISHES SCHEDULE.

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FLOORS: F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)

300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles to SABS Specification 581: 1992 (or later revision), and laid to SABS 070 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval F2: PORCELAIN TILES -MATT 600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with

SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and \$AB\$ specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPET TILES

500mm x 500mm , 100% PFX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54324 on wira test and ISO body test at less than 2Kv at 25% RH on static electricity. Colour and pattern to architects approval.

F4: CEMENT SAND SCREED

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

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

55mm thick multi-coloured concrete pavers laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approval and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or Latest Revision.

F6: GRANOLITHIC FINISH

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

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINLY SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self -Levelled Smooth Screed glued with conducive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist, Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

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

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

"Ex 75mm x 20mm Moulded Hardwood Skirting" to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred coners with screws and plugs at centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant beading. The skirting to be vanished with 3No. coats of egg shell clear vanish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

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

S3: CEMENT SAND SCREED

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

WALL FINISHES:

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

<u>R2: EMULSION (PVA) PAINT – FULL HEIGHT</u>

no, coats of PVA matt finish emulsion paint to SABS 1586 applied on plastered surface primed and with 1 no, coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R3:ALKYD (ENAMEL) PAINT

no. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant laster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of; 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5:CERAMIC WALL TILES – FULL HEIGHT

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

CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED GypCeil Classic" gypsum plasterboard ceilingor EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured,

ISO 9001 & 14001 certification, recycled paper content, Ecospecifier listing) fixed to timber brandering installed at maximum 300mm centers using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centers. Apply . Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.

C2: FIBRE CEMENT BOARDS (H-JOINTED)

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

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, Z150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed o the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire otches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

mulsion (PVA) Paint on Skimmed Plastered Slab" 3No. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

ROOF COVERING AND INSULATION:

ER1: EMBOSSED ROOFING SHEET (TWO SIDES)

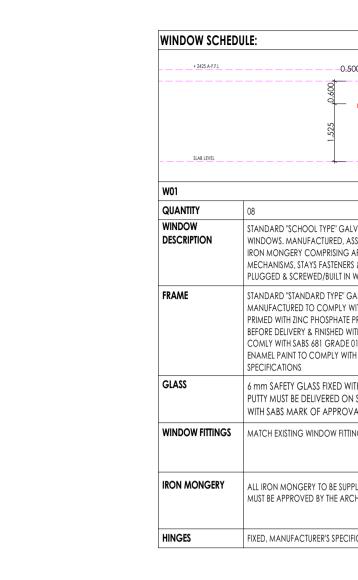
Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISQ 550 (31). The profile shall have three trapezoidal ribs at 203mm centers giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofsheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instructions

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

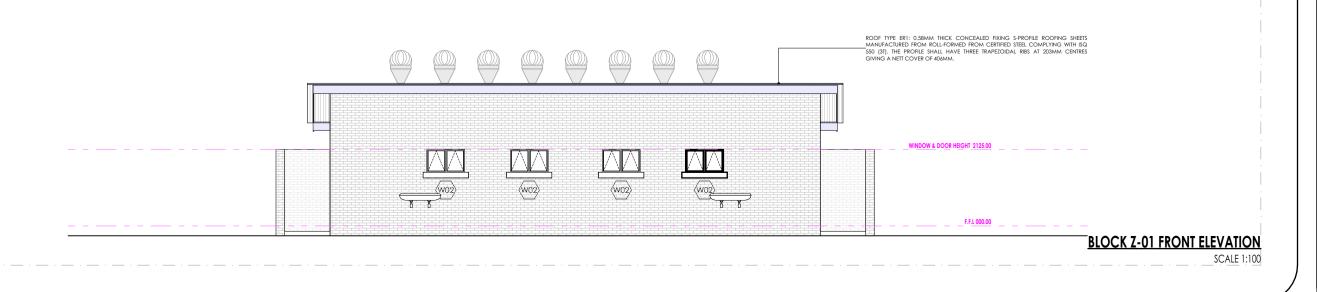
Galvanised Steel (GI) Gutter: 150mm Wide x 100mm Deep x 0.6mm Eaves Gutter of Commercial Grade Steel With Class Z275 Galvanising To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Fascia Board Together with standard accessories discharging into Rainwater Downpipes.

Downpipe: 110 x110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class 2275 Galvanising To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-taping screws To Manufacturer Installation Instructions.

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



FACEBRICK TYPE R1 WITH RULED MOTAR



	SANITARY SCHEDULE
	WC'S URINALS & SHOWE
1	71. CERAMIC STANDARD WC (CC)- COL

CERAMIC STANDARD WC (CC)- CONCEALED CISTERM NOTES mm thick Enamelled steel shower tray size 900x900x160 mm manufactured with anti slip pattern, with rounded internal corners, and 38 mm BSP grated waste STATED DRAWING ous china size 560 x 415mm rounded 'Tuscany', OR EQUAL AND APPROVE basin to comply with SABS 497 with single tapho ARCHITECT nic fireclay size 450x350mm oval self-rimming vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with: eous china size 455x290mm wash basin to comply with SABS 497 in 2-tap hole configuration supplied with integrated overflow and chainstay hole with; 2N DISCIPLINE CLIENT PLAN EXAMINER FIRE CONTROL drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsewl h SABS 906 fitted with: Approved Sink mixer- wall type, chrome plated swivel Outlet, adjustab turer's specifications. Sink installation height = 900mm AFFL. essed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboa comply with SABS 906 fitted with: Approved Sink mixer- wall tape, with chrome plated overarm acesories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFI k without overflow, with a centre end waste outlet, fitted to the wall on two semi-concealed 8/10 SS, stainless steel with radiused internal corners and provision for a 40mm dia, outlet. Fith d, complete with sliding wall flanges, Un-slotted sink waste with back nut, plug with stirrup, cho brass. Sink installation height = 900mm AFFL. Cut out size 535 x 425mm. ured from grade 304 (18/10) SS, radiused internal corners and provision for a 40mm dia. outlet djustable wall flanges and exposed adjustable connections. CP. Un-slotted sink waste with ba al 'P'-Trap. Sink mounted on 2no. 25mm square SS gallow brackets, front leg and adjustable fo 0mm high 275mm depth Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Sa ssories in accordance to manufacturer's specifications. height with polished bevelled edges 4 times holed for and fixed, with chromium plated dominated ss steel, Surface Satin Finish, Material Thickness 1.5mm, including Screws, dowels and all necessa ty of 100 Liners per pack Complete with all necessary accessories and installed in accordance to ssary accessories and installed in accordance to manufacturer's specifications. n satin polished finish complete with SS fixing screws and plastic wall plugs. Installed as pe et grab rail with 450mm high centre flange, in satin polished finish complete with SS fixing screw spenser in stainless steel. Complete with screws, locking key, and all necessary accessories ar omplete with screws, locking key, and all necessary accessories and installed in accordance DRG No. DESIGN Hat and Coat Hook in multi-track two Hooks Configuration With Anodised Silver Finish Comple SCALE ecessary accessories in accordance to manufacturer's specifications. Installation height as pe NOV 201 n long with flanged ends and screws CP fixing height as per PA's drawing. t resistant rigid uPVC (Colour Grey) and cut to suit door width from 3m length, installed strictly 900mm above FFL, or as specified. 750mm) with wall-mounted code SC0400 Keystone Brackets Adjustable Set of 2, size 300mm. 1 ordance with manufactures instructions. soft board core pinning material beaded all round with anodised aluminium channel surrou crews and wall plugs at 900mm above floor level.

<u>Z2: CERAMIC PARAPLEGIC WC</u>

Thermoset Plastic Seat". Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharae valve access pneumatic discharae val /itreous china 90o outlet or equal and approved, top inlet closed rim back-to-wall pan to comply with SABS 497. Fitted with Cistern Installed complete with (Vitreous china 900 outlet, back inlet pan to comply with SABS 497. Fitted complete with Back inlet exposed flush-valve complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. Flush valve to be fitted with suitable extension lever. Vitreous china 900 outlet, back inlet pan to comply with SABS 497. Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality Z4: CERAMIC WALL HUNG URINAL wall hang bowl urinal to comply with SABS 497. Supplied with suitable 38mmCP domical grating, CP top inlet spreader an configuration supplied with integrated overflow and chainstay hole through the centre semi-punched supplied with a 'Tuscany' pedestal and fitted with 1N pasin waste, 365/40 CP Bottle Trap, mounting kit and angle valves. 82: DISABLED BASIN 420mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with: 2 No. chrome plated Elbow action standing overflow tube, chrome plated Bottle Trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to t B3: WHITE GLAZED PORCELAIN WHB (VANITY) accordance to manufacture's specifications. pillar taps, chrome plated anti-theft plug with spindle plug, slotted basin waste, chrome plated Bottle Trap, mounting kit and angle valves with 400mm lor flexible inlets supplied with all necessary pipe connections. All brackets and fixing accessories in strict accordance to the manufacturer's specifications. Vitreous china 510 x 420mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with; 2 No.chrome plated Elbow action standing overflow tube, chrome plated Bottle Trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to the Combination of sanitaryware, accessories and general fittings comprising of:

Vitreous china 90° outlet WC or equal and approved top inlet closed rim back-to-wall pan, Floor Mounted to comply with SABS 497 & Fitted with "Jc Installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with blank flush plate. necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever. **Z3: CERAMIC PARAPLEGIC WC (CC)- CONCEALED CISTERN** Vitreous china 90o outlet WC or equal and approved top inlet closed rim back-to-wall pan, Floor Mounted to comply with SABS 497 & Fitted with "Jaz Thermoset Plastic Seat". Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve Installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever, blank flush plate & offset push button for paraplegic access Z4: CERAMIC STANDARD WC (BACK INLET) **Z5: CERAMIC STANDARD WC (CC)** approved heavy duty thermoset lid, seat and complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. two hanger brackets and fitted with exposed flush-valve, and suitable bottle trap chrome finish as per manufacturer's specifications and applicable SABS SO1: SHOWER fittina in corner position fitted with Shower set and complying with SABS 226 comprising of approved: Glazed Shower Cubicle with access door as per standard supply from manufacturer and sized to fit space configuration Overhead shower arm with wall flange. Chrome Plated Shower Head with ball jointed connector Chrome Plated Bath/shower diverter mixer-wall type with sliding wall flanges and concealed connections adjustable from 178 mm to 203 mm centres. Shower tray to be recessed 50 mm into a 100mm high concrete plinth with exposed plinth face tiled. WASH-HAND BASIN B1: WHB & MIXER TAP 'Cobra Watertech' 15mm chrome pushbutton demand pillar tap with flanged backnut (code KM2.102) metering tap, 309-32 CP anti-theft plug with spindle, 308 pillar-tap, with 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged backnut, chrome plated waste, chrome plated 32 mm 1No. chrome plated tap with flanged backnut (code KM2.102) metering tap, mounting kit and angle valves 400mm long flexible inlets and chrome plated bottle trap supplied with all necessary pipe connections. Basin mounted on cabinet or vanity slab with silicon sealant between contact areas in stric B4: SMALL BASIN & 2 TAPSTRAY & SHOWER SET (FOR WORKSHOPS) B5: H/DUTY BASIN & 1No. TAP (FOR LABS) heavy duty basin in one taphole configuration to comply with SABS 497 and RHS hole plugged and fitted with: INpillar tap, Chrome Plated anti-theft plug with spindle plug, slotted basin waste, chrome plated Bottle Trap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Fitted to wall using 2No. Semi-concealed cast iron brackets in accordance to the manufacturer B6: MEDIC BASIN & FITTINGS (SICK BAY) pillar-tap, with . turn ceramic disc head and blue & Red indicators water applications and flanged backnut, chrome plated waste, chrome plated 32mn manufacturer's specifications. • Mirror type K2. • Paper towel dispenser K8 and bin type K3. • Soap dispenser type K9. • Splashback comprising 2no. rows of wall tile finish type R5 as per finishes schedule and grout in compliance to manufacturer's specifications and government standard specifications. Installation heights as indicated in the drawings.

SINKS:
X1: STAINLESS STEEL SINK Stainless steel 1000 x 457mm inset single end bowl with recessed d measured), Grade 304 (18/10) Stainless Steel sink to comply with and supplied with suitable assesories in accordance to manufactu
X2: STAINLESS STEEL SINK Stainless steel 1500 x 457mm inset double end bowl with reces elsewhere measured), Grade 304 (18/10) Stainless Steel sink to co swivel Outlet, adjustable wall flanges and supplied with suitable ad
X3: CERAMIC SINK Ceramic fireclay 435 x 335 x 180 mm rectangular laboratory sink brackets supplied with all necessary accessories (all to be acid resi X4: SINGLE WASH TROUGH (inset) & 2 no. TAPS
600mm x 500mm Inset washtrough, manufactured from grade 18/ with Approved 2No. CP bibtaps – plain extended chrome plated, and stay. CP, 'P' trap, with deep seal and cleaning eye. Rough br
X5: DOUBLE WASH TROUGH (inset) & 2 no. TAPS 1200 x 553 x 260mm Double bowl wall hung washtub manufactur fitted with: Approved 2no wall type bibtaps, with Swivel Outlet, ad nut and plug with stirrup. CP, Double drain black rubber deep seal piece at height of 915mm AFFL.
SANITARY ACCESSORIES
K1: SS TOILET ROLL HOLDER- 2 ROLL Standard stainless steel toilet roll holder (2 roll) 153mm width x 270r finish, including screws and dowels and all other necessary access K2: GLASS MIRROR
6mm thick clear float glass silver-backed mirror, size 450x900mm h headed mirror screws K3: SS WASTE BIN 328W x 826H x 203D Waste bin manufactured From 18/10 Stainless
accessories in accordance to manufacturer's specifications. <u>K4: SANITARY BIN (PLASTIC)</u> 190mm x 320mm x 600mm Plastic Sanitary Pedal Bin with capacity
manufacturer's specifications. <u>K5: SOAP HOLDER</u> Single semi-recessed ceramic soap dish Complete with all necesso
K6: WALL GRAB RAILS-PARAPLEGIC Stainless steel 914 x 90 x 32mm diameter wall (rear) grab rail, in manufacturer's instructions.
K7: GRAB RAILS (RIGHT/LEFT HAND)-PARAPLEGIC Stainless steel 1016 x 90 x 32mm diameter right/left hand side toiled and plastic wall plugs. Installed as per manufacturer's instructions.
K8: PAPER TOWEL DISPENSER 350mmWx365mmHx230mmD tear and dry paper hand towel disp installed in accordance to manufacturer's specifications.
K9: SOAP DISPENSER/DISH- WALL MOUNTED 115W x 270H x 110D Stailess steel Hands Free soap dispenser. Con manufacturer's specifications.
K10: ALUMINIUM COAT HOOKS (Multirack) 820mm Wide x 220mm High x 90mm High Aluminium Multi-rack Ho with Screws K11: HAND DRYER (Hands free)
As per Electrical Engineers specification K12: TOWEL RAIL 55mm dia. Polished 900mm long towel rail complete with all nec
architect's drawing. <u>K13: SHOWER CURTAIN RAIL (straight)</u> 20mm dia. standard chromium plated shower curtain rail 1300mm
· ·
GENERAL FIXTURES
<u>G1: DOOR PROTECTOR</u> 200mm wide uPVC Door Protector manufactured in high impact re accordance to manufacturer's specifications. Installation height % <u>G2: PROJECTOR SCREEN</u>
Pull down PVC screen size 2440 x 1850mm (viewing area 2340 x 17: be supplied complete with all accessories, and fitted in strict accor G3: PINBOARD 1500W X 1000H
Pinboard size 1000mm H x 1500mm W comprising of laminated so mitred at the corners. To be fitted complete with fixing brackets, scr G4: PINBOARD 3000W X 1200H
Pinboard size 1200mm H x 3000mm W comprising of laminated so mitred at the corners. To be fitted complete with fixing brackets, scr G5: WINDOW NORMAL BLINDS(vertical fabric)
127 mm vertical deco blinds with anodised aluminium headrail fit mechanism. All runners to be connected by stainless steel links. Tilt cap. Blinds to be face fixed (fixed over the window opening) by me <u>G6: FLOOR DRAIN</u>
Cast iron flat type full-flow outlets size 110 mm diameter with centre

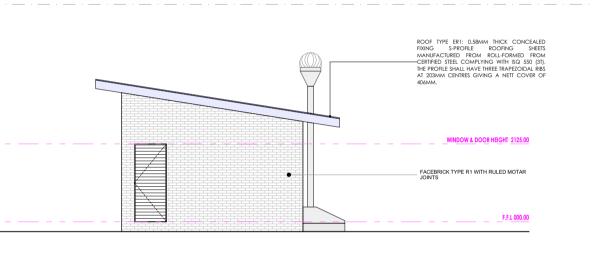
soft board core pinning material beaded all round with anodised aluminium channel surrou crews and wall plugs at 900mm above floor level fitted with colour coordinated insert. All runners o be wheeled and fitted with individual clut It mechanism to be operated by a nylon ball chain with a reduction gear inside a fully enclose means of concealed type fixing brackets.

Cast iron flat type full-flow outlets size 110 mm diameter with centre bolt, , including connections to downpipes. G7: SS FLOOR EXPANSION JOINT COVER Co-extruded heavy-duty stainless steel movement joint strip, with polyurethane infill (colour grey). To be installed within the tile surface over the 20mm expansion joints, in accordance to the manufacturer's specifications. G8: CHALKBOARDS- GREEN SURFACE COLOUR n 1000 standard WRITEBOARD or EQUAL & APPROVED vitreous enamelled steel utility school chalkboards wall-mounted size 4800mm x 1140mm hig nanufactured in accordance with SABS Standard CKS 36/2004 Edition 4 and suitable for Class 1: Heavy Duty applications, as defined therein. Enamel steel Util chalk board surfaces to be matt and finely structured, olive green in colour (Vitrex Colour Reference - Chalk Board Green LM1797/2), supplied complete wi ntegral anodised aluminium chalk rail (ACR), fixing components and secured in position to brickwork. The Chalk boards are to be fixed in position strictly

accordance with the manufacturer's instructions.

-0.500, wo2 52 72		1.000 1.222 5.125 5.125
	W02	
	QUANTITY	06
E" GALVANISED MILD STEEL DOUBLE SIDE HUNG HED, ASSEMBLED & DELIVERED COMPLETE WITH SING APPROVED HINGES, PIVOTING TENERS & WEATHERS BARS TO OENABLE PANELS: JILT IN WALLING	WINDOW DESCRIPTION	STANDARD "SCHOOL TYPE" GALVANISED MILD STEEL DOUBLE SIDE HUNG WINDOWS. MANUFACTURED, ASSEMBLED & DELIVERED COMPLETE WITH IRON MONGERY COMPRISING APPROVED HINGES, PIVOTING MECHANISMS, STAYS FASTENERS & WEATHERS BARS TO OENABLE PANELS: PLUGGED & SCREWED/BUILT IN WALLING
YPE" GALVANISED MILD STEEL WINDOW FRAME. APLY WITH SABS 727. FRAMES TO BE FACTORY HATE PRIMER TO COMPLY WITH SABS 1319 HED WITH ONE UNIVERSAL UNDERCOAT TO RADE 01, FINISHED WITH 2NO. COATS ALKYD LY WITH SABS 630. COLOR TO ARCHITECT'S	FRAME	STANDARD "STANDARD TYPE" GALVANISED MILD STEEL WINDOW FRAME. MANUFACTURED TO COMPLY WITH SABS 727. FRAMES TO BE FACTORY PRIMED WITH ZINC PHOSPHATE PRIMER TO COMPLY WITH SABS 1319 BEFORE DELIVERY & FINISHED WITH ONE UNIVERSAL UNDERCOAT TO COMLY WITH SABS 681 GRADE 01, FINISHED WITH 2NO. COATS ALKYD ENAMEL PAINT TO COMPLY WITH SABS 630. COLOR TO ARCHITECT'S SPECIFICATIONS
ED WITH PUTTY TO COMPLY WITH SABS 680. ED ON SITE IN SEALED CONTAINERS MARKED PROVAL	GLASS	6 mm SAFETY GLASS FIXED WITH PUTTY TO COMPLY WITH SABS 680. PUTTY MUST BE DELIVERED ON SITE IN SEALED CONTAINERS MARKED WITH SABS MARK OF APPROVAL
W FITTINGS (ORIGINAL)	WINDOW FITTINGS	MATCH EXISTING WINDOW FITTINGS (ORIGINAL)
E SUPPLIED MUST MATCH EXITING OR SIMILAR & IE ARCHITECT	IRON MONGERY	ALL IRON MONGERY TO BE SUPPLIED MUST MATCH EXITING OR SIMILAR & MUST BE APPROVED BY THE ARCHITECT
SPECIFICATION	HINGES	FIXED. MANUFACTURER'S SPECIFICATION

BLOCK Z-01 WINDOW SCHEDULE SCALE 1:100



BLOCK Z-01 SIDE ELEVATION

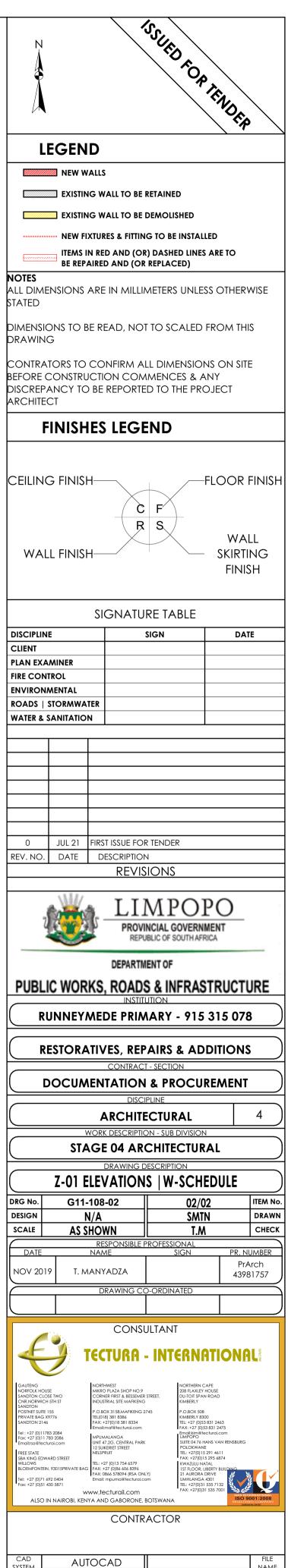
SCALE 1:100

BLOCK Z-01 SIDE ELEVATION

ANUFACTURED FROM ROLL-FORMED FROM CERTIFIED STEEL COMPLYING V 30 (31), THE PROFILE SHALL HAVE THREE TRAPEZOIDAL RIBS AT 203MM (1/VING A NETT COVER OF 404MM. $\Delta \Delta$ F.F.L 000.00 **BLOCK Z-01 REAR ELEVATION** SCALE 1:100

R HEIGHT 2125.0

F.F.L 000.0



PRO JECT NUMBER

LDPW - PROF/16002/G11

FINISHES LEGEND FLOORS:

F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)

300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles to SABS Specification 581: 1992 (or later revision), and laid to SABS 070 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval. F2: PORCELAIN TILES -MATT 600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with

SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPET TILES

500mm x 500mm , 100% PFX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54324 on wira test and ISO body test at less than 2Kv at 25% RH on static electricity. Colour and pattern to architects approval.

F4: CEMENT SAND SCREED

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

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

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

F6: GRANOLITHIC FINISH

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

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINLY SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self -Levelled Smooth Screed glued with conducive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

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

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

"Ex 75mm x 20mm Moulded Hardwood Skirting" to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred coners with screws and plugs at centres not exceeding 600mm , and fixed with a 19mm x 19mm quadrant beading. The skirting to be vanished with 3No. coats of egg shell clear vanish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

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

S3: CEMENT SAND SCREED

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

WALL FINISHES:

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

<u>R2: EMULSION (PVA) PAINT – FULL HEIGHT</u>

no. coats of PVA matt finish emulsion paint to SABS 1586 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

<u>R3:ALKYD (ENAMEL) PAINT</u>

2 no. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant plaster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of; 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5:CERAMIC WALL TILES – FULL HEIGHT

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

CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED "GypCeil Classic" gypsum plasterboard ceilingor EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured,

ISO 9001 & 14001 certification, recycled paper content, Ecospecifier listing) fixed to timber brandering installed at maximum 300mm centers using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centers. Apply . Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.

C2: FIBRE CEMENT BOARDS (H-JOINTED)

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

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

1200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, Z150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire otches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

Emulsion (PVA) Paint on Skimmed Plastered Slab" 3No. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

ROOF COVERING AND INSULATION:

ER1: EMBOSSED ROOFING SHEET (TWO SIDES)

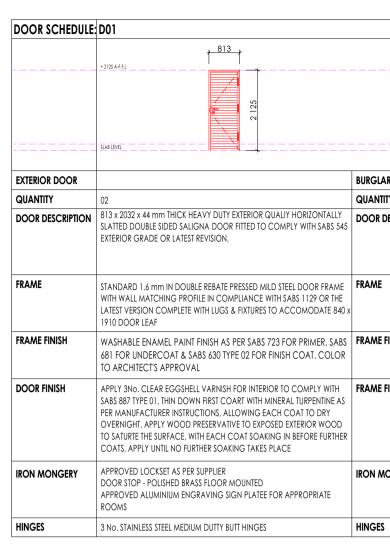
Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISQ 550 (31). The profile shall have three trapezoidal ribs at 203mm centers giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofsheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instructions

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

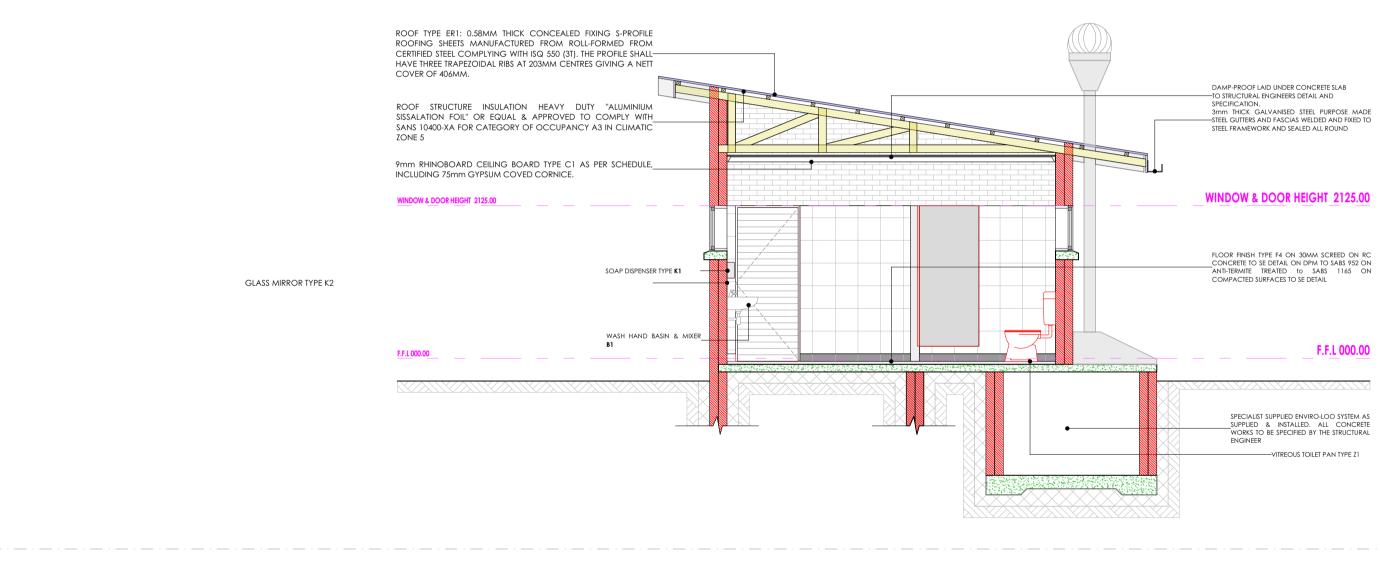
Galvanised Steel (GI) Gutter: 150mm Wide x 100mm Deep x 0.6mm Eaves Gutter of Commercial Grade Steel With Class 2275 Galvanising To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Fascia Board Together with standard accessories discharging into Rainwater Downpipes.

Downpipe: 110 x110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class Z275 Galvanising To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-taping screws To Manufacturer Installation Instructions.

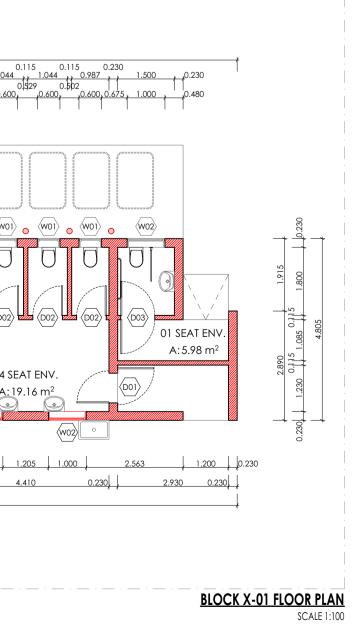
Fascia board: 250 x 10 mm Fibre- Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

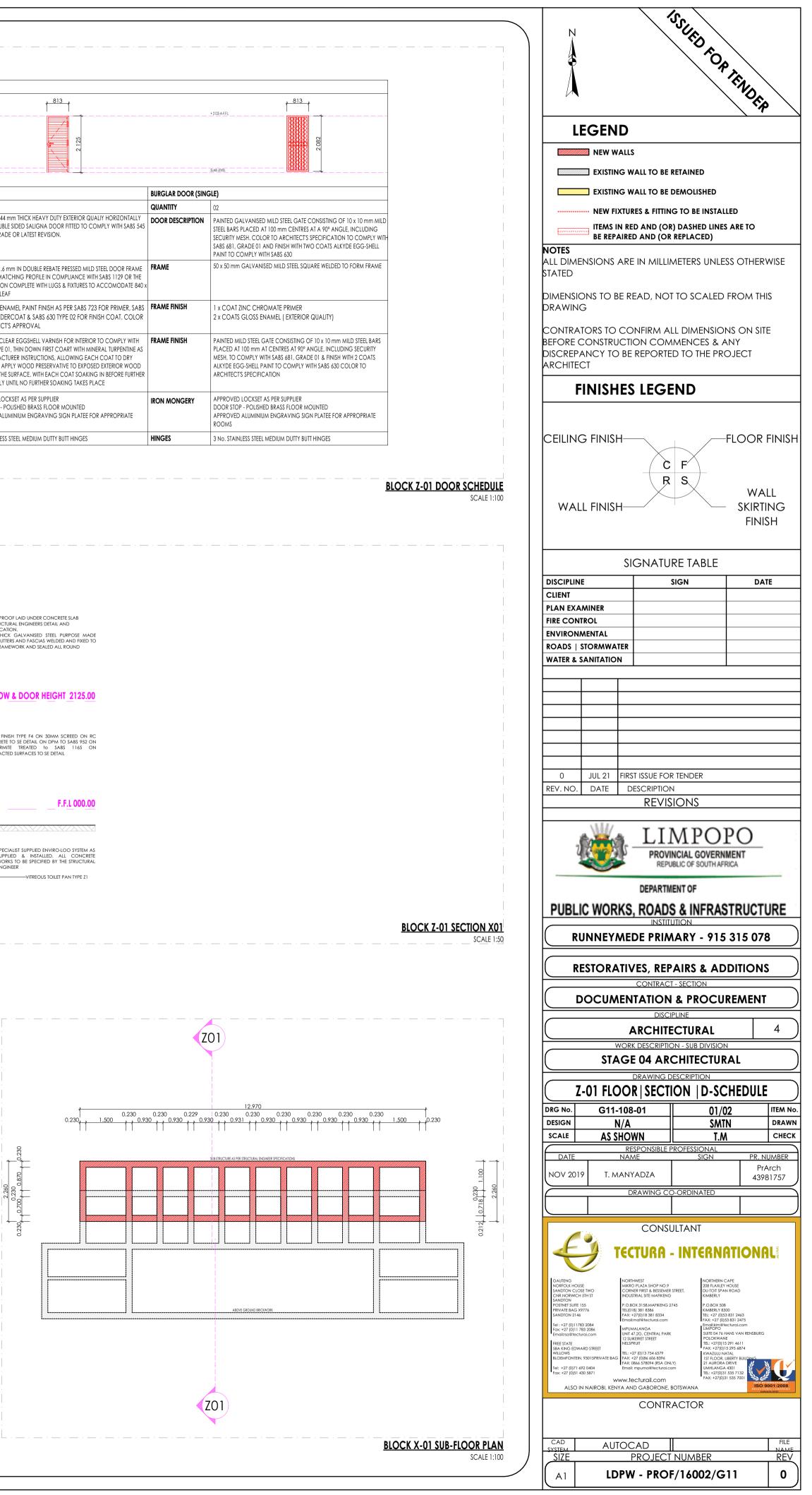


T2 0.230 0.230 0.115 0.115 0.115 0.115 0.115 0.115 0.115 0.115 0.115 0.115 0.115 0.115 0.115 0.230 0.590 1.044 1.044 1.0.990 0.590 1.044 1.0.990 0.590 0. SEAT ENV A: 5.98 m² 04 SEAT ENV. 04 SEAT ENV A·19.16 m A: 19.16 m _(wo2) (W02) (W02) 0.230 1.200 2.563 1.000 1.205 1.000 1.435 1.000 1.205 1.000 2.563 1.200 0.230 2.930 0.230 4.410 0.230 0.230 T2



		D02			D03		
	+ 2125 A-FFL		<u>* 813 *</u>		* 2125 AFFL		+ 2125 A-FFL
	SLAB LEVEL						SLAB LEVEL
GLAR DOOR (SING	SLE)	INTERIOR DOOR	ó	EXTERIOR DOOR		BURGLAR DOOR (SINC	GLE)
NTITY	02	QUANTITY	08	QUANTITY	02	QUANTITY	02
R DESCRIPTION	PAINTED GALVANISED MILD STEEL GATE CONSISTING OF 10 x 10 mm MILD STEEL BARS PLACED AT 100 mm CENTRES AT A 90° ANGLE, INCLUDING SECURITY MESH. COLOR TO ARCHITECT'S SPECIFICATION TO COMPLY WITH SABS 681, GRADE 01 AND FINISH WITH TWO COATS ALKYDE EGG-SHELL PAINT TO COMPLY WITH SABS 630	DOOR DESCRIPTION	813 x 2032 x 44 mm THICK INTERIOR GRADE FLUSH HOLLOW CORE SINGLE TIMBER DOOR WITH 3 mm PLY ON BOTH SIDES WITH 2 CONSOLIDATED EDGES FITTED TO COMPLY WITH SABS 545 IN PRESSED STEEL FRAME. ALL PAINTED TO ARCHITECT'S COLOR SCHEDULE	DOOR DESCRIPTION	813 x 2032 x 44 mm THICK HEAVY DUTY EXTERIOR QUALIY HORIZONTALLY SLATTED DOUBLE SIDED SALIGNA DOOR FITTED TO COMPLY WITH SABS 545 EXTERIOR GRADE OR LATEST REVISION.	DOOR DESCRIPTION	PAINTED GALVANISED MILD STEEL GAT STEEL BARS PLACED AT 100 mm CENTR SECURITY MESH. COLOR TO ARCHITEC SABS 681, GRADE 01 AND FINISH WITH PAINT TO COMPLY WITH SABS 630
ΛE	50 x 50 mm GALVANISED MILD STEEL SQUARE WELDED TO FORM FRAME	FRAME	STANDARD 1.6 mm IN DOUBLE REBATE PRESSED MILD STEEL DOOR FRAME WITH WALL MATCHING PROFILE IN COMPLIANCE WITH SABS 1129 OR THE LATEST VERSION COMPLETE WITH LUGS & FIXTURES TO ACCOMODATE 840 x 1910 DOOR LEAF	FRAME	STANDARD 1.6 mm IN DOUBLE REBATE PRESSED MILD STEEL DOOR FRAME WITH WALL MATCHING PROFILE IN COMPLIANCE WITH SABS 1129 OR THE LATEST VERSION COMPLETE WITH LUGS & FIXTURES TO ACCOMODATE 840 x 1910 DOOR LEAF	FRAME	50 x 50 mm GALVANISED MILD STEEL S
AE FINISH	1 x COAT ZINC CHROMATE PRIMER 2 x COATS GLOSS ENAMEL (EXTERIOR QUALITY)	FRAME FINISH	WASHABLE ENAMEL PAINT FINISH AS PER SABS 723 FOR PRIMER, SABS 681 FOR UNDERCOAT & SABS 630 TYPE 02 FOR FINISH COAT. COLOR TO ARCHITECT'S APPROVAL	FRAME FINISH	WASHABLE ENAMEL PAINT FINISH AS PER SABS 723 FOR PRIMER, SABS 681 FOR UNDERCOAT & SABS 630 TYPE 02 FOR FINISH COAT. COLOR TO ARCHITECT'S APPROVAL	FRAME FINISH	1 x COAT ZINC CHROMATE PRIMER 2 x COATS GLOSS ENAMEL (EXTERIO
AE FINISH	PAINTED MILD STEEL GATE CONSISTING OF 10 x 10 mm MILD STEEL BARS PLACED AT 100 mm AT CENTRES AT 90° ANGLE, INCLUDING SECURITY MESH, TO COMPLY WITH SABS 681, GRADE 01 & FINISH WITH 2 COATS ALKYDE EGG-SHELL PAINT TO COMPLY WITH SABS 630 COLOR TO ARCHITECT'S SPECIFICATION	DOOR FINISH	APPLY 3NO. CLEAR EGGSHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, THIN DOWN FIRST COART WITH MINERAL TURPENTINE AS PER MANUFACTURER INSTRUCTIONS, ALLOWING EACH COAT TO DRY OVERNIGHT, APPLY WOOD PRESERVATIVE TO EXPOSED EXTERIOR WOOD TO SATURTE THE SURFACE, WITH EACH COAT SOAKING IN BEFORE FURTHER COATS, APPLY UNTIL NO FURTHER SOAKING TAKES PLACE	DOOR FINISH	APPLY 3NO. CLEAR EGGSHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, THIN DOWN FIRST COART WITH MINERAL TURPENTINE AS PER MANUFACTURER INSTRUCTIONS, ALLOWING EACH COAT TO DRY OVERNIGHT, APPLY WOOD PRESERVATIVE TO EXPOSED EXTERIOR WOOD TO SATURTE THE SURFACE, WITH EACH COAT SOAKING IN BEFORE FURTHER COATS, APPLY UNTIL NO FURTHER SOAKING TAKES PLACE	FRAME FINISH	PAINTED MILD STEEL GATE CONSISTING PLACED AT 100 mm AT CENTRES AT 90 MESH, TO COMPLY WITH SABS 681, GR ALKYDE EGG-SHELL PAINT TO COMPLY ARCHITECT'S SPECIFICATION
MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATEE FOR APPROPRIATE ROOMS	IRON MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATEE FOR APPROPRIATE ROOMS	IRON MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATEE FOR APPROPRIATE ROOMS	IRON MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR APPROVED ALUMINIUM ENGRAVING S ROOMS
ES	3 No. STAINLESS STEEL MEDIUM DUTTY BUTT HINGES	HINGES	3 No. STAINLESS STEEL MEDIUM DUTTY BUTT HINGES	HINGES	3 No. STAINLESS STEEL MEDIUM DUTTY BUTT HINGES	HINGES	3 No. STAINLESS STEEL MEDIUM DUTTY E





FLOORS: F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)

300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles to SABS Specification 581: 1992 (or later revision), and laid to SABS 070 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval F2: PORCELAIN TILES -MATT 600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with

SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and \$AB\$ specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPET TILES

500mm x 500mm , 100% PFX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54324 on wira test and ISO body test at less than 2Kv at 25% RH on static electricity. Colour and pattern to architects approval.

F4: CEMENT SAND SCREED

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

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

55mm thick multi-coloured concrete pavers laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approval and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or Latest Revision.

F6: GRANOLITHIC FINISH

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

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINLY SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self -Levelled Smooth Screed alued with conducive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

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

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

"Ex 75mm x 20mm Moulded Hardwood Skirting" to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred coners with screws and plugs at centres not exceeding 600mm , and fixed with a 19mm x 19mm quadrant beading. The skirting to be vanished with 3No. coats of egg shell clear vanish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

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

S3: CEMENT SAND SCREED

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

WALL FINISHES:

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

<u>R2: EMULSION (PVA) PAINT – FULL HEIGHT</u>

no. coats of PVA matt finish emulsion paint to SABS 1586 applied on plastered surface primed and with 1 no. coat undercoat to SABS 68 grade1, in accordance to manufacturer's instructions.

R3:ALKYD (ENAMEL) PAINT

no. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant laster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of; 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5:CERAMIC WALL TILES – FULL HEIGHT

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

CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED GypCeil Classic" gypsum plasterboard ceilingor EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured,

ISO 9001 & 14001 certification, recycled paper content, Ecospecifier listing) fixed to timber brandering installed at maximum 300mm centers using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centers. Apply . Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.

C2: FIBRE CEMENT BOARDS (H-JOINTED)

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

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, Z150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed o the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire otches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

mulsion (PVA) Paint on Skimmed Plastered Slab" 3No. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

ROOF COVERING AND INSULATION:

ER1: EMBOSSED ROOFING SHEET (TWO SIDES)

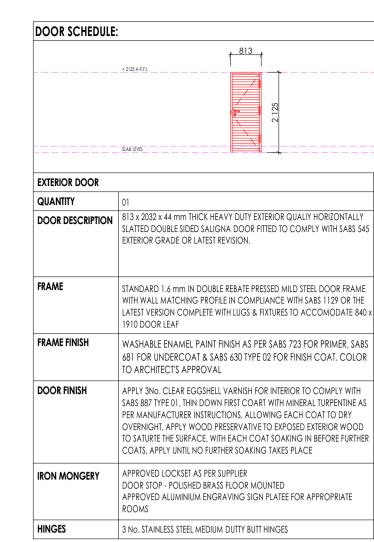
Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISQ 550 (31). The profile shall have three trapezoidal ribs at 203mm centers giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofsheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instruction

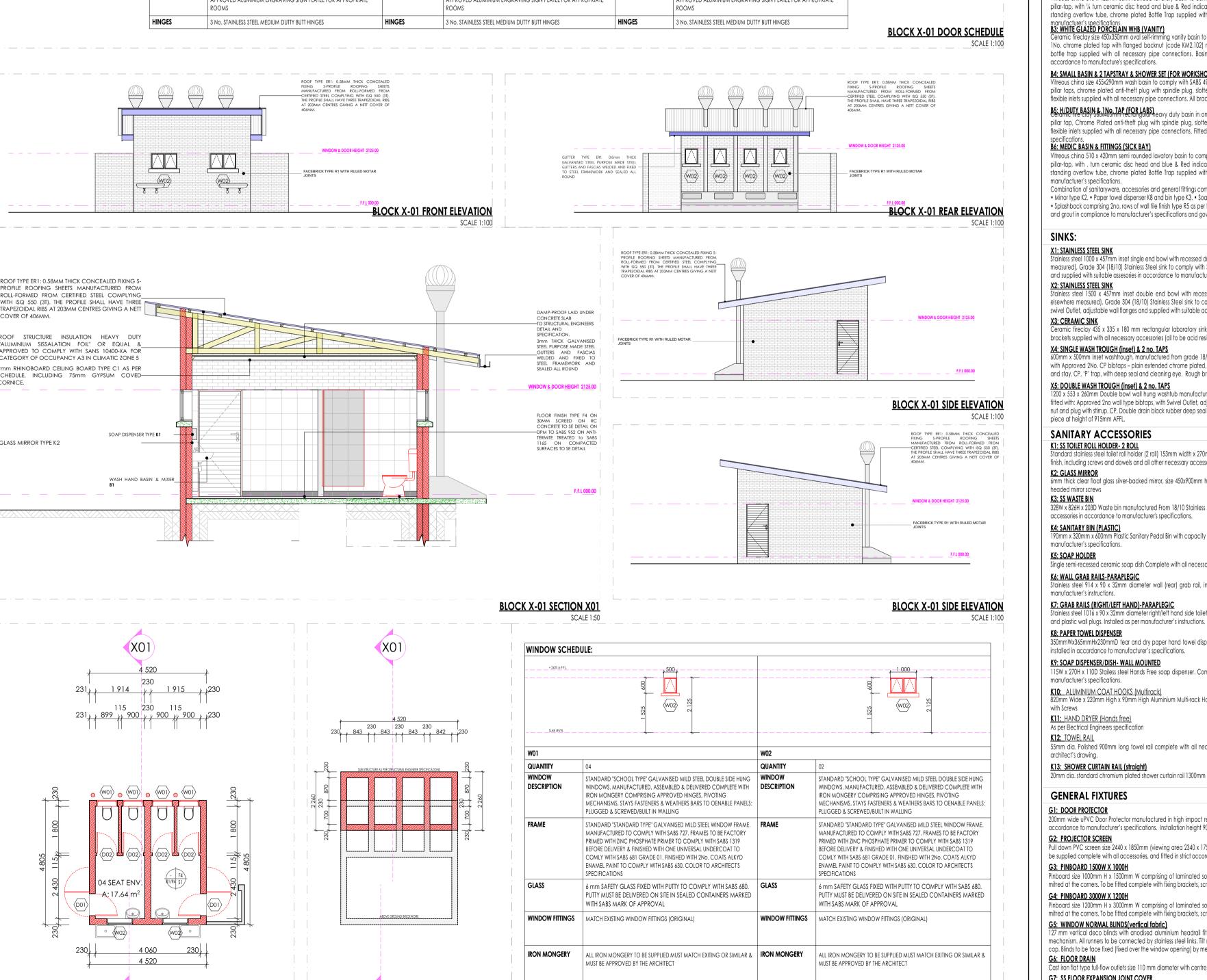
Insulation: SHALL EITHER BE: 1: where there are acoustic ceilings susspeded board, a heavy duty "Aluminium sisalation foil" shall be installed AND 2: where the steel work is exposed, a 50mm "FactoryBoard" manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm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

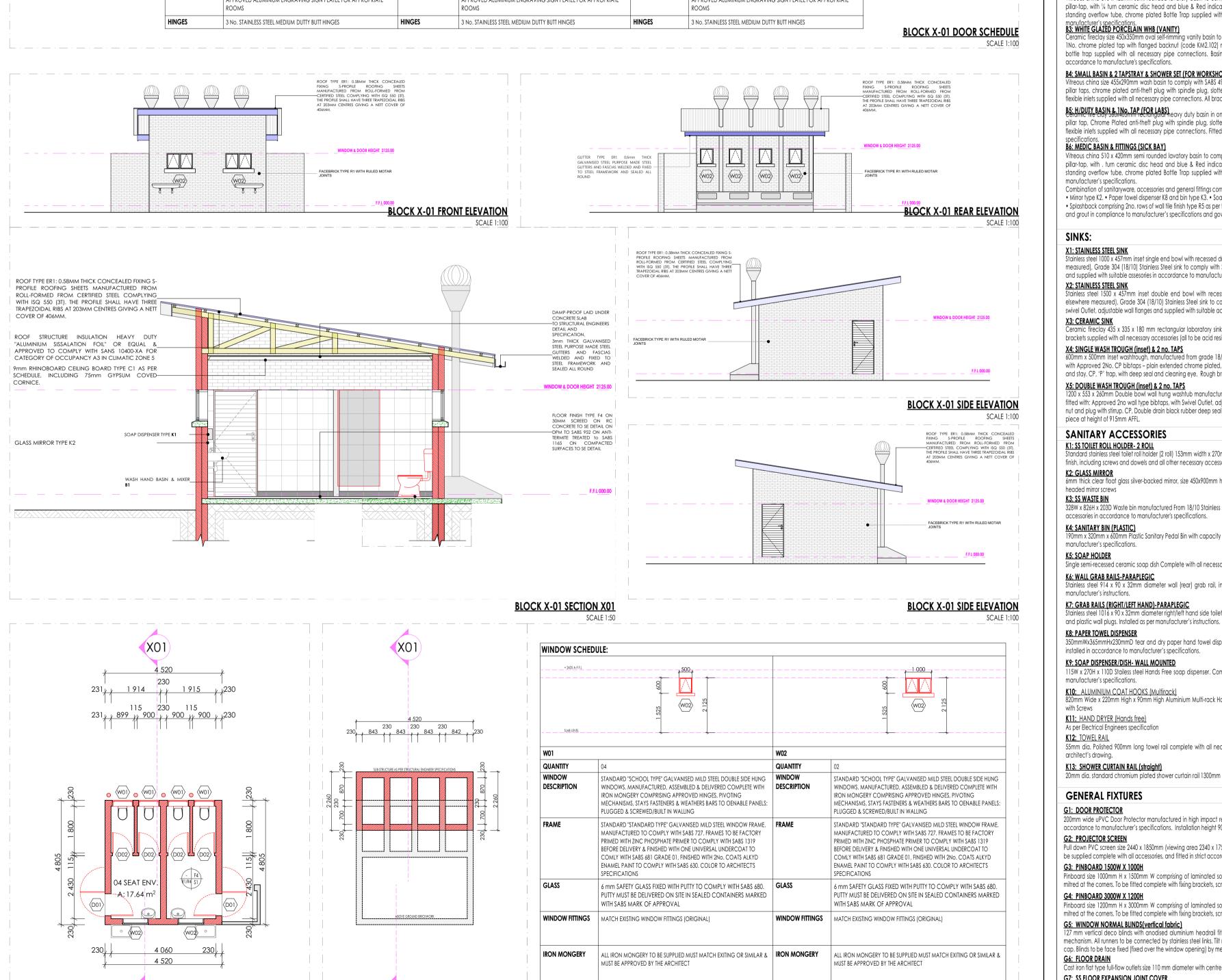
Galvanised Steel (GI) Gutter: 150mm Wide x 100mm Deep x 0.6mm Eaves Gutter of Commercial Grade Steel With Class Z275 Galvanising To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Fascia Board Together with standard accessories discharging into Rainwater Downpipes.

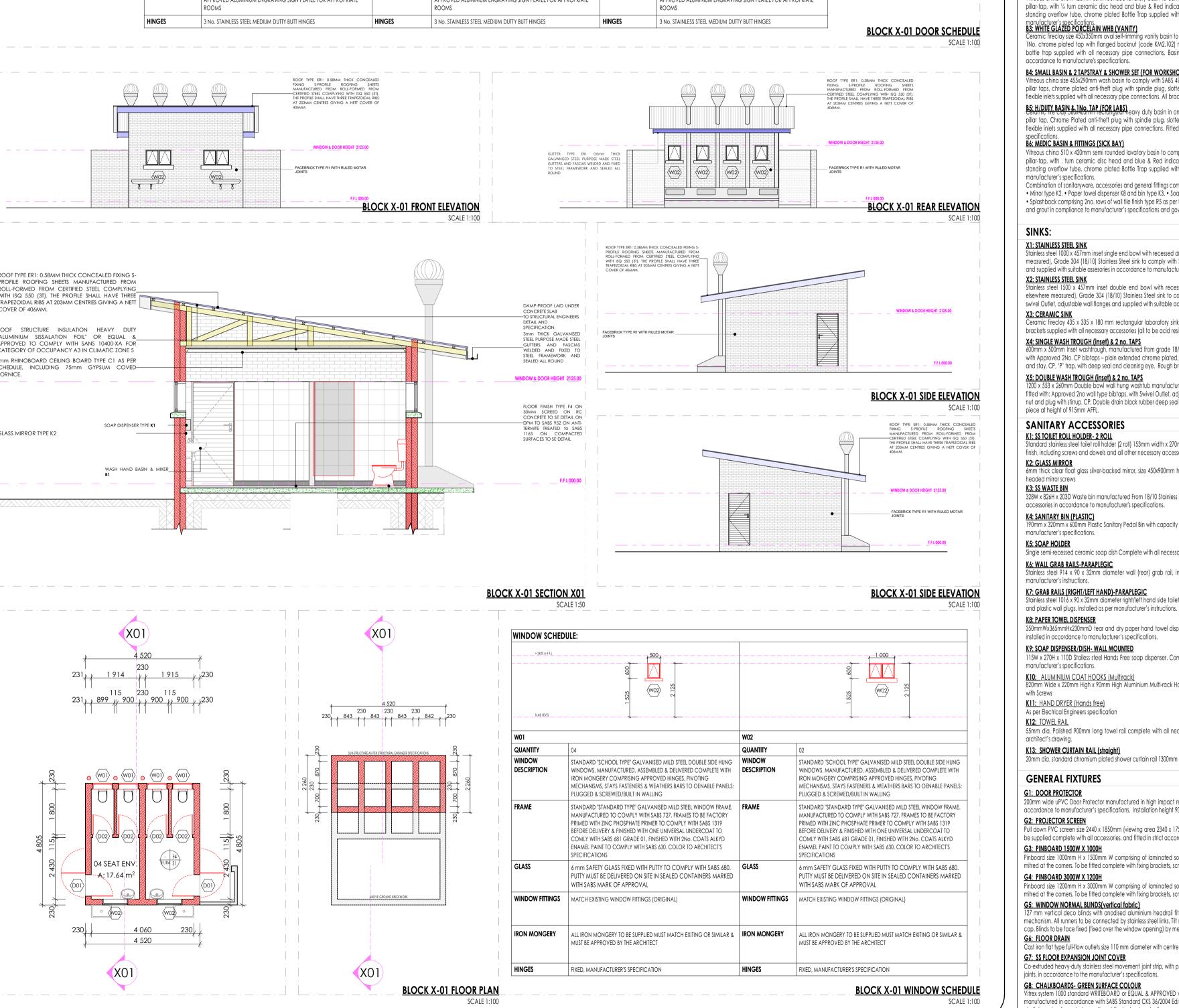
Downpipe: 110 x110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class 2275 Galvanising To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-taping screws To Manufacturer Installation Instructions.

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

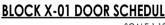








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		SLAS LEVEL			
				* 	
	BURGLAR DOOR (SING	ile)	INTERIOR DOOR	Г <u> </u>	
	QUANTITY	02	QUANTITY	02	
	DOOR DESCRIPTION	PAINTED GALVANISED MILD STEEL GATE CONSISTING OF 10 x 10 mm MILD STEEL BARS PLACED AT 100 mm CENTRES AT A 90° ANGLE, INCLUDING SECURITY MESH. COLOR TO ARCHITECT'S SPECIFICATION TO COMPLY WITH SABS 681, GRADE 01 AND FINISH WITH TWO COATS ALKYDE EGG-SHELL PAINT TO COMPLY WITH SABS 630		813 x 2032 x 44 mm THICK INTERIOR GRADE FLUSH HOLLOW CORE SINGLE TIMBER DOOR WITH 3 mm PLY ON BOTH SIDES WITH 2 CONSOLIDATED EDGES FITTED TO COMPLY WITH SABS 545 IN PRESSED STEEL FRAME. ALL PAINTED TO ARCHITECT'S COLOR SCHEDULE	
x	FRAME	50 x 50 mm GALVANISED MILD STEEL SQUARE WELDED TO FORM FRAME	FRAME	STANDARD 1.6 mm IN DOUBLE REBATE PRESSED MILD STEEL DOOR FRAME WITH WALL MATCHING PROFILE IN COMPLIANCE WITH SABS 1129 OR THE LATEST VERSION COMPLETE WITH LUGS & FIXTURES TO ACCOMODATE 840 x 1910 DOOR LEAF	
	FRAME FINISH	1 x COAT ZINC CHROMATE PRIMER 2 x COATS GLOSS ENAMEL (EXTERIOR QUALITY)	FRAME FINISH	WASHABLE ENAMEL PAINT FINISH AS PER SABS 723 FOR PRIMER, SABS 681 FOR UNDERCOAT & SABS 630 TYPE 02 FOR FINISH COAT. COLOR TO ARCHITECT'S APPROVAL	
	FRAME FINISH	PAINTED MILD STEEL GATE CONSISTING OF 10 x 10 mm MILD STEEL BARS PLACED AT 100 mm AT CENTRES AT 90° ANGLE, INCLUDING SECURITY MESH, TO COMPLY WITH SABS 681, GRADE 01 & FINISH WITH 2 COATS ALKYDE EGG-SHELL PAINT TO COMPLY WITH SABS 630 COLOR TO ARCHITECT'S SPECIFICATION	DOOR FINISH	APPLY 3No. CLEAR EGGSHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, THIN DOWN FIRST COART WITH MINERAL TURPENTINE AS PER MANUFACTURER INSTRUCTIONS, ALLOWING EACH COAT TO DRY OVERNIGHT, APPLY WOOD PRESERVATIVE TO EXPOSED EXTERIOR WOOD TO SATURTE THE SURFACE, WITH EACH COAT SOAKING IN BEFORE FURTHER COATS, APPLY UNTIL NO FURTHER SOAKING TAKES PLACE	
	IRON MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATEE FOR APPROPRIATE ROOMS	IRON MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATEE FOR APPROPRIATE ROOMS	
	HINGES	3 No. STAINLESS STEEL MEDIUM DUTTY BUTT HINGES	HINGES	3 No. STAINLESS STEEL MEDIUM DUTTY BUTT HINGES	

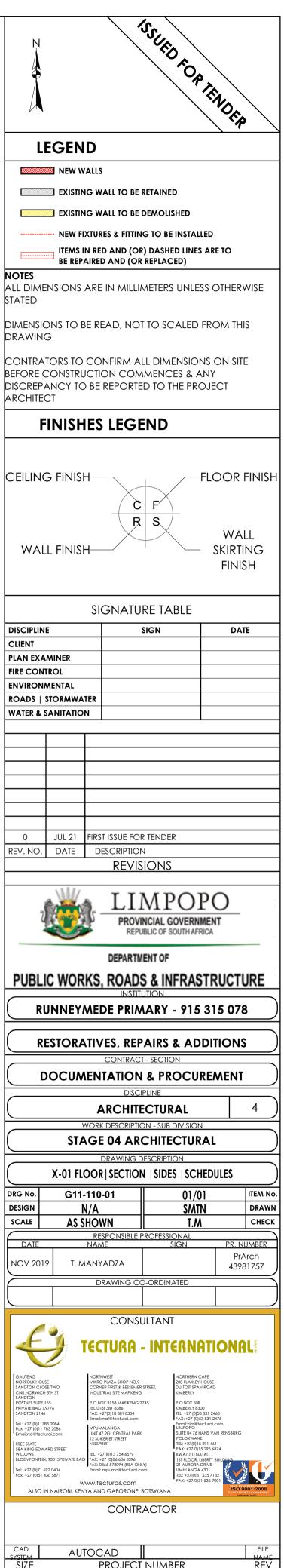


SANITARY SCHEDULE WC'S URINALS & SHOWER Z1: CERAMIC STANDARD WC (CC)- CONCEALED CISTERN Vitreous ching 90° outlet WC or equal and approved top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 497 & Fitted with "J Thermoset Plastic Seat", Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharae valve access pneumatic discharae val Installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with Z2: CERAMIC PARAPLEGIC WC /itreous china 90o outlet or equal and approved, top inlet closed rim back-to-wall pan to comply with SABS 497. Fitted with Cistern Installed complete with (necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever. **Z3: CERAMIC PARAPLEGIC WC (CC)- CONCEALED CISTERN** Vitreous ching 900 outlet WC or equal and approved top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 497 & Fitted with "J Thermoset Plastic Seat". Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve Installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever, blank flush plate & offset push button for paraplegic access Z4: CERAMIC STANDARD WC (BACK INLET) Vitreous china 900 outlet, back inlet pan to comply with SABS 497. Fitted complete with Back inlet exposed flush-valve complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. Flush valve to be fitted with suitable extension lever. **Z5: CERAMIC STANDARD WC (CC)** vitreous china 900 outlet, back inlet pan to comply with SABS 497. Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermoset lid, seat and complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. Z4: CERAMIC WALL HUNG URINAL wall hang bowl urinal to comply with SABS 497. Supplied with suitable 38mmCP domical grating, CP top inlet spreader an two hanger brackets and fitted with exposed flush-valve, and suitable bottle trap chrome finish as per manufacturer's specifications and applicable SABS NOTES SO1: SHOWER mm thick Enamelled steel shower tray size 900x900x160 mm manufactured with anti slip pattern, with rounded internal corners, and 38 mm BSP grated waste STATED fitting in corner position fitted with Shower set and complying with SABS 226 comprising of approved: Glazed Shower Cubicle with access door as per standard supply from manufacturer and sized to fit space configuration Overhead shower arm with wall flange. Chrome Plated Shower Head with ball jointed connector DRAWING Chrome Plated Bath/shower diverter mixer-wall type with sliding wall flanges and concealed connections adjustable from 178 mm to 203 mm centres. Shower tray to be recessed 50 mm into a 100mm high concrete plinth with exposed plinth face tiled. WASH-HAND BASIN B1: WHB & MIXER TAP ous china size 560 x 415mm rounded 'Tuscany', OR EQUAL AND APPROVE basin to comply with SABS 497 with single tapho ARCHITECT configuration supplied with integrated overflow and chainstay hole through the centre semi-punched supplied with a 'Tuscany' pedestal and fitted with 1N 'Cobra Watertech' 15mm chrome pushbutton demand pillar tap with flanged backnut (code KM2.102) metering tap, 309-32 CP anti-theft plug with spindle, 30 asin waste, 365/40 CP Bottle Trap, mounting kit and angle valves. 82: DISABLED BASIN 420mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with: 2 No. chrome plated Elbow action pillar-tap, with 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged backnut, chrome plated waste, chrome plated 32 mm standing overflow tube, chrome plated Bottle Trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to t amic fireclay size 450x350mm oval self-rimming vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with: 1No. chrome plated tap with flanged backnut (code KM2.102) metering tap, mounting kit and angle valves 400mm long flexible inlets and chrome plated bottle trap supplied with all necessary pipe connections. Basin mounted on cabinet or vanity slab with silicon sealant between contact areas in stric B4: SMALL BASIN & 2 TAPSTRAY & SHOWER SET (FOR WORKSHOPS) Vitreous china size 455x290mm wash basin to comply with SABS 497 in 2-tap hole configuration supplied with integrated overflow and chainstay hole with; 2N pillar taps, chrome plated anti-theft plug with spindle plug, slotted basin waste, chrome plated Bottle Trap, mounting kit and angle valves with 400mm lor flexible inlets supplied with all necessary pipe connections. All brackets and fixing accessories in strict accordance to the manufacturer's specifications. B5: H/DUTY BASIN & INO. TAP (FOR LABS) heavy duty basin in one taphole configuration to comply with SABS 497 and RHS hole plugged and fitted with: INpillar tap, Chrome Plated anti-theft plug with spindle plug, slotted basin waste, chrome plated Bottle Trap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Fitted to wall using 2No. Semi-concealed cast iron brackets in accordance to the manufacturer Vitreous china 510 x 420mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with; 2 No.chrome plated Elbow actior pillar-tap, with . turn ceramic disc head and blue & Red indicators water applications and flanged backnut, chrome plated waste, chrome plated 32mn standing overflow tube, chrome plated Bottle Trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to the DISCIPLINE CLIENT Combination of sanitaryware, accessories and general fittings comprising of • Mirror type K2. • Paper towel dispenser K8 and bin type K3. • Soap dispenser type K9. PLAN EXAMINER • Splashback comprising 2no. rows of wall tile finish type R5 as per finishes schedule FIRE CONTROL and arout in compliance to manufacturer's specifications and government standard specifications. Installation heights as indicated in the drawings ENVIRONMENTAL Stainless steel 1000 x 457mm inset single end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsewl measured), Grade 304 (18/10) Stainless Steel sink to comply with SABS 906 fitted with: Approved Sink mixer- wall type, chrome plated swivel Outlet, adjustab and supplied with suitable assessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL. Stainless steel 1500 x 457mm inset double end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboar elsewhere measured), Grade 304 (18/10) Stainless Steel sink to comply with SABS 906 fitted with: Approved Sink mixer- wall tape, with chrome plated overarm swivel Outlet, adjustable wall flanges and supplied with suitable acesories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFI Ceramic fireclay 435 x 335 x 180 mm rectangular laboratory sink without overflow, with a centre end waste outlet, fitted to the wall on two semi-concealer brackets supplied with all necessary accessories (all to be acid resistant x 500mm Inset washtrough, manufactured from grade 18/10 SS, stainless steel with radiused internal corners and provision for a 40mm dia, outlet, Eith with Approved 2No. CP bibtaps - plain extended chrome plated, complete with sliding wall flanges, Un-slotted sink waste with back nut, plug with stirrup, cho and stay. CP, 'P' trap, with deep seal and cleaning eye. Rough brass. Sink installation height = 900mm AFFL. Cut out size 535 x 425mm. REV. NO. 0 x 553 x 260mm Double bowl wall hung washtub manufactured from grade 304 (18/10) SS, radiused internal corners and provision for a 40mm dia. outle fitted with: Approved 2no wall type bibtaps, with Swivel Outlet, adjustable wall flanges and exposed adjustable connections. CP. Un-slotted sink waste with bac nut and plug with stirrup. CP, Double drain black rubber deep seal 'P'-Trap. Sink mounted on 2no. 25mm square SS gallow brackets, front leg and adjustable fo dard stainless steel toilet roll holder (2 roll) 153mm width x 270mm high 275mm depth Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Sat finish, including screws and dowels and all other necessary accessories in accordance to manufacturer's specifications. 6mm thick clear float glass silver-backed mirror, size 450x900mm height with polished bevelled edges 4 times holed for and fixed, with chromium plated dom 328W x 826H x 203D Waste bin manufactured From 18/10 Stainless steel, Surface Satin Finish, Material Thickness 1.5mm, including Screws, dowels and all necessar 1 x 320mm x 600mm Plastic Sanitary Pedal Bin with capacity of 100 Liners per pack Complete with all necessary accessories and installed in accordance to Single semi-recessed ceramic soap dish Complete with all necessary accessories and installed in accordance to manufacturer's specifications. Stainless steel 914 x 90 x 32mm diameter wall (rear) grab rail, in satin polished finish complete with SS fixing screws and plastic wall plugs. Installed as per stainless steel 1018 x 90 x 32mm diameter right/left hand side toilet grab rail with 450mm high centre flange, in satin polished finish complete with SS fixing screws 350mmWx365mmHx230mmD tear and dry paper hand towel dispenser in stainless steel. Complete with screws, locking key, and all necessary accessories ar 115W x 270H x 110D Stailess steel Hands Free soap dispenser. Complete with screws, locking key, and all necessary accessories and installed in accordance t DRG No. DESIGN 820mm Wide x 220mm High x 90mm High Aluminium Multi-rack Hat and Coat Hook in multi-track two Hooks Configuration With Anodised Silver Finish Comple SCALE 55mm dia. Polished 900mm long towel rail complete with all necessary accessories in accordance to manufacturer's specifications. Installation height as per NOV 201 20mm dia. standard chromium plated shower curtain rail 1300mm long with flanged ends and screws CP fixing height as per PA's drawing. 200mm wide uPVC Door Protector manufactured in high impact resistant rigid uPVC (Colour Grey) and cut to suit door width from 3m length, installed strictly in accordance to manufacturer's specifications. Installation height 900mm above FFL, or as specified. Pull down PVC screen size 2440 x 1850mm (viewing area 2340 x 1750mm) with wall-mounted code SC0400 Keystone Brackets Adjustable Set of 2, size 300mm. To be supplied complete with all accessories, and fitted in strict accordance with manufactures instructions. Pinboard size 1000mm H x 1500mm W comprising of laminated soft board core pinning material beaded all round with anodised aluminium channel surrour mitred at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level. Pinboard size 1200mm H x 3000mm W comprising of laminated soft board core pinning material beaded all round with anodised aluminium channel surrour mitred at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level 27 mm vertical deco blinds with anodised aluminium headrail fitted with colour coordinated insert. All runners o be wheeled and fitted with individual clute mechanism. All runners to be connected by stainless steel links. Tilt mechanism to be operated by a nylon ball chain with a reduction gear inside a fully enclose cap. Blinds to be face fixed (fixed over the window opening) by means of concealed type fixing brackets. Cast iron flat type full-flow outlets size 110 mm diameter with centre bolt, , including connections to downpipes.

accordance with the manufacturer's instructions.

Co-extruded heavy-duty stainless steel movement joint strip, with polyurethane infill (colour grey). To be installed within the tile surface over the 20mm expansion

n 1000 standard WRITEBOARD or EQUAL & APPROVED vitreous enamelled steel utility school chalkboards wall-mounted size 4800mm x 1140mm hig manufactured in accordance with SABS Standard CKS 36/2004 Edition 4 and suitable for Class 1: Heavy Duty applications, as defined therein. Enamel steel Util chalk board surfaces to be matt and finely structured, olive green in colour (Vitrex Colour Reference - Chalk Board Green LM1797/2), supplied complete wil ntegral anodised aluminium chalk rail (ACR), fixing components and secured in position to brickwork. The Chalk boards are to be fixed in position strictly ir



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FINISHES LEGEND FLOORS:

F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)

300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles to SABS Specification 581: 1992 (or later revision), and laid to SABS 070 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval F2: PORCELAIN TILES -MATT 600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with

SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

F3: CARPET TILES

500mm x 500mm , 100% PFX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54324 on wira test and ISO body test at less than 2Kv at 25% RH on static electricity. Colour and pattern to architects approval.

F4: CEMENT SAND SCREED

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

F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

55mm thick multi-coloured concrete pavers laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approval and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or Latest Revision.

F6: GRANOLITHIC FINISH

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

F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 197mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

F8: SEMI FLEXIBLE VINLY SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self -Levelled Smooth Screed alued with conducive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity. Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

F9: GRAVEL FINISH ON SAND LAYER

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

SKIRTING:

S1: HARDWOOD OR EQUAL AND APPROVED

"Ex 75mm x 20mm Moulded Hardwood Skirting" to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred coners with screws and plugs at centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant beading. The skirting to be vanished with 3No. coats of egg shell clear vanish to comply with SABS/SANS 381 type 1.

S2: CERAMIC TILE SKIRTING

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

S3: CEMENT SAND SCREED

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

WALL FINISHES:

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

<u>R2: EMULSION (PVA) PAINT – FULL HEIGHT</u>

no. coats of PVA matt finish emulsion paint to SABS 1586 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R3:ALKYD (ENAMEL) PAINT

no. coats matt (egg shell) finish alkyd (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant laster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of; 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification "R5", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R3" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

R5:CERAMIC WALL TILES – FULL HEIGHT

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

CEILING AND CORNICE:

C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED GypCeil Classic" gypsum plasterboard ceilingor EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured,

ISO 9001 & 14001 certification, recycled paper content, Ecospecifier listing) fixed to timber brandering installed at maximum 300mm centers using Gyproc RhinoBoard Sharp Point Grabber Screws 32mm at maximum 150mm centers. Apply . Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoLite.

C2: FIBRE CEMENT BOARDS (H-JOINTED)

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

C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place usina Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Donn T38 FR Main Tees (0.4mm thickness, Z150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed o the building structural members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire otches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED

mulsion (PVA) Paint on Skimmed Plastered Slab" 3No. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

ROOF COVERING AND INSULATION:

ER1: EMBOSSED ROOFING SHEET (TWO SIDES)

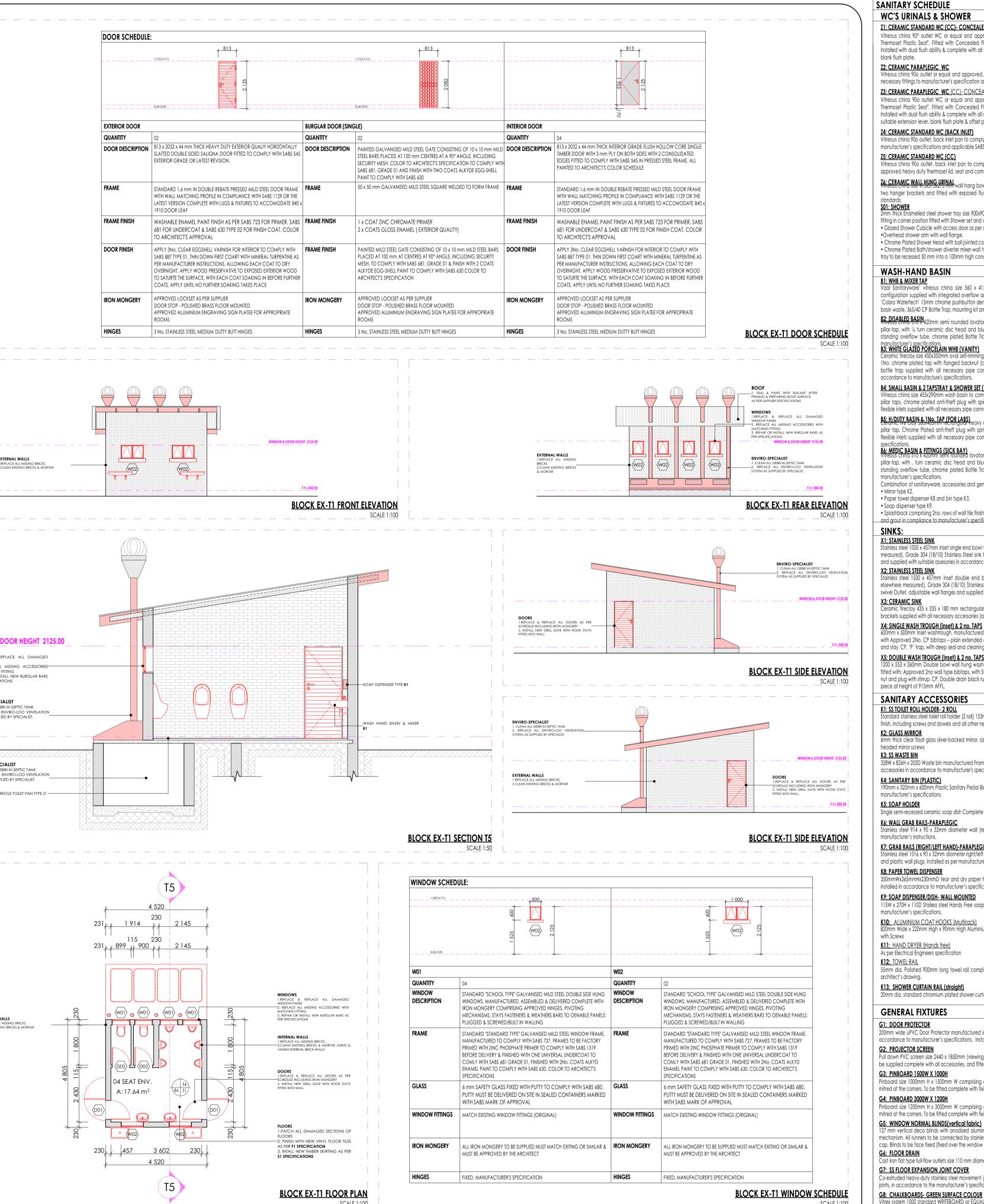
Roofing Sheets: 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISQ 550 (31). The profile shall have three trapezoidal ribs at 203mm centers giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centers to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roofsheets to be coated on both sides with "Global Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closers in strict compliance to manufacturer's instruction

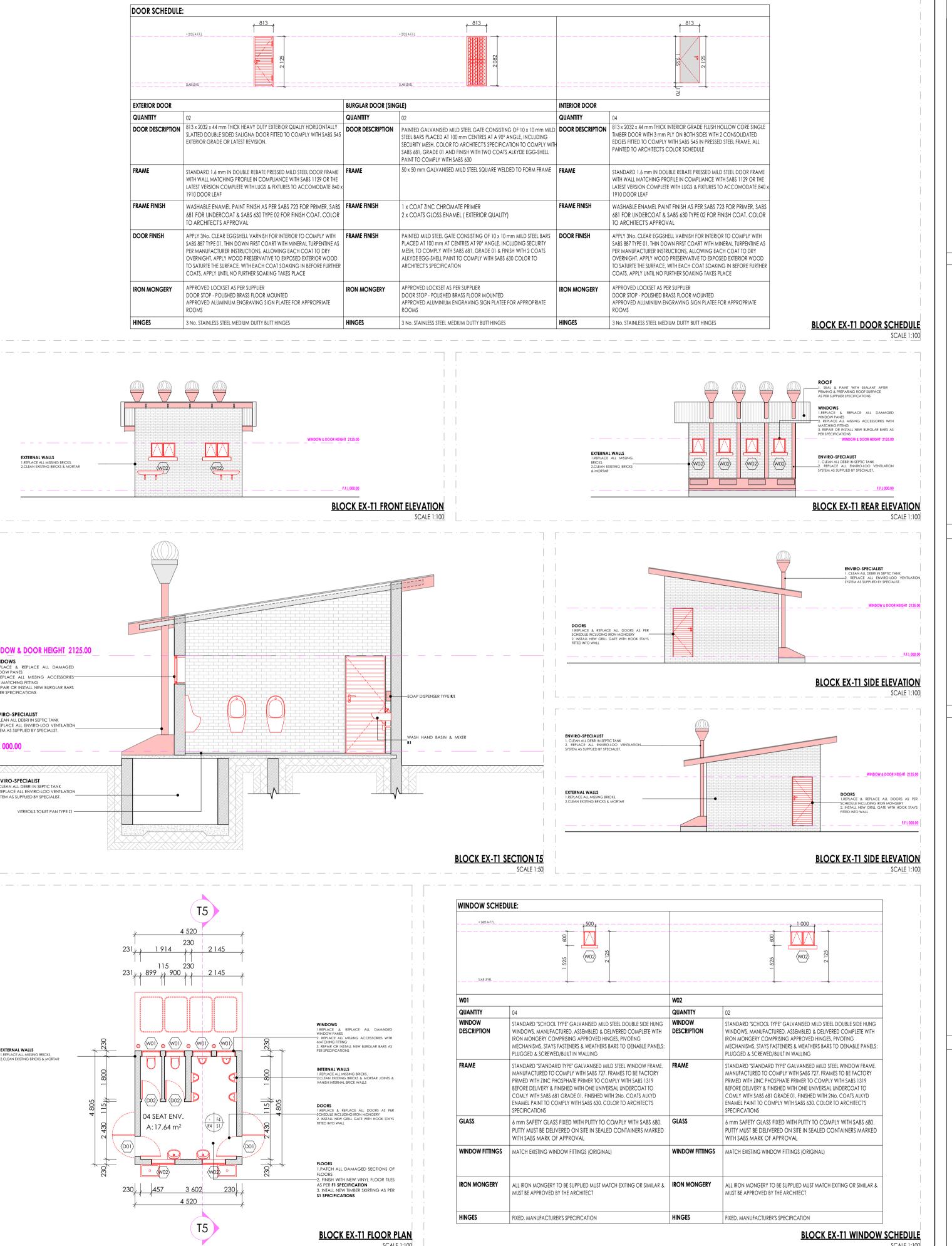
Insulation: SHALL EITHER BE: 1: where there are acoustic ceilings susspeded board, a heavy duty "Aluminium sisalation foil" shall be installed AND 2: where the steel work is exposed, a 50mm "FactoryBoard" manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm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

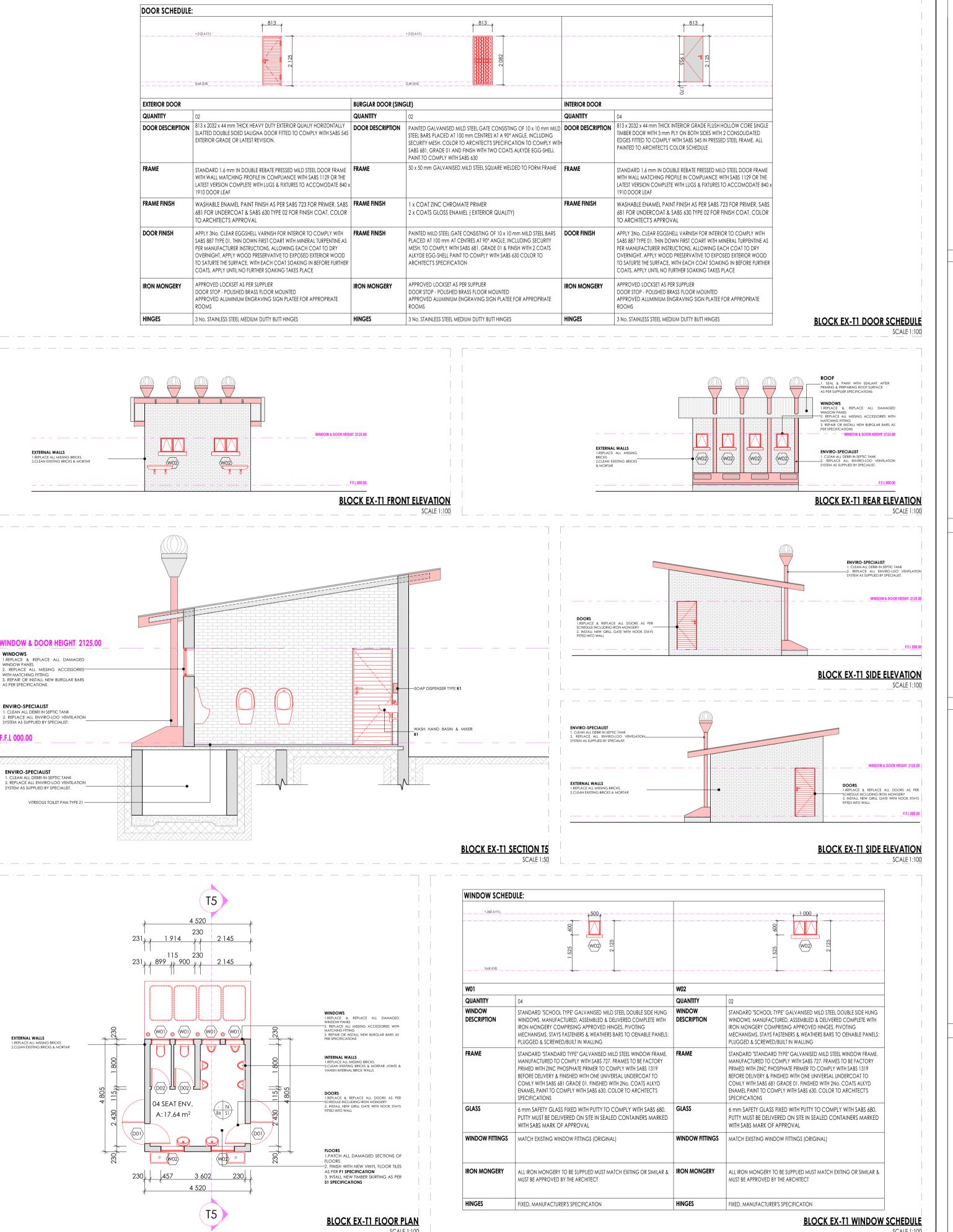
Galvanised Steel (GI) Gutter: 150mm Wide x 100mm Deep x 0.6mm Eaves Gutter of Commercial Grade Steel With Class Z275 Galvanising To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Fascia Board Together with standard accessories discharging into Rainwater Downpipes.

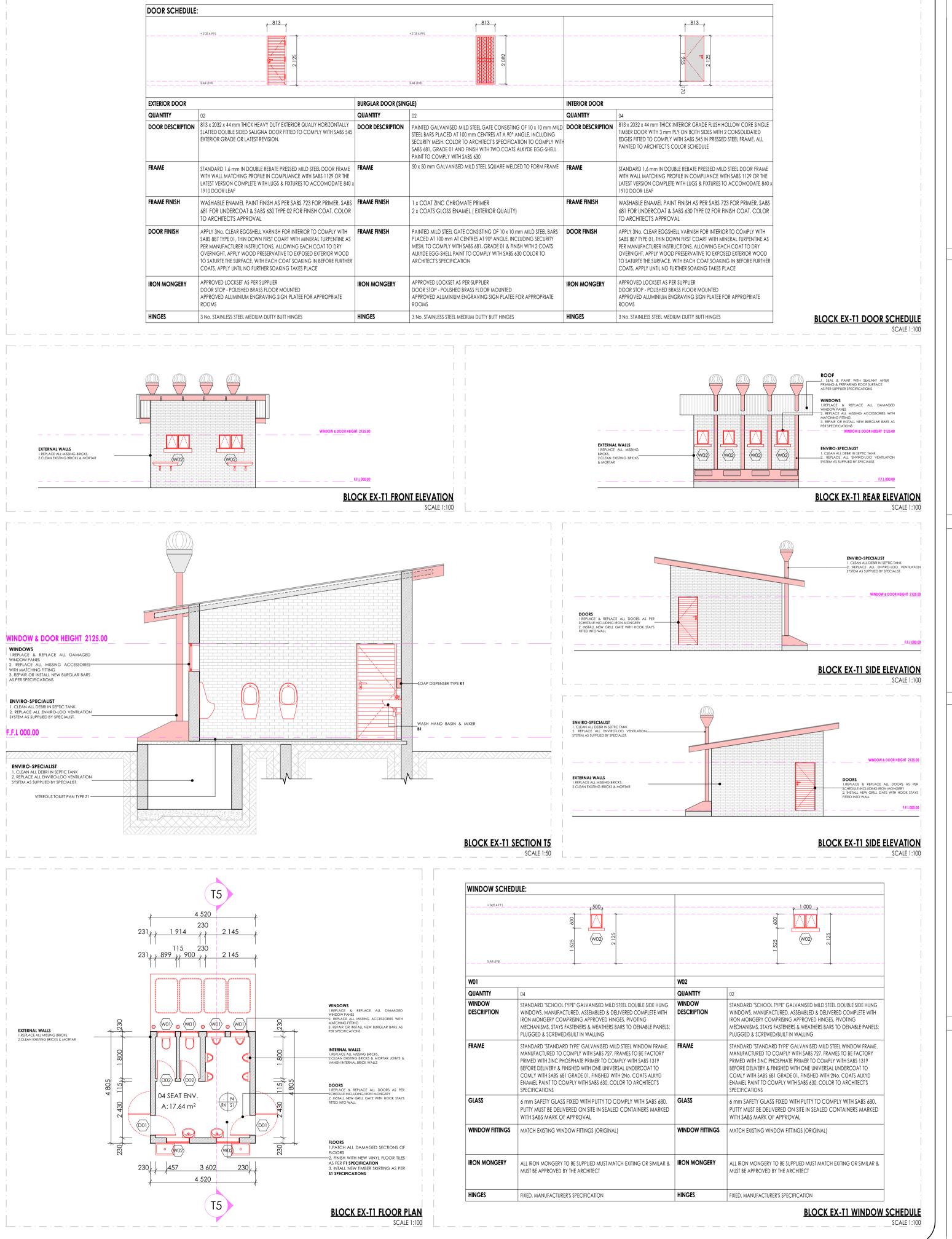
Downpipe: 110 x110 x 0.6mm Thick Commercial Grade Galvanised Steel Sheet With Class Z275 Galvanising To Comply With SABS 934 or Latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-taping screws To Manufacturer Installation Instructions.

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









two hanger brackets and fitted with exposed flush-valve, and suitable bottle trap chrome finish as per manufacturer's specifications and applicable SABS SO1: SHOWER fittina in corner position fitted with Shower set and complying with SABS 226 comprising of approved: • Glazed Shower Cubicle with access door as per standard supply from manufacturer and sized to fit space configuration Overhead shower arm with wall flange. Chrome Plated Shower Head with ball jointed connector tray to be recessed 50 mm into a 100mm high concrete plinth with exposed plinth face tiled. **WASH-HAND BASIN** B1: WHB & MIXER TAP pasin waste, 365/40 CP Bottle Trap, mounting kit and angle valves. B3: WHITE GLAZED PORCELAIN WHB (VANITY) accordance to manufacture's specifications. B4: SMALL BASIN & 2 TAPSTRAY & SHOWER SET (FOR WORKSHOPS) B5: H/DUTY BASIN & INO. JAP (FOR LABS) Ceramic fire City 500,400mm reconsignation eavy duty basin in one taphole configuration to comply with SABS 497 and RHS hole plugged and fitted with; INO pillar tap, Chrome Plated anti-theft plug with spindle plug, slotted basin waste, chrome plated Bottle Trap, mounting kit and angle valves with 400mm long B6: MEDIC BASIN & FITTINGS (SICK BAY) Wireous china 510 x 420mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with; 2 No.chrome plated Elbow action of the second manufacturer's specifications. Combination of sanitaryware, accessories and general fittings comprising of: Mirror type K2. Paper towel dispenser K8 and bin type K3. Soap dispenser type K9 • Splashback comprising 2no. rows of wall tile finish type R5 as per finishes schedule and grout in compliance to manufacturer's specifications and government standard specifications. Installation heights as indicated in the drawings. SINKS: X1: STAINLESS STEEL SINK and supplied with suitable assessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL. X2: STAINLESS STEEL SINK X3: CERAMIC SINK brackets supplied with all necessary accessories (all to be acid resistant X4: SINGLE WASH TROUGH (inset) & 2 no. TAPS X5: DOUBLE WASH TROUGH (inset) & 2 no. TAPS piece at height of 915mm AFF SANITARY ACCESSORIES K1: SS TOILET ROLL HOLDER- 2 ROLL finish, including screws and dowels and all other necessary accessories in accordance to manufacturer's specifications. K2: GLASS MIRROR headed mirror screws K3: SS WASTE BIN accessories in accordance to manufacturer's specifications. K4: SANITARY BIN (PLASTIC manufacturer's specifications. K5: SOAP HOLDER K6: WALL GRAB RAILS-PARAPLEGIC Stainless steel 914 x 90 x 32mm diameter wall (rear) grab rail, in satin polished finish complete with SS fixing screws and plastic wall plugs. Installed as per manufacturer's instructions. K7: GRAB RAILS (RIGHT/LEFT HAND)-PARAPLEGIC and plastic wall plugs. Installed as per manufacturer's instructions **K8: PAPER TOWEL DISPENSER** installed in accordance to manufacturer's specifications. K9: SOAP DISPENSER/DISH- WALL MOUNTED manufacturer's specifications. K10: ALUMINIUM COAT HOOKS (Multirack) with Screws K11: HAND DRYER (Hands free) As per Electrical Engineers specification K12: TOWEL RAIL architect's drawing. K13: SHOWER CURTAIN RAIL (straight) GENERAL FIXTURES G1: DOOR PROTECTOR accordance to manufacturer's specifications. Installation height 900mm above FFL, or as specified. G2: PROJECTOR SCREEN be supplied complete with all accessories, and fitted in strict accordance with manufactures instructions. G3: PINBOARD 1500W X 1000H mitred at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level. G4: PINBOARD 3000W X 1200H mitred at the corners. To be fitted complete with fixing brackets, screws and wall plugs at 900mm above floor level

joints, in accordance to the manufacturer's specifications.

G8: CHALKBOARDS- GREEN SURFACE COLOUR

accordance with the manufacturer's instructions

WC'S URINALS & SHOWER

Z4: CERAMIC STANDARD WC (BACK INLET)

blank flush plate

Z1: CERAMIC STANDARD WC (CC)- CONCEALED CISTERN

Z3: CERAMIC PARAPLEGIC WC (CC)- CONCEALED CISTERN

Vitreous ching 90° outlet WC or equal and approved top inlet closed rim back-to-wall pan, Floor Mounted to comply with SABS 497 & Fitted with "Jo Thermoset Plastic Seat" Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge value access pneumatic discharge value Installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with

/itreous china 900 outlet or equal and approved, top inlet closed rim back-to-wall pan to comply with SABS 497. Fitted with Cistern Installed complete with c necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever.

Vitreous china 900 outlet WC or equal and approved top inlet closed rim back-to-wall pan, Floor Mounted to comply with SABS 497 & Fitted with "Jac Thermoset Plastic Seat". Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve Installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever, blank flush plate & offset push button for paraplegic access

Vitreous china 900 outlet, back inlet pan to comply with SABS 497. Fitted complete with Back inlet exposed flush-valve complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. Flush valve to be fitted with suitable extension lever.

Vitreous china 900 outlet, back inlet pan to comply with SABS 497. Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermoset lid, seat and complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. Z4: CERAMIC Wall Hung URINAL wall hang bowl urinal to comply with SABS 497. Supplied with suitable 38mmCP domical grating, CP top inlet spreader an

mm thick Enamelled steel shower tray size 900x900x160 mm manufactured with anti slip pattern, with rounded internal corners, and 38 mm BSP grated waste

Chrome Plated Bath/shower diverter mixer-wall type with sliding wall flanges and concealed connections adjustable from 178 mm to 203 mm centres. Shower

eous china size 560 x 415mm rounded 'Tuscany', OR EQUAL AND APPROVE basin to comply with SABS 497 with single tapho configuration supplied with integrated overflow and chainstay hole through the centre semi-punched supplied with a 'Tuscany' pedestal and fitted with 1N 'Cobra Watertech' 15mm chrome pushbutton demand pillar tap with flanged backnut (code KM2.102) metering tap, 309-32 CP anti-theft plug with spindle, 308

B2: DISABLED BASIN 420mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with; 2 No.chrome plated Elbow actic pillar-tap, with 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged backnut, chrome plated waste, chrome plated 32 mm tanding overflow tube, chrome plated Bottle Trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to th

ramic fireclay size 450x350mm oval self-rimming vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with 1No. chrome plated tap with flanged backnut (code KM2.102) metering tap, mounting kit and angle valves 400mm long flexible inlets and chrome plated bottle trap supplied with all necessary pipe connections. Basin mounted on cabinet or vanity slab with silicon sealant between contact areas in stric

Vitreous china size 455x290mm wash basin to comply with SABS 497 in 2-tap hole configuration supplied with integrated overflow and chainstay hole with; 2Nc pillar taps, chrome plated anti-theft plug with spindle plug, slotted basin waste, chrome plated Bottle Trap, mounting kit and angle valves with 400mm lor flexible inlets supplied with all necessary pipe connections. All brackets and fixing accessories in strict accordance to the manufacturer's specifications.

flexible inlets supplied with all necessary pipe connections. Fitted to wall using 2No. Semi-concealed cast iron brackets in accordance to the manufacturer

pillar-tap, with . turn ceramic disc head and blue & Red indicators water applications and flanged backnut, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated Bottle Trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to the

Stainless steel 1000 x 457mm inset single end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsew measured), Grade 304 (18/10) Stainless Steel sink to comply with SABS 906 fitted with: Approved Sink mixer- wall type, chrome plated swivel Outlet, adjustab

Stainless steel 1500 x 457mm inset double end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsewhere measured), Grade 304 (18/10) Stainless Steel sink to comply with SABS 906 fitted with: Approved Sink mixer- wall tape, with chrome plated overarm swivel Outlet, adjustable wall flanges and supplied with suitable acesories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFI Ceramic fireclay 435 x 335 x 180 mm rectangular laboratory sink without overflow, with a centre end waste outlet, fitted to the wall on two semi-concealer

x 500mm Inset washtrough, manufactured from grade 18/10 SS, stainless steel with radiused internal corners and provision for a 40mm dia, outlet. Fitte with Approved 2No. CP bibtaps - plain extended chrome plated, complete with sliding wall flanges, Un-slotted sink waste with back nut, plug with stirrup, cho and stay. CP, 'P' trap, with deep seal and cleaning eye. Rough brass. Sink installation height = 900mm AFFL. Cut out size 535 x 425mm.

x 553 x 260mm Double bowl wall hung washtub manufactured from grade 304 (18/10) SS, radiused internal corners and provision for a 40mm dia. outle fitted with: Approved 2no wall type bibtaps, with Swivel Outlet, adjustable wall flanges and exposed adjustable connections. CP. Un-slotted sink waste with bac nut and plug with stirrup. CP, Double drain black rubber deep seal 'P'-Trap. Sink mounted on 2no. 25mm square SS gallow brackets, front leg and adjustable fo

ndard stainless steel toilet roll holder (2 roll) 153mm width x 270mm high 275mm depth Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Sa

5mm thick clear float glass silver-backed mirror, size 450x900mm height with polished bevelled edges 4 times holed for and fixed, with chromium plated dom

328W x 826H x 203D Waste bin manufactured From 18/10 Stainless steel, Surface Satin Finish, Material Thickness 1.5mm, including Screws, dowels and all necessar

x 320mm x 600mm Plastic Sanitary Pedal Bin with capacity of 100 Liners per pack Complete with all necessary accessories and installed in accordance to

Single semi-recessed ceramic soap dish Complete with all necessary accessories and installed in accordance to manufacturer's specifications.

stainless steel 1018 x 90 x 32mm diameter right/left hand side toilet grab rail with 450mm high centre flange, in satin polished finish complete with \$\$ fixing screw

350mmWx365mmHx230mmD tear and dry paper hand towel dispenser in stainless steel. Complete with screws, locking key, and all necessary accessories ar

115W x 270H x 110D Stailess steel Hands Free soap dispenser. Complete with screws, locking key, and all necessary accessories and installed in accordance

820mm Wide x 220mm High x 90mm High Aluminium Multi-rack Hat and Coat Hook in multi-track two Hooks Configuration With Anodised Silver Finish Comple

55mm dia. Polished 900mm long towel rail complete with all necessary accessories in accordance to manufacturer's specifications. Installation height as pe

20mm dia. standard chromium plated shower curtain rail 1300mm long with flanged ends and screws CP fixing height as per PA's drawing.

200mm wide uPVC Door Protector manufactured in high impact resistant rigid uPVC (Colour Grey) and cut to suit door width from 3m length, installed strictly in

Pull down PVC screen size 2440 x 1850mm (viewing area 2340 x 1750mm) with wall-mounted code SC0400 Keystone Brackets Adjustable Set of 2, size 300mm. To

Vinboard size 1000mm H x 1500mm W comprising of laminated soft board core pinning material beaded all round with anodised aluminium channel surrour

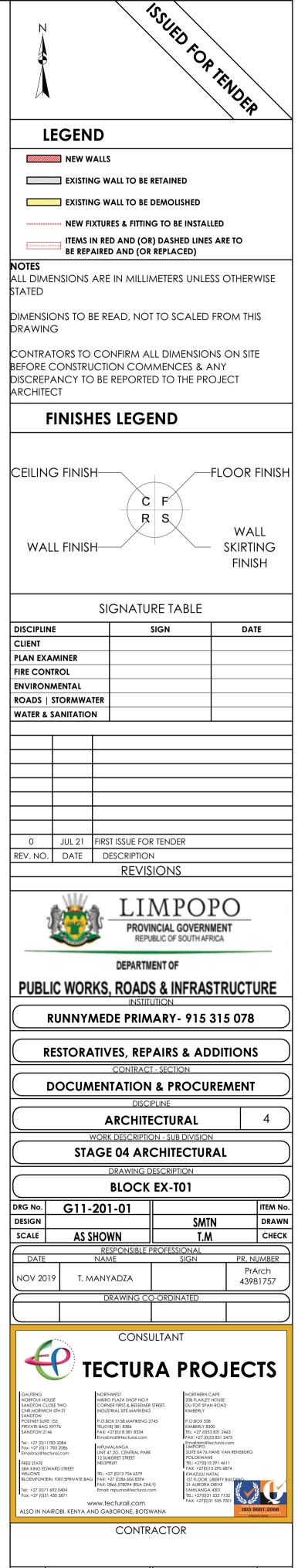
Pinboard size 1200mm H x 3000mm W comprising of laminated soft board core pinning material beaded all round with anodised aluminium channel surrour

27 mm vertical deco blinds with anodised aluminium headrail fitted with colour coordinated insert. All runners o be wheeled and fitted with individual clut mechanism. All runners to be connected by stainless steel links. Tilt mechanism to be operated by a nylon ball chain with a reduction gear inside a fully enclose cap. Blinds to be face fixed (fixed over the window opening) by means of concealed type fixing brackets.

Cast iron flat type full-flow outlets size 110 mm diameter with centre bolt, , including connections to downpipes.

Co-extruded heavy-duty stainless steel movement joint strip, with polyurethane infill (colour grey). To be installed within the tile surface over the 20mm expansion

system 1000 standard WRITEBOARD or EQUAL & APPROVED vitreous enamelled steel utility school chalkboards wall-mounted size 4800mm x 1140mm hig manufactured in accordance with SABS Standard CKS 36/2004 Edition 4 and suitable for Class 1: Heavy Duty applications, as defined therein. Enamel steel Util chalk board surfaces to be matt and finely structured, olive green in colour (Vitrex Colour Reference - Chalk Board Green LM1797/2), supplied complete wil ntegral anodised aluminium chalk rail (ACR), fixing components and secured in position to brickwork. The Chalk boards are to be fixed in position strictly



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