



MAKHADO MUNICIPALITY

BID NUMBER: 02 OF 2022

REFURBISHMENT OF WATERVAL REGIONAL OFFICE

CIDB GRADING: 5GB OR HIGHER

PREPARED FOR:

**The MUNICIPAL MANAGER
MAKHADO MUNICIPALITY**

83 Krogh Street

Private Bag X2596

Makhado

0920

Tel: (015) 519 3000

Contact Person: L. Thulare

PREPARED BY:



SES CAMPUS

**38 JASMYN STREET, FLORA PARK, POLOKWANE,
0699**

P. O BOX 4690

POLOKWANE

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Tel: (015) 265 7003 Fax: (086) 606 3734

NAME OF TENDERER.....

TENDER SUM (in figures)

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THE TENDER

PART T1: TENDERING PROCEDURES

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PART T1: TENDERING PROCEDURES

T1.1 TENDER NOTICE AND INVITATION TO TENDER



MAKHADO MUNICIPALITY



MAKHADO LOCAL MUNICIPALITY

Tel: (015) 519 3000 Fax: (015) 516 1195 • 83 Krogh Street, Louis Trichardt • Private Bag X2596 Makhado 0920

TENDER NOTICE

All suitable service providers are hereby invited to bid for the below mentioned projects. Bidders are requested to bid as per specification attached to the bid documents that will be obtainable from 27 January 2022 at non-refundable amount of R600.00 per document at the Procurement Office No. B043 Ground Floor, 83 Krogh Street, Civic Centre, Makhado or can be downloaded from e-tender portal for free <https://etenders.treasury.gov.za/content/advertised-tender> or www.makhado.gov.za.

BID NO:	DESCRIPTION	SPECIAL REQUIREMENT	TECHNICAL ENQUIRIES	REFERENCE AND NOTICE NO.	CLOSING DATE AND TIME
01 of 2022	Development of Dzanani park Phase 2 (Installation of Outdoor Gym, Playing equipment and swimming pool)	CIDB Grading 04 CE or higher	Acting Director Technical Services: Mr MG Raleshuku or Ms. L Thulare at Tel: 015 519 3000	File No. 8/3/2/1857 Notice No. 01/2022	11 February 2022 at 12:00pm
02 of 2022	Refurbishment of Waterval Regional Office	CIDB Grading 05GB or higher	Acting Director Technical Services: Mr. MG Raleshuku or Ms. L Thulare at Tel: 015 519 3000	File No. 8/3/2/1858 Notice No. 02/2022	11 February 2022 at 12:00pm
03 of 2022	Construction of fence at Madombidzha Graveyard	CIDB Grading 02SQ or higher	Acting Director Technical Services: Mr. MG Raleshuku or Ms. L Thulare at Tel: 015 519 3000	File No. 8/3/2/1869 Notice No. 03/2022	11 February 2022 at 12:00pm
04 of 2022	Construction of fence at Maelula Graveyard	CIDB Grading 02SQ or higher	Acting Director Technical Services: Mr. MG Raleshuku or Ms. L Thulare at Tel: 015 519 3000	File No. 8/3/2/1860 Notice No. 04/2022	11 February 2022 at 12:00pm
05 of 2022	Waterval Cemetery Road (Regraveling)	CIDB Grading 04 CE or higher	Acting Director Technical Services: Mr. MG Raleshuku or Ms. L Thulare at Tel: 015 519 3000	File No. 8/3/2/1861 Notice No. 05/2022	18 February 2022 at 12:00pm
06 of 2022	Rehabilitation of Streets in waterval : Djunani Street	CIDB Grading 04 CE or higher	Acting Director Technical Services: Mr. MG Raleshuku or Ms. L Thulare at Tel: 015 519 3000	File No. 8/3/2/1862 Notice No. 06/2022	18 February 2022 at 12:00pm
07 of 2022	Appointment of a service provider/consultants to render assignment for internal audit unit for Makhado municipality for the period of three (03) years	<ul style="list-style-type: none"> Be a member with IRBA Certificate (attach certified copy) Be a member with SAICA, (attach certified copy) Attach three year audited financial statement (only those that are required by the law) 	Manager Internal auditors: Mr. A Kgopa at Tel 015 519 3000	File No. 8/3/2/1863 Notice No. 07/2022	25 February 2022 at 12:00pm
08 of 2022	Cellphones and tablets contract package for the period of twenty four (24) months		Acting Chief Financial Officer: Mr NG Ralipha or Mrs L Murashiwa at Tel 0155193000	File No. 8/3/2/1864 Notice No. 08/2022	25 February 2022 at 12:00pm

NB: NO COMPULSORY BRIEFING MEETING FOR THE ABOVE MENTIONED BIDS

Completed bid documents signed by a duly authorized person, sealed in an envelope clearly marked "As mentioned above" must reach the undersigned by depositing it into the tender box at the foyer of the main entrance to the Civic Centre by not later than "As mentioned above" when all tenders received will be opened in public in the Council Chamber, Ground Floor, Civic Centre, No.83 Krogh Street, Makhado.

The Municipality is not bound to accept the lowest or any bid and reserves the right to accept any part of a bid. Bids must remain valid for a period of ninety (90) days after closing date of submission thereof. Submitted tenders will be evaluated on 80/20 preference points with functionality.

Bids which are late, incomplete, unsigned or submitted in pencil or by telegraph or facsimile or electronically by e-mail or not having the following documents attached for evaluation or not complying with the tender specifications, will not be evaluated and will be disqualified:

- Valid Tax compliance status pin issued by SARS
- A copy of company registration documents e.g. CK
- Certified copy/copies of company owner(s) ID book(s), not older than three (03) months.
- Attach proof of payment for municipal rates not owing for more than (03) months or formal lease agreement for rental premises or letter from the traditional authority in cases of non-ratable areas. (Attach for both entity and directors of the company)
- Copy of central supplier database report.

NB:

- Service provider must submit their certified BBBEE verification certificate from verification agency accredited by South African National Accreditation system (SANAS) or sworn affidavit.
- All Service Provider doing business with Makhado municipality are required to register on the CSD (Central Supplier Database).
- A copy of a certified copy will not be accepted.

All procurement enquiries should be directed to Ms. P Mudau at tel no. (015) 519 3044/3024

Civic Centre
83 Krogh Street
MAKHADO

MR KM NEMANAME
ACTING MUNICIPAL MANAGER

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in SANS 10845-3-2015 Edition 1.

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 of inconsistency between it and the Standard Conditions of Tender.

Each item of the tender data given below is cross-referenced to the sub-clause in the Standard Conditions of Tender to which it mainly applies.

Sub-clause	Tender Data
2.1	Wherever reference is made in the documentation to bill of quantities it shall also mean pricing schedule.
2.7	Wherever reference is made in the documentation to contractor it shall also mean service provider.
3.1	<p>The Employer is the Makhado Local Municipality. The Employer's domicilium citandi et executandi (permanent physical business address) is:</p> <p>83 Krogh Street Private Bag X2596 Makhado 0920</p>
3.2	<p>The tender documents issued by the Employer will be available for free download on e-Tender portal www.tenders.gov.za. The tenderer must print the document and ensure the specific colours stated below are adhered to.</p> <p>Part T1: Tendering Procedures</p> <p>1. T1.1 Tender Notice and Invitation to Tender (White)</p> <p>2. T1.2 Tender Data (Pink)</p> <p>Part T2: Returnable Schedules</p> <p>4. T2.1 List of Returnable Documents (Yellow)</p> <p>5. T2.2 Returnable Schedules (Yellow)</p> <p>Part C1: Agreements and contract data</p> <p>6. C1.1 Form of Offer and Acceptance (Yellow)</p> <p>7. C1.2 Contract Data (Yellow)</p> <p>8. C1.3 Other Standard Forms (Yellow)</p> <p>Part C2: Pricing data</p> <p>9. C2.1 Pricing instructions (Yellow)</p> <p>10. C2.2 Pricing Schedules / Bills of Quantities (Yellow)</p>

Sub-clause	Tender Data
	<p>Part C3: Scope of work</p> <p>11. C3 Scope of Work (Blue)</p> <p>Part C4: Site Information</p> <p>12. C4 Site Information (Green)</p>
3.4	<p>The Employer's Agent is SHUMBA ENGINEERING SERVICES, and located at the address below.</p> <p>SES CAMPUS 38 JASMYN STREET, FLORA PARK, POLOKWANE, 0699 P. O BOX 4690 POLOKWANE 0700</p> <p>Tel: (015) 265 7003 Fax: (086) 606 3734 Email: corporate@shumbaengineering.co.za Contact Person: Mr A. Mloyiswa</p> <p>The language for communications is English.</p>
3.5	<p>The tender process may be cancelled if:</p> <ul style="list-style-type: none"> a) Due to changed circumstances, there is no longer a need for the goods or services specified in the invitation; b) Funds are no longer available to cover the total envisaged expenditure; c) No acceptable tender is received; or d) There is a material irregularity in the tender process. <p>The period of 6 (six) months shall be measured from the time of tender close to the time of availability of re-issued tender documentation. The period of 6 (six) months may be reduced if the contracting strategy is changed.</p>
4.1.1	<p>Only those tenderers who satisfy the following criteria are eligible to submit tenders:</p> <ul style="list-style-type: none"> a) CIDB grading of 5GB or higher b) Meet the minimum requirements for the key persons as stated in the Scope of Works. c) Registered on National Treasury Central Supplier Database. Tenderers, or in the event of a Joint Venture (JV), each member of the JV, shall be registered on the National Treasury Central Supplier Database at the closing date for tender submissions. Tenders received from such tenderers who do not comply with this requirement will not be considered. d) Criteria for preferential procurement. <p>Tenderers that have a B-BBEE contributor status level of 1, 2, 3 or 4 and Tenderers shall submit a valid B-BBEE certificate in compliance with Tender Data 5.11.8 as proof of eligibility.</p> <p>Failure to satisfy the eligibility criteria is a breach of the Conditions of Tender and as such, results in a non-eligible tender.</p>

Sub-clause	Tender Data
4.6	Failure to apply instructions contained in addenda may render a tenderer's offer nonresponsive in terms of Condition of Tender 5.8.
4.7	There will be no compulsory briefing for this bid.
4.8	Request clarifications at least 7 (seven) working days before the closing time.
4.9	No insurance is provided by the Employer.
4.10	Tenderers are required to state the rates and currencies in Rand.
4.12	<p>Alternative offers are generally not acceptable due to possible manipulation of the tender process and resulting complexity of the evaluation. Therefore, the submission of alternative tenders is strongly discouraged.</p> <p>The submission of alternative key persons with an alternative financial offer will be considered as a non-responsive offer.</p> <p>However, a tenderer wishing to submit an alternative offer shall first apply to the Employer with full details of the principles of the alternative for confirmation that the Employer's standards and requirements are not compromised or reduced. Such confirmation must have been provided by the Employer in writing at least 5 (five) working days before the date and time of tender closing, or as extended by an addendum sent to all tenderers. The application shall not be submitted later than 7 (seven) working days before the date and time of tender closing given in Tender Data Clause 4.15.</p>
4.13.1	If a tenderer, including a joint venture partner or a Targeted Enterprise, submits or participates in more than one tender, then all such tenders shall be disqualified.
4.13.1	The returnable documents shall be electronically completed in their entirety, submitted on the issued software or fully compatible format, unless otherwise specified.
4.13.1	Submit the signed original tender offer in a bound A4 size book.
4.13.5	Wherever reference is made in the tender documentation for non-financial proposal it shall also mean technical proposal.
4.13.5	Submit only the signed original tender offer.
4.13.5	A two-envelope procedure will apply will not apply.
4.15	<p>The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package is:</p> <p>The Municipal Manager Makhado Local Municipality 83 Krogh Street Private Bag X2596 Makhado 0920</p>

Sub-clause	Tender Data
	<p>Tel: 015 519 3000 Email: livhuwanit@makhado.gov.za</p> <p>Identification details: Place the signed original tender offer in a package marked</p> <p style="text-align: center;">BID NUMBER: 02 OF 2022</p> <p style="text-align: center;">REFURBISHMENT OF WATERVAL REGIONAL OFFICE</p> <p>Tenders must be submitted during office hours (09h00 AM to 14h00) Monday to Friday at the Employer's address.</p> <p>It is in the tenderer's interest to ensure that the delivery of the tender offer is recorded in the Employer's tenders received register.</p>
4.15	The closing time for submission of tender offers is on 11 February 2022 at 12:00
4.16.1	The tender offer validity period is 90 days.
4.16.2	<p>Where a tenderer, at any time after the opening of his tender offer but prior to entering into a contract based on his tender offer:</p> <ul style="list-style-type: none"> a) withdraws his tender; b) gives notice of his inability to execute the contract in terms of his tender; or c) fails to comply with a request made in terms of 4.17, 4.18 or 5.9; <p>such tenderer shall be barred from tendering on any of the Employer's tenders for a period to be determined by the Employer, but not less than 6 (six) months from a date determined by the Employer. This sanction also applies to tenders under evaluation and not yet awarded. The Employer may fully or partly exempt a tenderer from the provisions of these conditions if he is of the opinion that the circumstances justify the exemption.</p>
4.18	Any additional information requested under this clause must be provided within 5 (five) working days of date of request.
5.1	The Employer shall respond to clarifications received up to 7 (seven) working days before tender closing time.
5.2	The Employer shall issue addenda until 5 (five) working days before tender closing time.
5.4	<p>The time and location for opening of the financial offers shall be communicated to all tenderers having achieved the minimum number of points for quality as prescribed in 5.5.</p> <p>The financial offers of all tenderers who failed to achieve the minimum number of points for quality shall be returned unopened.</p>
5.7	<p>Prior to disqualification, the Employer shall inform the tenderer and give the tenderer an opportunity to make representations within 14 (fourteen) days as to why the tender submitted should not be disqualified and as to why the tenderer should not be restricted by the National Treasury from conducting any business with any Organ of State for a period not exceeding 10 (ten) years.</p> <p>In the event of disqualification, the Employer may, at its sole discretion, claim damages from</p>

Sub-clause	Tender Data
	the tenderer and impose a specified period during which tender offers will not be accepted from the offending tenderer and the Employer shall inform the National Treasury in writing.
5.9	<p>Arithmetical errors, omissions, discrepancies, and imbalanced unit rates.</p> <p>Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount appearing in the summary to the Pricing Schedule shall govern.</p> <p>Check responsive tender offers for:</p> <ul style="list-style-type: none"> a) the gross misplacement of the decimal point in any unit rate; b) omissions made in completing the Pricing Schedule or Bills of Quantities; or c) arithmetic errors in: <ul style="list-style-type: none"> i) line-item totals resulting from the product of a unit rate and a quantity in Bills of Quantities or Schedules of Prices; or ii) the summation of the prices; d) imbalanced unit rates. <p>Notify shortlisted tenderers of all errors, omissions or imbalanced rates that are identified in their tender offers.</p> <p>Where the tenderer elects to confirm the errors, omissions or re-balancing of imbalanced rates the tender offer shall be corrected as follows:</p> <ul style="list-style-type: none"> a) if Bills of Quantities or Pricing Schedules apply and there is an error in the line-item total resulting from the product of the unit rate and the quantity, the unit rate shall govern, and the line-item total shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line-item total as quoted, and the unit rate shall be corrected. b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall be corrected. c) Where the unit rates are imbalanced, adjust such rates by increasing or decreasing them and selected others while retaining the total of the prices derived after any other corrections made under (a) and (b) above. <p>Where there is an omission of a line item, no correction is possible, and the offer may be declared non-responsive.</p> <p>Declare as non-responsive and reject any offer from a tenderer who elects not to accept the corrections proposed and subject the tenderer to the sanction under 4.16.2.</p> <p>The tenderer is required to submit balanced unit rates for Rate Only items in the Pricing Schedule. The rates submitted for these items will be taken into account in the evaluation of tenders.</p>
5.11.1	<p>The procedure for the evaluation of responsive tenders is Method 3.</p> <p>If 2 (two) or more tenderers score an equal total number of points, the contract must be awarded to the tenderer that scored the highest points for preference.</p> <p>If functionality is part of the evaluation process and 2 (two) or more tenderers score equal total</p>

Sub-clause	Tender Data															
	points and equal preference points, the contract must be awarded to the tenderer that scored the highest points for functionality. If 2 (two) or more tenderers score equal total points in all respects, the award must be decided by the drawing of lots.															
5.11.7	<p>The value of W1 is:</p> <ol style="list-style-type: none">90 where the financial value, inclusive of VAT, of the lowest responsive tender offer received has a value in excess of R50 000 000.00; or80 where the financial value, inclusive of VAT, of the lowest responsive tender offer has a value that equals or is less than R50 000 000.00. <p>The value of A will be calculated utilizing the following formula:</p> $A = (1 - (P - P_m) / P_m)$ <p>Where:</p> <p>P is the comparative offer of the tender offer under consideration; and Pm is the comparative offer of the most favourable comparative offer.</p> <p>In the event that the calculated value is negative, the allocated score shall be 0 (zero).</p>															
5.11.8	<p>Up to 100 minus W1 tender evaluation points will be awarded to tenderers who submit responsive tenders and who are found to be eligible for the preference claimed. Points are based on a tenderer's scorecard measured in terms of the Broad-Based Black Economic Empowerment Act (B-BBEE, Act 53 of 2003) and the Regulations (2017) to the Preferential Procurement Policy Framework Act (PPPFA, Act 5 of 2000).</p> <p>Points awarded will be according to a tenderer's B-BBEE status level of contributor and summarised in the table below:</p> <table><tr><th>B-BBEE Status Level of Contributor</th><th>Number of Points for Financial value up to and including R50 000 000.00</th><th>Number of Points for Financial value above R50 000 000.00</th></tr><tr><td>1</td><td>20</td><td>10</td></tr><tr><td>2</td><td>18</td><td>9</td></tr><tr><td>3</td><td>14</td><td>6</td></tr><tr><td>4</td><td>12</td><td>5</td></tr></table> <p>Eligibility for preference points will be determined as follows:</p> <ol style="list-style-type: none">A tenderer's scorecard shall be a B-BBEE Verification Certificate issued in accordance with:<ul style="list-style-type: none">the amended Construction Sector Codes published in Notice 931 of 2017 of Government Gazette No 41287 on 1 December 2017 by the Department of Trade and Industry; andThe scorecard shall be submitted as a certificate attached to Returnable Schedule	B-BBEE Status Level of Contributor	Number of Points for Financial value up to and including R50 000 000.00	Number of Points for Financial value above R50 000 000.00	1	20	10	2	18	9	3	14	6	4	12	5
B-BBEE Status Level of Contributor	Number of Points for Financial value up to and including R50 000 000.00	Number of Points for Financial value above R50 000 000.00														
1	20	10														
2	18	9														
3	14	6														
4	12	5														

Sub-clause	Tender Data
	<p>Form D1; and</p> <p>c) The certificate shall:</p> <ul style="list-style-type: none"> (i) Be an original or an original certified copy of the original; and (ii) Have been issued by a Verification Agency accredited by the South African National Accreditation System (SANAS); or (iii) Be in the form of a sworn affidavit or a certificate issued by the Companies and Intellectual Property Commission in the case of an Exempted Micro Enterprise (EME) with a total annual revenue of less than R1.8 million, if issued in accordance with the amended Construction Sector Codes published in Notice 931 of Government Gazette No 41287 on 1 December 2017 by the Department of Trade and Industry; and (iv) Be valid at the tender closing date; and (v) Have a date of issue less than 12 (twelve) months prior to the tender closing date (see Tender Data 4.15); and <p>d) Compliance with any other information requested to be attached to Returnable Schedule Form D1; and</p> <p>e) If a tenderer claims a preference score without submitting an acceptable Verification Certificate(s) and/or all of the information in compliance with Returnable Schedule Form D1, a period of 1 (one) working day will be granted to submit this information; and</p> <p>f) Failure to submit a valid Verification Certificate(s) and/o all the information in compliance with Returnable Schedule Form D1, will result in the award of 0 (zero) points for preference or will result in a non-eligible tender where such verification certificate is required to verify the B-BBEE status level or EME/QSE requirement; and</p> <p>g) In the event of a Joint Venture (JV), a project specific consolidated B-BBEE Verification Certificate in the name of the JV shall be submitted, as well as a valid B-BBEE Verification Certificate for each member of the JV; and</p> <p>h) If the tender documents indicate that the tenderer intends sub-contracting more than 25% of the value of the contract to any other person not qualifying for at least the status level that the tenderer qualifies for, 0 (zero) points for preference will be awarded, unless the intended sub-contractor is an EME that has the capability to execute the sub-contract.</p>

Sub-clause	Tender Data			
5.11.9	The quality criteria and maximum score in respect of each of the criteria are stated below.			
	Quality Criteria	Sub-criteria	Documentary Evidence to be Provided	Maximum number of Tender evaluation points
	1. Tenderer's experience in building projects	Minimum 3 building projects each of minimum R 3.5 million including VAT.	<ul style="list-style-type: none"> Completed Form B1 Provide 3 completion certificates Attach appointment letters for the completed projects 	100
	<i>Tenderer who provides less than 3 projects and/or less than 3 completion certificates will score zero points.</i>			
	2. Qualification of key personnel			100
	2.1 Contracts Manager	Contracts Manager must have minimum National Diploma in the built environment (Engineering, Architecture, Quantity Surveyor, Project Management, etc)	<ul style="list-style-type: none"> Completed Form B2 Certified copies of qualifications 	30
	2.2 Site Agent	Site Agent must have minimum National Diploma in the built environment (Engineering, Architecture, Quantity Surveyor, Project Management, etc)	<ul style="list-style-type: none"> Completed Form B2 Certified copies of qualifications 	35
	2.3 General Foreman	General Foreman must have at minimum a certificate in the built environment (Engineering, Architecture, Quantity Surveyor, Project Management, etc)	<ul style="list-style-type: none"> Completed Form B2 Certified copies of qualifications 	20

Sub-clause	Tender Data			
	2.5 Health and Safety Officer	Minimum certificate in Health and Safety	<ul style="list-style-type: none"> Completed Form B2 Certified copies of qualifications 	15
	<i>Tenderer fails to meet the minimum requirement in a sub-criteria on qualification of key personnel will score zero on that specific sub-criteria.</i>			
	3. Experience of key personnel			100
	3.1 Contracts Manager	Contracts Manager must have minimum 5 years as Contracts Manager or Site Agent in the built environment (Engineering, Architecture, Quantity Surveyor, Project Management, etc)	<ul style="list-style-type: none"> Completed Form B3 CV 	15
	3.2 Site Agent	Site Agent must have minimum 5 years as Site Agent in the built environment (Engineering, Architecture, Quantity Surveyor, Project Management, etc)	<ul style="list-style-type: none"> Completed Form B3 CV 	20
	3.3 General Foreman	General Foreman must have minimum 6 years as Foreman in the built environment (Engineering, Architecture, Quantity Surveyor, Project Management, etc)	<ul style="list-style-type: none"> Completed Form B3 CV 	15
	3.4 Health and Safety Officer	Minimum 3 years working on site as Health and Safety Officer	<ul style="list-style-type: none"> Completed Form B3 CV 	5
	<i>Tenderer who fails to meet the minimum requirement in a sub-criteria on experience of key personnel will score zero on that specific sub-criteria.</i>			
	4. Equipment			100
	4.1	Minimum 1 Pick-up truck (bakkie) either owned or written confirmation that the truck is available to the Tenderer on hire.	<ul style="list-style-type: none"> Completed Form B4 	25

Sub-clause	Tender Data				
	4.2	Minimum 1 TLB either owned or written confirmation that the TLB is available to the Tenderer on hire	• Completed Form B4	25	
	4.3	Minimum 1 Tipper Truck 10m ³ either owned or written confirmation that the Tipper Truck is available to the Tenderer on hire	• Completed Form B4	20	
	4.4	Minimum 1 Water Tanker either owned or written confirmation that the Water Tanker is available to the Tenderer on hire	• Completed Form B4	15	
	4.5	Minimum 1 Pedestrian Roller either owned or written confirmation that the Pedestrian Roller is available to the Tenderer on hire	• Completed Form B4	15	
	<i>Tenderer who fails to meet the minimum requirement in a sub-criteria on equipment will score zero on that specific sub-criteria.</i>				
	5. Bank rating	Bank rating D or better	• Completed Form B5	100	
	<i>Tenderer who fails to meet the minimum requirement of bank rating D or better will score zero on bank rating.</i>				
The minimum score for quality is 70% and any tendered who score below this threshold will be disqualified from further tender evaluation.					
5.13	The conditions stated in Clauses 5.13(a) to (f) of the Conditions of Tender as well as the following additional Clauses 5.13(g) to (k) shall be applied as objective criteria in terms of Section 2(1)(f) of the Preferential Procurement Policy Framework Act, 2000 and as compelling and justifiable reasons in terms of Conditions of Tender, Clause 5.11: g) The tenderer has CIDB grading 5GB or higher and h) the tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from				

Sub-clause	Tender Data
	<p>doing business with the public sector; and</p> <p>i) the tenderer has not abused the Employer's supply chain management system; and</p> <p>j) the tenderer has not failed to perform on any previous contract and has not been given a written notice to this effect; and</p> <p>k) the tenderer is registered on the National Treasury Central Supplier Database.</p> <p>In addition to the requirements under paragraph (b) of the Conditions of Tender, in the event that a due diligence is performed as part of the tender evaluation, the due diligence report will be used to evaluate the tenderer's ability to perform the contract as stated in sub-clause (b).</p> <p>The due diligence will evaluate the overall risk associated with the tender. The due diligence will take into consideration the following:</p> <ul style="list-style-type: none"> • Assessment of financial statements to assess the financial position of the tenderer and its ability to obtain the necessary guarantees or insurances; • Evaluation of managerial and technical ability and available resource in relation to the proposed tender; • Integrity risk evaluation; • Operations, activities, locations and key customers; • Reference checks from previous clients; and • Risk rating (i.e. high risk, medium to high risk, medium risk or low risk) of the tenderer.
5.17	The Employer will provide 1 (one) signed contract document to the Service Provider.
5.19	All requests shall be in writing.
Additional conditions of tender clauses:	
3.7	<p>Jurisdiction</p> <p>Unless stated otherwise in the Tender Data, each tenderer and the Employer undertake to accept the jurisdiction of the law courts of the Republic of South Africa.</p>

PART T2: RETURNABLE DOCUMENTS

T2.1 LIST OF RETURNABLE DOCUMENTS

FORM NO	FORM DESCRIPTION	NOTES
FORM A1	REGISTRATION ON TREASURY CENTRAL SUPPLIER DATABASE	*1, *2
FORM A2	CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING	*1,
FORM A3	CIDB GRADING	*1 *2
FORM A4	CERTIFICATE OF AUTHORITY OF SIGNATORY	*1, *2
FORM A5	CERTIFICATE OF SINGLE TENDER SUBMISSION	*1
FORM A6	CERTIFICATE OF PERMISSION TO CONDUCT DUE DILIGENCE INVESTIGATION	*1, *2
FORM A7	DEVIATIONS OR QUALIFICATIONS BY THE TENDERER	*1
FORM A8	MBD 2 TAX CLEARANCE CERTIFICATE REQUIREMENTS	*1
FORM A9	MBD 4 DECLARATION OF INTEREST	*1, *2
FORM A10	MBD5 DECLARATION FOR PROCUREMENT ABOVE 10M (ALL APPLICABLE TAX INCLUDED)	*1, *2
FORM A11	MBD6.1 PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017	*1, *2
FORM A12	MBD6.2 DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS	*1
FORM A13	MBD8 DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES	*1
FORM A14	MBD9 CERTIFICATE OF INDEPENDENT BID DETERMINATION	*1
FORM A15	B-BBEE CERTIFICATE	*1
FORM A16	SCHEDULE OF ADDENDA TO TENDER DOCUMENTS	*1
FORM A17	TENDERER'S LITIGATION HISTORY	*1
FORM A18	SCHEDULE OF SUBCONTRACTORS	*1, *2
FORM A19	SCHEDULE OF LABOUR CONTENT	*1, *2
FORM A20	COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND CONSTRUCTION REGULATIONS, 2014	*1, *2

FORM A21	VALUE OF PRELIMINARY AND GENERALS	*1
FORM B1	TENDERER'S EXPERIENCE IN BUILDING PROJECTS	*1, *2
FORM B2	QUALIFICATION OF KEY PERSONNEL	*1, *2
FORM B3	EXPERIENCE OF KEY PERSONNEL	*1, *2
FORM B4	SCHEDULE OF EQUIPMENT	*1
FORM B5	FINANCIAL DETAILS, BANK RATING AND BANK REFERENCES	*1, *2
FORM B6	HDI SUPERVISORY PERSONNEL COMPLIMENT	*1, *2
FORM C1	PROJECT PROGRAMME	*1, *2
FORM C2	METHOD STATEMENT	*1, *2
FORM C3	SCHEDULE OF ESTIMATED MONTHLY EXPENDITURE	*1, *2
FORM D1	RETENTION MONEY GUARANTEE	*1, *2
FORM D2	TRAINING AND COMMUNITY LIASON REPORTING	*1, *2

NOTES:

*1 - SCHEDULES/DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

*2 - SCHEDULES/DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

T2.2 RETURNABLE SCHEDULES

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FORM A1: REGISTRATION ON TREASURY CENTRAL SUPPLIER DATATBASE

Tenderer to supply proof of registration on treasury central supplier database.

The tenderer shall provide a printed copy of the Active Supplier Listing on the National Treasury Central Supplier Database (www.treasury.gov.za). Tenderers who are not registered on the Central Supplier Database at tender closure will be declared non-responsive (refer to Tender Data, Clause 4.1.1).

In the case of a Joint Venture, a printed copy of the Active Supplier Listing must be provided for each member of the Joint Venture.

Name of Service Provider:

Central Supplier Database Supplier Number:

Signed on behalf of tenderer:

FORM A2: CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING

This is to certify that

.....(Tenderer)

of

.....

.....(address)

was represented by the person(s) named below at the compulsory meeting held for all tenderers at

.....(Location) on.....(Date), starting at.....

We acknowledge that the purpose of the meeting was to acquaint ourselves with the site of the works and / or matters incidental to doing the work specified in the tender documents in order for us to take account of everything necessary when compiling our rates and prices included in the tender.

Particulars of person(s) attending the meeting:

Name.....**Not Applicable**

Capacity.....

Name.....Signature.....

Capacity.....

Attendance of the above persons at the meeting is confirmed by the Employer's representative/
Employer's Agent, namely:

Name.....Signature.....

Capacity.....Date & Time.....

FORM A3: CONSTRUCTION INDUSTRY DEVELOPMENT BOARD REGISTRATION

The tenderer is to affix to this page either:

Written proof of his registration with the CIDB as a Category GB

Or

Written proof of his application to the CIDB for registration as a contractor in the category listed above.

Or

The tenderer shall provide the following details of his registration with the Construction Industry Development Board, as well as a printed copy of the Active Contractor's Listing off the CIDB website (www.cidb.org.za)

Name of Contractor.....

Contractor Grading Designation:

CIDB Contractor Registration Number:

Note:

1. Failure to affix such documentation as prescribed to this page shall result in this tender not being further considered for the award of the contract.
2. Should this tender be considered for award of the contract, based on proof of submission of application for registration in the appropriate category with the CIDB, and should proof of such subsequent registration not be forthcoming to the Employer by the time of award of the contract, then this tender will no longer be considered for the award of the contract.

FORM A4: CERTIFICATE FOR AUTHORITY OF SIGNATORY

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

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

A.Certificate for company

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

.....

Chairman Signature

.....

Date

As witnesses:

1.

Print Name

.....

Sign

2.

Print Name

.....

Sign

.....

Date

B. Certificate of partnership

We, the undersigned, being the key partners in the business trading as(*company name*)

hereby authorise Mr/Mrs.....(*name*), acting in the capacity of.....(*designation*)to sign all documents in connection with the tender for **Bid Number: 02 of 2022**and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

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

C.Certificate for Joint Venture

We, the undersigned, are submitting this tender offer in Joint Venture and hereby authorise Mr/Mrs.....(*name*), authorised signatory of the company(*company name*),acting in the capacity of lead partner, to sign all documents in connection with the tender offer for **Bid Number: 02 of 2022** and any other contract resulting from it on our behalf.

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

NAME OF FIRM	ADDRESS	AUTHORISING SIGNATURE, NAME & CAPACITY
Lead partner		

D. Certificate for sole proprietor

I, (*name*), hereby confirm that I am the sole owner of the
business trading as(*company name*)

.....

Sole Proprietor: Signature

.....

Date

As witnesses:

1.
Print Name Sign

2.
Print Name Sign

.....
Date

E. Certificate for Close Corporation

We, the undersigned, being the key members in the business trading
as.....(*company name*)hereby
authorise Mr/Mrs.....(*name*)

Acting in the capacity of.....(*designation*), to sign all documents in
connection with the tender for **Bid Number: 02 of 2022** and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

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

FORM A5: CERTIFICATE OF SINGLE TENDER SUBMISSION

Notes to tenderer:

1. This certificate serves as a declaration by the tenderer that a single tender was submitted.
2. In the case of a joint venture (JV), a Targeted Enterprise or sub-contracted Key Person(s), a separate certificate is to be completed and submitted by each JV member, Targeted Enterprise or sub-contracted Key Person(s).

DECLARATION

I, the undersigned, in submitting the accompanying tender on behalf of the tenderer do hereby make the following statements that I certify to be true and complete in every respect:

1. I have read and understand the notes to, and the contents of, this certificate.
2. I understand that the accompanying tender and any other tender shall be disqualified in the event that i, including a joint venture partner, a Targeted Enterprise or a sub-contracted Key Person(s), participate in more than 1 (one) tender.

Signature:

Date:

Position:

Tenderer:

FORM A6: CERTIFICATE OF PERMISSION TO CONDUCT DUE DILIGENCE INVESTIGATION

Notes to tenderer:

1. The tenderer shall complete the declaration below.

2. In the event of a joint venture (JV), each member of the JV shall comply with the above requirements.

I, (name), the undersigned in my

capacity as (position), on behalf of

..... (name of company),

herewith grant consent that Makhado Municipality or any of their appointed service providers may conduct a due diligence investigation on

..... (name

of company) to evaluate our ability to perform the contract as stipulated in the standard conditions of tender, clause 5.13(b).

In addition, any information in this regard requested by Makhado Municipality or any of their appointed service providers, shall be submitted within the timelines of the request.

.....

Signature

.....

Date

FORM A7: DEVIATIONS OR QUALIFICATIONS BY THE TENDERER

Note: Tenderers will be declared to be non-responsive should any proposed deviation or qualification, save for where alternative tender offers as permitted in terms of the Tender Data, in the Employer's opinion:

- a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- b) change the Employer's or the tenderer's risks and responsibilities under the contract, or
- c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

PAGE	DESCRIPTION

SIGNED ON BEHALF OF TENDERER:

.....

FORM A8: MBD2 TAX CLEARANCE CERTIFICATE REQUIREMENTS

It is a condition of bid that the taxes of the successful bidder must be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the bidder's tax obligations.

1. In order to meet this requirement bidders are required to complete in full the attached form TCC 001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids.
2. SARS will then furnish the bidder with a Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
3. The original Tax Clearance Certificate must be submitted together with the bid. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.
4. In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.
5. Copies of the TCC 001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website www.sars.gov.za.
6. Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website www.sars.gov.za.



TAX CLEARANCE

TCC 001

Application for a Tax Clearance Certificate

Purpose

Select the applicable optionTenders ☐ Good standing ☐

If "Good standing", please state the purpose of this application

Particulars of applicant

Name/Legal name (Initials & Surname or registered name)																					
Trading name (if applicable)																					
ID/Passport no											Company/Close Corp. registered no										
Income Tax ref no											PAYE ref no	7									
VAT registration no	4										SDL ref no	L									
Customs code											UIF ref no	U									
Telephone no	CODE					NUMBER					Fax no	CODE					NUMBER				
E-mail address																					
Physical address																					
Postal address																					

Particulars of representative (Public Officer/Trustee/Partner)

Surname																					
First names																					
ID/Passport no											Income Tax ref no										
Telephone no	CODE					NUMBER					Fax no	CODE					NUMBER				
E-mail address																					
Physical address																					

FORM A9: MBD4 DECLARATION OF INTEREST

1. Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes a price quotation, advertised competitive bid, limited bid or proposal). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where:

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

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

2.1 Full Name of bidder or his or her representative:

2.2 Identity Number:

2.3 Position occupied in the Company (director, trustee, shareholder²):

2.4 Company Registration Number:

2.5 Tax Reference Number:

2.6 VAT Registration Number:

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

¹"State" means –

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

- (d) national Assembly or the national Council of provinces; or
- (e) Parliament.

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

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

2.7.1 If so, furnish the following particulars:

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

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

Position occupied in the state institution:

Any other particulars:

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

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

2.7.2.1.1 If yes, did you attached proof of such authority to the bid **YES / NO**
document?

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

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

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

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

2.8.1 If so, furnish particulars:

.....

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

2.9.1 If so, furnish particulars.

.....

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

2.10.1 If so, furnish particulars.

.....

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

2.11.1 If so, furnish particulars:

.....

3 FULL DETAILS OF DIRECTORS / TRUSTEES / MEMBERS / SHAREHOLDERS.

Full Name	Identity Number	Personal Tax Reference Number	State Number / Employee Peral Number

CERTIFICATION

I, THE UNDERSIGNED (NAME)

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.

I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....

Signature

.....

Date

.....

Position Name of Bidder

FORM A10: MBD5 DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)

For all procurement expected to exceed R10 million (all applicable taxes included), bidders must complete the following questionnaire:

1 Are you by law required to prepare annual financial statements for auditing?

1.1 If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.

***YES / NO**

.....

.....

2 Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days? ***YES / NO**

2.1 If no, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than three months or other service provider in respect of which payment is overdue for more than 30 days.

2.2 If yes, provide particulars.

.....

.....

.....

* Delete if not applicable

3. Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract?

YES / NO

3.1 If yes, furnish particulars.

.....

.....

4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected transferred out of the Republic?

***YES / NO**

- 4.1 If yes, furnish particulars

.....

.....

CERTIFICATION

I, THE UNDERSIGNED (NAME)

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT. I ACCEPT THAT STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....

Signature

.....

Date

.....

Position

.....

Name of Bidder

**FORM A11: MBD6.1 PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL
PROCUREMENT REGULATIONS 2017**

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

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.

1. GENERAL CONDITIONS

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

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

1.2

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

1.3 Points for this bid shall be awarded for:

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

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

	POINTS
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
Total points for Price and B-BBEE must not exceed	100

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

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

2. DEFINITIONS

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

3. POINTS AWARDED FOR PRICE

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

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

80/20

or

90/10

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

or

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

Where

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

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

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

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

5. BID DECLARATION

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

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

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

7. SUB-CONTRACTING

- 7.1 Will any portion of the contract be sub-contracted?
 (*Tick applicable box*)

YES		NO	
-----	--	----	--

- 7.1.1 If yes, indicate:

- What percentage of the contract will be subcontracted.....%
- The name of the sub-contractor.....
- The B-BBEE status level of the sub-contractor.....
- Whether the sub-contractor is an EME or QSE

(Tick applicable box)

YES		NO	
-----	--	----	--

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

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

8. DECLARATION WITH REGARD TO COMPANY/FIRM

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

8.2 VAT registration number:.....

8.3 Company registration number:.....

8.4 TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

.....

.....

8.6 COMPANY CLASSIFICATION

- ☐ Manufacturer
- ☐ Supplier
- ☐ Professional service provider
- ☐ Other service providers, e.g. transporter, etc.

[*TICK APPLICABLE BOX*]

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

8.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution.

WITNESSES

1.
2.

.....

SIGNATURE(S) OF BIDDERS(S)

DATE:

ADDRESS.....

.....

.....

FORM A12: MBD 6.2 DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

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

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

1. General Conditions

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

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand

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

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) on the date of advertisement of the bid as indicated in paragraph 3.1 below.

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

2. The stipulated minimum threshold(s) for local production and content for this Tender is/are as follows:

Item	Description of Service	Stipulated Minimum Threshold
A	Roof Sheetting	100%
B	Reinforcing bars	100%
C	Window Frames	100%
D	Door Frames	100%
E	Gutters and Downpipes	100%
F	Wire Products	100%

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

(*Tick applicable box*)

YES		NO	
-----	--	----	--

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

The relevant rates of exchange information is accessible on www.reservebank.co.za.

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

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

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

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

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

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

IN RESPECT OF BID NO.

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

.....

NB

1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thdti.gov.za/industrial_development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),

do hereby declare, in my capacity as

of(name of bidder entity), the following:

(a) The facts contained herein are within my own personal knowledge.

(b) I have satisfied myself that:

- (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (ii) the declaration templates have been audited and certified to be correct.

(c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

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

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above.

The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

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

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

Annex C

Local Content Declaration - Summary Schedule

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

Note: VAT to be excluded from all calculations

Pula	0	EU	0	GBP	0
------	---	----	---	-----	---

[illegible]

Annex D											SATS 1286.2011			
Imported Content Declaration - Supporting Schedule to Annex C														
(D1)	Tender No.								Note: VAT to be excluded from all calculations					
(D2)	Tender description:													
(D3)	Designated Products:													
(D4)	Tender Authority:													
(D5)	Tendering Entity name:													
(D6)	Tender Exchange Rate:				Pula		EU		R 9,00		GBP		R 12,00	
A. Exempted imported content					Calculation of imported content						Summary			
Tender item no's	Description of imported content	Local supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice (D11)	Tender Exchange Rate (D12)	Local value of imports (D13)	Freight costs to port of entry (D14)	All locally incurred landing costs & duties (D15)	Total landed cost excl VAT (D16)	Tender Qty (D17)	Exempted imported value (D18)			
(D7)	(D8)	(D9)	(D10)							0				
										0				
(D19) Total exempt imported value										R	-			
This total must correspond with Annex C - C 21														
B. Imported directly by the Tenderer					Calculation of imported content						Summary			
Tender item no's	Description of imported content	Unit of measure	Overseas Supplier	Foreign currency value as per Commercial Invoice (D24)	Tender Rate of Exchange (D25)	Local value of imports (D26)	Freight costs to port of entry (D27)	All locally incurred landing costs & duties (D28)	Total landed cost excl VAT (D29)	Tender Qty (D30)	Total imported value (D31)			
(D20)	(D21)	(D22)	(D23)							0				
(D32) Total imported value by tenderer										R	-			
C. Imported by a 3rd party and supplied to the Tenderer					Calculation of imported content						Summary			
Description of imported content	Unit of measure	Local supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice (D37)	Tender Rate of Exchange (D38)	Local value of imports (D39)	Freight costs to port of entry (D40)	All locally incurred landing costs & duties (D41)	Total landed cost excl VAT (D42)	Quantity imported (D43)	Total imported value (D44)			
(D33)	(D34)	(D35)	(D36)							0				
										0				
(D45) Total imported value by 3rd party										R	0			
D. Other foreign currency payments				Calculation of foreign currency payments					Summary of payments					
Type of payment	Local supplier making the payment (D47)	Overseas beneficiary (D48)	Foreign currency value paid (D49)	Tender Rate of Exchange (D50)				Local value of payments (D51)						
(D46)														
(D52) Total of foreign currency payments declared by tenderer and/or 3rd party														
(D53) Total of imported content & foreign currency payments - (D32), (D45) & (D52) above										R	0			
This total must correspond with Annex C - C 23														
Signature of tenderer from Annex B														
Date:														

SATS 1286.2011

Annex E

Local Content Declaration - Supporting Schedule to Annex C

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

Note: VAT to be excluded from all calculations

Local Products
(Goods, Services and Works)

Description of items purchased

Local suppliers

Value

(E6)

(E7)

(E8)

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

R -

(E10) Manpower costs (Tenderer's manpower cost)

R -

(E11) Factory overheads (Rental, depreciation & amortisation, utility costs, consumables etc.)

R -

(E12) Administration overheads and mark-up (Marketing, insurance, financing, interest etc.)

R -

(E13) Total local content

R -

This total must correspond with Annex C - C24

Signature of tenderer from Annex B

Date:

FORM A13: MBD8 DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

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

Item	Question	Yes	No
4.1	<p>Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector?</p> <p>(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied).</p> <p>The Database of Restricted Suppliers now resides on the National Treasury's website(www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.</p>	<p>Yes</p> <p><input type="checkbox"/></p>	<p>No</p> <p><input type="checkbox"/></p>
4.1.1	If so, furnish particulars:		
4.2	<p>Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)?</p> <p>The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.</p>	<p>Yes</p> <p><input type="checkbox"/></p>	<p>No</p> <p><input type="checkbox"/></p>

4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
Item	Question	Yes	No
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.5.1	If so, furnish particulars:		

CERTIFICATION

I, the undersigned (full name).....certify that
the information furnished on this declaration form is true and correct.

I accept that, in addition to cancellation of a contract, action may be taken against me should this
declaration prove to be false.

.....

Signature

.....

Date

.....

Position

.....

Name of bidder

**Note: Failure of a tenderer to fully complete and sign this part of this SDB form in full will
invalidate the tender**

FORM A14: MBD9 CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Institution)

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

I certify, on behalf of: _____ that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.

7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
- (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

NOTE: Failure of a tenderer to fully complete and sign this part of this SBD form in full will invalidate the tender

FORM A15: BBBEE CERTIFICATE

Tenderer to supply B-BBEE certificate and eligibility for preference points is as per the MBD6.1
(Form A11)

Signed.....Date

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

Tenderer.....

FORM A16: 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 of Details
1		
2		
3		
4		
5		
6		

Attach additional pages if more space is required.

Signed.....Date

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

Tenderer.....

FORM A17: DECLARATION OF TENDERER'S LITIGATION HISTORY CONTRACT**Note to tenderer:**

The tenderer shall list below details of any litigation with which the tenderer (including its directors, shareholders or other senior members in previous companies) has been involved with any organ of state or state department within the last ten years. The details must include the year, the litigating parties, the subject matter of the dispute, the value of any award or estimated award if the litigation is current and in whose favour the award, if any, was made.

Client	Other Party	Litigation	Dispute	Award Value	Date Resolved

Signed on behalf of the tenderer:

FORM A18: SCHEDULE OF PROPOSED SUBCONTRACTORS

<p>We notify you that it is our intention to employ the following subcontractors for work in this contract.</p> <p>If we are awarded a contract we agree that this notification does not change the requirement for us to submit the name of proposed subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.</p>			
	Name and address of proposed Subcontractor	Company Registration Number & CIDB Classification	Description of Work to be executed by Subcontractor
1.			
2.			
3.			
4.			
5.			

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

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

Tenderer.....

FORM A19: SCHEDULE OF LABOUR CONTENT

The Tenderer must complete the table below to reflect the labour force anticipated to be employed on this contract, including labour employed by sub-contractors. The specified target value is a minimum of 12% of contract amount.

Type of Labour	Person-hours	Minimum Wage Rate per Unit	Total Wage Cost (Excl. VAT)
Permanent Labour			
Temporary Labour			
SMME/HDI's Labour			
TOTAL			
PERCENTAGE			

Notes to Tenderer:

- (1) Labour is defined as hourly paid personnel.
- (2) The penalty for non-compliance during the contract or for fraudulent disclosure is R10 per every person-hour by which the Contractor fails to meet the target.
- (3) The minimum wage rate to be R191.60 per day

SIGNED ON BEHALF OF THE TENDERER:

**FORM A20: COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 AND
CONSTRUCTION REGULATIONS, 2014**

The tenderer shall attach to this Form evidence that he is registered and in good standing with a compensation insurer who is approved by Department of Labour in terms of section 80 of the Compensation for Injury and Disease Act (COID) (Act 130 of 1993).

The tenderer is required to disclose, by also attaching documentary evidence to this form, all inspections, investigations and their outcomes conducted by the Department of Labour into the conduct of the tenderer at any time during the 36 months preceding the date of this tender.

SIGNED ON BEHALF OF TENDERER:

Note to tenderer:

Discovery that the tenderer has failed to make proper disclosure may result in the Municipality terminating a contract that flows from this tender on the ground that it has been rendered invalid by the tenderer's misrepresentation.

FORM A21: VALUE OF PRELIMINARIES AND GENERALS

Should the combined, extended total tendered for Section 1200A, the contractor's contractual obligations:

- Fixed charge and value related items
- Time-related Items

Exceed a maximum of 12% of the tender sum (excluding VAT), the tenderer shall clearly set out his reasons for tendering in this manner in a letter attached to this page.

Total tendered for SABS 1200A Item 8 expressed as a percentage of the tender sum (excluding VAT):% (insert percentage).

PRELIMINARIES AND GENERALS		
ITEM	PORTION OF RATE OR SUM (R)	VALUE (RANDS)
TOTAL VALUE		

SIGNED ON BEHALF OF TENDERER:

FORM B1: TENDERER'S EXPERIENCE IN BUILDING PROJECTS

The following is a statement of similar building work successfully executed by myself/ourselves:

Employer, contact person and telephone number	Description of contract (Outline mainly building upgrading, refurbishment and/or rehabilitation)	Value of work Inclusive of VAT (Rand)	Date Completed

Note:

- 1. ATTACH PROJECT WITH MINIMUM 3 (THREE) COMPLETION CERTIFICATES FOR COMPLETED PROJECTS**
- 2. ATTACH APPOINTMENT LETTERS FOR THE COMPLETED PROJECTS**

Functionality Criteria

Criteria	Points
3 building projects of total value more R10.5m	100%
3 building projects of total value R10.5m	70%
3 building projects of total value less than R10.5m	0

Signed.....Date

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

Tenderer.....

FORM B2: ORGANOGRAM AND QUALIFICATIONS

Tenderer to supply an organogram for the management of the contract depicting key personnel and include recently (not older than 3 months from the tender closing date) certified copies of original qualifications. The personnel included here shall be used on the project unless otherwise agreed by the Employer's Agent. Where replacement of the key personnel is requested by the Tenderer after contract award, the replace must be of at least the same quality as required in this tender.

Name & Surname of Key Personnel	List of Qualifications & Year Obtained

Functionality Criteria

Criteria	Points
Exceed minimum requirements	100%
Meet minimum requirements	70%
Does not meet minimum requirements	0%

SIGNED ON BEHALF OF TENDERER:

FORM B3: EXPERIENCE OF KEY PERSONNEL

Tenderer to supply a curricula vitae of key personnel. These curricula vitae shall provide evidence of relevant qualifications and experience of the key staff in the organogram. The personnel included here shall be used on the project unless otherwise agreed by the Employer's Agent. Where replacement of the key personnel is requested by the Tenderer after contract award, the replace must be of at least the same quality as required in this tender.

Name & Surname of Key Personnel	Numbers years relevant experience	List of minimum three (3) building projects completed	Referee name and contact number(s) per project (at least 1 referee per project)
Project Director			

Name & Surname of Key Personnel	Numbers years relevant experience	List of minimum three (3) building projects completed	Referee name and contact number(s) per project (at least 1 referee per project)
Contracts Manager			
Name & Surname of Key Personnel	Numbers years relevant experience	List of minimum three (3) building projects completed	Referee name and contact number(s) per project (at least 1 referee per project)
Site Agent			

Name & Surname of Key Personnel	Numbers years relevant experience	List of minimum three (3) building projects completed	Referee name and contact number(s) per project (at least 1 referee per project)
General Foreman			
Name & Surname of Key Personnel	Numbers years relevant experience	List of minimum three (3) building projects completed	Referee name and contact number(s) per project (at least 1 referee per project)
Health and Safety Officer			

Functionality Criteria

Criteria	Points
Exceed minimum requirements	100%
Meet minimum requirements	70%
Does not meet minimum requirements	0%

SIGNED ON BEHALF OF TENDERER:

FORM B4: SCHEDULE OF CONSTRUCTION EQUIPMENT

The tenderer must state below what constructional equipment will be immediately available for this contract, what constructional equipment will become available by virtue of outstanding orders, and what further constructional plant will be acquired or hired for the work should he be awarded the contract.

a) CONSTRUCTION EQUIPMENT OWNED AND AVAILABLE WITH SUPPORTING DOCUMENTS AND REGISTRATION NUMBERS

Description of equipment	Size and capacity	Number	Registration Number
Pick-up truck			
TLB			
Tipper Truck			
Water Tanker			
Pedestrian Roller			
Other (s			

b) CONSTRUCTIONAL PLANT ON ORDER

State details of the arrangements made with supporting documents, letters of intent from suppliers and delivery dates.

[illegible]

c) CONSTRUCTIONAL PLANT THAT WILL BE ACQUIRED OR HIRED

State details of delivery arrangements, supporting documents and letters of intent from suppliers.

Description, size and capacity	Number

Attach additional pages if more space is required.

Functionality Criteria

Criteria	Points
Exceed the minimum equipment requirements	100%
Meet the minimum equipment requirements	70%
Does not meet the minimum equipment requirements	0%

Signed.....Date

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

Tenderer.....

FORM B5: FINANCIAL DETAILS, BANK RATING AND BANK REFERENCES**1. FINANCIAL STATEMENTS**

I/We agree, if required, to furnish a copy of the latest audited set of financial statement together with my/our Director's and Auditor's report for consideration by the Makhado Municipality.

2. DETAILS OF CONTRACTOR'S BANK ACCOUNT

I/We furnish the following information:

- a) Account Holders:.....
- b) Name of Bank:
- c) Branch of Bank:.....
- d) Town/city/suburb where bank is situated:.....
- e) Contact Person at the Bank:.....
- f) Telephone number of Bank: Code: Number:
- g) Account Number:
- h) Bank rating (include stamped letter of confirmation from bank or financial institution):.....

I/We hereby authorise the Employer to approach the above Bank or financial institution for a reference.

Functionality Criteria

Criteria	Points
Grade C or better	100%
Grade D	70%
Grade E or worse	0%

SIGNED ON BEHALF OF THE TENDERER:.....

FORM B6: HDI SUPERVISORY PERSONNEL COMPLIMENT

In terms of the Project Specification and the Conditions of Tender, unskilled workers may only be brought in from outside the local community if such personnel are not available locally.

The Tenderer shall list below the personnel which he intends to utilize on the Works, including key personnel which may have to be brought in from outside if not available locally.

CATEGORY OF EMPLOYEE	KEY PERSONNEL PART OF THE CONTRACTOR'S ORGANISATION		KEY PERSONNEL TO BE IMPORTED IF NOT AVAILABLE LOCALLY	
	HDI	NON-HDI	HDI	NON-HDI
Project Director				
Contracts Manager				
Site Agent				
General Foreman				
Health & Safety Officer				

Signature: Date:

Tenderer:.....

FORM C1: PROJECT PROGRAMME

Tenderer to supply project programme, using acceptable software, in sufficient detail to cover the various facets of the work.

SIGNED ON BEHALF OF TENDERER:

Note to Tenderer

If a tenderer wishes to submit an alternative tender then this form, appropriately completed, shall be attached to the bill of quantities for the alternative proposal.

FORM C2: METHOD STATEMENT

Tenderer to supply a method statement project indicating the tenderer's proposed work plan for the construction of the works.

SIGNED ON BEHALF OF TENDERER:

FORM C3: SCHEDULE OF ESTIMATED MONTHLY EXPENDITURE

The tenderer shall state his estimated value of the work to be completed every month, based on his preliminary programme and his tendered unit rates, in the table below. The amounts for contingencies and contract price adjustment shall not be included.

MONTH	VALUE (INCLUDING VAT)
1	R
2	R
3	R
4	R
5	R
6	R
7	R
8	R
9	R
10	R
11	R
12	R
TOTAL: R..... (EXCLUDING CONTINGENCIES AND CONTRACT PRICE ADJUSTMENT)	

SIGNED ON BEHALF OF TENDERER:.....

FORM D1: RETENTION MONEY GUARANTEE PROFORMA**EXAMPLE**

.....Municipality

.....

.....

.....

FOR INFORMATION ONLY:

This Guarantee is not to be
completed and signed by the
Guarantor.

A separate form will be issued
to the successful Tenderer

Notes to Tenderer

1. This pro-forma is for information only. Any amendments, omission or addition to this pro-forma will need the Employer's Agent's authorisation. The successful tenderer's guarantor will lodge this guarantee with the Employer.
2. The tenderer's guarantee will have to be on letterheads indicating the contact details of the guarantor, shareholders/board of directors, guarantee number and the company registration number.

RETENTION MONEY GUARANTEE**RETENTION MONEY GUARANTEE FOR BID NUMBER: 02 of 2022: REFURBISHMENT OF WATERVAL REGIONAL OFFICE**

Guarantor:

.....

Contractor:

Employer: MAKHADO MUNICIPALITY

Employer's

Address:.....

.....

.....

At the instance of the Contractor, I/we the undersigned in my respective capacity as..... of(guarantor)
Registration Number:.....(hereinafter referred to as the
Guarantor) and duly authorised thereto, hold at the Employer's disposal and undertake to pay to the Employer an amount not exceeding subject to the terms and conditions stated below.

1. Payment shall be made to the Employer on receipt by the Guarantor, first written demand and which written demand shall be accompanied by the following:
 - 1.1 Written confirmation, signed by the Employer, stating that the Contractor is in breach of the Contract in which this guarantee was required or that any event triggering payment in terms of this guarantee has occurred; and
 - 1.2 Written confirmation, signed by the Employer, of the amount being claimed in both figures and words, with such amount not exceeding the maximum amount of this guarantee.
2. This guarantee expires automatically at(hereinafter referred to as the "expiry date"). After the expiry date this guarantee shall be null and void, whether returned to the Guarantor for cancellation or not.
3.(Guarantor) hereby guarantees and binds themselves jointly and severally as Guarantor and Co-principal debtors to the Employer under renunciation of the benefits of division and excursion for due payment in breach of the Contract in which this guarantee was required.
4. Notwithstanding anything to the contrary contained herein, the Guarantor's obligations hereunder shall be construed as principal and not as accessory to the obligations of the Employer, and compliance with any demand for payment received by the Guarantor in terms of hereof shall not be delayed, nor shall the Guarantor's obligations in terms hereof be discharged, by the fact that a dispute may exist between the Contractor and the Employer.
5. This guarantee is personal to the Employer and is neither negotiable nor transferrable, and must be returned back to the Guarantor on payment, withdrawal or expiry.
6. The Guarantor's obligations under this guarantee shall be restricted to the payment of money.
7. The Guarantor accepts that the Employer address reflected above is the Employer's *domicilium citandi et executandi* for all purposes in connection with this guarantee and notices shall be sent by registered post or hand delivered to the *domicilium* address. It is the Employer's responsibility to ensure that any change in *domicilium* address is communicated to the Guarantor in writing. Any notice sent to the *domicilium* address by registered post shall be deemed to have been received by the Employer 7 (seven) days after postage.
8. This guarantee shall be governed by South African law and subject to the jurisdiction of South African Courts.

9. In witness whereof this guarantee has been executed by us at

_____ on this _____ day of _____ 2021.

Duly authorised to sign for and on behalf of.....
(Guarantor)

Signature_____

Full names and Surname_____

Capacity_____

As witness:

1.	_____	_____
	Full Names	Signature

2.	_____	_____
	Full Names	Signature

FORM D2: TRAINING AND COMMUNITY IAISON REPORTING

The contractor shall report on entrepreneurial training, engineering training and community liaison based on reporting template as per the Makhado Municipality.

SIGNED ON BEHALF OF TENDERER:

CONTRACT

PART C1	AGREEMENT AND CONTRACT DATA
PART C2	PRICING DATA
PART C3	SCOPE OF WORKS
PART C4	SITE INFORMATION

PART C1: AGREEMENT AND CONTRACT DATA

C1.1	FORM OF OFFER AND ACCEPTANCE.....	C-3
C1.2	AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO. 85 OF 1993)	C-6
C1.3	PERFORMANCE GUARANTEE	C-8
C1.4	AGREEMENT IN TERMS OF THE MINE HEALTH AND SAFETY ACT, (ACT NO. 29 OF 1996) AS AMENDED BY THE MINE HEALTH AND SAFETY AMENDMENT ACT (ACT NO. 72 OF 1997)	C-9
C1.5	APPOINTMENT IN TERMS OF SECTION 4 OF THE MINE HEALTH AND SAFETY ACT, (ACT NO. 29 OF 1996) AS AMENDED BY THE MINE HEALTH AND SAFETY AMENDMENT ACT (ACT NO. 72 OF 1997).....	C-11
C1.6	MINE HEALTH AND SAFETY ACT NO. 29 OF 1996 AND AMENDMENT ACT NO. 72 OF 1997	C-13
C1.7	CONTRACT DATA	C-14

C1.1 FORM OF OFFER AND ACCEPTANCE

Offer

The Employer, identified in the acceptance signature block, has solicited offers to enter into a contract for the procurement of:

BID NUMBER: 02 OF 2022 - REFURBISHMENT OF WATERVAL REGIONAL OFFICE

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 this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

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

.....
.....
.....Rand (in words);(in figures)

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 and address of organization)

Name of witness.....

Signature Date

Acceptance

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 contractor 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 agreement)

PART C2 Pricing data

PART C3 Scope of work

PART C4 Site information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender 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 agreement. No amendments to or deviations from said documents are valid unless contained in this schedule, which must be signed by the authorised representative(s) of both parties.

The tenderer shall within two weeks after 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 bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data at, or just after, the date this agreement comes into effect. 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 contractor) within five 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.

Signature(s)
Name(s)
Capacity
for the Employer: Makhado Municipality, Private Bag X2596, Makhado, 0920		
Name of witness:	
Signature	Date:

****For official use only

Schedule of Deviations

Item	Deviation Details

By the duly authorised representatives signing this schedule of deviations, 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 tender 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.

For the Contractor:

Signature(s)

Name(s)

Capacity

.....
(Name and address of organization)

Name of witness

Signature Date:

For the Employer:

Signature(s)

Name(s)

Capacity

for the Employer: **Makhado Municipality, Private Bag X2596, Makhado 0920**

Name of witness

Signature Date:

******For official use only**

C1.2 AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT NO. 85 OF 1993)

THIS AGREEMENT made at(place) on this the day of(month) in the year..... between Makhado Municipality (hereinafter called "the Employer") on the one part, herein represented by(name) in his capacity as(designation) and delegate of the Employer and..... (hereinafter called "the Principal Contractor") of the other part, herein represented byin his capacity as

WHEREAS the Employer is desirous that certain works be constructed, viz (**REFURBISHMENT OF WATERVAL REGIONAL OFFICE**) and has accepted a tender by the Principal Contractor for the construction, completion & maintenance of such works and whereas the Employer and the Principal Contractor have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Principal Contractor with the provisions of the Occupational Health and Safety Act 1993 (Act 85 of 1993 and the Construction Regulations, February 2014);

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. The Principal Contractor shall execute the work in accordance with the contract documents pertaining to this contract.
2. This Agreement shall hold good from its commencement date, which shall be the date of a written notice from the Employer or Employer's Agent requiring him to commence the execution of the Works, to either:
 - a) the date of the Certificate of Completion issued in terms of clause 5.14.4 of the General Conditions of Contract for Construction Works 2015 (2nd Edition) as issued by the South African Institution of Civil Engineering (hereinafter referred to as "the GCC 2015"), as contained in the contract documents pertaining to this contract, or
 - b) the date of termination of the contract in terms of clauses 9.1, 9.2 or 9.3 of the GCC 2015.
3. The Principal Contractor declares himself to be conversant with the following:-
 - a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as "The Act", together with its amendments and with special reference to the following Sections of The Act.
 - i) Section 8: General duties of Employers to their employees.
 - ii) Section 9: General duties of Employers and self-employed persons to persons other than employees.
 - iii) Section 37: Acts or omissions by employees or mandatories and
 - iv) Sub-section 37(2) relating to the purpose and meaning of this Agreement.
 - v) Construction Regulations 2003, and other safety regulations, as applicable.
 - b) The procedures and safety rules of the Employer as pertaining to the Principal Contractor and to all his sub-contractors.
4. The Principal Contractor is responsible for the compliance with the Act by all his sub-contractors, whether or not selected and/or approved by the Employer.
5. The Principal Contractor warrants that all his and his sub-contractors' employees are covered in terms of the Compensation for Occupational Injuries and Diseases Act 1993 which cover shall remain in force whilst any such employees are present on site. A letter of good standing

from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.

6. The Principal Contractor undertakes to ensure that he and/or his sub-contractors and/or their respective employees will at all times comply with the following conditions:
- a) The Principal Contractor shall assume the responsibility in terms of Section 16.1 of the Occupational Health and Safety Act. The Principal Contractor shall not delegate any duty in terms of Section 16.2 of this Act without the prior written approval of the Employer. If the Principal Contractor obtains such approval and delegates any duty in terms of section 16.2 a copy of such written delegation shall immediately be forwarded to the Employer.
 - b) All incidents referred to in the Occupational Health and Safety Act shall be reported by the Principal Contractor to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
 - c) The Employer hereby obtains an interest in the issue of any formal enquiry conducted in terms of section 32 of the Occupational Health and Safety Act into any incident involving the Principal Contractor and/or his employees and/or his sub-contractors.

In witness thereof the parties hereto have set their signatures hereon in the presence of the subscribing witnesses:

SIGNED FOR AND ON BEHALF OF THE EMPLOYER

NAME OF WITNESS1: 2:

SIGNATURE 1: 2:

******For official use only**

SIGNED FOR AND ON BEHALF OF THE PRINCIPAL CONTRACTOR

NAME OF WITNESS1: 2:

SIGNATURE 1: 2:

C1.3 PERFORMANCE GUARANTEE

Performance Guarantee shall be provided by the Contractor with wording strictly as provided in Proforma Performance Guarantee in Appendix 3 of the GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION WORKS, by SAICE, Third Edition (2015).

The Employer's Agent and/or Employer may make adjustments to the wording provided in the Proforma Performance Guarantee stated above.

C1.4 AGREEMENT IN TERMS OF THE MINE HEALTH AND SAFETY ACT, (ACT No. 29 OF 1996) AS AMENDED BY THE MINE HEALTH AND SAFETY AMENDMENT ACT (ACT No. 72 OF 1997)

THIS AGREEMENT made at(place) on this(day) of(month) in the year 20..... between the Makhado Municipality (hereinafter) called "the Employer") of the one part, herein represented by(name) in his capacity as(designation) and delegate of the Employer in terms of the Employer's standard powers of delegation pursuant to the provisions of Act No. 7 of 1998 andin his capacity asand being duly authorised by virtue of a resolution appended hereto as;

Annexure A:

WHEREAS the Employer is desirous that certain works be constructed, (REFURBISHMENT OF WATERVAL REGIONAL OFFICE) and has accepted a tender by the Contractor for the construction, completion and maintenance of such works and whereas the Employer and the Contractor have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Contractor with the provisions of the Mine Health and Safety Act (Act 29 of 1996); as amended by the Mine Health and Safety Amendment Act (Act No. 27 of 1997).

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. The Contractor shall himself obtain the Mining Authorisation for the sites.
2. The Contractor shall assume responsibility for the Environmental Management Programmes (EMP) in respect of the sites and shall ensure that the sites are rehabilitated at the conclusion of the Contract.
3. The Contractor shall comply with the provisions of the Act and the requirements of the Director: Mineral Development of the Department of Minerals and Energy in making the necessary financial provisions to mine optimally and safely and to rehabilitate the surface of the land concerned satisfactory and to carry out the EMP. All costs incurred in providing a guarantee or other financial provision shall be borne by the Contractor.
4. This Agreement shall hold from the date on which the Mining Authorisation is issued until the date on which a Closure Certificate is issued in terms of the Minerals Act, 1991.
5. Nothing in this Agreement shall exonerate the Contractor from compliance with any requirements of the Employer's Agent regarding the rehabilitation of sites prior to the issue of a Final Approval Certificate in terms of clause 5.16.1 of the General Conditions of Contract (2010).
6. The Contractor shall undertake all the duties and accept all the responsibilities of the owner in compliance with the requirements of the Act as amended.
7. The Contractor accepts responsibility for compliance with the Act, as amended, by all his sub-contractors whether or not selected and/or approved by the Employer.

In witness thereof the parties have set their signatures hereon in the presence of the subscribing witnesses:

SIGNED ON BEHALF OF THE EMPLOYER

AS WITNESS:

1.

2:

.....

NAME(Print):

.....

NAME(Print):

******For official use only**

SIGNED ON BEHALF OF THE CONTRACTOR

AS WITNESS:

1.....

2:

.....

NAME (Print):

.....

NAME(Print):

C1.5 APPOINTMENT IN TERMS OF SECTION 4 OF THE MINE HEALTH AND SAFETY ACT, (ACT No. 29 OF 1996) AS AMENDED BY THE MINE HEALTH AND SAFETY AMENDMENT ACT (ACT No. 72 OF 1997)

I,(name) in my capacity as(designation) of the Employer, **The Makhado Municipality** who is the owner of the Mine(s) state name(s) or state "to be worked under the requirements of the above mentioned, hereby appoint(name) in his capacity as(designation) of the Contractor to perform all functions entrusted to the Employer by Sections 2 and 3 of the Act, as amended

SIGNED:.....

DATE:.....

Witness 1..... 2.

.....

NAME(Print):

NAME(Print):

******For official use only**

I hereby accept the above appointment

SIGNED:..... DATE:

Witness 1: 2:

.....

NAME(Print):

NAME(Print):

Note to tenderer:

The person appointed by the Employer in terms of Section 4 of the above Act, as amended, having accepted the appointment, is required under Section 3 of the Act as amended to appoint one or more Managers to be responsible for the day to day management and operation of the mine. The form of appointment, completed and signed, shall be submitted by the successful tenderer for the approval of the Employer before the Contract is signed.

I,.....having been appointed in terms of
Section 4 of the Act, as amended to perform all functions entrusted to the Employer by Sections 2 and
3 of the act, as amended, hereby appoint in his
capacity as of the
Contractor.....as Manager, who, in terms of Section 3 of
the Act, as amended, will be responsible for the day to day management and operation of the mine(s).

SIGNED:.....DATE:.....

Witness 1: 2:

.....

NAME (Print):

NAME(Print):

I hereby accept the above appointment:

SIGNED: DATE:.....

Witness 1: 2:

.....

NAME (Print):

NAME (Print):

C1.6 MINE HEALTH AND SAFETY ACT No. 29 OF 1996 AND AMENDMENT ACT No. 72 OF 1997

DEFINITIONS:

Section 102 of the Mine Health and Safety Act refers.

“mine” means, when –

- (a) “used as a noun-
 - (i) any borehole, or excavation, in any tailing or in the earth, including the portion of the earth that is under the sea or other water, made for the purpose of searching for or winning a mineral, whether is being worked or not, or
 - (ii) any other place where a mineral deposit is being exploited, including the mining area and all buildings, structures, machinery, mine dumps, access buildings or objects situated on or in that area that are used or intended to be used in connection with searching, winning, exploiting or processing of a mineral, or for health and safety purposes. But, if two or more excavations, boreholes or places are being worked in conjunction with one another
 - (iii) a works; and
- b) used as a verb, the making of any excavation or borehole referred to in paragraph (a) (i), or the exploitation of any mineral deposit in any other manner, for the purpose of winning a mineral including prospecting in connection with the winning of a mineral.
 - a) whether that substance is in solid, liquid or gaseous form;
 - b) that occurs natural in or on the earth, in or under water or in tailings, and
 - c) that has been formed by or subjected to a geological process.

“processing” means the recovering, extracting, concentrating, refining, calcimining, classifying, crushing, milling, screening, washing, reduction, smelting or gasification or any mineral, and “process” has a similar meaning

“works” means any place, excluding a mine, where any person carries out-

 - a) The transmitting and distributing to another consumer of any form of power from a mine, by the owner thereof, to the terminal point of bulk, to the power supply meter on any such other consumer’s premises, or
 - b) Training at any central rescue station, or
 - c) The making, repairing, re-opening or closing of any subterranean tunnel, or
 - d) Any operations necessary in connection with any of the operational listed in this paragraph.

C1.7 CONTRACT DATA

The General Conditions of Contract for Construction Works Third Edition (2015) published by the South African Institution of Civil Engineering, is applicable to this contract. Copies of these General Conditions of Contract may be obtained from the South African Institution of Civil Engineering:

Block 19, Thornhill Office Park

Bekker Street, Vorna Valley,

Midrand.

Private Bag X200, Halfway House. 1685

Tel: 011-805 5947

Fax: 011-805 5971

The special conditions of contract are stated in Clause C1.7.3 of this section of the document.

C1.7.1 CONTRACT DATA: INFORMATION PROVIDED BY EMPLOYER

The following contracts data are applicable to this contract:

REFERENCE TO:	CLAUSE.	DATA
Contractor.	1.1.1.9	To be appointed by Makhado Municipality
Defect liability Period	1.1.1.13	The defect liability period shall be 12 months.
Due Completion Date	1.1.1.14	The Works shall be completed within 6 months as envisaged by the Employer.
Employer.	1.1.1.15	Makhado Municipality
Contract Cessions	1.3.1	Contract Cessions will be approved by the Employer on this Project
Sub-Contracting	4.4	No Works of value more than 25% of contract amount may be sublet to non-HDI Sub-contractor if contract has been obtained with HDI points
Documentation Required Before Commencement with Works	5.3.1	<p>The Works are to be commenced within twenty one (21) days of the Commencement Date. The documents required before commencement with the Works execution are:</p> <ul style="list-style-type: none">• Initial Programme (clause 5.6);• Insurance (clause 8.6); and• Health and safety plan and approved OHS file by the Department of Labour in terms of Construction Regulations 2014 (clause 4.3)• CVs and qualifications of key staff, and Contractor's project team organogram in accordance with requirements in this bid (Schedule F - Tenderer Key Personnel and Bid Evaluation Criteria)

REFERENCE TO:	CLAUSE.	DATA
Submission of documents required in clause 5.3.1	5.3.2	The time to submit the documentation required before commencement with the Works execution is 21 days except OHS related documents which must be submitted within 7 days.
Special Non-working days	5.8.1	The special non-working days are public holidays
Penalty for delay	5.13.1	0.0575% of the contract value per calendar day or part thereof.
Liability for Any Latent Defects	5.16.3	The latent defect period is 10 years after the issue of the Final Approval Certificate
Contract Guarantee	6.2.3	Within 14 days after appointment letter has been issued.
Guarantee Sum	6.2.1/6.2.2	Performance guarantee shall be 10% of the Contract Value
Percentage Allowances	6.5.1.2.3	The percentage allowances shall be 15%.
Time for Completion	5.6.2.1	6 months from Commencement Date
Contract Price Adjustment	6.8.2	Not Applicable in this contract
Special Materials	6.8.3	There are no special materials in this contract.
Materials on Site	6.10.1.5	The percentage limit on materials and plant not yet built into the Permanent Works is 80% .
Retention Money	6.10.3	The percentage retention is 10%
Limit of Retention	6.10.3	The limit of retention money is 10% of the tender sum
Retention Money Guarantee	6.10.5	A Retention Money Guarantee may be required in lieu of retention money.
Defects Liability Period	7.8.1	12 Months
Excepted Risks	8.3.1.11	Clause 8.3.1.11 is not applicable for this Contract. The Contractor must include in his insurances risks due to use or occupation by the Employer or Employees of the Employer or agents or other contractors of any part of the Works.
Insurances	8.6.1	The amount to be included in the sum insured to cover the value of:
	8.6.1.1.2	No material to be supplied directly by the Employer.
	8.6.1.1.3	b)Professional fees not included in the Contract Price is R0.00 (Nil Rand).
	8.6.1.3	The limit of the liability insurance required shall not be less than the contract amount
	8.6.1.5	The following additional and varied insurances are required: CAR & SASRIA should not be less than the contract amount.

REFERENCE TO:	CLAUSE.	DATA
Limit of indemnity	8.4.2	Claims unlimited
Other Insurances	8.6.1.3	Liability Insurances
Dispute Resolution	10.5.1/ 10.5.3	Adjudication, Arbitration and the Court will be acceptable dispute resolution mechanisms

C1.7.2 CONTRACT DATA: INFORMATION PROVIDED BY TENDERER

Clause	
1.1.1.9	The Contractor is (name)
1.2.1.2	The Contractor's address for receipt of communication is: Telephone.....Facsimile:..... e-mail:..... Postal Address:..... Physical Address:.....

C1.7.3 SPECIAL CONDITIONS OF CONTRACT

If the Contractor does not make due payment to his creditor on this Contract, being any of Employee or his Supplier or Subcontractor, in accordance with the agreement between him and the aforementioned creditor, the Employer shall consult with the Contractor and send a reminder letter to the Contractor reminding him to pay monies due to his creditor, in accordance with the agreement between him and the creditor. If the Contractor does not pay the creditor within one month after the Employer has sent the Contractor a reminder letter, the Employer reserves to act in accordance with either one or a combination of Clauses 6.10.1, 6.10.1.3, 6.10.6 and 6.10.6.1 of the General Conditions of Contract for Construction Works Third Edition (2015) published by the South African Institution of Civil Engineering, in respect of any payment certificate in terms of the Contract, and set-off payments, for the Employer to directly pay the creditor. By entering in this Contract 02 of 2022, the Contractor agrees to fully provide and sign all the necessary documents that would enable the Employer to directly pay his creditors, being any of Employee or Supplier or Subcontractor.

PART C2: PRICING DATA

C2.1	PRICING NSTRUCTIONS	C.19
C2.2	BILL OF QUANTITIES	C.24

C2.1 PRICING INSTRUCTIONS

1. General

The Bill of Quantities forms part of the Contract Document and must be read and price in conjunction with all the other documents comprising the Contract Documents, which include the Tender Data, Agreement and Contract Data, Scope of Work and Drawings.

2. Description of items in the schedule

The Bill of Quantities has been drawn up generally in accordance with SANS 1200.

The short description of the items in the Bill of Quantities are for identification purpose only and the measurements and payment clause of the Standardized Specifications and the Particular Specifications, read together with the relevant clauses of the project Specification and directives on the drawings, set out what ancillary or associated work and activities are included in the rates for the operations specified.

3. Provisional sums and prime cost sums

Where Provisional sums or Prime Cost sums are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with Clause 6.6 of the General Conditions of Contract 2015. The Employer reserves the right, during execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenders shall not under any circumstances whatsoever delete or amend any of the sums inserted in the "Amount" column of the Bill of Quantities and in the Summary of the Bill of Quantities unless ordered or authorized in writing by the Employer before closure of tenders. Unauthorized changes made by the Tenderer to provisional items in the Bill of Quantities, or to the provisional percentages and sums in the Summary of the Bill of Quantities will lead to the **disqualification** of the Tenderer.

4. Quantities reflected in the schedule

The Quantities given in the Bill of Quantities are estimates only, and subject to re-measuring during the execution of the work. The Contractor shall obtain the Employer's Agent's detailed instructions for all work before ordering any materials or executions work or making arrangements for it.

The works as finally completed in accordance with the Contract shall be measured and paid for as specified of the Bill of Quantities and in accordance with the Conditions of

Contract, the Specifications and the Drawings. Unless otherwise stated, items are measured net in accordance with the Specification and/or Drawings, and no allowance has been made for waste.

The validity of the contract will in no way be affected by differences between the Quantities in the Bill of Quantities and the quantities finally certified for payment.

5. Pricing of the bill of quantities

The prices and rates to be inserted by the Tenderer in the Bill of Quantities shall be the full inclusive prices to be paid by the Employer for the work described under the several incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Tender is based.

Each item shall be priced and extended to the "Total" column by the Tenderer, with the exception of the items for which only rates are required, or items which already have Prime Cost or Provisional Sums affixed thereto. If the Contractor omits to price any items in the Bill of Quantities, then these items will be considered to have a nil rate or price.

All items for which terminology such as "inclusive" or "not applicable" have been added by the tenderer will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the Contract.

The tenderer shall fill in rates for all items where the words "rate only" appears in the Total" column. "Rate Only" items have been included where:

- a) The alternative item or material is contemplated;
- b) Variations of specified components in the make-up of a pay item may be expected;
and
- c) No work under the item is foreseen at tender stage but the possibility that such work may be required is not excluded.

For 'Rate only' items no quantities are given the "Quantity" column but the quoted rate shall include all in the event of work under this item being required. The Tenderer shall however note that in terms of the Tenderer may be asked to reconsider any such rate which the Employer may regard as unbalanced.

All rates and amounts quoted in the Bill of Quantities shall be in rands and cents and shall include all levies and taxes (other than VAT). VAT will be added in the summary of the Bill of Quantities.

"The Contractor shall be deemed have inspected and examined the site and its surroundings and information available in connection therewith and to have satisfied himself before submitting his tender (as far as is practicable) as to:

- a) The form and nature of the site and its surroundings, including subsurface conditions;
- b) The hydrological and climatic conditions;
- c) The extent and nature of work and materials necessary for the execution and completion of the works; and
- d) The means of access to the Site and the accommodation he may require

and, in general, shall be deemed to have obtained all information (as far as is practicable) as to risks, contingencies and all other circumstances which may influence or affect his Tender”

A tender may be rejected if the unit rates or lump sums for some of the items in the bill of quantities are, in the opinion of the Employer, unreasonable or out of proportion, and if the tenderer fails, within a period of seven (7) days of having been notified in writing by the Employer to adjust the unit rates or lump sums for such items, to make such adjustments.

6. Rands and cents

All rates and sums of money quoted in the bill of quantities shall be in rands and whole cents. Fractions of a cent shall be discarded.

7. Correction of entries

Incorrect entries shall not be erased or abstained with correction fluid but must be crossed out neatly.

The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initialled by the Tenderer.

8. Arithmetic errors

Where there is discrepancy between amounts in words and amounts in figures, the amount in words shall govern.

For purposes of comparing offers during bid evaluation the amount in the form of Offer and Acceptance shall be utilised.

In finalising the tender evaluation and/or adjudication, should there be any discrepancies between the tender sum and the correctly extended and totalled bill of quantities, the tenderer will be notified of all errors or omissions that were identified in the tender offer and be invited to either confirm the tender offer as tendered or accept the total prices as corrected by the Employer. Where the tenderer elects to confirm the tender offer as tendered, the errors will be corrected as follows:

- If there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.

- Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tenderer total of the prices.

In all consultations with the Tenderer in respect of Arithmetic errors, the Employer's decision shall be final.

9. Units of measurement

The units of measurement described in the Bill of Quantities are metric units.

Unit: The unit of measurement for each item of work as defined in the standard specifications or the project specifications.

Quantity: The number of units of work for each item.

Rate: The payment per unit of work for which the tenderer tenders to do the work.

Amount: The product of the quantity and the rate tendered for an item.

Lump Sum: An amount tendered for an item, the extent of which is described in the bill of quantities, the specifications or elsewhere, but of which the quantity of work is not measured in units.

The following abbreviations are used in the bill of quantities:

- mm = millimetre
- m = metre
- km = kilometre
- km-pass = kilometre-pass
- m² = square metre
- m²-pass = square metre pass
- ha =hectare
- m³ = cubic metre
- m³km = cubic metre kilometre
- l = litre
- kl = kilolitre
- kg = kilogram
- t = ton (1000 kg)
- No = number
- mn = meganewton
- mn-m = meganewton-metre
- % = per cent
- kW = kilowatt
- Kn = kilonewton

- PC sum = prime cost sum
- Prov sum = provisional sum

10. Labour intensive construction

The following wording, as appropriate, should be included in the pricing instructions and in the bills of quantities in the pricing data:-

- Those parts of the contract to be constructed using labour-intensive methods have been marked in the bill of quantities with the letters 'LI' filled in against every item so designated. The works, or parts of the works so designated are to be constructed using labour-intensive methods only. The use of plant to provide such works, other than plant specifically provided for in the scope of works, is a breach to the contract. The items marked with the letters 'LI' are not necessarily an exhaustive list of all the activities, which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour intensive specification in the Scope of Works.
- Where minimum labour intensity is specified by the design the contractor is expected to use their initiative to identify additional activities that can be done labour-intensively in order to comply with the set minimum labour intensity target
- Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the scope of works) may not be made unless they are constructed using labour-intensive methods. Any unauthorised use of plant to carry out work, which was to be done labour-intensively will not be condoned, and any works so constructed may not be certified for payment. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.

C2.2 BILL OF QUANTITIES

MAKHADO MUNICIPALITY**REFURBISHMENT OF WATERVAL REGIONAL OFFICE****SUMMARY OF SCHEDULES**

SCHEDULE	DESCRIPTION	AMOUNT
SCHEDULE 1:	PRELIMINARY AND GENERAL	
SCHEDULE 2:	HEALTH AND SAFETY COMPLIANCE	
SCHEDULE 3:	BUILDING WORKS	
SCHEDULE 4:	CIVIL WORKS	
SCHEDULE 5:	ELECTRICAL & MECHANICAL INSTALLATIONS	
SUB-TOTAL 1		
ADD: 10% CONTINGENCIES		
SUB-TOTAL 2		
ADD 15% VAT		
TOTAL AMOUNT CARRIED TO FORM OF OFFER AND ACCEPTANCE		

WATERVAL REGIONAL OFFICE

SCHEDULE 1 : PRELIMINARY AND GENERAL

ITEM NO.	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.1	SABS 1200 A	<u>PRELIMINARY AND GENERAL</u>				
1.1.1	8.3					
1.1.1	PSA 4.1	Contractual Requirements	Sum	1		
1.1.2	8.3.2	<u>Establish facilities on the site</u>				
1.1.2.1	8.3.2.1	i) <u>Facilities for Engineer</u>				
	PSA 4.5	a) Furnished offices (1x) and meeting facility	Sum	1		
		b) Contract Name board	Sum	1		
		c) Survey assistants and material	Sum	1		
1.1.2.2	8.3.2.2	ii) <u>Facilities for Contractor</u>				
		a) Offices and storage sheds	Sum	1		
		b) Workshops	Sum	1		
		c) Laboratories	Sum	1		
		d) Living accommodation	Sum	1		
		e) Ablution and latrine facilities	Sum	1		
		f) Tools and equipment	Sum	1		
		g) Water supplies, electric power & communications	Sum	1		
		h) Dealing with water	Sum	1		
		i) Access	Sum	1		
		j) Plant	Sum	1		
1.1.2.3	8.3.4	Removal of Engineer's and Contractor's site establishment from site on completion of works.	Sum	1		
1.2	8.4	<u>TIME RELATED ITEMS</u>				
1.2.1	PSA 4.2	Contractual requirements	Sum	6		
1.2.2	8.4.2	<u>Operations and maintenance of facilities on site</u>				
1.2.2.1	8.4.2.1	Facilities for Employer's Agent for duration of construction				
	PSA 4.6	a) Employer's Agent office	Sum	6		
		b) Name board	Sum	6		
1.2.3	8.4.2	<u>Operations and maintenance of facilities on site</u>				
1.2.3.1	8.4.2.2	<u>Facilities for the Contractor for the duration of the Contract, except where otherwise stated</u>				
		a) Offices and storage sheds	Sum	6		
		b) Workshops	Sum	6		
		c) Laboratories	Sum	6		
		d) Ablution and latrine facilities	Sum	6		
TOTAL CARRIED FORWARD						

WATERVAL REGIONAL OFFICE

SCHEDULE 1 : PRELIMINARY AND GENERAL

ITEM NO.	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
1.2.4	8.4.3	e) Tools and equipment	Sum	6		
		f) Water supplies, electric power & communications	Sum	6		
		g) Dealing with water	Sum	6		
		h) Access	Sum	6		
		i) Plant	Sum	6		
1.2.5	8.4.4	Supervision for duration of the construction by the contractor	sum	6		
1.2.6	8.4.5	Company and Head Office overhead costs for the duration of the Contract	Sum	6		
1.3	8.5	Other time related obligations	Sum	6		
1,3	8,5	<u>SUMS STATED PROVISIONALLY BY THE EMPLOYER'S AGENT</u>				
		a) Remuneration of Community Liaison Officer (R6 000/month)	Prov. Sum	7	6 000,00	42 000,00
		b) Provisional sum for PSC Members (6No x R250/person/meeting)	Prov. Sum	7	1 500,00	10 500,00
		c) Allow for in-service training for 2 (two) students	Prov. Sum	6	12 000,00	72 000,00
	8.5 b) 2)	d) Overheads, charges and profit on 1.3 a to c	Item	%	124 500,00	
1,31		<u>DAYWORKS</u>				
		a) Labourers:				
		(i) Unskilled	hr	1		
		(ii) Semi-skilled	hr	1		
		(iii) Skilled	hr	1		
		b) Foreman	hr	1		
		c) Tipper trucks:				
		(i) 3 - 5 ton	hr	1		
		(ii) 5,1 - 10 ton	hr	1		
		d) Loader (0,5m³)	hr	1		
		e) Grader (CAT 140G or similar)	hr	1		
		f) LDV	hr	1		
TOTAL CARRIED FORWARD						

ITEM NO.	PAYM. REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
		g) Compaction Rollers: (i) Vibrator roller (ii) Tamping roller (iii) Grid roller h) Hand Controlled Compactors (i) Pedestrian roller (Bomag BW90 or similar) (ii) Vibratory plate (iii) Rammers i) Water truck (min 10 000 l) j) Dozer (D7 or similar)	 1 1 1 1 1 1 1 1			
TOTAL SCHEDULE 1 CARRIED FORWARD TO SUMMARY						

WATERVAL REGIONAL OFFICE

SCHEDULE 2 : HEALTH AND SAFETY COMPLIANCE

ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1		<u>SECTION 2: OHS COMPLIANCE</u>				
		<u>FIXED CHARGE ITEMS</u>				
1.1	CR 7(1) (a). H&S Spec (10)	Project specific SHE plan based on the H&S specification.	Sum	1		
1.2	COIDA. H&S Spec (7)	Workmen's compensation letter.	Sum	1		
1.3	CR 4. H&S Spec (b)	Notification of construction work	Sum	1		
2		<u>Site Establishment</u>				
2.1		Fencing to the construction site (1.8m high)	Sum	1		
2.2		Hoarding with a green net (1.8m high)	Sum	1		
2.3	GSR 3(2). H&S Spec (z)	First aid boxes	No	1		
2.4	GSR 4. BRA 15, 35. CR 29	Fire Extinguishers (7x9kgs and 3x5kgs)	No	2		
2.5	CR 30.BRA 2.H&S SPEC (u)	Toilets (1 per 15 people, each toilet per gender)	No	3		
2.6	CR27	Waste bins (Plastic overlapping waste bins 100L)	No	1		
2.7	CR30	Shadding net for an eating area (Green net 5m long)	No	1		
2.8	CR30	Benches for an eating area (4m long)	No	2		
3	H&S SPEC (g). CR 7(6). GSR 2	<u>Personal Protective Equipment</u>				
3.1		Overalls(Blue/Orange/Green)	No	30		
3.2		Hart hats	No	30		
		<u>Boots</u>				
3.3		Water boots	No	5		
3.4		Safety boots	No	25		
3.5		Gloves (General and Skilled activities)	No	30		
		TOTAL CARRIED FORWARD				

WATERVAL REGIONAL OFFICE
SCHEDULE 2 : HEALTH AND SAFETY COMPLIANCE

ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
3.6		Googles	No	5		
3.7		Earplugs	No	20		
3.8		Reflector vests	No	30		
3.9		Sun-block hats	No	10		
3.10		Dust mask	No	15		
4	H&S SPEC (9),(ii). CR 23(K)	<u>Inductions, Toolbox talks, Checklists, Registers and Risk assessments</u>				
4.1		Stationery	Sum	1		
4.2	CR 7(g). H&S SPEC (16)	Medical Fitness examinations	Sum	1		
5	H&S SPEC (17).BRA (10).GSR(2B)	<u>Signage and boards</u>				
5.1		Construction Safety Board	No	1		
5.2		First aid Box	No	1		
5.3		Fire extinguisher	No	2		
5.4		Assembly Point	No	1		
5.5		Excavation	No	1		
5.6		Plant and Construction vehicle	No	4		
5.7		Toilets information signs (male and female)	No	2		
5.8		Eating area information Sign	No	1		
		TOTAL CARRIED FORWARD				

WATERVAL REGIONAL OFFICE
SCHEDULE 2 : HEALTH AND SAFETY COMPLIANCE

ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
5.9	BRA (1).H&S SPEC (8)	Escape routes/ evacuation	No	1		
5.10		Scaffold safe/unsafe use	No	1		
5.11		Access control	No	1		
5.12		No smoking	No	1		
5.13		Storage Container	No	1		
5.14		Boundry wall (Hazadours chemicals, liquids and cement mixing area)	No	1		
5.15		Site Offices	No	1		
6		<u>Training and awareness</u>				
6.1		SHE rep Training	Sum	1		
6.2		First aid level 1,2,3	Sum	1		
6.3		Working at heights	Sum	1		
6.4		Risk assessment analyses	Sum	1		
6.5		Environmental awareness campaign	Sum	1		
6.6		HIV/AIDS awareness and accomodation needs, posters and distribution of condoms. X90 employees	Sum	1		
		TOTAL CARRIED FORWARD				

WATERVAL REGIONAL OFFICE
SCHEDULE 2 : HEALTH AND SAFETY COMPLIANCE

ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
7	H&S SPEC (i)	<u>Appointments with remunerations</u>				
7.1	OHSA(17)	Competent She rep with a SHE certificate	Months	6		
7.2	GSR 3(6)	First aider with level 1,2,3 certificate	Months	6		
8	H&S SPEC(y).CR27	<u>Housekeeping</u>				
8.1		Transportation once a week	Sum	1		
8.2		Barricading of rubble, use a 1m height and 200m long orange net	Sum	1		
9	CR27.H&S SPEC(y)	Cleaning materials and chemicals				
9.1		Broom	No	2		
9.2		Mop	No	1		
9.3		Sunlight liquid (25L)	No	1		
9.4		Handy andy (25)	No	1		
10	H&S SPEC(i) SABS Code 085.SANS 10085	<u>Scaffolding</u>				
10.1		Scaffolding to include shutter boards, toe boards, base jacks, access stairs/ladders, braces and safety harnesses	Sum	1		
11	ER	<u>Environmental</u>				
11.1		Dust suppression (twice a day)	Sum	1		
11.2	H&S SPEC (11)CR7(1)(b)	Health and Safety File	Sum	1		
		TOTAL CARRIED FORWARD				

WATERVAL REGIONAL OFFICE
 SCHEDULE 2 : HEALTH AND SAFETY COMPLIANCE

ITEM NO	PAYMENT REFERS	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		BROUGHT FORWARD				
12	H&S SPEC(y).CR27	<u>TIME RELATED CHARGE ITEMS</u> <u>Housekeeping</u>				
12.1		Barricading of rubble, use a 1m height and 200m long orange net	Month	6		
13	BRA(13)	Removal of waste off site once a week				
13.1		Transportation once a week	Month	6		
TOTAL CARRIED FORWARD TO SUMMARY						

BUILDING WORKS

ITEM NO	DESCRIPTION	AMOUNT
3.1	Alterations	
3.2	Foundations	
3.3	Concrete, Formwork and Reinforcement	
3.4	Masonry	
3.5	Waterproofing	
3.6	Roof Coverings, etc	
3.7	Carpentry and Joinery	
3.8	Ceilings, Partitions and Access Flooring	
3.9	Ironmongery	
3.10	Metalwork	
3.11	Plastering	
3.12	Tiling	
3.13	Plumbing and Drainage (Provisional)	
3.14	Glazing	
3.15	Paintwork	
	Total Carried To Final Summary	

SCHEDULE 3: BUILDING WORKS

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WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
3.1.4.3	Ditto size 2500 x 1245mm high	No	1		
3.1.4.4	Ditto size 2000 x 600mm high	No	1		
3.1.4.5	Ditto size 2500 x 1500mm high	No	5		
3.1.4.6	Ditto size 1022 x 900mm high	No	3		
3.1.4.7	Ditto size 533 x 600mm high	No	4		
3.1.4.8	Timber single door size 813 x 2032mm high	No	17		
3.1.4.9	Glazed steel window not exceeding 2,5m²	No	2		
3.1.4.10	Steel grille gate and frame not exceeding 2,5m²	No	4		
3.1.4.11	Steel double door and frame exceeding 2,5m² and not exceeding 5m²	No	1		
3.1.5	<u>Taking out and removing sundry joinery work, fittings, etc.'LI'</u>				
3.1.5.1	Kitchen sink cupboard size 3 000 x 600 x 900mm high	No	1		
3.1.5.2	Kitchen cupboard size 1 500 x 600 x 900mm high	No	1		
3.1.5.3	Counter top size 1 520 x 600mm wide	No	1		
3.1.5.4	Counter top size 1 950 x 600mm wide	No	1		
3.1.5.5	Counter top size 1 720 x 600mm wide	No	1		
3.1.5.6	Counter top size 1 620 x 600mm wide	No	1		
3.1.5.7	Counter top size 2 075 x 600mm wide	No	2		
3.1.5.8	2 500 x 1 200mm High Pinning/Notice board from walls	No	6		
3.1.5.9	Window blinds not exceeding 2,5m2 from walls	No	13		
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
3.1.6	<u>Taking up and removing wood block floor coverings, vinyl floor coverings, carpets, etc and preparing screeds for new floor coverings 'LI'</u>				
3.1.6.1	Vinyl or carpet tile floor covering	m2	262		
3.1.7	<u>Hacking up/off and removing granolithic, screeds, plaster, etc. from concrete or brickwork and preparing surfaces for new screed, plaster, tile finishes, etc. 'LI'</u>				
3.1.7.1	Internal plaster from walls	m2	43		
3.1.7.2	External plaster from walls	m2	2		
3.1.8	<u>Hacking up/off and removing ceramic tiles including removing mortar bed or adhesive from concrete or brickwork and preparing surfaces for new screed, plaster, tile finish, etc 'LI'</u>				
3.1.8.1	Tiles to floors	m2	57		
3.1.8.2	Tiles to walls	m2	258		
3.1.9	<u>Taking out and removing piping, sanitary fittings, etc. including cutting off as necessary, disconnecting piping from fittings and making good floor and wall finishes (making good tiling and paintwork elsewhere) 'LI'</u>				
3.1.9.1	PVC piping not exceeding 50mm diameter	m	18		
3.1.9.2	PVC piping exceeding 50mm and not exceeding 100mm diameter	m	3		
3.1.9.3	15mm Bib tap	No	4		
3.1.9.4	Stainless steel wall hung urinal with flush valve and flush pipe	No	2		
3.1.9.5	Vitreous china WC pan with cistern and flush pipe	No	6		
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
3.1.9.6	Vitreous china wash hand basin	No	6		
3.1.9.7	Water Geyser	No	1		
3.1.9.8	Undercounter boiler	No	1		
3.1.10	<u>Service repairs to existing 'LI'</u>				
3.1.10.1	Service and repair to 30m Fire hose reel, including brackets, etc.	No	1		
3.1.10.2	Service fire extinguisher complete with backing board	No	3		
3.1.11	CUTTING THROUGH FLOORS AND CEILINGS 'LI'				
3.1.11.1	Saw cut 30mm deep into concrete floors to be removed	m	4		
3.1.12	<u>Taking out/off and removing glass and mirrors 'LI'</u>				
3.1.12.1	Glass from steel windows, including cleaning out rebates and preparing for new glass	m2	39		
	BUILDING UP OPENINGS				
3.1.13	<u>Brickwork in NFP bricks in class I mortar in building up openings, including bonding new to existing and making good cement plaster on both sides (making good paintwork elsewhere) 'LI'</u>				
3.1.13.1	Opening 600 x 900mm high overall in one brick wall	No	1		
3.1.14	<u>Brickwork in NFP bricks in class I mortar in building up openings, including bonding new to existing and making good cement plaster on one side and face brickwork on the outer side (making good paintwork elsewhere) 'LI'</u>				
3.1.14.1	Opening 600 x 800mm high overall in one brick wall	No	1		
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
3.1.14.2	Cutting toothings and bonding new brickwork to existing <u>Sundries</u>	m2	3		
3.1.15	<u>Breaking out for and forming openings through brick walls for doors and frames, including necessary precast concrete lintels and making good plaster on both sides and into reveals (new ironmongery, and making good paintwork elsewhere) 'LI'</u>				
3.1.15.1	For single door and frame size 813 x 2 032mm high through 230mm brick wall PREPARATORY WORK TO EXISTING SURFACES 'LI'	No	1		
3.1.16	Prepare existing concrete surface to receive new screed MAKING GOOD FINISHES, ETC.	m2	5		
3.1.17	<u>Making good cement screeds 'LI'</u>				
3.1.17.1	25mm Thick on floors in patches	m2	150		
3.1.17.2	Floors where partitions removed	m	30		
3.1.18	<u>Making good internal cement plaster 'LI'</u>				
3.1.18.1	Walls in patches including mesh	m2	20		
3.1.18.2	Concrete ceilings in patches	m2	10		
3.1.19	<u>Making good concrete floors 'LI'</u>				
3.1.19.1	30MPa Unreinforced concrete in patches	m3	2		
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
	OPENINGS THROUGH EXISTING WALLS, ETC.				
3.1.20	<u>Altering openings 'LI'</u>				
3.1.20.1	In 220mm brick wall, where steel window frame size 2000 x 600mm high removed, form opening size 2000 x 1500mm high, breaking down brickwork to the sides, make good into reveals to receive new finishes (new door, lintel, plastering and paintwork measured elsewhere)	No	1		
3.1.20.2	In 220mm brick wall, where double steel door size 1600mm x 2 200mm high removed to form plain opening by removing frame, breaking down brickwork to the sides, make good into reveals to receive new finishes (new door, lintel, plastering and paintwork measured elsewhere)	No	1		
	CLEANING OF EXISTING WORK				
3.1.21	<u>Clean existing surfaces with a high pressure water spray to remove all debris and oil, inspect recessed joints and fill with mortar where necessary to achieve flush joints 'LI'</u>				
3.1.21.1	Face brick walls	m2	385		
	CRACK REPAIRS				
3.1.22	<u>Prepare and apply three coats Plascon Professional Waterproofing compound SAT520, or similar approved, by brush or long pile synthetic roller at a spreading rate of not exceeding 1,2m²/liter (approx. WFT 700um) per coat to yield a total combined DFT of 1mm 'LI'</u>				
3.1.22.1	To isolated wall areas, over repaired cracks	m2	10		
	TEMPORARY PARTITIONING				
3.1.22	<u>Allow for temporary partitioning in the existing building to be located by the Client</u>				
3.1.22.1	Allow a sum of R50 000.00 (Fifty Thousand Rands) for temporary partitioning to existing building to be located by the Client	Prov. Sum	1	R50 000,00	50 000,00
	Total Carried To Building Summary				

SCHEDULE 3: BUILDING WORKS

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WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
	<u>FILLING, ETC</u>				
3.2.5	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site compacted to 100% Mod AASHTO density 'LI'</u>				
3.2.5.1	Backfilling to trenches, holes, etc	m3	3		
3.2.6	<u>Earth filling of G6 material supplied by the contractor compacted in 150mm layers compacted to 95% Mod AASHTO to density 'LI'</u>				
3.2.6.1	Under floors, steps, pavings, etc	m3	4		
3.2.7	<u>Coarse river sand filling supplied by the contractor 'LI'</u>				
3.2.7.1	Under floors etc	m3	1		
3.2.8	<u>Compaction of surfaces 'LI'</u>				
3.2.8.1	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 90% Mod AASHTO density	m2	5		
3.2.9	<u>Prescribed density tests on filling</u>				
3.2.9.1	Modified AASHTO Density test	No	2		
	<u>SOIL POISONING AND PROTECTION AGAINST TERMITES 'LI'</u>				
3.2.10	<u>Soil insecticide under a 10 year guarantee by firm of specialist 'LI'</u>				
3.2.10.1	Under floors, etc including forming and poisoning shallow furrows etc and filling in furrows and ramming	m2	5		
3.2.10.2	To bottoms and sides of trenches, etc	m2	19		
	Total Carried To Building Summary				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>BILL NO. 3</u> <u>CONCRETE, FORMWORK AND REINFORCEMENT</u> <u>PREAMBLES</u> For preambles see 'Model Preambles for Trades, 2008 Edition as published by Association of South African Quantity Surveyors, SANS Standards and PW371 Specification of Materials and Methods to be used as Published by National Department of Public Works & Infrastructure <u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES 'LI'</u>				
3.3.1	<u>25 MPa/19mm Concrete in 'LI':</u>				
3.3.1.1	Strip footings	m3	2		
3.3.1.2	Surface beds on waterproofing	m3	1		
3.3.1.3	Aprons cast in panels	m3	13		
3.3.1.4	Extra over thickening down apron size 200 x 150mm deep including all necessary excavations, backfilling, etc	m	127		
3.3.1.5	Ramps cast in panels	m3	2		
3.3.1.6	Steps	m3	1		
3.3.2	<u>TEST BLOCKS 'LI'</u>				
3.3.2.1	Making and testing 150 x 150 x 150mm concrete strength test cube and submit report to the Representative / Agent (only successful tests will be paid for)	No	5		
	<u>MOVEMENT JOINTS, ETC 'LI'</u>				
3.3.3	<u>Saw cut joints 'LI'</u>				
3.3.3.1	6 x 40mm Saw cuts joints in top of concrete including grey polysulphide sealing compound	m	115		
	Total Carried Forward				

SCHEDULE 3: BUILDING WORKS

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WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>BILL NO. 4</u> <u>BRICKWORK</u> <u>PREAMBLES</u> For preambles see 'Model Preambles for Trades, 2008 Edition as published by Association of South African Quantity Surveyors, SANS Standards and PW371 Specification of Materials and Methods to be used as Published by National Department of Public Works & Infrastructure <u>FOUNDATIONS (PROVISIONAL)</u> 3.4.1 <u>Brickwork of NFX bricks (14 MPA nominal compressive strength) in class I mortar 'LI'</u> 3.4.1.1 Half brick walls 3.4.1.2 One brick walls <u>SUPERSTRUCTURE</u> 3.4.2 <u>Brickwork in NFP clay bricks (14 Mpa nominal compressive strength) in Class II mortar 'LI'</u> 3.4.2.1 Half brick walls 3.4.2.2 One brick walls 3.4.3 <u>BRICK REINFORCEMENT 'LI'</u> 3.4.3.1 75mm Wide reinforcement built into brick walls with sufficient laps at end joints, angles and intersections (measured net) 3.4.3.2 150mm Wide reinforcement built into brick walls with sufficient laps at end joints, angles and intersections (measured net) <u>BRICKWORK SUNDRIES</u> 3.4.4. <u>Prestressed concrete lintels including necessary tempoary supports 'LI'</u> 3.4.4.1 150 x 75mm Lintels in lengths not exceeding 3m				
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
3.4.5	<u>Hoop Irons 'LI'</u>				
3.4.5.1	38 x 1,6mm Galvanised hoop iron roof tie with one end built six courses deep into top of brickwork and other end wrapped around and nailed to trusses (Provisional)	No	7		
3.4.6	<u>Air bricks, etc 'LI'</u>				
3.4.6.1	229 x 152mm Clay vermin proof air brick	No	20		
3.4.7	<u>MOVEMENT JOINTS 'LI'</u>				
3.4.7.1	Movement joint formed of 20mm softboard built in vertically between brickwork	m2	9		
	<u>NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS</u>				
3.4.8	<u>Natural grey sills in single lengths bedded in class I mortar including metal fixing lugs, etc 'LI'</u>				
3.4.8.1	15 x 150mm Wide sills set flat and slightly projecting	m	39		
	Total Carried To Building Summary				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>BILL NO. 5</u> <u>WATERPROOFING</u> <u>PREAMBLES</u> For preambles see 'Model Preambles for Trades, 2008 Edition as published by Association of South African Quantity Surveyors, SANS Standards and PW371 Specification of Materials and Methods to be used as Published by National Department of Public Works & Infrastructure <u>DAMPPROOFING OF WALLS AND FLOORS</u> <u>One layer approved 375 micron embossed black polyethylene damp proof course 'LI'</u> 3.5.1 3.5.1.1 In walls m2 2 <u>One layer 250 micron green polyethylene waterproof sheeting complying with SABS-0400 in widest practicable widths with all joints lapped and sealed with pressure sensitive tape all in strict accordance with the manufacturer's requirements 'LI'</u> 3.5.2 3.5.2.1 Under surface beds m2 5 <u>JOINT SEALANTS, ETC</u> 3.5.3 <u>Silicon sealing compound including non-fungal sustaining clear silicon sealant 'LI'</u> 3.5.4.1 Between tiles and sanitary fittings (provisional) m 15 3.5.4.2 Between tiles and timber fittings (provisional) m 5				
	Total Carried To Building Summary				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>BILL NO. 6</u>				
	<u>ROOF COVERINGS, ETC</u>				
	<u>PREAMBLES</u>				
	For preambles see 'Model Preambles for Trades, 2008 Edition as published by Association of South African Quantity Surveyors, SANS Standards and PW371 Specification of Materials and Methods to be used as Published by National Department of Public Works & Infrastructure				
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>				
3.6.1	<u>0.58mm Thick Aluminium-Zinc AZ150 G550 painted Safintra SFLOK 700 AZ150 G550 Zinalume or equal approved interlocking roof sheeting fixed to timber purlins or rails and 0.60mm approved Z275 galvanised sheet steel accessories with silicon polyester finish on one side 'LI'</u>				
3.6.1.1	Roof sheeting with pitch not exceeding 20 degrees including necessary cutting and waste	m2	485		
3.6.1.2	Galvanised flushing	m	8		
3.6.1.3	Ridge capping 462mm girth	m	46		
	<u>ROOF AND WALL INSULATION 'LI'</u>				
3.6.2	<u>100mm Alutherm or equal approved polyester fibre blanket laminated to 4mm white bubble layer on one side and reinforced foil facing on other complying with SANS 1381-1:2007</u>				
3.6.2.1	Insulation laid taut over purlins (at approximately 455mm centres) and fixed concurrent with roof covering including galvanised steel straining wires	m2	485		
	Total Carried To Building Summary				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<p><u>BILL NO. 7</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p><u>PREAMBLES</u></p> <p>For preambles see 'Model Preambles for Trades, 2008 Edition as published by Association of South African Quantity Surveyors, SANS Standards and PW371 Specification of Materials and Methods to be used as Published by National Department of Public Works & Infrastructure</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Treatment against insect pests</u></p> <p>Rates for all timber shall be deemed to include for treatment against insect pests</p> <p><u>Mitres, intersections, etc</u></p> <p>Descriptions of timber which is given linear, angles, rebates, grooves, chamfers, moulded edges, etc . are to be deemed to include for mitres, intersections, splay cut ends, stops, etc</p> <p>Descriptions of timber, etc shall be deemed to include for straight cutting and notching</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include for screwing to fibre, plastic or metal plugs at not exceeding 600mm centres or shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.</p> <p>Descriptions are to be deemed to include for nails, screws, plugs, adhesives, holes, sin- kings, pelleting, etc</p>				
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
	<p><u>Structural timber</u></p> <p>Descriptions of structural timber are to be deemed to include for joints in the length, holes, splay cut ends and mitres</p> <p><u>Fascias, etc.</u></p> <p>Descriptions of fibre cement fascias and barge boards shall be deemed to include for mitres, end junctions, screws, bolts, wall anchors, holes, etc.</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>ROOFS, ETC</u></p> <p>ROOF CONSTRUCTION</p>				
3.7.1	<u>Sawn softwood 'LI':</u>				
3.7.1.1	38 x 114mm Wall plates.	m	11		
3.7.1.2	38 x 114mmmm rafters exceeding 2.4m and not exceeding 3.9m (Provisional).	m	150		
3.7.1.3	50 x 76mm rafters	m	24		
3.7.1.4	50 x 76mm purlins (Provisional)	m	80		
3.7.1.5	28 x 228mm SAP gangboarding (Provisional)	m	7		
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
	<u>Sundries 'LI'</u>				
3.7.2	Two coats creosote on sawn timbers (Provisional)	m2	5		
	<u>EAVES , VERGES , ETC</u>				
3.7.3	<u>Everite Flexit pressed nutec-cement 'LI'</u>				
3.7.3.1	20 x 225mm high Everite Nutec or equal approved fascias and barge boards including galvanised steel H-profile jointing strips	m	135		
	<u>DOORS</u>				
3.7.4	<u>Semi solid core timber door with 100mm undercut, horizontal panels treated and painted to Architect specification fixed to standard steel frame 'LI'</u>				
3.7.4.1	40mm Door 813 x 2032mm high	No	17		
3.7.5	<u>Solid core weather bar timber door with horizontal panel treated and painted to Architects specifications fixed to standard steel frame 'LI'</u>				
3.7.5.1	40mm Door, size 813 x 2125mm high	No	2		
3.7.6	<u>Wrought meranti doors hung to steel frames 'LI':</u>				
3.7.6.1	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles ,16 x 150mm middle ledge and braces and 22 x 220mm bottom rail, filled in with 22mmV-jointed one side boarding and covered on other side with 4mm plywood with veneer to match door, let into and including rebates all round.	No	5		
3.7.7	<u>Ventillation door grills, etc</u> <u>Extra over for 600 x 600mm framed opening for aluminium unit (louvre unit elsewhere) 'LI'</u>				
3.7.7.1	600 x 600mm aluminium louvre	No	8		
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
	<u>JOINERY SUNDRIES</u>				
3.7.8	<u>Worktop 'LI'</u>				
3.7.8.1	Counter top 1 520 x 600 x 1 200mm high fixed on drywall support wall (wall measured elsewhere), and 4No 80mm diameter "Roco" chrome plated adjustable worktop legs (code: G130870CH) (as per dwg)	No	1		
3.7.8.2	Counter top 1 950 x 600 x 1 200mm high fixed on drywall support wall (wall measured elsewhere), and 4No 80mm diameter "Roco" chrome plated adjustable worktop legs (code: G130870CH) (as per dwg)	No	1		
3.7.8.3	Counter top 1 720 x 600 x 1 200mm high fixed on drywall support wall (wall measured elsewhere), and 4No 80mm diameter "Roco" chrome plated adjustable worktop legs (code: G130870CH) (as per dwg)	No	1		
3.7.8.4	Counter top 1 620 x 600 x 1 200mm high fixed on drywall support wall (wall measured elsewhere), and 4No 80mm diameter "Roco" chrome plated adjustable worktop legs (code: G130870CH) (as per dwg)	No	1		
3.7.8.5	Counter top 2 075 x 600 x 1 200mm high fixed on drywall support wall (wall measured elsewhere), and 4No 80mm diameter "Roco" chrome plated adjustable worktop legs (code: G130870CH) (as per dwg)	No	2		
3.7.8.6	Tapezoidal shape counter top (3 500 - 1 100) x 600 x 1 200mm high fixed on steel frame (measured elsewhere) - (as per dwg)	No	1		
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
	<u>Kitchen Unit 'LI'</u>				
3.7.8.7	Kitchen sink cupboard 900 x 480 x 900mm high at perpendicular side with top, 40mm thick formica splash back fixed to wall, sides, bottom, divisions, back, drawers, bin drawer and 3 sets of double hinged doors, including cutting out rectangular opening through formica top for sink (sink elsewhere measured)	No	1		
3.7.8.8	L-Shaped kitchen sink cupboard 3 000 x 600 x 900mm high at one end and 1 500 x 600 x 900mm high at perpendicular side with top, 20mm thick granite splash back fixed to wall, sides, bottom, divisions, back, drawers, bin drawer and 3 sets of double hinged doors, including cutting out rectangular opening through formica top for sink (sink elsewhere measured)	No	1		
	<u>Key cabinet 'LI'</u>				
3.7.8.9	Supply and install key cabinet as per Architectural drawing (Prime cost amount R1 000.00)	No	1		
	<u>Shelving 'LI'</u>				
3.7.9	<u>Wrought hardwood 'LI'</u>				
3.7.9.1	30mm Thick laminated shelving exceeding 450mm wide, screwed to mild steel brackets (brackets and wall bands measured elsewhere)	m	76		
	<u>Sundries 'LI'</u>				
3.7.9.2	Additional 50 x 75mm sown soft wood timber	m	85		
	Total Carried To Building Summary				

SCHEDULE 3: BUILDING WORKS

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WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
3.8.4	SUSPENDED CEILING 'LI' <u>600 x 1200 x 12.5mm Gyproc DonnCeil Gyprex Ceramic or equal approved vinyl finished gypsum ceilings tiles laid on and including SQ/T38 white powder coated main tees, cross tees, hold down clips, wedges, etc all suspended with galvanised RSAS suspension hanger centres not exceeding 1200mm centres with aluminium shadow line cornice trim laid in accordance with manufacturer's specifications</u>				
3.8.4.1	Ceilings suspended not exceeding 1m below trusses at 1200mm centres	m²	331		
3.8.4.2	Extra over ceiling for opening for 100mm opening	No	20		
3.8.4.3	Extra over ceiling for opening for 600 x 1200mm light fitting	No	20		
	<u>Cornices, perimeter trims, etc to suspended ceilings</u>				
3.8.4.4	47 x 35mm aluminium shadow line cornice plugged	m	251		
	<u>PARTITIONS ETC 'LI'</u>				
	<u>Gypsum drywall partition systems</u>				
3.8.5	<u>114mm thick GypWall Classic 63/F60S46 (46db, 60min fire resistance) or equal approved with all the manufacturer recommended system components and accessories</u>				
3.8.5.1	Partitioning 3.5m high with bottom and top tracks plugged	m	45		
3.8.5.2	Extra over partition 3.5m high for corner	No	3		
3.8.5.3	Extra over partition 3.5m high for T-Section	No	3		
3.8.5.4	Extra over partition 3.5m high for vertical abutment	No	9		
	Total Carried Forward				

SCHEDULE 3: BUILDING WORKS

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WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>BILL NO. 9</u> <u>IRONMONGERY</u> <u>PREAMBLES</u> For preambles see 'Model Preambles for Trades, 2008 Edition as published by Association of South African Quantity Surveyors, SANS Standards and PW371 Specification of Materials and Methods to be used as Published by National Department of Public Works & Infrastructure				
3.9.1	<u>Dormakaba or equal approved</u>				
	<u>Stainless steel 'LI':</u>				
3.9.1.1	DFP-SS-026, 102 x 50mm rectangular flush pull handle plugged	No	4		
3.9.1.2	D02935 SS, narrow stile hook lock, case dimensions (mm) 174H x 50D, forend dimensions (mm) 290H x 22W, backset 35mm plugged	No	1		
3.9.1.3	DCE-105 SS narrow stile cylinder escutcheon	pair	1		
3.9.1.4	DDC056501 KD (65mm), 65mm five pin Euro-profile cylinder key to differ plugged	No	23		
3.9.1.5	D036S SS, Cylinder sash lock, case dimensions 116.5H x 78D, forehand dimensions 168H x 22W, backset 57mm centres 61mm plugged	No	17		
3.9.1.6	TH125 Cyl SS, lever handle on rose with cylinder escutcheons plugged	set	17		
3.9.1.7	DDS-NP-018 floor mounted door stop plugged	No	22		
3.9.1.8	TS90-SL, EN 3/4 cam action slide channel non hold open door closer - hydraulic speed control, pull side leaf or transom fixing, push side - leaf or transom fixing. EN3 850-950, EN4 950-1100 plugged	No	5		
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
3.9.1.9	DPH210 BT, 300 x 300mm straight tubular pull handle BT plugged	No	4		
3.9.1.10	DPP-430-BL-SF 75 x 300, 75 x 300 x 1.2mm thick Grade 430 stainless steel plate, plate to have 6 countersunk holes for screw fixing plugged	No	4		
3.9.1.11	D037D S, cylinder deadlock, case dimensions 116.5H x 78D, forehand dimensions 168H x 22W, backset 57mm plugged	No	5		
3.9.1.12	DCE-002 SS, round cylinder escutcheon plugged	No	5		
3.9.1.13	DSS-130M, 150 x 150mm male sign plugged	No	2		
3.9.1.14	DSS-131F, 150 x 150mm female sign plugged	No	2		
3.9.1.15	DSS-135 TC, 150 x 150mm tea cup sign plugged	No	1		
3.9.1.16	DPH210 BTB, 300 x 300mm straight tubular pull handle BTB (BTB fixing sets included) plugged	pair	1		
3.9.1.17	TH125 WC SS, lever handle on rose with bathroom/WC furniture plugged	set	7		
3.9.1.18	D035S SS, bathroom sash lock, case dimensions 102H x 78D, forehand dimensions 155H x 22W, backset 57mm, centre 57mm plugged	No	7		
3.9.1.19	DHC-SS-031B, hat and coat hook with rubber buffer plugged	No	7		
	<u>LETTERS, NAMEPLATES, ETC 'LI'</u>				
	<u>Union or similar approved</u>				
3.9.1.20	Anodised aluminium plate with "reception" letters	No	1		
3.9.1.21	Anodised aluminium plate with "office" letters	No	6		
3.9.1.22	Anodised aluminium plate with "rates office" letters	No	2		
3.9.1.23	Anodised aluminium plate with "records room" letters	No	1		
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
3.9.1.24	Anodised aluminium plate with "store" letters	No	2		
3.9.1.25	Anodised aluminium plate with "kitchen" letters	No	1		
3.9.1.26	Anodised aluminium plate with "boardroom" letters	No	1		
3.9.1.27	Anodised aluminium plate with "guard house" letters	No	1		
3.9.1.27	Allow a provisional sum of R10 000.00 (Ten Thousand Rands) for Waterval Regional Office signage board	Sum	1	R10 000,00	10 000,00
	<u>BATHROOM FITTINGS 'LI'</u>				
	<u>Vandal proof</u>				
3.9.2.1	Stainless steel towel rail 600mm long plugged and screwed to walls with stainless steel screws	No	1		
3.9.2.2	SE2 lockable two roll toilet dispenser code 405597 size 120 x 380 x 130mm deep plugged	No	7		
3.9.2.3	Franke Rodan Code STRX600 or equal approved paper towel dispenser plugged	No	7		
3.9.2.4	Franke Rodan Code 359983 or equal approved wall mounted bin size 355 x 168 x 460mm high plugged	No	7		
3.9.2.5	Soap dispenser size 134 x 120 x 150mm high with push button and anti-bacterial cleanser securely fixed to wall	No	7		
	<u>SEATING 'LI'</u>				
3.9.3	<u>"Bonno" or equal approved metal chair seating and back rest in 3mm thick perforated mild steel supported mounting brackets in 6mm thick lazer cut mild steel mounted on 50 x 50 x 3mm steel beam on concrete floor.</u>				
3.9.3.1	Two seater bench version with grey epoxy finish on legs as per manufacturers instructions.	No	2		
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
	Shelves 'LI'				
3.9.4	<u>Sanlic or equal approved</u>				
3.9.4.1	Heavy duty double slot wall band 2200mm long plugged	No	19		
3.9.4.2	Heavy duty shelf bracket for 450mm shelve plugged	No	76		
3.9.5	<u>Window ironmongery 'LI'</u> <u>Brass:</u>				
3.9.5.1	Peg stays.	No	52		
3.9.5.2	Window handles.	No	40		
3.9.5.3	Sliding stays.	No	52		
	<u>Window Blinds 'LI'</u>				
3.9.6	<u>127mm wide non-fade material vertical blinds as per "Windowvert" or similar approved ,fitted as per manufacturere's instructions</u>				
3.9.6.1	To fit window size 1 400 x 900mm high.	No	1		
3.9.6.2	To fit window size 1 460 x 1 500mm high.	No	5		
3.9.6.3	To fit window size 2 500 x 1 245mm high.	No	1		
3.9.6.4	To fit window size 2 000 x 600mm high.	No	1		
3.9.6.5	To fit window size 2 500 x 1 500mm high.	No	5		
3.9.6.6	To fit window size 1 022 x 900mm high.	No	1		
3.9.7	PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS ETC 'LI'				
	<u>"Vitrex" or equal approved</u>				
3.9.7.1	Pinning boar 900 x 1200mm high plugged.	No	1		
	Total Carried Forward				

SCHEDULE 3: BUILDING WORKS

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WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<p><u>BILL NO. 10</u></p> <p><u>METALWORK</u></p> <p><u>PREAMBLES</u></p> <p>For preambles see 'Model Preambles for Trades, 2008 Edition as published by Association of South African Quantity Surveyors, SANS Standards and PW371 Specification of Materials and Methods to be used as Published by National Department of Public Works & Infrastructure</p> <p><u>HANDRAILS, BALUSTRADES, ETC</u></p> <p>3.10.1 <u>Welded handrails to stairs 'LI'</u></p> <p>Balustrades of 1000mm high from to top of stiles, formed of 75mm external diameter x 1.5mm thick continuous top rail, four number steel rails of 25.88mm external diameter x 1.6mm thick continuous tubular intermediate rails at equal centres and intermediate posts of 50mm diameter connected with machined pin connection to top rail. Posts fixed with polster non-shrink grout into holes core drilled to a depth of 150mm through floor finishes including 76mm diameter x 2mm thick pressed steel flange cover plates, ends posts, closure pieces, ends, intersections, ramps, knees, bends, etc.</p> <p>3.10.1.1</p> <p><u>Balustrades to ramps and steps 'LI'</u></p> <p>Raking ballustrades of 1000mm high from to top of stiles, formed of 75mm external diameter x 1.5mm thick continuous top rail, four number steel rails of 25.88mm external diameter x 1.6mm thick continuous tubular intermediate rails at equal centres and intermediate posts of 50mm diameter connected with machined pin connection to top rail. Posts fixed with polster non-shrink grout into holes core drilled to a depth of 150mm through floor finishes including 76mm diameter x 2mm thick pressed steel flange cover plates, ends posts, closure pieces, ends, intersections, ramps, knees, bends, etc.</p> <p>3.10.1.2</p>	m	4		
		m	4		
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
3.10.2	<u>Steel gates and frames 'LI'</u>				
3.10.2.1	Single gate and frame 900 x 2 100mm high overall, the outer frame of 45 x 45 x 3mm hollow section bolted to wall with and including eight 70mm M80 expansion bolts and the gate size leaf 900 x 2 100mm high of 40 x 60 x 2mm hollow section frame with two 40 x 6mm flat section horizontal rails filled in with 20mm diameter vertical rails at 110mm centres fitted with one and a half pairs of suitable pin hinges welded to hollow section steel frame, complete with and including 150mm barrelbolt	No	6		
	<u>PRESSED STEEL DOOR FRAMES</u>				
3.10.3	<u>1,2mm Double rebated frames suitable for one brick walls 'LI'</u>				
3.10.3.1	Frame for door 877 x 2032mm high	No	1		
	<u>STEEL WINDOWS</u>				
3.10.4	<u>Residential type windows with factory applied red oxide primer complete with 12 x 12 (B33) solid burglar bars 'LI'</u>				
3.10.4.1	Window size 533mm x 654mm high	No	1		
3.10.4.2	Window size 900mm x 900mm high	No	1		
3.10.4.3	Window size 1 550mm x 949mm high	No	1		
3.10.5	<u>Burglar Bars to Steel Sashes 'LI'</u> <u>12 x 12(B33) solid burglar bars to all sashes:</u>				
3.10.5.1	To window size 1 022 x 900mm high	No	1		
3.10.5.2	To window size 1 400 x 900mm high	No	1		
3.10.5.3	To window size 1 460 x 1 500mm high	No	5		
3.10.5.4	To window size 2 000 x 600mm high	No	1		
3.10.5.5	To window size 2 500 x 1 500mm high	No	5		
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
3.10.5.6	To window size 2 500 x 1 245mm high	No	1		
3.10.6	<u>25 x 12 x 8mm vertical Durowin or equal approved burglar positioned behind mullion welded to steel frame and imbeded into window reveal including 10mm diameter horizontal bars spaced at 150mm centres to opening sashes welded to RHS frame 'LI'</u>				
3.10.5.7	Allow R15 000.00 (Fifteen Thousand Rands) for additional burglar proofing to record room windows	sum	1		
	<u>ALUMINIUM WINDOWS, DOORS, ETC 'LI'</u>				
3.10.6	<u>Powder coated aluminium window frames (SABS approved) supplied complete with 6mm frosted glass and furniture to suite opening sashes, colour to Architect specification</u>				
3.10.6.1	Double door and frame with glazed sidelight overall size 1 620 x 2 200mm high (as per Architectural dwg)	No	1		
3.10.7	<u>Powder coated aluminium window frames (SABS approved) fished supplied complete with 4mm clear glass and furniture to suite opening sashes, colour to Architect specification</u>				
3.10.7.1	Window size 1000 x 1000mm high (View Panel)	No	1		
3.10.8	<u>SECURITY BARRIERS 'LI'</u>				
3.10.8.1	Trellidoor size 1 500 x 2 200mm high fixed to walls	No	1		
3.10.9	<u>Door louvre, etc 'LI'</u> <u>Approved fixed louvre units screwed into timber doors</u>				
3.10.9.1	Purpose made louvre unit for 600 x 600mm high opening	No	8		
3.10.10	<u>SECURITY PAYROLL WINDOWS</u> <u>Security payroll windows suitable for 230mm walls, fixed to brickwork 'LI'</u>				
3.10.10.1	Pay window - PW2 RG38mm resistoglas 38mm size 600 x 950mm high, speechpost and transaction drawer as per the Architectural drawing	No	4		
3.11.1	<u>Turnstile</u> Supply and install 4-arm, full height bi-directional single turnstile pedestrian finish hot dip galvanised zinc coating suitable for corrosive environment including Impro System or equal approved access control all as per supplier specifications	No	1		
	Total Carried To Building Summary				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>BILL NO. 11</u> <u>PREAMBLES</u> For preambles see 'Model Preambles for Trades, 2008 Edition as published by Association of South African Quantity Surveyors, SANS Standards and PW371 Specification of Materials and Methods to be used as Published by National Department of Public Works & Infrastructure <u>PLASTERING</u> <u>SCREEDS 'LI'</u> 3.11.1 <u>Screeds wood floated on concrete</u> 3.11.1.1 30mm Thick on floors and landings <u>GRANOLITHIC 'LI'</u> 3.11.2 <u>Untinted granolithic on concrete</u> 3.11.2.1 35mm Thick on floors and landings <u>INTERNAL PLASTER 'LI'</u> 3.11.3 <u>One coat 4:1 Cement plaster finished to a smooth surface steel trowel float on brickwork</u> 3.11.3.1 On walls 3.11.3.2 On narrow widths <u>EXTERNAL PLASTER</u> 3.11.4 <u>One coat 4:1 Cement plaster finished to a smooth surface steel trowel float on brickwork</u> 3.11.4.1 On walls 3.11.4.2 On narrow widths				
	Total Carried Forward				

SCHEDULE 3: BUILDING WORKS

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SCHEDULE 3: BUILDING WORKS

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SCHEDULE 3: BUILDING WORKS

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WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>BILL NO. 13</u> <u>PLUMBING AND DRAINAGE</u> <u>PREAMBLES</u> For preambles see 'Model Preambles for Trades, 2008 Edition as published by Association of South African Quantity Surveyors, SANS Standards and PW371 Specification of Materials and Methods to be used as Published by National Department of Public Works & Infrastructure <u>RAINWATER DISPOSAL 'LI'</u> <u>Seamless aluminium pre-coated gutters and rainwater pipes complete with all fixing brackets:</u>				
3.13.1					
3.13.1.1	100 x 125mm Rectangular section eaves gutter with 20mm wide overlapping joints sealed with and including "Compriband" or other approved bitumen sealing strip and rivetted at 20mm centres.	m	113		
3.13.1.2	Extra over 100 x 125mm eaves gutter for stopped end.	No	2		
3.13.1.3	Extra over 100 x 125mm eaves gutter for outlet for 100 x 76mm downpipe including galvanized wire balloon grating.	No	25		
3.13.1.4	100mm x 76mm Rainwater pipe with brackets fixed to brick wall or concrete.	m	112		
3.13.1.5	Extra over 100 x 76mm rainwater pipe for shoe.	No	25		
3.13.1.6	Extra over 100 x 76mm rainwater pipe for bend	No	25		
3.13.2	<u>SANITARY FITTINGS 'LI'</u> <u>Franke or equal approved:</u>				
3.13.2.1	Franke grade 304 18/10 Quinline QLX611 single end bowl inset sink 900 x 500mm wide (code: 820000)	No	2		
3.13.3	<u>Vaal or equal approved:</u>				
3.13.3.1	Vaal Sanitaryware vitreous china 510 x 405mm rounded"Hibiscus" code 7023 basin with one taphole	No	6		
	Total Carried Forward				

SCHEDULE 3: BUILDING WORKS

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WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
	SANITARY PLUMBING:				
3.13.7	<u>uPVC pipes 'LI':</u>				
3.13.7.1	50mm Pipes.	m	60		
3.13.7.2	110mm Pipes.	m	40		
	<u>Extra over uPVC pipes for fittings:</u>				
3.13.7.3	50mm Access bend.	No	18		
3.13.7.4	50mm Junctions.	No	18		
3.13.7.5	110mm Bend	No	7		
3.13.7.6	110mm Straight pan connector	No	7		
3.13.7.7	110mm Bent pan connector	No	1		
3.13.7.8	110mm Access heel bend.	No	7		
3.13.7.9	110mm Access reducing junction.	No	7		
3.13.7.10	110mm Vent valve.	No	7		
	<u>Sundries:</u>				
3.13.8	Test waste pipe system.	Sum	1		
	WATER SUPPLIES:				
3.13.9	<u>Galvanised steel pipes 'LI'</u>				
3.13.9.1	20mm Pipes	m	30		
	<u>Extra over galvanised steel pipes for steel fittings</u>				
3.13.9.2	20mm fittings	No	10		
3.13.10	<u>Class O copper pipes:</u>				
3.13.10.1	15mm Pipes.	m	50		
3.13.10.2	22mm Pipes.	m	60		
	Total Carried Forward				

WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought Forward				
3.13.11	<u>Extra over class O copper pipes for capillary fittings:</u>				
3.13.11.1	15mm Fittings.	No	15		
3.13.11.2	22mm Fittings.	No	15		
3.13.12	<u>Copper overflow and service pipes:</u>				
3.13.12.1	15mm Service pipe 300mm girth.	No	1		
3.13.12.2	22mm Service pipe 300mm girth.	No	1		
3.13.13	<u>ELECTRIC WATER HEATERS 'LI':</u>				
3.13.13	<u>Kwikot:</u>				
3.13.13.1	150 Litre horizontal type electric water heater including drip tray, relief valve, stop valve, etc.	No	1		
3.13.14	BUILDER'S WORK, INCLUDING ALL MAKING GOOD 'LI':				
3.13.14.1	Fair cutting and fittings bricks around pipe not exceeding 100mm diameter.	No	7		
3.13.15	<u>Sundries:</u>				
3.13.15.1	Testing water pipe system.	Sum	1		
	Total Carried To Building Summary				

SCHEDULE 3: BUILDING WORKS

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WATERVAL REGIONAL OFFICE

SCHEDULE 3: BUILDING WORKS

ITEM NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>BILL NO. 15</u> <u>PAINTWORK</u> <u>PREAMBLES</u> For preambles see 'Model Preambles for Trades, 2008 Edition as published by Association of South African Quantity Surveyors, SANS Standards and PW371 Specification of Materials and Methods to be used as Published by National Department of Public Works & Infrastructure <u>PAINTWORK, ETC TO NEW WORK</u> <u>ON FLOATED PLASTER</u> <u>Prepare, clean and apply one coat plaster primer and two coats approved quality matt acrylic paint applied as per manufacturers specification 'LI'</u> 4.15.1 4.15.1.1 On internal plastered walls <u>Prepare, clean and apply one coat plaster primer and two coats approved quality matt acrylic paint applied as per manufacturers specification 'LI'</u> 4.15.1.2 On external plastered walls <u>ON PLASTERBOARD</u> 4.15.2 <u>Prepare and apply one coat primer and two coats approved quality matt acrylic emulsion paint as per manufacturers specification 'LI'</u> 4.15.2.1 On internal fibre-cement board ceilings and cornices including priming steel joints and nail heads with one coat zinc phosphate alkyd resin primer 4.15.2.2 On partitions 4.15.2 <u>Prepare and apply one coat alkali resistant primer, one universal undercoat and two coats gloss enamel paint 'LI'</u> 4.15.2.1 On fascias and barge boards				
	Total Carried Forward				

SCHEDULE 3: BUILDING WORKS

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WATERVAAL REGIONAL OFFICE

CIVIL WORKS

SCHEDULE 4:

SUMMARY OF SCHEDULES

SCHEDULE	DESCRIPTION	AMOUNT
Schedule 4.1:	Site clearance	
Schedule 4.2:	Earthworks (Small Works)	
Schedule 4.3:	Earthworks (Pipe Trenches)	
Schedule 4.4:	Medium Pressure Pipelines, Tanks & Borehole	
Schedule 4.5:	Bedding	
Schedule 4.6:	Stormwater Drainage	
Schedule 4.7:	Concrete (Small Works)	
Schedule 4.8:	Gabions & Stone Pitching	
Schedule 4.9:	Earthworks (Roads, Subgrade)	
Schedule 4.10:	Base	
Schedule 4.11:	Segmented Paving	
Schedule 4.12:	Kerbing & Channelling	
Schedule 4.13:	Ancillary Roadworks	
SUB-TOTAL CARRIED TO FINAL SUMMARY		

REFURBISHMENT OF WATERVAL REGIONAL OFFICE
 BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	SANS 1200 C	SITE CLEARANCE Covers removal of vegetation, boulders, surface obstructions, and the demolition and removal of structures (including their basements, if any) not directly associated with or incidental to any excavation.				
1,1	8.2.5	Take down existing fences 'LI'	m	220		
1,2	8.2.8	Demolish and remove structures/buildings and dismantle steel work, etc				
		(a) Remove existing water tanks 'LI'	Sum	1	R 5 000,00	5 000,00
1200C	TOTAL CARRIED TO SUMMARY					

REFURBISHMENT OF WATERVAL REGIONAL OFFICE
BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2	SANS 1200 DA	EARTHWORKS (SMALL WORKS) LIMITED TERRACING (e.g. TANKS) ISOLATED STRUCTURES (BUILDINGS, MANHOLES, CATCHPITS, STROMWATER CHANNELS AND THE LIKE)				
2,1	8.3.1	Excavation a) Remove topsoil to nominal depth 150mm, stockpile and maintain b) (i) Excavate in all materials and use for embankment or backfill or dispose c) Extra-over for: i) Intermediate excavation ii) Hard rock excavation	m ² m ³ m ³ m ³	6 3 1 1		
2,2	8.3.2	Restricted Excavation a) Excavate for restricted foundations and footings in all materials and use for backfill or embankment or dispose b) Extra-over for: i) Intermediate excavation ii) Hard rock excavation	m ³ m ³ m ³	3 1 1		
2,3	8.3.3	Overhaul (a) Limited overhaul (b) Long overhaul	m ³ m ³ .km	2 6		
1200DA	TOTAL CARRIED TO SUMMARY					

REFURBISHMENT OF WATERVAL REGIONAL OFFICE
BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2	SANS 1200 DB	EARTHWORKS (PIPE TRENCHES) WATER, STORMWATER AND EXTERNAL SEWER PIPES				
2,1	8.3.1	Site Clearance and removal of topsoil				
		c) Removal of topsoil: upto 150 mm thick x 1 m wide	m ²	20		
2,2	PSDB 8.3.2	Excavation				
		(a) Excavation in all material for trenches, backfill, compact and dispose of surplus material (trenches upto 1000mm wide)				
		(i) Hand excavation from 0.0 m to 1.5 m depth	m ³	160		
		(ii) Machine excavation from 0.0 m to 1.5 m depth	m ³	30		
		(iii) Machine excavation from 1.5 m to 3 m depth	m ³	20		
		(b) Extra-over item (a) above for:				
		(1) Intermediate excavation	m ³	40		
		(2) Hard excavation	m ³	6		
		(c) Excavation and disposal of unsuitable material from trench bottom	m ³	3		
2,3	8.3.3	Excavation Ancillaries				
2.3.1	8.3.3.3	Compaction in road reserves	m ³	3		
2.3.2	8.3.3.4	Overhaul				
		(a) Limited overhaul	m ³	12		
		(b) Long overhaul	m ³ .km	24		
2,4	PSDB 8.3.5	Existing Services that Intersect or Adjoin a Pipe Trench				
2.4.1		(a) Services that intersect a trench				
		1) Storm water pipes	number	5		
		2) Water pipes	number	3		
		3) Sewer pipes	number	4		
		4) Electricity cables	number	5		
		TOTAL CARRIED FORWARD				

		BROUGHT FORWARD				
2.4.2		(b) Services that adjoin a trench				
		1) Storm water pipes	number	2		
		2) Water pipes	number	3		
		3) Sewer pipes	number	2		
		4) Electricity cables	number	2		
2,5	8.3.6	Reinstate road complete with all courses				
		a) Asphalt of thickness 30 mm	m ²	8		
		d) Gravel road layer of thickness 150 mm				
		(i) Unstabilised gravel road layer	m ²	10		
		(i) Cement stabilised gravel road layer	m ²	8		
1200DB	TOTAL CARRIED TO SUMMARY					

REFURBISHMENT OF WATERVAL REGIONAL OFFICE BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3	SANS 1200 L	MEDIUM-PRESSURE PIPELINES WATER PIPELINES OF ALL TYPES				
3,1	8.2.1	Supply, lay, and bed pipes complete with couplings (a) uPVC pipes to SANS 966 (Part1:1998) (i) 110 mm OD Class 9 (b) HDPE pipes to SANS 966 (SANS ISO 4427) (i) 63 mm OD Class 10 (ii) 40 mm OD Class 9 (iii) 32 mm OD Class 9 (iv) 25 mm OD Class 9 (c) Supply, lay, and bed pipes complete with couplings GMS pipes (medium duty) - flanged with flanges drilled to SANS 1123 Table 1600 (i) 65 mm ND (ii) 32 mm ND (ii) 25mm ND	m 	24 		
3,2	8.2.2	Extra-over 8.2.1 for the supplying, laying and bedding of specials complete with couplings				
3.2.1		(a) Bends (i) 110 mm uPVC OD 90° (ii) 110 mm uPVC OD 22.5° (iii) 100 mm malleable iron 90° (all types) (iv) 32 mm malleable iron 90° (all types) (v) 25 mm malleable iron 90° (all types)	No. 	3 		
3.2.2		(b) Elbows (i) 100 mm malleable iron 90° (all types) (ii) 32 mm malleable iron 90° (all types) (iii) 25 mm malleable iron 90° (all types)	No. 	3 		
3.2.3		(c) Reducers (i) 110 mm x 75 mm uPVC class 9	No.	2		
1200L	TOTAL CARRIED FORWARD					

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		Brought Forward				
3.2.4		(ii) 75 mm x 50 mm uPV class 9	No.	2		
		(iii) 50 mm x 40 mm uPV class 9	No.	2		
		(iii) 50 mm x 40 mm HDPE PE 100 PN10	No.	2		
		(d) Equal Tees				
3.2.5		(i) 110 mm x 110 mm uPVC class 9	No.	2		
		(e) Couplings				
		(i) 110 mm uPVC class 9	No.	6		
		(f) Bulk water meter (propeller type, max Q=15l/s, Kent or similar)	No.	1		
3,3	8.2.11	Anchor/Thrust Blocks and Pedestals				
		(a) Concrete	m ³	5		
		(b) Formwork	m ²	8		
3,4	8.2.13	Valve and Hydrant Chambers, etc	No.	5		
3,5	8.2.14	Manholes				
		(a) (i) Brick manhole (for water pipelines) with plan dimensions less than 4m ² 4 m ² complete with mahole cover and frame Type 4A to SANS 558 and/or as shown on the drawings	No.	5		
		(b) Extra-over for maholes of depth exceeding 1.5 m	No.	3		
3,6		Water Tank				
3.6.1		Supply, install, disinfect and test 164.426 m ³ combined domestic and firewater tank ABECO type or similar pressed steel tank complete with steel panels, inlets and outlets, scour, and flat bars at supports.	Item	1		
3.6.2		Supply, install, disinfect and test 5 m ³ and 10 m ³ Jojo type complete with tank stand, steel panels, inlets and outlets and overflow	Item	1		
3,7		Pumps				
		Supply and install pumps, one duty and the other standby for pumping firewater water from the 163.426 m ³ domestic/firewater tank in item 3.6.1 to hydrants and fire horse reels				
		Discharge 21 l/s; residual head at hydrant/fire horse reel at least 300 KPa	Item	1		
		Supply and install pumps, one duty pumping firewater water from the 163.426 m ³ domestic/firewater tank in item 3.6.1 to elevated 5m ³ domestic water tank				
		Discharge 0.6 l/s; total head approximately 17m	Item	1		
1200L	TOTAL CARRIED FORWARD					

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		Brought Forward				
3,8		Pumphouse Construct pump house as shown on the drawings	Provisional Sum	1	R 100 000,00	100 000,00
3,9		Borehole Test Test existing borehole including pump test, yield, water class, recovery rate, chemical results, microbial results, borehole depth, existing pump type, pump parameters, depth of pump in borehole	Provisional Sum	1	R 30 000,00	30 000,00
3.10		Borehole Equipping Equip borehole instructed by Civil Engineer, including installing new pump, pipe work, control motor, complete	Provisional Sum	1	R 80 000,00	80 000,00
3,11		Profit and attendance on item 3.8 to 3.10	Item	%	R 210 000,00	
1200L	TOTAL CARRIED SUMMARY					

**REFURBISHMENT OF WATERVAL REGIONAL OFFICE
BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS**

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
4	SANS 1200 LB	BEDDING (PIPES) WATER, STORMWATER AND SEWER PIPES				
4,1	8,2	SCHEDULED ITEMS				
4.1.1	8.2.1	Provision of bedding from trench excavation				
		a) Selected granular material	m ³	12		
		b) Selected fill material	m ³	55		
4.1.3	8.2.2	Supply only of bedding by importation				
4.1.3.1	8.2.2.1	From other necessary excavation				
		a) Selected granular material	m ³	5		
		b) Selected fill material	m ³	3		
4.1.3.2	8.2.2.2	From borrow pits				
		a) Selected granular material	m ³	2		
		b) Selected fill material	m ³	2		
4.1.4	8.2.3	Concrete Bedding Cradle	m ³	1		
1200LB	TOTAL CARRIED TO SUMMARY					

REFURBISHMENT OF WATERVAL REGIONAL OFFICE
BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
5	SANS 1200 LE	STORMWATER DRAINAGE				
5.1	8.2	SCHEDULED ITEMS				
5.1.1	8.2.1	Supply and Lay Concrete Pipes				
		(a) 300 mm diameter concrete pipe class 100 D on class B bedding	m	30		
		(b) 450 mm diameter concrete pipe class 100 D on class B bedding	m	90		
		(c) 600 mm diameter concrete pipe class 100 D on class B bedding	m	72		
5.1.2	8.2.4	Extra-over Item 8.2.1 for Cutting End Units for Culverts on Site				
		(a) Straight cut	No.	5		
		(b) Skew cut	No.	3		
5.1.3	8.2.4	Supply and Install Manholes, Catchpits, and the Like				
		(a) (ii) Brick manhole (for stormwater pipelines) with plan dimensions less than 2.5 m ² complete with grated mahole cover and frame as shown on the drawings	No.	10		
1200LB	TOTAL CARRIED TO SUMMARY					

REFURBISHMENT OF WATERVAL REGIONAL OFFICE
BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
6	SANS 1200GA	CONCRETE (SMALL WORKS) ALL CONCRETE WORKS ON THE PROJECT				
6,1	8,1	SCHEDULED ITEMS				
6.1.1	8.1.1	Formwork 'LI'				
		a) Rough	m ²	12		
		b) Smooth				
		(i) vertical plane	m ²	16		
		(ii) inclined plane	m ²	2		
6,2	8,3	Reinforcement 'LI'				
6.2.1	8.3.1	Steel bars:				
		a) High tensile steel bars				
		(i) Y12	t	0,5		
		(i) Y10	t	0,5		
		b) Mild steel bars				
		(i) R8	t	0,5		
		c) High-tensile welded mesh reference 617	t	0,5		
6,3	8,4	Concrete 'LI'				
6.3.1	8.4.2	Blinding Layer in 15MPa Concrete	m ³	2		
6.3.2	8.4.3	Strength Concrete, Grade 25MPa	m ³	5		
1200GA	TOTAL CARRIED TO SUMMARY					

REFURBISHMENT OF WATERVAL REGIONAL OFFICE
BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
7	SANS 1200 DK	GABIONS AND PITCHING				
7,1	8.2.1	Surface preparation for bedding of gabions 'LI' a) Cavities filled with approved excavated material or rock	m ²	18		
7,2	8.2.2	Gabions 'LI' (a) Galvanised gabion boxes (dimension 1m x 1m x 0.5 m mesh aperture 80mm x 100mm wire diameter 2.7 mm)	m ³	8		
7,3	8.2.4	Geotextile (or geomembrane) 'LI' (a) Filter fabric (A4/U24)	m ²	22		
7,4	8.2.5	Pitching 'LI' (a) Plain pitching (i) Method 1 of section 5103 of COLTO Standard Specification for Road and Bridge Works for State Road Authorities	m ²	24		
1200DK	TOTAL CARRIED TO SUMMARY					

REFURBISHMENT OF WATERVAL REGIONAL OFFICE
BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
8	SANS 1200 DM	EARTHWORKS (ROADS, SUBGRADE)				
		ACCESS ROAD AND PAVING				
8,1	8.3.3	Treatment of road-bed				
		(a) Roadbed preparation and compaction to:				
		(i) 93% of Mod AASHTO	m ³	147		
8,2	8.3.4	Cut to fill, borrow to fill				
		(a) Compacted to 93% Mod AASHTO density (150 mm layers) (including temporary stockpiling)	m ³	74		
		(b) (i) Rockfill (boulders 150mm and less), process and compact	m ³	2		
		(ii) Graded crushed stone (G3) obtained from commercial sources process and compacted to 85% Mod AASHTO (150 mm layers)	m ³	3		
8,3	8.3.5	Selected layers compacted to 93% Mod. AASHTO density (150 mm layers)	m ³	378		
8,4	8.3.7	Cut to spoil at site located by the contractor , including temporary stockpiling, loading and transportation) from:				
		a) Soft excavation	m ³	60		
		b) Intermediate excavation	m ³	40		
		c) Rock excavation	m ³	3		
1200DM	TOTAL CARRIED TO SUMMARY					

BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS

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**REFURBISHMENT OF WATERVAL REGIONAL OFFICE
BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS**

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
10	SANS 1200 MF	BASE				
		ACCESS ROAD AND PAVING				
10,1	8,3	Construction of base				
	8.3.1	Construct 150 mm base course (chemically stabilised) with material excavated from borrow pits (i) Compacted to 97% of Mod AASHTO	m ³	62		
	8.3.2	Construct 150 mm base course (chemically stabilised) with material excavated from designated excavations (i) Compacted to 97% of Mod AASHTO	m ³	144		
10,2	1200ME/MF8.3.8	Stabilizing Agent (i) Cement	t	1,0		
1200MF	TOTAL CARRIED TO SUMMARY					

REFURBISHMENT OF WATERVAL REGIONAL OFFICE
BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
11	SANS 1200 MJ	SEGMENTED PAVING				
11,1	8,2	Paving 'LI'				
11.1.1	8.2.2	Construction of Paving Complete				
		(i) Precast concrete interlocking blocks 60mm thick including 20mm sand bedding and 25 micron plastic sheeting	m ²	1 260		
11.1.2	8.2.3	Cutting of units to fit edge restraints	m	20		
1200MJ	TOTAL CARRIED TO SUMMARY					

REFURBISHMENT OF WATERVAL REGIONAL OFFICE
BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
12	SANS 1200 MK	KERBING AND CHANNELING				
12,1	8,2	Concrete Kerbing 'LI'				
12.1.1	8.2.1	Concrete Kerbing				
		25MPa Precast concrete kerbs including radii				
		(i) Figure 3 SANS 927	m	160		
1200MK	TOTAL CARRIED TO SUMMARY					

REFURBISHMENT OF WATERVAL REGIONAL OFFICE
BILL OF QUANTITIES FOR CIVIL ENGINEERING WORKS

ITEM	PAYMENT REFERS TO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
13	SANS 1200 MM	ANCILLARY ROADWORKS				
13,1	8,3	Permanent Road Signs 'LI'				
13.1.1	8.3.1	Sign Faces with Painted Background, with Painted Symbols, Characters, Legend and Borders, and with signboards constructed from: c) Sheet steel (1,6mm thick), of area Over and Up to (i) 2m ²	m ²	2		
13.1.2	8.3.2	Provision and Application of Retro-reflective material a) Engineering grade retro-reflective background, characters, symbols, legend and borders	m ²	2		
13.1.3	8.3.3	Sign supports c) Timber poles 100mm diameter complete with creosote treatment	No	1		
13,2	8,4	Road Markings				
13.2.1	8.4.1	Non-reflectorised Paint Applied at Nominal rate of 4,2l/m ² a) White lines (broken or unbroken) 100mm wide	km	0,25		
13.2.2	8.4.2	Variation in rate of Application from that Stated in Item 8.4.1 above a) White paint	/	5		
13.2.3	8.4.4	Setting out and Premarking a) Lines (excluding traffic island markings, characters and symbols)	km	0,25		
1200MK	TOTAL CARRIED TO SUMMARY					

REFURBISHMENT OF WATERVAL REGIONAL OFFICE

SCHEDULE 6: BILL OF QUANTITIES FOR ELECTRICAL/MECHANICAL ENGINEERING WORKS

ITEM NO	PAYMENT CLAUSE	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		<u>SELECTED SUB-CONTRACTOR WORKS</u>				
		<u>ELECTRICAL INSTALLATION</u>				
5.1		Provide the sum of R 950,000.00 (Nine Hundred and Fifty Thousand Rands) for Electrical Installation complete including issuing of certificate of compliance	Item	1	R950 000,00	R950 000,00
5.2		Allow for profit	Item	%		
5.3		Allow for attendance	Item	%		
		<u>MECHANICAL INTALLATIONS</u>				
5.4		Provide the sum of R50,000.00 (Fifty Thousand Rands) for Mechanical Installations complete including issuing of certificate of compliance	Item	1	R50 000,00	R50 000,00
5.5		Allow for profit	Item	%		
5.6		Allow for attendance	Item	%		
SUB-TOTAL CARRIED FORWARD TO SUMMARY						

PART C3: SCOPE OF WORK

C3.1	DESCRIPTION OF THE WORKS, DESIGN GENERAL REQUIREMENTS AND CONSTRUCTION GENERAL REQUIREMENTS
C3.2	BUILDING WORKS SPECIFICATIONS
C3.3	CIVIL ENGINEERING SPECIFICATIONS
C3.4	EPWP AND LIC CONSTRUCTION SPECIFICATIONS
C3.5	OCCUPATIONAL HEALTH AND SAFETY SPECIFICATIONS
C3.6	HIV AND AIDS SPECIFICATIONS
C3.7	ENVIRONMENTAL MANAGEMENT SPECIFICATIONS

**C3.1 DESCRIPTION OF WORKS, DESIGN GENERAL
REQUIREMENTS AND CONSTRUCTION GENERAL
REQUIREMENTS**

3.1.1 DESCRIPTION OF THE WORKS

This section provides the description of the project and the general requirements for executing the work. The work is construction of a youth centre in located in Makhado Municipality.

C3.1.1.1 Employer's Objectives

The Employer's objectives are to deliver public infrastructure using labour intensive methods.

C3.1.1.2 Overview of the Works

Labour

C3.1.1.3 Location of the Works

Waterval Regional Offices is located under the jurisdiction of Makhado Municipality, Elim in Limpopo Province.

The site coordinates are 23° 16' 39.7" S and 30° 07' 07.6" E.

C3.1.1.34 Extent of the Works

The description of the project contained in this section is merely an outline of the contract works and shall not limit the work to be carried out by the Contractor under this contract. Approximate quantities of each type of work to be carried out in accordance with the contract documents are listed in the Bill of Quantities bound in this volume.

The nature of work to be carried out under this contract includes inter alia the following:

- Establishment of camps on site;
- Site clearance;
- Building work – Refurbishment of existing works;
- Drilling, testing, equipping, electrifying and commissioning of a borehole;
- Paving with concrete blocks;
- Installation of sewer, water pipes and water tanks; and
- Repairs to Electrical and Mechanical

The contractor shall be required to attend meetings relating to the Works and the site, *inter alia* Incident Management System, Disaster Management Forum, Public Liaison Committee, Farmers' Association, and Fire Protection Association.

Refurbishment of the WATERVAL REGIONAL OFFICE includes the following works:

- a) Building work – Refurbishment of offices and guard house
- b) Borehole
 - drilling;
 - testing of both yield and water quality;

- equipping and construction of pump house;
 - electrification; and
 - Commissioning.
- c) Sewer
- Installation of sewer line from the building to the septic tank
 - Construction of the septic tank and soakaway;
 - Testing of the constructed system.
- d) Water
- Pipeline from the drilled borehole to the reservoir(s).
 - Distribution line(s) from tank(s) to the building
- e) Paving
- Paving the walkway into the building
- f) Maintenance works
- Maintenance of the works during construction and defects liability period. In addition the contractor must pick up the litter and keep the working area clean.

C3.1.2 DESIGN GENERAL REQUIREMENTS

C3.1.2.1 Design Services

The design of the Permanent Works and providing the related construction drawings is the responsibility of the Employer.

The Contractor is responsible for the design of the Temporary Works. The Contractor is responsible providing As-built data and information in the manner and form required by the Employer's Agent and/or Employer.

C3.1.2.2 Working and Construction Drawings

The reduced drawings contained in Part C4 that form part of the tender document shall be used for tender purposes only. Further drawings are to be provided on an on-going basis by the Employer's Agent.

Drawings are not to be scaled. Only figured dimensions shall be used and drawings shall not be scaled unless so instructed by the Employer's Agent. If a dimension is not shown, it will be the responsibility of the Contractor to find the correct dimension from the Employer's Agent.

For steelwork the actual as built concrete dimensions/ levels must be measured before ordering or proceeding with fabrication.

The Contractor will be provided with three free sets of paper prints of the drawings and two free copies of the contract document.

In addition, a further set of paper prints of the drawings will be issued to the Contractor which shall be kept on site and upon which the Contractor shall record all data necessary for the compilation of "As-built" drawings. The Contractor shall record all the data necessary to for the compilation of "As-built" drawings and provide this data monthly to the Employer's Agent.

At the Completion of the Works, all data necessary for completion of "As-built" drawings must have been provided to the Employer's Agent.

C3.1.2.3 As-Built Drawings

The Contractor is required to supply to the Employer's Agent for the records of the Employer the following:

- "As Built" plans showing the work designed by him in terms of the Contract as well as any additional information the Employer's Agent or Employer may wish to have shown thereon. One paper print of each such plan as well AUTOCAD compatible digital file shall be submitted for the Employer's Agent's approval within three months of the issue of a Certificate of Completion.
- Furthermore at the extra set of paper prints issued to the contractor the contractor must pass all changes and with the conclusion of the works.

Any information in the possession of the Contractor, which the Employer's Agent requires to complete the as-built drawings, shall be supplied to the resident Employer's Agent before a certificate of completion will be issued.

No additional payment will be made and the cost related thereto shall be deemed to be included in the tendered rates for the related items.

C3.1.2.4 Custody of Drawings and Specifications

The Drawings and Specifications shall remain the sole property of the Employer and the Contractor shall be required to sign for receipt thereof. The copyright of all documents shall vest in the Employer and the Drawings and Specifications may not be reproduced, in part or in whole, without the written authority of the Employer's Agent.

C3.1.2.5 Copyright

The copyright in all documents, drawings and records related to the purpose and scope of the Works or related in any other manner to the Works, shall vest in the Employer and the Contractor shall not furnish any information in connection with the Works to anybody without the approval of the Employer.

C3.1.3 CONSTRUCTION GENERAL REQUIREMENTS

C3.1.3.1 Project Meetings

The contractor shall be required to attend meetings relating to the Works and the site.

C3.1.3.2 Power, Water Supply and Other Services

The contractor shall make his own arrangements concerning the supply of electrical power and all other services. No direct payment will be made for the provision of electrical and other services. The cost of providing these services will be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required.

There is power available on site at the electrical substation and for light duty at different buildings. The contractor must supply all temporary major connections at the works and connect directly to this substation where he will install an electrical meter. The use of electricity will be monitored and charged for at the Eskom current charge out rates by the owner for payment by the contractor. The client cannot guarantee supply of power and is noted that outage is common in the area. The contractor must make his own arrangements for emergency power supply to his camp and especially at critical machinery and plant of his operation. No extension of time for outage will be entertained. It is to be noted that a certified electrician must correctly install all site electrical extensions.

The Employer will make metered potable water available at a standard charge of R5.00 per m³ for the normal execution of the works and the needs of the labour force on site. The Contractor shall make his own arrangements with the Employer for a suitable connection point for a water supply for contractors' camp and construction purposes. Such installation inclusive of any water pipes and dispense taps will be for the contractor account. The contractor shall install at his expense a water meter to monitor the consumption of water and also will be liable for any punitive payments required in regard to excessive use of water.

The following are noted:

- The abstraction and purification works have water available for use by the contractor, but the contractor's attention is drawn to the fact that water will not be available at certain periods during the refurbishment stage which he will be carrying out as well during the often occurring on site outage. The cost of the line to the main contractor camp will have to be borne by the general P&G rates offered. The connection point would be in the vicinity of the main water tower. The client cannot guarantee either the water supply or the water quality. Especially the water for drinking purposes.
- The Contractor shall comply with any measures regarding restrictions on the use of water laid down by the Employer from which water is directly or indirectly obtained.

C3.1.3.3 Contractor's Camp Site and Security

The contractor shall make his own arrangements regarding the establishment of a camp site and housing for his construction personnel and all regulations stipulated by the local authority

shall be adhered to.

It is anticipated that the contractor's choice of a camp site will be influenced by the availability of telephone and electrical connections as well as the supply of potable water.

Provision is made in these specifications for the erection of a security fence around the site offices. The contractor shall be responsible for the security of his personnel and constructional plant on and around the site of the works and for the security of his camp, and the Employer will consider no claims in this regard.

C3.1.3.4 Accommodation of Traffic

The contractor may not commence constructional activities before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual.

The contractor shall submit proposals in connection with directional signs to the Employer's Agent for approval.

C3.1.3.5 Construction in Confined Areas

It may be necessary for the contractor to work in confined areas. The method of construction in these confined areas depends on the contractor's construction plant. However, the contractor must note that measurement and payment will be in accordance with the specified cross-sections and dimensions, irrespective of the method used to achieve these cross-sections and dimensions, and that the rates and amounts tendered will be deemed to include full compensation for any special equipment or construction methods or for any difficulty encountered in working in confined areas and narrow widths, and at or around obstructions, and that no extra payment will be made nor will any claim for payment be considered on account of these difficulties.

C3.1.3.6 Barricading of Excavations

All excavations in close proximity to pedestrian and vehicular traffic are to be barricaded to the satisfaction of the Employer's Agent. Barricading shall consist of a minimum of two strands of parallel and horizontal wire of at least 2mm gauge, the topmost strand being fixed at least 1m above ground level. These wires shall be fixed to the approved fence posts, which shall be securely fixed in a vertical position.

The visibility of these barricades shall be enhanced by the attachment of high visibility construction tape to the posts and wire strands and by the placing of reflective signing to the Employer's Agent's satisfaction. All costs arising from these requirements are to be included in the tendered rates for excavation.

C3.1.3.7 Equivalency of Standards and Codes

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or

relate to a particular country or region, other authoritative standards which ensure an equal or higher quality than the standards and codes specified will be accepted subject to the Employer's Agent's prior review and written approval. Differences between the standards specified and the proposed alternative standards must be fully described in writing by the Contractor and submitted to the Employer's Agent at least 7 days prior to the date when the Contractor desires the Employer's Agent's approval. In the event the Employer's Agent determines that such proposed deviations do not ensure equal or higher quality, the Contractor shall comply with the standards specified in the documents.

C3.1.3.8 Temporary Accommodation

The contractor shall make his own arrangements for accommodation of his workmen and staff. He shall liaise with the relevant authorities and comply with any regulations required. No accommodation will be allowed inside the security area of the purification works.

The contractor's site camp and site accommodation of personnel will be subject to the requirements of the Construction Safety Act of 2003, the requirements of the Employment Act and the Environmental Impact Report.

C3.1.3.9 Health and Sanitation

Provide health and sanitation in accordance to the latest safety act regulations. In a similar manner change rooms, shower facilities, site personnel eating facilities with gender separation where required are to be supplied. The contractor shall be responsible for the safe and environmentally acceptable disposal of all rubbish and rubble from the site, accumulated during the construction period. All facilities must comply with the OHS act.

The hygiene measures with regards to the works durations as well the number of personnel to be deployed on site must be seen very seriously by the contractor. Chemical toilets will only be allowed on a temporary basis for use at the furthest areas of the works, at the work face.

These shall be provided on the following basis:

One per 20 labourers of the Contractor's staff with separate facilities for male and female staff.

The Contractor shall make arrangements for the proper maintenance of these facilities.

Reference is made to the Health and safety act and specific requirements for sanitation. The Health and safety requirements are to be the prevailing standards requirements.

The main camp of the contractor will be expected to have container type ablution facilities with combined shower and hand wash facilities. Each chemical facility must be equipped with a hand cleaning facility with soap and paper towel dispenser. All effluent to be collected in containers for disposal of and evacuated timeously off site. Upon appointment and within two weeks a detailed plan must be put in place and submitted for the Employer's Agent approval.

C3.1.3.10 Notice of Covering of Works

The Contractor shall give due notice to the Employer's Agent, whenever any work is intended to be covered over with earth or otherwise, in order that the Employer's Agent may examine

the work to determine that it is in accordance with the Specification and that its correct dimensions may be ascertained before the work is covered, and in default of such notice being received the work shall be uncovered at the Contractor's expense whenever instructions are given by the Employer's Agent to do so.

C3.1.3.11 Inspection and Rejection of Faulty Work

The Employer's Agent or his representative (Employer's Agent's Representative) appointed by the Employer's Agent shall have the full power to inspect the work during every stage of its construction, and for that purpose shall have free access to the works at all times. Should any work appear to the Employer's Agent or his representative not be executed in accordance with the Specifications, the same may be immediately rejected, and the Contractor shall forthwith carry out the making good, breaking down and rebuilding where applicable of rejected work at his own expense.

The Employer's Agent or his representative (Employer's Agent's Representative) appointed by the Employer's Agent shall not be used as the Contractor's site agent. The contractor is deemed to have carried out all process control before asking for the work to be inspected.

The inspection of all concrete work will be on all stages of the construction and no works will be released for the new stage unless is done so in writing by the Employer's Agent the foundation level, the placing and fixing of steel and the final end product. Settings out and quality of shutters are the responsibility of the contractor and can only be accessed once the end product is built.

All inspection call outs (successful or not) will be recorded and must be reported at the site meetings. Both parties must agree all defect lists with a completion date entered into the list for each defect.

All site communications are to be confirmed in writing.

C3.1.3.12 Setting Out of the Works

The Contractor shall set out the works using the various Setting Out Drawings. He will establish a system of setting out and reference pegs encased in concrete, which will be checked by the Surveyor of the Employer's Agent and then maintained and protected for the duration of the contract by the contractor. Should any benchmark be disturbed it will be re-established and verified by the Employer's Agent at the cost of the contractor.

The contractor shall set out the Works relative to the afore-mentioned system of reference pegs in accordance with the positioning and dimensions on the drawings.

C3.1.3.13 Control of Stormwater

The Contractor is fully responsible for the handling of storm water from higher-laying areas, adjacent to the works, for the management of possible sub-surface water and for the management of spoiled water when disconnecting existing connections or valves. No separate payment will be made for this as all costs related thereto will be deemed to be included in the tendered rates.

C3.1.3.14 Finishing and Tidying

Progressive and systematic finishing and tidying will form an essential part of this contract. Under no circumstances would spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate unnecessarily. In the event of this occurring the Employer's Agent will have the right to withhold payment for as long as necessary in respect of the relevant works in the area(s) concerned.

C3.1.3.15 Contractor's Code of Conduct

Workmen Instant Dismissal

Workmen may be instantly dismissed for the following:

- a) Theft.
- b) Violence with co-workers or supervising staff
- c) Committing a criminal offence and is sentenced to prison without the option of a fine.

Misconduct

Any employee who, within a period of 6 months, receives two written warnings and for the third time is guilty of misconduct as listed below may be dismissed without further notice.

- a) Insubordination and constant refusal to follow instructions
- b) Absenteeism for 3 or more days without a valid medical certificate
- c) Repeatedly coming to work late
- d) Disruptive behaviour conducive to delays in the work program
- e) Intimidation of other workers
- f) Dangerous behaviour
- g) Use of alcohol or drugs during working hours
- h) Non-performance
- i) Abuse or waste of company property
- j) Continuous absenteeism

C3.1.3.16 Features Requiring Special Attention

a) Existing services

The Contractor shall be deemed to have made allowance in his tender for the need to protect the existing services from damage and to hand over the completed works with the existing services intact and undamaged.

Notwithstanding the information given herein, the Contractor shall retain full responsibility for establishing the exact positions of the various existing services, which may not be shown on the construction drawings, in advance of the main construction work.

The use of specialised equipment for location of power cables and other services is allowed into the relevant Bill of quantities.

All the works areas with known services are to be preceded with thorough investigation with hand excavations and exposure of the services.

b) Survey beacons

The Contractor's attention is drawn to SABS 1200 A, Clause 5.1.2 - Preservation and Replacement of Beacons and Pegs subject to the Land Survey Act - and to the liabilities of the Employer and the Contractor in this regard.

The Contractor shall locate and mark all existing pegs.

The Contractor shall be held responsible for the maintenance of all the cadastral and benchmark pegs on the site that are recorded as existing at the commencement of construction, and for the placement of any pegs that are found to be missing or disturbed upon the completion of the contract. A Completion Certificate shall only be issued after the Contractor has handed back all the pegs and has submitted a certificate from a registered Land Surveyor to the Employer's Agent stating that all relevant pegs are in their correct positions.

Notwithstanding Clause 8.8.5 of SABS 1200 A, the Contractor shall tender sums for searching for and protecting all pegs. Where pegs have been moved, disturbed or covered on the specific instruction of the Employer's Agent, such pegs shall be reinstated by a registered Land Surveyor and shall be paid for by number reinstated on instruction of the Employer's Agent.

C3.1.3.16 Damage to Services and Existing Works

a) Responsibility of contractor

The Contractor shall be responsible for any damage to existing services and existing works in the execution of this contract and shall reimburse the Owner concerned for any repairs required or compensation for damages awarded. The Contractor's attention is drawn to Clause 3.1.30 and SABS 1200 A, Clause 5.4.

b) Notification

The Contractor will be responsible for immediately notifying the Authorities concerned the Employer and the Employer's Agent regarding any damage caused to public services and existing works.

The Employer's Agent's Representative must be notified without delay.

C3.1.3.17 Work on Public and Private Property

The Contractor shall exercise the greatest care to avoid unnecessary damage to trees, gardens, fences, walls and structures on public and private property, and also strictly supervise the behaviour of his workmen.

On completion of the work over or in the vicinity of Local or Tribal Authority or private property, the Contractor shall ensure that anything that may have been disturbed or damaged has been compensated for or reinstated to a condition equal to that which it was before construction commenced and also to the satisfaction of the owner concerned. The materials resulting from any demolition of existing structures shall be the property of the owner.

C3.1.3.18 Regulations

The Contractor shall in all respects conform to the requirements contained in regulations by higher authorities. Such regulations shall include *inter alia*:

- 1.) ***National Building Regulations. SANS 10400**
- 2.) Code of Practice for the Wiring of Premises, SANS 10142-1 as amended.
- 3.) The Mines and Works Regulations, Government Notice Number R1609 of 1962-09-28, as amended.
- 4.) ***The Occupational, Health and Safety Act 85/93, as amended.**
- 5.) The local Municipal Bye-laws and Regulations as well as the regulations of the local Supply Authority.
- 6.) The local Fire Regulations.
- 7.) The regulations of Telkom.
- 8.) The regulations of the local Gas Board where applicable.
- 9.) The standard regulations of any Government Department or public service company where applicable.
- 10.) The Regulations of Lepelle Northern Water attached at volume no 1.
- 11.) The Regulations of Eskom
- 12.) ***The NHBRC National home builders: Home building manual part 1&2 ,& part 3 two volumes**
- 13.) ***SANS 1200 and the application SANS 10120.**
- 14.) The construction Regulations of the Construction Industry Development Board (CIDB)

The regulations marked “*” are to be kept on site.

The Contractor shall pay and indemnify the Employer against any fees or charges by law and shall keep the Employer and the Employer's Agent indemnified against all penalties and liabilities of any kind for breach by the Contractor or any of the conditions due by law, except insofar as amended or specifically allowed by the Employer's Agent.

C3.1.3.19 Employment of Local Labour

The contractor shall limit the utilisation of permanently employed personnel for the execution of the Works to key personnel, such as contracts manager, site agent, foreman, supervisors, plant operators, material technicians, surveyors, trainers, buyers, storemen and the like should such expertise not be available within the community. Not less than 70% of the labour employed on site shall be drawn from the community closest to the contract Works.

The contractor, in conjunction and in co-ordination with the local community/Local Authority, will establish a Community Liaison Officer (CLO) within the local community and the Contractor shall apply to the CLO for details of local labourers who are available and shall give preference to the employment of these labourers identified through the CLO.

The employment of labour from outside the local area will only be allowed in the event of:

- The unavailability within the local community of sufficient numbers of local labourers to execute the work,
- The unavailability of required skills within the local community necessary for the execution of specific tasks
- Where the completion period does not permit the creation of the necessary skills through training.

In these cases, the contractor shall prove to the satisfaction of the Employer that he has exercised his best endeavours and taken all reasonable actions to recruit local labour.

The Contractor shall maintain accurate and comprehensive daily records of all labour engaged on the contract and shall submit to the Employer at two weekly intervals detailed labour returns substantiating the actual numbers of labours employed, the amounts actually paid in respect thereof, and details of the various activities undertaken by the labourers.

The Contractor shall employ a Community Liaison Officer (CLO), through the Labour Committee (LC) representing the local community. The CLO and LC shall be the facilitators for all negotiations between the Contractor and the Labourers. An Agreement signed by the LC on behalf of the Labourers shall be given to and accepted by the Contractor and applied without revisions. The Contractor may price to recover his Payment for the CLO in the P & G and where he enters no price; it shall be assumed that the cost of the CLO is included in the other rates.

3.1.3.20 Labour-Intensive Construction and EPWP

As much as is economically feasible all work shall be implemented by employing Labour Intensive Construction methods. Over and above the normal Building and Allied works to be implemented by employing skilled and unskilled labour the works specified in the "Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)" shall be undertaken using Labour Intensive Construction methods.

Employer's objectives

The Employer's objectives are to deliver public infrastructure using labour intensive methods.

Labour-intensive works

Labour-intensive works comprise the activities described in SANS 1921-5, Earthworks activities which are to be performed by hand, and its associated specification data. Such works shall be constructed using local workers who are temporarily employed in terms of this Scope of Work.

Labour Intensive Competencies of Supervisory and Management Staff

Contractors having a CIDB contractor grading designation of 5GB/CE and higher shall engage, as far as is feasible, supervisory and management staff in labour intensive works who have relevant Labour Intensive Construction Qualifications or have relevant experience in Labour Intensive Construction.

The managing principal of the contractor, namely, a sole proprietor, the senior partner, the managing director or managing member of a close corporation, as relevant, having a contractor grading designation of 1GB/CE, 2 GB/CE, 3 GB/CE and 4 GB/CE shall have, as far as is feasible, personally completed a relevant skills programme in Labour Intensive Construction or have relevant experience in Labour Intensive Construction. All other site supervisory staff in the employ of such contractors must, as far as is feasible, have completed a relevant skills programme in Labour Intensive Construction or have relevant experience in Labour Intensive Construction.

The Employer may set other conditions at their discretion which must be complied to when engaging Contractors who do not comply with is provision.

1 EMPLOYMENT OF UNSKILLED AND SEMI-SKILLED WORKERS IN LABOUR-INTENSIVE WORKS

1.1 Requirements for the sourcing and engagement of labour.

- 1.1.1 Unskilled and semi-skilled labour required for the execution of all labour intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.
- 1.1.2 The rate of pay set for the SPWP is R200.00 per task or per day.
- 1.1.3 Tasks established by the contractor must be such that:
 - a) the average worker completes 5 tasks per week in 40 hours or less; and
 - b) the weakest worker completes 5 tasks per week in 55 hours or less.
- 1.1.4 The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 1.1.3.
- 1.1.5 The Contractor shall, through all available community structures, inform the local community of the labour intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:
 - a) where the head of the household has less than a primary school education;
 - b) that have less than one full time person earning an income;
 - c) where subsistence agriculture is the source of income.
 - d) those who are not in receipt of any social security pension income
- 1.1.6 The Contractor shall endeavour to ensure that the expenditure on the employment of temporary workers is in the following proportions:
 - a) 55% women;
 - b) 55% youth who are between the ages of 18 and 35; and

c) 2% on persons with disabilities.

1.2 Specific provisions pertaining to SANS 1914-5

1.2.1 Definitions

Targeted labour: Unemployed persons who are employed as local labour on the project.

1.2.2 Contract participation goals

1.2.2.1 There is no specified contract participation goal for the contract. The contract participation goal shall be measured in the performance of the contract to enable the employment provided to targeted labour to be quantified.

1.2.2.2 The wages and allowances used to calculate the contract participation goal shall, with respect to both time-rated and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

1.2.3 Terms and conditions for the engagement of targeted labour.

Further to the provisions of clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

1.2.4 Variations to SANS 1914-5

1.2.4.1 The definition for net amount shall be amended as follows: Financial value of the contract upon completion, exclusive of any value added tax or sales tax which the law requires the Employer to pay the contractor.

1.2.4.2 The schedule referred to in 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days of formal training provided to targeted labour.

1.3 Training of targeted labour

1.3.1 The contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.

1.3.2 The cost of the formal training of targeted labour, will be funded by the provincial office of the Department of Labour. This training should take place as close to the project site as practically possible. The contractor, must access this training by informing the relevant provincial office of the Department of Labour in writing, within 14 days of being awarded the contract, of the likely number of persons that will undergo training and when such training is required. The Employer must be furnished with a copy of this request.

1.3.3 A copy of this training request made by the contractor to the DOL provincial office must also be faxed to the EPWP Training Director in the Department of Public Works - Cinderella Makunike, Fax Number 012 328 6820 or email cinderella.makunike@dpw.gov.za Tel: 083 677 4026.

1.3.4 The contractor shall be responsible for scheduling the training of workers and shall take all reasonable steps to ensure that each beneficiary is provided with a minimum of six (6) days of formal training if he/she is employed for 3 months or less and a minimum of ten (10) days if he/she is employed for 4 months or more.

1.3.5 The contractors shall do nothing to dissuade targeted labour from participating in the above mentioned training programmes.

1.3.6 An allowance equal to 100% of the task rate or daily rate shall be paid by the contractor to workers who attend formal training, in terms of 1.3.4 above.

1.3.7 Proof of compliance with the requirements of 1.3.2 to 1.3.6 must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

C3.1.3.21 Environment and Safety

The Environmental Management Plan (EMP) for the site of the Works has been commissioned by the Client and will be issued to the Successful Contractor.

The Contractor shall comply with all the requirements laid down in the EMP. The Contractor shall take time to acquaint his employees with the provisions, regulations, duties, obligations and prohibitions, and shall accept sole liability for due compliance with the duties, obligations and prohibitions and absolve the Employer from being obliged to comply with the aforesaid duties, obligations and prohibitions.

In case of failure on the part of the Contractor to comply with the requirements of the EMP, the Employer shall be entitled to employ and pay other persons to carry out any remedial work to rectify any consequence resulting from the non-compliance by the Contractor and all cost consequent or incidental thereto shall be borne by the Contractor and shall be recoverable from him by the Employer. If it is not practical to rectify any consequence resulting from the non-compliance of the Contractor with the EMP the Employer will be entitled to impose a penalty on the Contractor which penalty shall be in relation to the expense which the Contractor would have incurred to comply.

The Contractor shall indemnify the Employer and the Employer's Agent against responsibility for damage to the environment on the site of the Works.

C3.1.3.22 Recording of Weather

The Employer's Agent shall adjudge the extent of the delays that are attributable to "abnormal climatic conditions", however, in order to assist him in this regard, the Contractor must erect a rain gauge at the site office to record rainfall figures. The reading of the rain gauge shall be made at 08h00 and 16h00 of each working day of the contract. The records shall be submitted weekly to the Employer's Agent (the Employer's Agent); together with a statement recording the Contractor's opinion of the effect on his programme of any weather condition that he may consider to be abnormal.

C3.1.3.23 Extension of Time Resulting from Abnormal Rainfall

The critical-path method shall be used to for determining the extension of time resulting from abnormal rainfall.

A delay caused by inclement weather conditions will be regarded as delay only if, in the opinion of the Employer's Agent, all progress on an item or items of work on the critical path of the working programme of the Contractor has been brought to a halt. Delays on working days only (based on five-day working week) will be taken into account for the extension of time, but the Contractor shall make provision in his programme of work for an expected of "10" working days caused by normal rain weather, for he will not receive any extension of time.

Extension of time during working days will be granted to the degree to which actual delays, as defined above, exceed the 10 working days.

C3.1.3.24 Blasting Indemnity

The Contractor may require to blast rock from time to time during the implementation of his construction works. The use of a certified Blasting Contractor as sub-contractor is paramount to the safety of the surrounding public, person and property. When blasting in the close proximity of fixed structures, the Contractor shall take full responsibility for any costs related to damage thereof. It is in this context that it is recommended for the Contractor to fully photograph and record structural damage, prior to blasting. The Contractor shall complete the "Blasting Indemnity included below, before the commencement of the Works.

The Contractor is responsible for compliance with all requirements of the authorities concerned with respect to the safety of the Works labourers and the public. Any negligence or non-compliance on the side of the Contractor shall be sufficient cause for the Employer's Agent to suspend the Works and the Contractor shall have no claim for additional compensation against the Employer in such an event.

BLASTING INDEMNITY FORM

Contract No.

Given by

*Company Registration No.

Address

a *Company incorporated with limited liability according to the company laws of the Republic of South Africa,
*Partnership, *Close Corporation, *Public Company (hereinafter called the Contractor), represented herein
by in his capacity as the Contractor's
..... duly authorised hereto by a resolution of the Contractor dated
..... a certified copy of which resolution is attached to this Indemnity.

WHEREAS the Contractor has entered into a Contract with the **MAKHADO MUNICIPALITY** (hereinafter
called the Company) for,
and the Company requires this Indemnity from the Contractor

NOW THEREFORE THIS DEED WITNESSE that the Contractor does hereby indemnify and hold harmless
the Company in respect of all loss or damage that may be incurred or sustained by the Company by reason
of or in any way arising out of or caused by blasting operations that may be carried out by the Contractor
in connection with the aforementioned Contract and also in respect of all claims that may be made against
the Company in consequence of such blasting operations, by reason of or in any way arising out of any
accidents or damage to persons, life or property or any other cause whatsoever, and also in respect of all
legal or other expenses that may be incurred by the Company in examining, resisting or settling any such
claims; for the due performance of which the Contractor binds itself according to law.

THUS DONE AND SIGNED for and on behalf of the Contractor at on the
..... day of 20..... in the presence of the subscribing witnesses.

AS WITNESSES

SIGNATURE

DESIGNATION OF
SIGNATORY

C3.2 BUILDING WORKS SPECIFICATIONS

C3.2.1 APPLICATION

This specification specifies the materials and methods to be used in Building Works including that Architectural work to be done on the new filters and settling tanks. This technical specification forms an integral part of the contract document and therefore shall be read in conjunction with the Bills of Quantities and Drawings.

C3.2.2 SPECIFICATIONS

The specifications applicable to building works are the latest **PW 371 SPECIFICATIONS OF MATERIALS AND METHODS TO BE USED** published by the South African National Department of Public Works (NDPW).

The latest **PW 371 SPECIFICATIONS OF MATERIALS AND METHODS TO BE USED** is obtainable from the **Department of Public Works website (www://publicworks.gov.za/ under Consultants Guidelines)**

The National Building Regulations and Building Standards Act (Act no. 103 of 1977) as amended shall apply. The SANS 10400, The Application of National Building Regulations shall also apply.

C3.2.3 PARTICULAR SCOPE FOR ARCHITECTURAL WORKS

This particular scope of Architectural Works must be read in conjunction with drawing number SES/054/A/100 - SITE LAYOUT.

A1: SCOPE OF WORK LIST: MAIN OFFICE BLOCK - INTERIOR

1. GF001 Verandah

- a) Replace French door with aluminium double swing doors
- b) Repair existing floor finish, and install new none-slip porcelain tiles
- c) Provide tile skirting
- d) Provide aluminium edge strips
- e) Replace all glass panels to existing steel windows to meet the requirements of SANS10400 – N
- f) Repair fibre cement window sills
- g) Sand down timber beam and paint
- h) Sand down timber trusses and paint
- i) Clean face brick
- j) Provide new Fire House Reel as stipulated under the Civil and Structural Engineering section and requirements



2. GF002 Public Area

- a) Plaster and paint existing face brick, plaster to match existing
- b) Repair reveals to 4x cashier windows
- c) Remove existing floor finish, repair floor and install new porcelain tiles
- d) Provide tile skirting
- e) Sand down and door frames and paint
- f) Demolish drywall to GF003 Office 01 and GF027 Office 05 and re-do with new fire rated drywall to underside of ceiling
- g) Provide 1x 2000mm wide pining board
- h) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- i) Service existing fire extinguisher and provide back board
- j) Provide new fire signage
- k) Remove existing suggestion and keep for re-use. Sand down and varnish
- l) Provide new security trellidor to new aluminium door



3. GF003 Office 01

- a) Plaster and paint existing face brick, plaster to match existing
- b) Replace all glass panels to existing steel window to meet the requirements of SANS10400 – N. Service existing window furniture and OR provide new where necessary
- c) Provide new blinds to existing steel window
- d) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- e) Provide a sets of window blinds
- f) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- g) Remove existing floor finish, repair floor and install new porcelain tiles
- h) Provide tile skirting against masonry walls and aluminium skirting to drywall
- i) Provide new drywall to underside of ceiling and prescribe in GF002 Public Area
- j) Provide an aluminium service hatch (1500mm wide)
- k) Provide a 300 x 1500mm wide writing counter for clients
- l) Provide new semi-solid timber door with a 600 x 600mm louvre and aluminium door frame suitable for drywall, complete with new ironmongery
- m) Provide door stop
- n) Provide 1x 2000mm wide pinning board



4. GF004 Office 02

- a) Plaster and paint existing face brick, plaster to match existing
- b) Replace all glass panels to existing steel window to meet the requirements of SANS10400 – N. Service existing window furniture and OR provide new where necessary
- c) Provide new blinds to existing steel window
- d) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- e) Provide a sets of window blinds
- f) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- g) Remove existing floor finish, repair floor and install new porcelain tiles
- h) Provide tile skirting against masonry walls
- i) Repair door frame, repaint and provide new striker plate
- j) Provide new semi-solid timber door with a 600 x 600mm louvre complete with new ironmongery
- k) Provide door stop
- l) Provide 1x 2000mm wide pinning board



5. GF005 Office 03

- a) Remove old Aircon wall unit, brick-up and plaster
- b) Plaster and paint existing face brick, plaster to match existing
- c) Replace all glass panels to existing steel window to meet the requirements of SANS10400 – N. Service existing window furniture and OR provide new where necessary
- d) Provide new blinds to existing steel window
- e) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- f) Provide 2x sets of new window blinds
- g) Sand down and varnish existing timber window between office and passage
- h) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- i) Remove existing floor finish, repair floor and install new porcelain tiles
- j) Provide tile skirting against masonry walls
- k) Repair door frame, repaint and provide new striker plate
- l) Provide new semi-solid timber door with a 600 x 600mm louvre complete with new ironmongery
- m) Provide door stop
- n) Provide 1x 2000mm wide pinning board
- o) Provide a key cabinet for 100 keys



6. GF006 Male Toilet

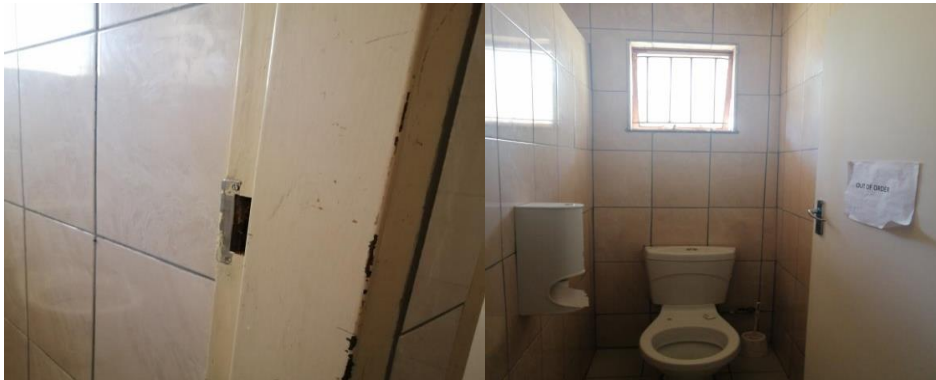
- a) Remove existing floor finish, repair floor and install new none-slip porcelain tiles
- b) Replace all glass panels to existing steel window to meet the requirements of SANS10400 – N. Service existing window furniture and OR provide new where necessary
- c) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- d) Replace existing ceiling with fibre cement ceiling board
- e) Provide a coved ceiling cornice
- f) Repair 2x door frame, repaint and provide new striker plate
- p) Provide 1x new semi-solid timber door with a 600 x 600mm louvre complete with new ironmongery
- q) Sand down existing paneled timber door and provide new ironmongery
- g) Repair existing drainage pipe, making sure there are flowing properly
- h) Replace WC and fittings
- i) Replace WHB, taps and fittings
- j) Remove existing stainless steel urinal trough and make good
- k) Provide new wall tiles to match existing after the removal of the steel urinal trough
- l) Provide new urinal bowl with fittings
- m) Provide 600 x 1000mm high mirror above basin
- n) Provide new soap dispenser
- o) Provide toilet roll holder
- p) Provide new paper towel dispenser and bin

- q) Provide new signage
- r) Provide door closer
- s) Provide door stop



7. GF007 Female Toilet

- a) Remove existing floor finish, repair floor and install new none-slip porcelain tiles
- b) Replace all glass panels to existing steel window to meet the requirements of
SANS10400 – N. Service existing window furniture and OR provide new where necessary
- c) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- a) Replace existing ceiling with fibre cement ceiling board
- b) Provide a coved ceiling cornice
- c) Repair 3x door frame, repaint and provide new striker plate
- d) Provide 1x new semi-solid timber door with a 600 x 600mm louvre complete with new ironmongery
- e) Sand down existing panelled timber door and provide new ironmongery
- f) Repair existing drainage pipe, making sure there are flowing properly
- g) Replace 2x WC and fittings
- h) Provide 2x WHB, taps and fittings
- i) Provide 2x 600 x 1000mm high mirror above basin
- j) Provide new soap dispenser
- k) Provide toilet roll holder
- l) Provide new paper towel dispenser and bin
- m) Provide new signage
- n) Provide door closer
- o) Provide door stop





8. GF008 Record Room/ Office

- a) Plaster and paint existing face brick, plaster to match existing
- b) Provide dry walling partition as per architectural drawings to the underside of the ceiling complete with an aluminium door frame, a semi-solid timber door with a 600 x 600mm louvre and complete with door ironmongery
- c) Provide an aluminium service hatch (1500mm wide)
- d) Provide a 300 x 1500mm wide writing counter for clients
- e) Replace 1x steel window frames with new steel window, size 1245 x 2400mm wide and complete with accessories burglars to opening sections to match existing
- f) Replace all glass panels to existing steel window to meet the requirements of
SANS10400 – N. Service existing window furniture and OR provide new where necessary
- g) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- h) Provide external steel burglar cages to windows, allowing them to be opened to their maximum
- i) Provide 2x sets of window blinds
- j) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- k) Repair existing floor finish, and install new porcelain tiles
- l) Provide tile skirting against masonry walls
- m) Repair door frame, repaint and provide new striker plate
- n) Provide new external horizontal timber door with a 600 x 600mm louvre complete with new ironmongery with a weather bar
- o) Remove existing steel gate and provide new security gate
- p) Provide cabin hook and eye latch
- q) Provide 1x 2000mm wide pinning board



9. GF009 Female Toilet (Outside)

- a) Remove existing wall tiles, repair walls and provide new wall tiles
- b) Remove existing floor finish, repair floor and install new porcelain tiles
- c) Remove existing floor finish, repair floor and install new none-slip porcelain tiles
- d) Replace all glass panels to existing steel window to meet the requirements of
SANS10400 – N. Service existing window furniture and OR provide new where necessary
- e) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- f) Replace existing ceiling with fibre cement ceiling board
- g) Provide a coved ceiling cornice
- h) Repair 3x door frame, repaint and provide new striker plate
- i) Provide 2x new semi-solid timber door with a 600 x 600mm louvre complete with new ironmongery
- j) Provide new external horizontal timber door complete with new ironmongery with a weather bar
- k) Repair existing drainage pipe, making sure there are flowing properly
- l) Replace 2x WC and fittings
- m) Provide 1x WHB, taps and fittings
- n) Provide 1x 600 x 1000mm high mirror above basin
- o) Provide new soap dispenser
- p) Provide toilet roll holder
- q) Provide new paper towel dispenser and bin
- r) Provide new signage
- s) Provide door closer
- t) Provide door stop



10. GF010 Lobby

- a) Clean existing floor
- b) Clean existing face brick



11. GF011 Lobby

- a) Clean existing floor
- b) Clean existing face brick



12. GF012 Male Toilet (Outside)

- a) Remove existing wall tiles, repair walls and provide new wall tiles
- b) Remove existing floor finish, repair floor and install new porcelain tiles
- c) Remove existing floor finish, repair floor and install new porcelain tiles
- d) Remove existing floor finish, repair floor and install new none-slip porcelain tiles
- e) Replace all glass panels to existing steel window to meet the requirements of
SANS10400 – N. Service existing window furniture and OR provide new where necessary
- f) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- g) Replace existing ceiling with fibre cement ceiling board
- h) Provide a coved ceiling cornice
- i) Repair 2x door frame, repaint and provide new striker plate
- j) Provide 1x new semi-solid timber door with a 600 x 600mm louvre complete with new ironmongery
- k) Provide new external horizontal timber door complete with new ironmongery with a weather bar
- l) Repair existing drainage pipe, making sure there are flowing properly
- m) Replace WC and fittings
- n) Provide WHB, taps and fittings
- o) Remove existing stainless steel urinal trough and make good
- p) Provide new urinal bowl with fittings
- q) Provide 600 x 1000mm high mirror above basin
- r) Provide new soap dispenser
- s) Provide toilet roll holder
- t) Provide soap dispenser
- u) Provide new paper towel dispenser and bin
- v) Provide new signage
- w) Provide door closer
- x) Provide door stop





13. GF013 Switch Board/ Office

- a) Plaster and paint existing face brick, plaster to match existing
- b) Provide dry walling partition as per architectural drawings to the underside of the ceiling complete with an aluminium door frame, a semi-solid timber door with a 600 x 600mm louvre and complete with door ironmongery
- c) Provide an aluminium service hatch (1500mm wide)
- d) Replace 1x steel window frames with new steel window, size 1245 x 2400mm wide and complete with accessories burglars to opening sections to match existing
- e) Replace all glass panels to existing steel window to meet the requirements of
SANS10400 – N. Service existing window furniture and OR provide new where necessary
- f) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- g) Provide a sets of window blinds
- h) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- i) Remove existing floor finish, repair floor and install new porcelain tiles
- j) Provide tile skirting against masonry walls
- k) Repair door frame, repaint and provide new striker plate
- l) Provide new external horizontal timber door with a 600 x 600mm louvre complete with new ironmongery with a weather bar
- m) Remove existing steel gate and provide new security gate
- n) Provide door stop
- o) Provide 1x 2000mm wide pinning board





14. GF014 Garage

- a) Repair and prepare existing floor and install new none-slip porcelain tiles
- b) Clean existing face brick
- c) Replace existing ceiling with fibre cement ceiling board
- d) Service existing fire extinguisher, service lock and breakout glass fire cabinet
- e) Provide cabin hook and eye latch



15. GF015 Passage 01

- a) Plaster and paint existing face brick, plaster to match existing
- b) Remove existing floor finish, repair floor and install new porcelain tiles
- c) Provide tile skirting
- d) Sand down and door frames and paint
- e) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- f) Service existing fire extinguisher and provide back board
- g) Provide new fire signage
- h) Provide 3x corner protectors
- i) Provide 1x new semi-solid timber door complete with new ironmongery
- j) Provide 1x new external horizontal timber door complete with new ironmongery
- k) Sand down 2x timber windows and varnish
- l) Repaint burglar to timber window
- m) Remove existing steel gate and provide new security gate



16. GF016 Cubicle 01

- a) Plaster and paint existing face brick, plaster to match existing
- b) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- c) Repair existing floor finish, repair floor and install new porcelain tiles
- d) Provide tile skirting against masonry walls and aluminium skirting to drywall
- e) Demolish existing partitioning, provide new fire rated drywall cubicle to approximately 2400mm high
- f) Provide an aluminium service hatch (900mm wide) with bullet proof glass
- g) Provide a 300 x 1000mm wide writing counter for clients
- h) Sand down and varnish existing timber window between office and passage
- i) Remove existing blinds and provide new window blinds
- j) Provide new semi-solid timber door with and aluminium door frame suitable for drywall, complete with new ironmongery
- k) Provide new granite counter top
- l) Provide door stop

17. GF017 Cubicle 02

- a) Plaster and paint existing face brick, plaster to match existing
- b) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- c) Repair existing floor finish, repair floor and install new porcelain tiles
- d) Provide tile skirting against masonry walls and aluminium skirting to drywall
- e) Demolish existing partitioning, provide new fire rated drywall cubicle to approximately 2400mm high
- f) Provide an aluminium service hatch (900mm wide) with bullet proof glass
- g) Provide a 300 x 1000mm wide writing counter for clients
- h) Provide new semi-solid timber door with and aluminium door frame suitable for drywall, complete with new ironmongery
- i) Provide new granite counter top
- j) Provide door stop

18. GF018 Cubicle 03

- a) Plaster and paint existing face brick, plaster to match existing
- b) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- c) Repair existing floor finish, repair floor and install new porcelain tiles
- d) Provide tile skirting against masonry walls and aluminium skirting to drywall
- e) Demolish existing partitioning, provide new fire rated drywall cubicle to approximately 2400mm high
- f) Provide an aluminium service hatch (900mm wide) with bullet proof glass

- g) Provide a 300 x 1000mm wide writing counter for clients
- h) Provide new semi-solid timber door with and aluminium door frame suitable for drywall, complete with new ironmongery
- i) Provide new granite counter top
- j) Provide door stop

19. GF019 Cubicle 04

- a) Plaster and paint existing face brick, plaster to match existing
- b) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- c) Repair existing floor finish, repair floor and install new porcelain tiles
- d) Provide tile skirting against masonry walls and aluminium skirting to drywall
- e) Demolish existing partitioning, provide new fire rated drywall cubicle to approximately 2400mm high
- f) Provide an aluminium service hatch (900mm wide) with bullet proof glass
- g) Provide a 300 x 1000mm wide writing counter for clients
- h) Provide new semi-solid timber door with and aluminium door frame suitable for drywall, complete with new ironmongery
- i) Provide new granite counter top
- j) Provide door stop



20. GF020 Rates office

- a) Plaster and paint existing face brick, plaster to match existing
- b) Repair imperfection in plaster and paint
- c) Remove timber door, demolish existing doorframe, brick-up, plaster and paint
- d) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- e) Repair existing floor finish, and install new porcelain tiles
- f) Provide tile skirting against masonry walls
- g) Sand down and varnish existing timber window between office and passage
- h) Provide aluminium skirting against dry walls
- i) Repair door frame, repaint and provide new striker plate
- j) Provide new semi-solid timber door with a 600 x 600mm louvre complete with new ironmongery
- k) Provide door stop
- l) Remove existing steel gate and provide new security gate
- m) Service existing fire extinguisher and provide back board
- n) Repair existing drainage pipe, making sure there are flowing properly
- o) Provide WHB, taps and fittings
- p) Provide new soap dispenser
- q) Provide new paper towel dispenser and bin
- r) Provide soap dispenser
- s) Provide 2x 2000mm wide pinning board



21. GF021 Strong Room

- a) Remove existing shelves and provide new timber shelves
- b) Plaster and paint existing face brick, plaster to match existing
- c) Repair existing concrete ceiling and paint
- d) Repair existing floor finish, and install new porcelain tiles
- e) Provide tile skirting against masonry walls
- f) Service existing strong room door, provide an spare key



22. GF022 Kitchen

- a) Plaster and paint existing face brick, plaster to match existing
- b) Replace all glass panels to existing steel window to meet the requirements of SANS10400 – N. Service existing window furniture and OR provide new where necessary
- c) Provide new blinds to existing steel window
- d) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- e) Provide a sets of window blinds
- f) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- g) Repair existing floor finish, and install new porcelain tiles
- h) Provide tile skirting against masonry walls
- i) Repair door frame, repaint and provide new striker plate
- j) Provide new semi-solid timber door with a 600 x 600mm louvre and aluminium door frame suitable for drywall, complete with new ironmongery
- k) Provide door stop
- l) Demolish existing kitchen fittings
- m) Remove existing wall tiles – replace with new 200 x 200mm white wall tiles
- n) Repair existing drainage pipe, making sure there are flowing properly
- o) Provide new kitchen fittings, sink, accessories and kitchen mixer tap
- p) Provide and under-counter water heater
- q) Provide new paper towel dispenser and bin
- r) Provide soap dispenser



23. GF023 Boardroom

- a) Plaster and paint existing face brick, plaster to match existing
- b) Replace all glass panels to existing steel window to meet the requirements of
SANS10400 – N. Service existing window furniture and OR provide new where necessary
- c) Provide new blinds to existing steel window
- d) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- e) Provide 5x sets of window blinds
- f) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- g) Repair existing floor finish, and install new porcelain tiles
- h) Provide tile skirting against masonry walls
- i) Repair door frame, repaint and provide new striker plate
- j) Provide new external horizontal timber door complete with new ironmongery and a weather bar
- k) Remove existing steel gate and provide new security gate
- l) Provide door stop
- m) Provide 2x 2000mm wide pinning board
- n) Provide 1x 2000mm white board
- o) Service existing fire extinguisher and provide back board



24. GF024 Passage 02

- a) Plaster and paint existing face brick, plaster to match existing
- b) Remove timber door, demolish existing doorframe, brick-up, plaster and paint
- c) Remove existing floor finish, repair floor and install new porcelain tiles
- d) Provide tile skirting against masonry walls and aluminium skirting against dry walls
- e) Sand down door frames and paint
- f) Sand down and varnish existing timber window between office and passage
- g) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- h) Provide new fire extinguisher with back board
- i) Provide 2x corner protectors



25. GF025 Store Room

- a) Remove existing timber shelving and provide new timber shelving
- b) Plaster and paint existing face brick, plaster to match existing
- c) Replace all glass panels to existing steel window to meet the requirements of SANS10400 – N. Service existing window furniture and OR provide new where necessary
- d) Provide new blinds to existing steel window
- e) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- f) Provide a sets of window blinds
- g) Provide blinds to aluminium window
- h) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- i) Repair existing floor finish, and install new porcelain tiles

- j) Provide tile skirting against masonry walls
- k) Repair door frame, repaint and provide new striker plate
- l) Provide new semi-solid timber door with a 600 x 600mm louvre and aluminium door frame suitable for drywall, complete with new ironmongery
- m) Provide door stop



26. GF026 Office 06

- a) Plaster and paint existing face brick, plaster to match existing
- b) Replace all glass panels to existing steel window to meet the requirements of SANS10400 – N. Service existing window furniture and OR provide new where necessary
- c) Provide new blinds to existing steel window
- d) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- e) Provide a sets of window blinds
- f) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- g) Remove existing floor finish, repair floor and install new porcelain tiles
- h) Provide tile skirting against masonry walls
- i) Repair door frame, repaint and provide new striker plate
- j) Provide new semi-solid timber door with a 600 x 600mm louvre and aluminium door frame suitable for drywall, complete with new ironmongery
- k) Provide door stop
- l) Provide 1x 2000mm wide pinning board



27. GF027 Office 05

- a) Plaster and paint existing face brick, plaster to match existing
- b) Replace all glass panels to existing steel window to meet the requirements of SANS10400 – N. Service existing window furniture and OR provide new where necessary
- c) Provide new blinds to existing steel window
- d) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- e) Provide a sets of window blinds
- f) Replace existing ceilings with gypsum ceiling tiles 1200 x 600 ceiling tiles together with a recessed shadow-line wall angle
- g) Remove existing floor finish, repair floor and install new porcelain tiles
- h) Provide tile skirting against masonry walls and aluminium skirting to drywall
- i) Provide new drywall to underside of ceiling and prescribe in GF002 Public Area
- j) Provide blinds to aluminium window
- k) Provide new semi-solid timber door with a 600 x 600mm louvre and aluminium door frame suitable for drywall, complete with new ironmongery
- l) Provide door stop
- m) Provide 1x 2000mm wide pinning board



A2: SCOPE OF WORK LIST: MAIN OFFICE BLOCK – EXTERIOR WORKS AND ROOF

- a) Provide 21x exterior fibre cement window sills after installation of new aluminium windows
- b) Remove existing roof covering, provide new purlins, new concealed fix roof sheets
- c) Provide new roof thermal insulation
- d) Provide new fascia boards
- e) Provide new gutters and downpipes
- f) Clean existing face bricks
- g) Repaint existing generator steel palisade fence
- h) Repair plaster and screen wall closer to the generator, and demolish remainder of wall and make good
- i) Repaint flag pole
- j) Provide parking bays (to be discussed with PA)







A3: SCOPE OF WORK LIST: GUARD HOUSE – INTERIOR

28. GF028 Circulation

- a) Plaster and paint existing walls
- b) Repair existing floor and install new non-slip porcelain tiles
- c) Provide tile skirting against masonry walls
- d) Repair door frame and repaint
- e) Provide 1x 2000mm wide pinning board
- f) Provide 1x turnstile with a control button from the security office
- g) Service existing fire extinguisher and provide back board



29. GF029 Guard Room

- a) Replace all glass panels to existing steel window to meet the requirements of SANS10400 – N. Service existing window furniture and OR provide new where necessary
- b) Provide new blinds to existing steel window
- c) Remove existing steel burglars, make good and provide new steel burglars to all opening sections of the windows
- d) Provide new aluminium viewing panel 1125 x 900mm wide
- e) Provide a 300 x 1000mm wide writing counter for visitors and clients
- f) Repair existing floor and install new none-slip porcelain tiles
- g) Provide 200 x 200mm white tile splash back above kitchen fitting up to window height
- h) Provide tile skirting against masonry walls
- i) Repair door frame, repaint and provide new striker plate
- j) Provide new external horizontal timber door complete with new ironmongery with a weather bar
- k) Provide door stop

- l) Provide 1x 1000mm wide pining board
- m) Extend guard room as indicated on drawings, breakout opening and provide lintels
- n) Provide new kitchen fittings, sink, accessories and kitchen mixer tap
- o) Breakout wall install new steel door frame into GF030 WC
- p) Paint new door frame

30. GF030 WC (extension to guard house)

- a) Extend guard room as indicated on drawings
- b) Prepare existing wall to take wall tiles
- c) Provide wall tile
- d) Provide new non-slip porcelain tiles
- e) Provide new aluminium window, size 900 x 600mm wide complete with accessories and aluminium strip burglar to all opening sections
- f) Provide interior fibre cement window sills with DPC under
- g) Provide new door frame, paint and provide new striker plate
- h) Provide new semi-solid timber door complete with new ironmongery
- i) Provide door stop
- j) Provide new WC and fittings
- k) Provide new WHB, taps and fittings
- l) Provide 600 x 1000mm high mirror above basin
- m) Provide new soap dispenser
- n) Provide toilet roll holder
- o) Provide soap dispenser
- p) Provide new paper towel dispenser and bin
- q) Provide new signage
- r) Provide door closer
- s) Provide door stop

A4: SCOPE OF WORK LIST: GUARD HOUSE – EXTERIOR WORKS

- a) Extend guard house as indicated on drawings
- b) Plaster and paint extension, plaster to match existing
- c) Plaster and paint existing walls
- d) Provide 1x exterior fibre cement window sills after installation of new aluminium windows
- e) Remove existing roof covering, provide new purlins, new concealed fix roof sheets and also roof extension
- f) Provide new roof thermal insulation
- g) Provide new fascia boards
- h) Provide new gutters and downpipes



C3.3 CIVIL ENGINEERING SPECIFICATIONS

C3.3.1 STANDARD CIVIL ENGINEERING SPECIFICATIONS

In these specifications and SANS1200 Standardised Specification for Civil Engineering Construction, “Engineer” has the corresponding same meaning as “Employer’s Agent”

The Tenderer is expected to be in possession of a copy of the Standard Specifications. The successful Tenderer will be required to provide a full set of the applicable standard specifications at the commencement of the Contract which is to be kept available on site at all times.

Copies of the “Standardised Specification for Civil Engineering Construction” SANS 1200 are available from the:

South African Bureau of Standards

Private Bag X191

Pretoria, 0001

The following SANS 1200 specifications shall apply for the construction of the Works:

SANS 1 200 A: General

SANS 1 200 AB: Engineer’s Office

SANS 1 200 C: Site Clearance

SANS 1 200 D: Earthworks

SANS 1200 DA: Earthworks (Small Works)

SANS 1 200 DB: Earthworks (Pipe Trenches)

SANS 1 200 DK: Gabions and Pitching

SANS 1 200 DM: Earthworks (Roads, Subgrade)

SANS 1 200 G: Concrete (Small Works)

SANS 1 200 L: Medium pressure pipelines

SANS 1 200 LB: Bedding (Pipes)

SANS 1 200 LE: Stormwater drainage

SANS 1 200 ME: Subbase

SANS 1 200 MF: Base

SANS 1 200 MJ: Segmented paving

SANS 1 200 MK: Kerbing and channelling

SANS 1 200 MM: Ancillary Road works

C3.3.2 AMENDMENTS TO STANDARD CIVIL ENGINEERING SPECIFICATIONS

This part of the project specifications deals with matters relating to the standard specifications. Where reference is made in the standard specifications to the project specifications this part shall also contain the relevant information e.g. the requirements where a choice of materials or construction methods are provided for the standard specifications.

In certain clauses the standard specifications allow a choice to be specified in the project specifications between alternative materials or methods of construction and for additional requirements to be specified to suit a particular contract. Details of such alternatives or additional requirements applicable to this contract are contained in this part of the project specifications. It also contains some additional specifications and amendments of the standard specifications required for this particular contract.

The number of each clause and each payment item in this part of the project specifications consists of the prefix P followed by a number corresponding to the number of the relevant clause or payment item in the standard specifications. The number of a new clause or a new payment item, which does not form part of a clause or a payment item in the standard specifications and is included here, is also prefixed by P followed by a new number. The new numbers follow on the last clause or item number used in the relevant section of the standard specifications.

The following variations to standardized specifications and additional clauses are applicable to this Contract:

PSA	General
PSAB	Employer's Agent's Office
PSC	Site Clearance
PSDB	Earthworks (Pipe Trenches)
PSG	Concrete (Structural)
PSL	Medium Pressure Pipelines
PSLB	Bedding

STATUS

Should any requirement of the project specification conflict with any requirements of the standardised specification listed, the requirements of the project specification shall prevail.

PSA GENERAL

PSA 1 SCOPE

REPLACE THE CONTENTS OF SUB-CLAUSE 1.1, INCLUDING THE NOTES, WITH THE FOLLOWING:

- "1.1 This specification covers requirements, principles and responsibilities of a general nature which are generally applicable to civil engineering construction and building works contracts, as well as the requirements for the Contractor's establishment on the Site."

PSA 2 INTERPRETATIONS

PSA 2.3 DEFINITIONS

IN THE OPENING PHRASE BETWEEN THE WORDS "specification" AND "the following", INSERT THE WORDS "the definitions given in the Conditions of Contract and".

(a) General

ADD THE FOLLOWING DEFINITIONS:

" 'General Conditions' and 'Conditions of Contract': The General Conditions of Contract specified for use with this Contract, together with the Special Conditions of Contract as applicable.

'Specified': As specified in the Standardized Specifications, the Drawings or the Project Specifications. 'Specifications' shall have the corresponding meaning."

(b) Measurement and payment

REPLACE THE DEFINITIONS FOR "Fixed charge", "Time-related charge" AND "Value-related charge" WITH THE FOLLOWING:

" 'Fixed charge': A charge that is not subject to adjustment on account of variations in the value of the Contract Price or the time allowed in the Contract for the completion of the work.

'Time-related charge': A charge, the amount of which varies in accordance with the Time for Completion of the Works, adjusted in accordance with the provisions of the Contract.

'Value-related charge': A charge, the amount of which varies pro rata with the final value of the measured work executed and valued in accordance with the provisions of the Contract.' "

PSA 2.4 ABBREVIATIONS

(a) Abbreviations relating to standard documents

ADD THE FOLLOWING ABBREVIATION:

"CKS: SANS Co-ordinating Specification."

PSA 3 MATERIALS

PSA 3.1 QUALITY

ADD THE FOLLOWING AT THE END OF SUB-CLAUSE 3.1:

PSA 3.1 QUALITY

ADD TO THE FOLLOWING:

“No used or recycled material may be used in the Works unless expressly authorised by the Employer’s Agent.

All materials to be provided under this Contract shall bear the mark of the South African Bureau of Standards wherever such materials are the subject of an SABS standard.

Materials bearing the SABS or BS mark will not be subjected to tests to determine whether they comply with the relevant specifications. The Employer’s Agent may in his discretion require any material not bearing such mark to be tested in accordance with the relevant specifications; should he do so the Contractor shall arrange for such tests to be carried out at the Contractor’s cost by the South African Bureau of Standards or other approved body. Should the tests prove that any material complies with the Specifications the Contractor will be reimbursed the value of the testing body’s account for carrying out the tests required by the Employer’s Agent.”

ADD THE FOLLOWING SUB-CLAUSES TO CLAUSES 3:

"PSA 3.3 ORDERING OF MATERIALS

The quantities set out in the schedule of quantities have been carefully determined from calculations based on data available at the time and should therefore be considered to be approximate quantities only. Before ordering materials of any kind the contractor shall check with the Employer’s Agent whether or not the scope of the work for which the materials are required is likely to change substantially. No liability or responsibility whatsoever shall be attached to the Employer for materials ordered by the contractor except when ordered in accordance with written confirmation issued by the Employer’s Agent.

PSA 3.4 Delay Due to Supply of Materials

The Contractor shall ensure that the work is not delayed, due to the lack of materials on the site of the works, by placing orders with suppliers for the materials required under this contract timeously.

The Contractor shall, by producing copies of written orders or written enquiries for supplies, prove to the satisfaction of the Employer’s Agent that any delay occasioned by non-availability of materials has been caused by the inability of suppliers to supply and not by his own lack of timely ordering or lack of exhaustive enquiry for supplies, before any extensions of the contract time will be allowed due to such delays.”

PSA 4 PLANT

PSA 4.1 SILENCING OF PLANT

REPLACE THE CONTENTS OF SUB-CLAUSE 4.1 WITH THE FOLLOWING:

"The Contractor's attention is drawn to the applicable regulations pertaining to noise and hearing conservation, framed under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) as amended.

The Contractor shall at all times and at his own cost, be responsible for implementing all necessary steps to ensure full compliance with such regulations, including but not restricted to the provision and use of suitable and effective silencing devices for pneumatic tools and other plant which would otherwise cause a noise level in excess of that specified in the said regulations.

Where appropriate, the Contractor shall further, by means of temporary barriers, effectively isolate the source of such noise in order to comply with the said regulations."

PSA 4.2 CONTRACTOR'S OFFICES, STORES AND SERVICES

ADD THE FOLLOWING PARAGRAPH BEFORE THE EXISTING FIRST PARAGRAPH IN SUB-CLAUSE 4.2:

"Neither housing nor shelters are available for the Contractors employees on site. The Contractor shall make his own arrangement to house his employees and transport them to the site.

The Contractor's buildings, sheds and other facilities erected or utilised on the Site for the purposes of the Contract shall be fenced off and shall contain all offices, stores, workshops, testing laboratories, toilet facilities, etc. as may be required by the Contractor. The facilities shall always be kept in a neat and orderly condition.

No personnel may reside on the Site. Only night-watchmen may be on the Site after hours."

DELETE "and first-aid services" IN THE SECOND PARAGRAPH OF SUB-CLAUSE 4.2 AND ADD THE FOLLOWING:

"The Contractor shall provide on the Site and in close proximity to the actual locations where the work is being executed, one toilet per 10 workmen, which toilets shall be effectively screened from public view and their use enforced. Such toilets shall be relocated from time to time as the location of the work being executed changes, so as to ensure that easy access to the toilets is maintained.

The Contractor shall, where applicable, make all necessary arrangements and pay for the removal of night soil."

ADD THE FOLLOWING NEW SUB-CLAUSE 4.3:

"PSA 4.3 Suitability of Constructional Plant

If the Employer's Agent considers that any constructional plant in use is in any way inefficient or is inadequate in capacity to complete the Works properly or on time, he shall have the right to call upon the Contractor to provide such additional plant or equipment as may be required to meet the needs of the works."

PSA 5 CONSTRUCTION

PSA 5.1 SURVEY

PSA 5.1.2 Preservation and replacement of survey beacons and pegs subject to the Land Survey Act

DELETE THE WORDS "in the vicinity of boundaries" IN THE SECOND SENTENCE OF SUB-CLAUSE 5.1.2 AND REPLACE THE WORDS "under the direction of" IN THE SAME SENTENCE WITH "in consultation and liaison with".

ADD THE FOLLOWING AFTER THE SECOND SENTENCE OF SUB-CLAUSE 5.1.2:

"The Contractor and the Employer's Agent shall record on the said list, their concurrence or disagreement (as the case may be) regarding the completeness and accuracy of the details recorded therein."

REPLACE THE THIRD SENTENCE OF SUB-CLAUSE 5.1.2 WITH THE FOLLOWING:

"At the completion of the Contract, the Contractor shall expose all pegs that were listed at the commencement of the construction as being in order and the Contractor shall arrange with a registered Land Surveyor for the checking of the positions of all such pegs and the replacement of those that the Land Surveyor's check reveals have become disturbed or damaged. The Contractor shall, as a precedent to the issue of the Certificate of Completion, provide to the Employer's Agent, a certificate from the registered land surveyor, certifying that all the pegs listed at the commencement of construction in accordance with the provisions of this clause, have been checked and that those found to have been disturbed, damaged or destroyed have been replaced in their correct positions, all in accordance with the provisions of the said Act.

The costs of all checking, replacement and certification as aforesaid shall be entirely for the Contractor's account. This, with the provision always that the Contractor shall not be held liable for the cost of replacement of pegs which:

- (a) cannot reasonably be re-established in their original positions by reason of the finished dimensions of the permanent works, and
- (b) the Contractor can prove beyond reasonable doubt to the satisfaction of the Employer's Agent, were disturbed, damaged or destroyed by others beyond his control."

PSA 5.3 PROTECTION OF EXISTING STRUCTURES

REPLACE "Machinery and Occupational Safety Act, 1983 (Act No 6 of 1983)" WITH "Occupational Health and Safety Act, 1993 (Act No 85 of 1993), as amended," AND INSERT THE FOLLOWING AFTER "(Act No. 27 of 1956)": "as amended".

PSA 5.4 PROTECTION OF OVERHEAD AND UNDERGROUND SERVICES

REPLACE THE HEADING AND THE CONTENTS OF SUB-CLAUSE 5.4 WITH THE FOLLOWING:

"PSA 5.4 LOCATION AND PROTECTION OF EXISTING SERVICES

PSA 5.4.1 Location of existing services

Before commencing with any work in an area, the Contractor shall ascertain the presence and actual position of all services which can reasonably be expected by an experienced and competent contractor to be present on, under, over or within the Site.

Without in any way limiting his liability in terms of the Conditions of Contract in relation to damage to property and interference with services, the Contractor shall, in collaboration with the Employer's Agent, obtain the most up-to-date plans as are available, showing the positions of services existing in the area where he intends to work. Neither the Employer nor the Employer's Agent offers any warranty as to the accuracy or completeness of such plans and because services can often not be reliably located from plans, the Contractor shall ascertain the actual location of services depicted on such plans by means of careful inspection of the Site.

Thereafter, the Contractor shall, by the use of appropriate methodologies, carefully expose the services at such positions as are agreed to by the Employer's Agent, for the purposes of verifying the exact location and position of the services. Where the exposure of existing services involves excavation to expose underground services, the further requirements of sub-clauses 4.4 and 5.1.2.2 of SANS 1200 D (as amended) shall apply.

The aforesaid procedure shall also be followed in respect of services not shown on the plans but which may reasonably be anticipated by an experienced Contractor to be present or potentially present on the site.

All services, the positions of which have been determined as aforesaid at the critical points, shall henceforth be designated as 'known services' and their positions shall be indicated by the Contractor on a separate set of drawings, a copy of which shall be furnished to the Employer's Agent without delay.

As soon as any service which has not been identified and located as described above is encountered on, under, over or within the site, it shall henceforth be deemed to be a known service and the aforesaid provisions pertaining to locating, verifying and recording its position on the balance of the site shall apply. The Contractor shall notify the Employer's Agent immediately when any such service is encountered or discovered on the Site.

Whilst he is in possession of the Site, the Contractor shall be liable for all loss of or damage as may occur to

- (a) known services, anywhere along the entire lengths of their routes, as may reasonably be deduced from the actual locations at which their positions were verified as aforesaid, due cognizance being taken of such deviations in line and level which may reasonably be anticipated, and
- (b) any other service which ought reasonably to have been a known service in accordance with the provisions of this clause,

The Contractor shall also be liable for consequential damage in regard to (a) and (b), whether caused directly by the Contractor's operations or by the lack of proper protection.

No separate payment will be made to the Contractor in respect of his costs of providing, holding available on the Site and utilising the said detecting and testing equipment, nor for any costs incurred in preparing and submitting to the Employer's Agent the Drawings as aforesaid. These costs shall be deemed included in the Contractor's other tendered rates and prices included in the Contract.

Payment to the Contractor in respect of exposing services at the positions agreed by the Employer's Agent and as described above will be made under the payment items (if any) as may be provided for in the respective sections of the specifications pertaining to the type of work involved.

PSA 5.4.2 Protection during construction

The Contractor shall take all reasonable precautions and arrange its operations in such a manner as to prevent damage occurring to all known services during the period which the Contractor has occupation and/or possession of the Site.

Services left exposed shall be suitably protected from damage and in such a manner as will eliminate any danger arising therefrom to the public and/or workmen, all in accordance with the requirements of the prevailing legislation and related regulations.

Unless otherwise instructed by the Employer's Agent, no services shall be left exposed after its exact position has been determined and all excavations carried out for the purpose of exposing underground services shall be promptly backfilled and compacted. In pipes, the requirements of sub-clause 4.1 of SANS 1200 DB should be observed.

PSA 5.4.3 Alterations and repairs to existing services

Unless the contrary is clearly specified in the Contract or ordered by the Employer's Agent, the Contractor shall not carry out alterations to existing services. When any such alterations become necessary, the Contractor shall promptly inform the Employer's Agent, who will either make arrangements for such work to be executed by the owner of the service, or instruct the Contractor to make such arrangements himself.

Should damage occur to any existing services, the Contractor shall immediately inform the Employer's Agent, or when this is not possible, the relevant authority, and obtain instructions as to who should carry out repairs. In urgent cases, the Contractor shall take appropriate steps to minimise damage to and interruption of the service. No repairs of telecommunication cables or electric power lines and cables shall be attempted by the Contractor.

PSA 5.7 SAFETY

REPLACE THE CONTENTS OF SUB-CLAUSE 5.7 WITH THE FOLLOWING:

"Pursuant to the provisions of the Conditions of Contract, and without in any way limiting the Contractor's obligations thereunder, the Contractor shall at his own expense (except only where specific provision (if any) is made in the Contract for the reimbursement to the Contractor in respect of particular items), provide the following:

- (a) Provide to its Employees on the site of the works, all safety materials, clothing and equipment necessary to ensure full compliance with the provisions of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) as amended (hereinafter referred to as the Act) at all times, and shall institute appropriate and effective measures to ensure the proper usage of such safety materials, clothing and equipment at all times;
- (b) Provide, install and maintain all barricades, safety signage and other measures to ensure the safety of workmen and all persons in, on and around the site, as well as the general public;
- (c) Implement on the site of the works, such procedures and systems and keep all records as may be required to ensure compliance with the requirements of the Act at all times;
- (d) Implement all necessary measures so as to ensure compliance with the Act by all subcontractors engaged by the Contractor and their employees engaged on the works;
- (e) Full compliance with all other requirements pertaining to safety as may be specified in the Contract.

The Employer and the Employer's Agent shall be entitled, although not obliged, to make such inspections on the site as they shall deem appropriate, for the purpose of verifying the Contractor's compliance with the requirements of the Act. For this purpose, the Contractor shall grant full access to the site of all parts of the site and shall co-operate fully in such inspections and shall make available for inspection all such documents and records as the Employer's and/or Employer's Agent's representative may reasonably require.

Where any such investigations reveal, or where it comes to the Employer's Agent's attention that the Contractor is in any way in breach of the requirements of the Act or is failing to comply with

the provisions of this clause, the Employer's Agent shall, in accordance with the provisions of Clause 39 of the Conditions of Contract, be entitled to suspend progress on the works or any part thereof until such time as the Contractor has demonstrated to the satisfaction of the Employer's Agent, that such breach has been rectified.

The Contractor shall have no grounds for a claim against the Employer for extension of time and/or additional costs if the progress on the works or any part thereof is suspended by the Employer's Agent in terms of this clause, and the Contractor shall remain fully liable in respect of the payment of penalties for late completion in accordance with the provisions of Clause 5.13(1) of the Conditions of Contract should the Contractor fail to complete the Works on or before the specified due completion date in consequence of the suspension.

Persistent and repeated breach by the Contractor of the requirements of the Act and/or this clause shall constitute grounds for the Employer's Agent to act in terms of Sub-clause 9.2(1)(3)(5) of the Conditions of Contract and for the Employer to cancel the Contract in accordance with the further provisions of the said Clause 9.2 (GCC 2010)."

ADD THE FOLLOWING SUB-CLAUSES TO CLAUSE 5:

PSA 5.9 SITE MEETINGS

The Contractor or his authorised agent will be required to attend regular site meetings, which shall normally be held once a month on dates and at times determined by the Employer's Agent, but in any case whenever reasonably required by the Employer's Agent. Unless otherwise indicated in the Contract or instructed by the Employer's Agent, such meetings shall be held at the Contractor's offices on the site. At such monthly meetings, matters such as general progress on the works, quality of work, problems, claims, payments, and safety shall be discussed, but not matters concerning the day-to-day running of the Contract.

The Contractor shall provide a suitable venue for holding these meetings. The venue shall be furnished with a conference table and chairs that can seat at least 12 people. The room shall be well ventilated and provided with adequate air conditioning. At least two 220 -240V power points shall be provided.

PSA 6 TOLERANCES

ADD THE FOLLOWING SUB-CLAUSE TO CLAUSE 6:

"PSA 6.4 USE OF TOLERANCES

No guarantee is given that the full specified tolerances will be available independently of each other, and the Contractor is cautioned that the liberal or full use of any one or more of the tolerances may deprive him of the full or any use of tolerances relating to other aspects of the work.

Except where the contrary is specified, or when clearly not applicable, all quantities for measurement and payment shall be determined from the 'authorised' dimensions. These are specified dimensions or those shown on the Drawings or, if changed, as finally prescribed by the Employer's Agent, without any allowance for the specified tolerances. Except if otherwise specified, all measurements for determining quantities for payment will be based on the 'authorised' dimensions.

If the work is constructed in accordance with the 'authorised' dimensions plus or minus the tolerances allowed, the calculation of quantities will be based on the 'authorised' dimensions, regardless of the actual dimensions to which the work has been constructed.

When the work is not constructed in accordance with the 'authorised' dimensions plus or minus the tolerances allowed, the Employer's Agent may nevertheless, at his sole discretion, accept the work for payment. In such cases no payment shall be made for quantities of work or material in excess of those calculated for the 'authorised' dimensions, and where the actual dimensions are less than the 'authorised' dimensions minus the tolerance allowed, quantities for payment shall be calculated based on the actual dimensions as constructed."

PSA 7 TESTING

PSA 7.1 PRINCIPLES

PSA 7.1.1 Checking

REPLACE THE LAST SENTENCE WITH THE FOLLOWING:

"The Contractor shall obtain the services of an independent testing laboratory at his own expense (refer to Clause 8 in Portion 1 of the Project Specifications) to carry out the checks prescribed in the various standardized specifications."

PSA 7.1.2 Standard of finished work not to specification

REPLACE THE WORDS "Where the Employer's Agent's checks reveal ..." WITH "Where the checks by the approved laboratory reveal ..."

PSA 7.2 APPROVED LABORATORIES

REPLACE THE CONTENTS OF SUB-CLAUSE 7.2 WITH THE FOLLOWING:

"Unless otherwise specified in the relevant specification or elsewhere in the Project Specification, the following shall be deemed to be approved laboratories in which design work, or testing required in terms of a specification for the purposes of acceptance by the Employer's Agent of the quality of materials used and/or workmanship achieved, may be carried out:

- (a) Any testing laboratory certified by the South African National Accreditation Systems (SANAS) in respect of the nature and type of testing to be undertaken for the purposes of the Contract;
- (b) Any testing laboratory owned, managed or operated by the Employer or the Employer's Agent;
- (c) Any testing laboratory established and operated on the Site by or on behalf of the Employer or the Employer's Agent.
- (d) Any other laboratory that the Employer's Agent approves in his absolute discretion.

PSA 8 MEASUREMENT AND PAYMENT

PSA 8.1 MEASUREMENT

PSA 8.1.1 Method of measurement, all sections of the Schedule

DELETE THE WORDS "and South West Africa".

PSA 8.1.2 Preliminary and General item or section

PSA 8.1.2.1 Contents

REPLACE THE LAST SENTENCE OF SUB-CLAUSE 8.1.2.1(b) WITH THE FOLLOWING:

"Separate items will be scheduled to cover the fixed, value-related and time-related components of the Contractor's preliminary and general costs."

PSA 8.1.2.2 Tendered sums

REPLACE THE CONTENTS OF THIS SUB-CLAUSE WITH THE FOLLOWING:

"Except only where specific provision is made in the Specifications and/or the Schedule of Quantities for separate compensation for any of these items, the Contractor's tendered sums under items PSA 8.3 and PSA 8.4 shall collectively cover all charges for:

- risks, costs and obligations in terms of the Conditions of Contract and of this standardized specification;
- head-office and site overheads and supervision;
- profit and financing costs;
- expenses of a general nature not specifically related to any item or items of the permanent or temporary work;
- providing such facilities on site as may be required by the Contractor for the proper performance of the Contract and for its personnel, including, but without limitation, providing offices, storage facilities, workshops, ablutions, services such as water, electricity, sewage and rubbish disposal, access roads and all other facilities required, as well as for the maintenance and removal on completion of the works of these facilities and cleaning-up of the site of the Contractor's establishment and reinstatement to not less than its original condition, and
- providing the facilities for the Employer's Agent and his staff as specified in the Contract and their removal from the site on completion of the Contract."

PSA 8.2 PAYMENT

PSA 8.2.1 Fixed-charge and value-related items

REPLACE THE CONTENTS OF SUB-CLAUSE 8.2.1 WITH THE FOLLOWING:

PSA 8.2.1.1 Fixed-charge items

"Payment of fixed charges in respect of item 8.3.1 will be made as follows:

- (a) EIGHTY PER CENT (80%) of the sum tendered will be paid when the facilities have been provided and approved;
- (b) The remaining TWENTY PER CENT (20%) will be paid when the works have been completed, the facilities have been removed and the site of the Contractor's establishment has been cleared and cleaned to the satisfaction of the Employer's Agent.

No adjustment will be made to the sum tendered in respect of item 8.3.1 should the value of the works finally executed or the time for completion vary in any way from that specified in the tender.

PSA 8.2.1.2 Value-related items

Payment for the sum tendered under item 8.3.2 will be made in three separate instalments as follows:

- (a) The first instalment, which is 40% of the sum, will be paid when the Contractor has fulfilled all his obligations to date under this specification, the General Conditions of Contract and the Special Conditions of Contract, and when the value of work certified for payment, excluding materials on site and payments for preliminary and general items, is equal to not less than 5% of the total value of the work listed in the Schedule of Quantities.

- (b) The second instalment, which is 40% of the sum, will be made when the amount certified for payment, including retention moneys but excluding this second instalment, exceeds 50% of the tender sum.
- (c) The final payment, which is 20% of the sum, will be made when the works have been certified as completed and the Contractor has fulfilled all his obligations to date under this Specification, the General Conditions of Contract and the Special Conditions of Contract.

Should the value of the measured work finally completed be more or less than the tender sum, the sum tendered under item 8.3.2 will be adjusted up or down in accordance with the provisions of Clause 50 of the Conditions of Contract, and this adjustment will be applied to the third instalment."

PSA 8.2.2 Time-related items

REPLACE THE CONTENTS OF SUB-CLAUSE 8.2.2 WITH THE FOLLOWING:

"Subject to the provisions of sub-clauses 8.2.3 and 8.2.4, payment under item 8.4.1 (time-related item) will be made monthly in equal amounts, calculated by dividing the sum tendered for the item by the tendered Contract period in months, provided always that the total of the monthly amounts so paid for the item is not out of proportion to the value of the progress of the Works as a whole."

PSA 8.5 SUMS STATED PROVISIONALLY BY THE EMPLOYER'S AGENT

REPLACE THE CONTENTS OF SUB-CLAUSE 8.5 WITH THE FOLLOWING:

PSA 8.5.1 Works executed by the Contractor Unit: Prov Sum

The Contractor will be reimbursed in accordance with the Provisional Sums (if any) allowed in the Schedule of Quantities, in the amounts determined in accordance with the provisions of Clause 6.6 of the General Conditions of Contract for Construction Works."

PSA 8.6 PRIME COST ITEMS

REPLACE SUB-CLAUSE 8.6 WITH THE FOLLOWING:

PSA 8.6 PRIME COST SUMS

(a) Description of item to which Prime Cost Sum applies Unit: PC Sum

(b) Charge required by Contractor on subitem (a) above Unit: %

Subitems (a) and (b) will be provided in the Schedule of Quantities for each different item to which a Prime Cost Sum applies.

The Contractor shall be reimbursed under subitem(s) (a) in substitution of the respective Prime Cost Sums included in the Contract, the actual price(s) paid or payable by him in respect of the goods, materials or services supplied, but excluding any charges for the Contractor's labour, profit, carriage, establishment or other charges related to such goods, services or materials.

The Contractor shall be paid under subitem (b), the respective percentage, as stated by the Contractor in his tender, of the amount certified by the Employer's Agent for payment under the related subitem (a). The percentages tendered by the Contractor for each respective subitem (b) included in the Schedule of Quantities shall be deemed to be in full and final compensation to the Contractor in respect of any charge by the Contractor for labour, carriage profit, establishment and for any other charges related to the goods, services or materials supplied under the related subitem (a).

If the Contractor shall have omitted within his tender to insert a tendered percentage under subitem (b), or tendered a zero percentage, the Contractor's tendered rate for subitem (b) shall

be deemed to be zero and the Contractor shall not be entitled to any payment under subitem (b).

Note in connection with additional tests required by the Employer's Agent:

When a PC sum is included in the Schedule of Quantities for additional tests required by the Employer's Agent, the Contractor shall be responsible for both the cost of normal testing as described in the Standard Specifications and for the cost of any additional test that indicates that the specifications have not been complied with."

PSA 8.7 DAYWORK

REPLACE THE CONTENTS OF SUB-CLAUSE 8.7 WITH THE FOLLOWING:

"Measurement and payment shall be in accordance with the provisions of Sub-clause 6.5 of the Conditions of Contract for Construction Works.

PSA 8.9 COMPLIANCE WITH OHS ACT AND REGULATIONS

(INCLUDING THE CONSTRUCTION REGULATIONS 2003) Unit: sum

The tendered sum shall include full compensation to the Contractor for compliance with all the requirements of the OHS Act and Regulations (including the Construction Regulations 2003) at all times for the full duration of the Contract, as described in the project specifications and Employers' OHS policy. The successful tenderer shall provide the Employer's Agent with a complete breakdown of this tendered sum.

This sum will be paid to the Contractor in equal monthly amounts subject to proper/substantial compliance."

PSAB EMPLOYER'S AGENT'S OFFICE

PSAB 3 MATERIALS

PSAB 3.1 NAMEBOARDS

REPLACE THE FIRST SENTENCE OF SUB-CLAUSE 3.1 OF SANS 1200AB WITH THE FOLLOWING :

"The Contractor shall supply and erect at locations approved by the Employer's Agent, 1 name-boards, which, unless otherwise specified in the Contract, shall comply with the recommendations for the standard board of the South African Association of Consulting Employer's Agents, with regards to size, painting, decorating and detail, and the requirements described hereunder."

PSAB 4 PLANT

REPLACE SUB-CLAUSE 4.1 OF SANS 1200AB WITH THE FOLLOWING:

"PSAB 4.1 CELLPHONE

The Contractor shall pay for the cellphone costs for the exclusive use of the Employer's Agent and his staff. The Contractor shall pay the cellphone costs pro rata monthly or as a lumpsum for the contract."

ADD THE FOLLOWING NEW SUB-CLAUSES TO CLAUSE 4 OF SANS 1200AB :

PSAB 4.4 SURVEY EQUIPMENT

The Contractor shall provide and make available on site for the exclusive use of the Employer's Agent and his staff, the survey equipment and labour listed below:

- (c) Automatic level (including staff and tripod stand)
- (d) 5m steel measuring tape
- (e) 30m plastic measuring tape
- (f) 2 survey assistants
- (g) 3 ranging rods
- (h) 4kg hammer

All survey equipment provided by the Contractor shall be in good condition, properly calibrated and fit for the purpose.

In addition to survey equipment provided by the Contractor for the exclusive use of the Employer's Agent and his staff, the Contractor shall make available for use by the Employer's Agent any further survey equipment when such is reasonably required by the Employer's Agent and his staff for the purposes of the Contract.

PSAB 5 CONSTRUCTION

REPLACE THE CONTENTS OF SUB-CLAUSE 5.4 OF SANS 1200AB WITH THE FOLLOWING :

"PSAB 5.4 Cellular Telephone Costs

The Contractor shall ensure that all cellular phone costs are promptly paid.."

PSAB 5.8 SURVEY EQUIPMENT

All survey equipment provided by the Contractor shall be kept fully serviceable at all times by the Contractor. The Contractor shall have any defective equipment repaired or replaced at its own cost within 12 hours after notification by the Employer's Agent's staff.

Where required by the Employer's Agent, the Contractor shall at its own cost, promptly arrange for the re-calibration of survey equipment provided.

PSC SITE CLEARANCE

PSC 3 MATERIALS

PSC 3.1 DISPOSAL OF MATERIAL

ADD THE FOLLOWING:

"The Contractor shall obtain his own dumping sites for the disposal of material and all transport costs shall be included in the rates tendered for site clearance."

PSC 5 CONSTRUCTION

PSC 5.1 AREAS TO BE CLEARED AND GRUBBED

ADD THE FOLLOWING:

"The following areas are to be cleared and grubbed:

1. The Contractor's site.
2. Septic tank and Soakaway located areas
3. The pipeline routes.

PSC 5.2 CUTTING OF TREES

PSC 5.2.3 Preservation of trees

PSC 5.2.3.2 Individual trees

REPLACE THE LAST SENTENCE WITH THE FOLLOWING:

"An amount of not less than R500.00 (Five Hundred Rands) will be deducted from moneys due to the Contractor as a penalty for every tree that is damaged or removed unnecessarily, and as further guided by prevailing legislation."

PSC 5.5 RECLEARING OF VEGETATION

ADD THE FOLLOWING:

"When areas have to be re-cleared on the written instructions of the Employer's Agent, such re-clearing shall be carried out at the Contractor's own cost and the Contractor is therefore advised not to clear the areas too soon."

PSC 5.7 Landscape Preservation and Conservation of Flora

ADD THE FOLLOWING:

"A penalty of R1000-00 (One Thousand Rands) per hectare of general habitat and flora damaged by the Contractor outside the designated areas shall be levied".

PSC 8 MEASUREMENT AND PAYMENT

PSC 8.2 PAYMENT

PSC 8.2.1 Clear and grub

REPLACE THE FIRST LINE WITH THE FOLLOWING:

"The area designated by the Employer's Agent to be cleared and grubbed will be measured in square metre to the nearest square metre or, "

ADD THE FOLLOWING ITEMS IN SUB-CLAUSE 8.2:

PSC 8.2.11 Take down and re-erect existing fences Unit : m

The rate shall cover the cost of taking down the fences, coiling wire, sorting, stacking and guarding all materials, the cost of loading, transporting and off-loading such materials, the cost of re-erecting the fence in such position as indicated by the Employer's Agent using the dismantled material, the cost of temporary bracing of the fencing sections not taken down and the cost of appurtenant materials that may be required to restore the fence to its original condition before dismantling.

PSC 8.2.12 Remove topsoil to spoil site furnished by Contractor Unit : m³

The tendered rate shall include full compensation for removing topsoil to a depth of 150 mm and for loading and transporting the material to spoil sites furnished by the Contractor."

PSDB EARTHWORKS (PIPE TRENCHES)

PSDB 3 MATERIALS

PSDB 3.5 BACKFILL MATERIALS

ADD THE FOLLOWING PARAGRAPHS TO SUB-CLAUSE 3.5 :

"(c) Cement-stabilised backfilling

Backfilling shall, where directed by the Employer's Agent, be stabilised with 5% cement. The aggregate shall consist of approved soil or gravel containing stones not bigger than 38 mm and with a plasticity index not exceeding 10.

The soil or gravel shall be mixed with 5% cement and shall be compacted in layers of 100 mm thick to 90% of modified AASHTO density.

(d) Soilcrete backfilling

The aggregate for soilcrete shall be mixed with 5% cement and shall consist of approved soil or gravel containing stones not bigger than 38 mm and with a plasticity index not exceeding 10.

The soil or gravel shall be mixed in a concrete mixer with the cement and enough water to acquire a consistency that allows the mixture to be placed with vibrators to fill all voids between the pipe and the sides of the trench. Shuttering shall be used where necessary."

PSDB 3.7 SELECTION

REPLACE THE WORDS "if he so wishes" IN THE FIRST LINE OF THE SECOND PARAGRAPH WITH THE WORDS "at his own cost".

PSDB 5 CONSTRUCTION

PSDB 5.4 EXCAVATION

ADD THE FOLLOWING:

"Except where otherwise specified, trenches shall be of such a depth that the minimum cover over the pipes shall be 750 mm except at road-crossings where the minimum cover shall be 1 000 mm."

PSDB 5.5 TRENCH BOTTOM

ADD THE FOLLOWING:

"No compensation shall be made for overbreak and the backfilling thereof except in hard rock conditions where a maximum of 300mm over break under the designated trench bottom shall be allowed for. No over break shall be allowed for the sides of the trench excavation.

Where the bottom of the trench is in water logged conditions, the Employer's Agent may instruct the Contractor to lay a 200mm thick layer of 19mm to 6,7mm graded stone under the pipes".

PSDB 5.6 BACKFILL

ADD THE FOLLOWING:

"No pipe joint or pipefitting shall be covered by either the blanket fill or main fill prior to the successful completion of the visual inspection of the relevant section of the pipeline".

PSDB 5.6.3 Disposal of soft excavation material

REPLACE THE WORDS "unless otherwise required in the project specification." AT THE END OF SUB-CLAUSE 5.6.3 WITH:

"or to spoil in accordance with the requirements of Sub-clause PSD 5.2.2.3, as instructed by the Employer's Agent."

ADD THE FOLLOWING NEW SUB-CLAUSES IN CLAUSE 5:

“PSDB 5.11 REMOVAL OF EXISTING PIPES

- PSDB 5.11.1 Where shown on the drawings or where so instructed by the Employer's Agent, the Contractor shall excavate, expose and remove from the ground, existing water pipelines.
- PSDB 5.11.2 If so instructed by the Employer's Agent, the Contractor shall, before commencing with the excavation of the pipeline, expose the pipeline to be removed by means of careful hand excavation at positions agreed with the Employer's Agent, in accordance with the requirements of Sub-clause PSA 5.4.1 of Portion 1 of the Project Specifications. Measurement and payment for locating the exact positions of the pipelines where required by the Employer's Agent, shall be made in accordance with and under Item PSD 8.3.8.1.
- PSDB 5.11.3 Thereafter, the existing pipelines to be removed shall be carefully opened up by machine excavation to a depth of not more than 300 mm above the pipes after which the whole pipeline shall be fully exposed by means of careful hand excavation. The excavation width shall comply with Sub-clause 5.2.
- PSDB 5.11.4 The pipes and all specials encountered (eg. bends, valves, valve box covers and the like) shall be removed from the trench in a manner as to avoid causing damage and as approved by the Employer's Agent, cleaned sufficiently as to allow inspection of the pipes and specials by the Employer's Agent and stacked in such a manner as will facilitate the inspection of each pipe and special by the Employer's Agent.
- PSDB 5.11.5 Pipes and specials that are declared by the Employer's Agent as suitable for re-use shall be transported to the Employer's storeyard located at the Airport, where they shall off-loaded and neatly stacked to the satisfaction of the Employer's Agent. The Contractor shall be responsible for obtaining a written receipt of all pipes so delivered to the Employer's storeyard.
- PSDB 5.11.6 Pipes and specials which are declared by the Employer's Agent as unsuitable for re-use shall be transported to a spoil site and covered with spoil material to a depth of not less than 300 mm.
- PSDB 5.11.7 After removal of the pipelines, the trenches shall be backfilled using the excavated material and compacted to 90% Mod AASHTO density. The provisions of sub-clauses 5.6. and 5.7 shall apply.

PSDB 8 MEASUREMENT AND PAYMENT

PSDB 8.3 SCHEDULED ITEMS

PSDB 8.3.2 Excavation :

- (i) Excavate in all materials, for trenches, backfill compact and dispose of surplus material

*REPLACE “of 1,0 m” IN THE FIRST SENTENCE OF 8.3.2(a) WITH :
“as specified in the Schedule of Quantities”.*

- (ii) Extra over item (a) above for:

ADD THE FOLLOWING AT THE END OF THE EXISTING SUB-ITEM 2:

“No payments will be made under sub-items (1) and (2) in respect of any materials measured and paid for under sub-item 3 below.”

AND ADD THE FOLLOWING NEW SUB-ITEMS IN 8.3.2(b) :

” Hand excavation where ordered by the Employer's Agent in :

- (a) Soft materialUnit : m³*

(b) Intermediate materialUnit : m³

(c) Hard materialUnit : m³

The unit of measurement shall be the cubic metre of material, measured in place according to the authorised dimensions, which was excavated by hand on the specific prior written instructions of the Employer's Agent ; provided always that the Employer's Agent's said instruction shall have stated that measurement and payment for such hand excavation will be in accordance with this item.

The tendered rate shall include full compensation for the additional cost, effort and time resulting from excavating in the respective materials using hand methods only.

The Employer's Agent shall not be obliged to authorise payment under this item in respect of any hand excavation carried out (whether ordered in writing or otherwise), which hand excavation was in any case necessary to achieve compliance by the Contractor of his obligations under the Contract to :

- (i) utilise construction appropriate to the nature of the specific parts of the Works and/or
- (ii) protect existing structures and/or services ; and/or
- (iii) comply with all prevailing legislation and regulations.

(iii) Backfill stabilised with 5% cement where directed

by the Employer's AgentUnit : m³

The unit of measurement shall be the cubic metre of backfill material, measured in place after compaction according to the authorised dimensions, which was stabilised on the Employer's Agent's instructions in accordance with Sub-clause PSDB 3.5(c).

The tendered rate shall include full compensation for supplying the cement and for selecting, mixing, backfilling and compacting the stabilised material to 90% of modified AASHTO density.

(iv) Soilcrete backfill where directed by the Employer's Agent Unit: m³

The unit of measurement shall be the cubic metre of soilcrete placed on the Employer's Agent's instructions in accordance with Sub-clause PSDB 3.5(d), measured in place according to the authorised dimensions.

The tendered rate shall include full compensation for supplying the cement and for selecting, mixing and placing the soilcrete as well as for the cost of shuttering if required."

PSL MEDIUM-PRESSURE PIPELINES

PSL 3 MATERIAL

PSL 3.1 GENERAL

ADD THE FOLLOWING PARAGRAPHS:

"Each type of pipe delivered to the Site shall have a standard length corresponding with the standard lengths offered by the pipe manufacturer in his catalogue, with a maximum permissible variation in length of $\pm 2\%$.

A pipe that is a shorter or longer than the defined standard will be rejected by the Employer's Agent, except when such non-standard lengths are required in terms of the Contract and have been specifically manufactured or cut as such by the pipe manufacturer or supplier."

PSL 3.4 STEEL PIPES, FITTINGS AND SPECIALS

PSL 3.4.2 Pipes of nominal bore up to 150 mm

ADD THE FOLLOWING:

"The pipes shall be 'normalised' or seamless steel pipes and shall be used with malleable cast-iron fittings complying with the requirements of SANS 509."

PSL 3.4.3 Pipes of nominal bore up to 150mm

ADD THE FOLLOWING:

All steel pipes shall be flanged heavy-duty mild steel pipes. Flanges shall be welded on prior to galvanising. No screwed-on flanges will be allowed, nor will welding to galvanised pipes be allowed.

All bolts and nuts to be used for connecting flanges, joints, fittings, specials, etc. shall be manufactured from stainless steel.

The length of each bolt shall be such that, after the bolt has been tightened, the end of the bolt projects not less than 2 threads and not more than 4 threads above the nut.

PSL 3.7 OTHER TYPES OF PIPES

PSL 3.7.2 Polyethylene pipes

REPLACE THE CONTENTS OF THIS SUB-CLAUSE WITH THE FOLLOWING:

"Polyethylene pipes shall be HDPE type IV pipes with compression fittings and shall comply with SANS 533 Part II."

PSL 3.8.2 Flexible Couplings

ADD THE FOLLOWING:

"Where detachable flexible couplings or flange adaptors are used these shall be of the Viking-Johnson type except where otherwise specified or approved by the Employer's Agent.

Detachables flexible couplings for nominal pipe diameters up to 600mm shall be suitable for an angular deflection of 5 degrees without leakage. Flange adaptors shall be suitable for half the angular deflection stated."

PSL 3.8.3 Flanged and Accessories

ADD THE FOLLOWING:

"Flanges to other standards shall be used only if approved by the Employer's Agent and provided that any differences do not effect mating dimensions."

PSL 3.9 CORROSION PROTECTION

PSL 3.9.2 Steel pipes

PSL 3.9.2.1 Steel pipes of nominal bore up to 150 mm

ADD THE FOLLOWING:

"Steel pipes shall be galvanised where shown on the Drawings."

PSL 3.9.2.2 Steel pipes of nominal bore over 150 mm

ADD THE FOLLOWING:

"Steel pipes shall receive heavy duty galvanising, unless otherwise stated on the drawings".

PSL 3.9.6 Corrosive soil

ADD THE FOLLOWING:

"Where shown on the Drawings, steel pipes in contact with corrosive soil shall be wrapped with Densopol Tape 60 or an equivalent approved product, strictly in accordance with the manufacturer's instructions, prior to the commencement of the backfilling.

All flanges and other fittings in contact with natural ground shall be covered with Denso putty prior to the commencement of the backfilling.

All bolts and nuts, which are to be painted, shall be covered with Genstick L prior to the commencement of the painting.

All valves shall be epoxy coated internally as well as externally with Copon KZIR88.

PSL 3.10 VALVES

REPLACE THE CONTENTS OF THIS SUB-CLAUSE WITH THE FOLLOWING:

"Sluice valves shall be of approved pattern and finish. They shall be of the non-rising spindle type, clockwise closing with hand wheel and shall be Class 16 valves complying with SANS 664.

Butterfly valves shall be of approved pattern and finish. They shall be standard 16 bar valves, gearbox operated, conforming to BS-5155: 1984, and fitted between flanges specified elsewhere.

Air valves shall be of approved pattern and finish. They shall be standard 16 bar double orifice air release and vacuum break valves, with anti-shock orifice mechanism, and fitted to flanges specified elsewhere.

All 80mm nominal bore and larger valves to be flanged valves, with all flanges being drilled in accordance with SANS 1123 Table 10.

All smaller sized valves (less than 80mm nominal bore) to be female threaded valves."

PSL 5 CONSTRUCTION

ADD THE FOLLOWING:

PSL 5.1.4.1: Depth and cover

ADD THE FOLLOWING:

"The minimum cover to pipelines shall be 1000 mm, unless otherwise shown on drawings."

PSL 5.6 VALVE AND HYDRANT CHAMBERS

PSL 5.6.1 General

REPLACE THE WORDS "drawing L-1" IN THE SECOND LINE WITH "the Drawings".

PSL 5.6.2 Construction of chambers

REPLACE THE WORDS "drawing L-1, L-2 and L-3" IN THE FOURTH LINE WITH "the Drawings".

ADD THE FOLLOWING SUB-CLAUSES:

PSL 5.9 Lifting and replacing of existing pipe

ADD THE FOLLOWING:

"Where new pipes, valves or specials are to be connected to, or inserted into existing mains, the Contractor shall excavate back along the existing main only as far as is necessary in order to complete the connection satisfactorily - he shall ensure that suitable material is carefully placed and properly compacted beneath all existing and new work so that the pipes, specials, etc. are properly bedded on sound material.

Where necessary, the Contractor shall cut the existing pipes so that new valves and/or specials can be installed. Care shall be taken that the lengths cut from existing pipes, etc. are accurate so as to ensure a proper joint when the new material is installed. Similarly, where specials and/or valves are removed from existing pipes, closure pieces shall be accurately cut to length and the gaps properly closed.

Whereas nominal pipe/fitting sizes are specified and/or shown on the drawing, it shall be the responsibility of the Contractor to confirm the accurate sizes of the pipes involved and to supply the new materials according to these measured sizes."

ADD THE FOLLOWING CLAUSES:

"PSL 5.11 MARKER BLOCKS

Type 1 and Type 2 marker blocks shall be manufactured and positioned as shown on the Drawings.

PSL 5.12 PIPELINE ROUTE MARKERS

Route markers for the various water pipelines shall be erected in the positions and shall be manufactured according to the details shown on the Drawings."

PSL 7 TESTING

PSL 7.1 GENERAL

REPLACE THE FIRST SENTENCE WITH:

Pipes shall be tested in convenient lengths not exceeding 1000 m. Longer lengths require the Employer's Agent's approval.

AND ADD:

The Contractor must include in his rates for all equipment, thrust block arrangements and overhead costs necessary for testing.

PSL 7.3 STANDARD HYDRAULIC PIPE TEST

PSL 7.3.1 Test pressure and time of test

PSL 7.3.1.2 Testing pressure shall be 1,5 times Working Pressure as scheduled or labelled by the manufacturer.

Hydraulic pipe tests shall be carried out in the presence of both the Employer's Agent and the Contractor, and for each test a form shall be completed and certified by both parties, as a record of the test.

PSL 8 MEASUREMENT AND PAYMENT

PSL 8.2 SCHEDULED ITEMS

PSL 8.2.1 Supply, Lay and Bed pipes complete with Couplings..... Unit : m

ADD THE FOLLOWING:

The price tendered and paid for pipelines of various diameters and types shall include for the supply and installation of all fittings, joints and specials not specifically scheduled.

Payments of pipes laid shall be affected as follows:

- a) 90% of the laid rate on successful completion of laying, cutting, jointing and flushing of the line plus selected fill.
- b) 100% on successful completion of the hydraulic testing of the line.

Pipe work is to be bedded on a Class C bed as per drawing SANS 1200 LB.

PSL 8.2.11 Anchor blocks/Thrust blocks and pedestals

INSERT "concrete" BEFORE "and" IN THE LAST LINE OF THE LAST PARAGRAPH.

ADD THE FOLLOWING:

"The tendered rates shall also include the wrapping of uPVC pipes and fittings with Densopol 80 or a similar approved material where the pipes and fittings come into contact with concrete."

PSLB BEDDING (PIPES)

PSLB 3 MATERIALS

PSLB 3.1 SELECTED GRANULAR MATERIAL

REPLACE THE CONTENTS OF THIS SUB-CLAUSE WITH THE FOLLOWING:

"Selected granular material shall have a PI not exceeding 6 and shall be free from sharp-edged particles exceeding 19 mm."

PSLB 3.2 SELECTED FILL MATERIAL

ADD THE FOLLOWING:

"Selected fill material used for bedding shall be stabilised with 5% cement as specified under Sub-clause PSDB 3.5(c)."

PSLB 3.3 BEDDING

ADD THE FOLLOWING:

"uPVC and HDPE pipes are deemed to be flexible pipes for the purposes of this sub-clause."

PSLB 3.4 SELECTION

PSLB 3.4.1 Suitable material available from trench excavation

REPLACE THE WORDS "(but is not required)" IN THE FIFTH LINE WITH THE WORDS "(at his own cost)".

PSLB 8 MEASUREMENT AND PAYMENT

PSLB 8.1 PRINCIPLES

PSLB 8.1.5 Disposal of displaced material

REPLACE THE CONTENTS OF THIS SUB-CLAUSE WITH THE FOLLOWING:

"Material displaced by the pipeline and by imported material from sources other than trench excavation, shall be disposed of at an approved site furnished by the Contractor. No haulage is payable for such material."

PSLB 8.1.6 Free-haul

DELETE THE WORDS "of 0,5 km" IN THE FIRST LINE OF THIS SUB-CLAUSE.

PSLB 8.2 SCHEDULED ITEMS

ADD THE FOLLOWING ITEM:

"PSLB 8.2.6 Extra over items 8.2.1 and 8.2.2 for bedding stabilised

with 5% cementUnit : m³

C3.4 EPWP AND LIC SPECIFICATIONS

SJ: LABOUR INTENSIVE SPECIFICATION

The Generic Labour-intensive specification below is the same as SANS 1921-5, Construction and management requirement for works contracts- Part 5: Earthworks activities which are to be performed by hand and should be included in the scope of works without amendment or modification as set out below. Reference should also be made to EPWP Infrastructure Guidelines 3rd Edition June 2015 and is obtainable from the Department of Public Works website ([www://publicworks.gov.za/under Consultants Guidelines](http://www://publicworks.gov.za/under%20Consultants%20Guidelines))

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SJ 01 SCOPE

This specification establishes general requirements for activities which are to be executed by hand involving the following:

- trenches having a depth of less than 1.5 metres;
- pipe laying;
- bricklaying;
- plastering;
- carpentry;
- paving; and
- borehole drilling, testing, electrifying, equipping; and
- Other relevant Works amenable to LIC and EPWP.

SJ 02 PRECEDENCE

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this specification shall prevail.

SJ 03 HAND EXCAVATEABLE MATERIAL

Hand excavateable material is material:

a) granular materials:

- i) whose consistency when profiled may in terms of table 1 be classified as very loose, loose, medium dense, or dense; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm;

b) cohesive materials:

- i) whose consistency when profiled may in terms of table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
- ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

- Note:
- 1) A boulder, a cobble and gravel is material with a particle size greater than 200mm, between 60 and 200mm.
 - 2) A dynamic cone penetrometer is an instrument used to measure the insitu shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle of 60° with reselect to the horizontal) into the material being used.

Table SJ1: Consistency of materials when profiled

GRANULAR MATERIALS		COHESIVE MATERIALS	
CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION
Very loose	Crumbles very easily when scraped with a geological pick.	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle.
Loose	Small resistance to penetration by sharp end of a geological pick.	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30-40 mm; can be moulded by fingers with some pressure.
Medium dense	Considerable resistance to penetration by sharp end of a geological pick.	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in upto 10 mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade.
Dense	Very high resistance to penetration by the sharp end of geological pick; requires many blows for excavation.	Stiff	Can be indented by thumb-nail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers.
Very dense	High resistance to repeated blows of a geological pick.	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of a geological pick point.

SJ 04 TRENCH EXCAVATION

All hand excavateable material in trenches having a depth of less than 1,5 metres shall be excavated by hand.

SJ 05 COMPACTION OF BACKFILLING TO TRENCHES (areas not subject to traffic)

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100mm. Each layer shall be compacted using hand stampers

- a) to 90% Proctor density;
- b) such that in excess of 5 blows of a dynamic cone penetrometer (DCP) is required to penetrate 100 mm of the backfill, provided that backfill does not comprise more than 10% gravel of size less than 10mm and contains no isolated boulders, or
- c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

SJ 06 EXCAVATION

All hand excavateable material including topsoil classified as hand excavateable shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand.

The excavation of any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

SJ 07 CLEARING AND GRUBBING

Grass and small bushes shall be cleared by hand.

SJ 08 SHAPING

All shaping shall be undertaken by hand.

SJ 09 LOADING

All loading shall be done by hand, regardless of the method of haulage.

SJ 10 HAUL

Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150 m.

SJ 11 OFFLOADING

All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilised for haulage

SJ 12 SPREADING

All material shall be spread by hand.

SJ 13 COMPACTION

Small areas may be compacted by hand provided that the specified compaction is achieved.

SJ 14 GRASSING

All grassing shall be undertaken by sprigging, sodding, or seeding by hand.

SJ 15 STONE PITCHING AND RUBBLE CONCRETE MASONRY

All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must to be collected, loaded, off loaded and placed by hand.

Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Grout shall be mixed and placed by hand.

SJ 16 MANUFACTURED ELEMENTS

Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. In addition the items shall be large enough so that four workers can conveniently and simultaneously acquire a proper hand hold on them.

C3.5 OHS SPECIFICATIONS

HS1: OHS GENERAL

HS1.1 TENDER DOCUMENT

This document is the pre-contract Health and Safety Specification which must be used by the Principal Contractor and Sub Contractors appointed by the Principal Contractor to compile Health and Safety Plans for this project and forms part of the tender documentation.

The Principal Contractor and Sub Contractors' particular attention is drawn to this specification whereby

"Upon award of the contract, the contractor is to assume and adopt the function and duties of the Principal Contractor as set out in the Construction Regulations 2014 No. 10113 promulgated 07 February 2018."

The health and safety specifications outlined herein must be taken into account and due allowance made within the pricing of appropriate items contained within the specification. Where the tenderer is of the opinion that a requirement is missing or is not adequately specified then this shall be drawn to the Client attention during the tender period. In the absence of any direction to the contrary, the tenderer shall as part of the tender submission, set out the details of such discrepancy together with the costs associated therewith, separately identified and included within the tender figure.

HS1.2 PRINCIPAL CONTRACTOR

The successful tenderer will on signing of the contract for:-

Project Name: Refurbishment of Waterval Regional Offices

be required to fulfil the function and duties of the Principal Contractor as set out in the Construction Regulations 2014 No. 10113 promulgated 07 February 2018.

HS1.3 START OF CONSTRUCTION PHASE

The construction phase shall not commence until the Principal Contractor's Health and Safety Plan was considered and approved by the Client and Design Team. The Client shall discuss and negotiate with the Principal Contractor the contents of the Health and Safety Plan submitted by the Principal Contractor before finally approving it for implementation.

The construction phase shall not commence until written permission is received from the Client. In this respect the Client may rely on the advice of the Technical Team as to the adequacy and comprehensiveness of the Plan offered by the Principal Contractor.

In preparing their detailed Health and Safety Plan based on the relevant sections of this Health and safety Specifications supplied to them by the Client, contractors must allow for the adoption of safe working procedures and co-ordinate and rationalize activities to avoid controllable hazards arising due to clashes of activities.

HS1.4 SUB-CONTRACTORS, SUPPLIERS & DESIGNERS

The Principal Contractor shall ensure that all direct appointments in connection with this project include provisions for the compliance of his sub-contractors, suppliers and designers, etc, with the relevant provision of the Occupational Health and Safety Act (Act 85 of 1993) and it's Regulations, in particular the Construction Regulations 2014 No. 10113 promulgated 07 February 2018.

The Principal Contractor shall together with all his appointees, liaison with the Client as required under the Regulations and agrees procedures for the transfer of relevant Information in respect of designs and in connection with the preparation of the Health and Safety File.

HS1.5 ADVICE

The tenderer shall, as part of the tender submission, indicate where advice will or may be required of the Client in respect of the competence of the tenderer's designers and the adequacy of resources allocated or to be allocated by them.

HS1.6 UNDERTAKING BY PRINCIPAL CONTRACTOR AND SUB-CONTRACTORS APPOINTED BY THE PRINCIPAL CONTRACTOR.

The Principal Contractor as well as Sub-Contractors appointed by him / her shall undertake in writing to ensure that the provisions of the Occupational Health and Safety Act (Act 85 of 1993) and its Regulations, in particular the Construction Regulation of 2014 No. 10113 promulgated 07 February 2018 and any amendments or re-enactments thereto are complied with.

The attached Occupational Health and Safety provisions undertaking form for the Principal Contractor shall be completed and signed by the Project Manager of the company / firm awarded the tender.

Client's Occupational Health and Safety Agent: To be appointed

HS1.7 INFORMATION REQUIREMENTS

The contractor must provide the following information.

HS1.7.1 GENERAL

- The Principal Contractor / Sub-Contractor shall have an OHS Policy in accordance with the OHS(Occupational Health and Safety Act, Act 85 of 1993) and include a copy of the Policy in the Health and Safety Plan to be submitted by the Principal Contractor / Sub-Contractor.
- The Principal Contractor / Sub-Contractor shall promptly display a copy of the Company's OHS Policy on the OHS Notice Board for the duration of the contract and include it into information provided to persons at the contract OHS induction.
- The Principal Contractor shall develop a Contract specific OHS Management Commitment Statement based on the Company's OHS Policy.
- The Principal Contractor's Project Managing shall sign the Commitment statement and prominently display a copy on the OHS Notice Board for the duration of the contract. A copy of the Commitment Statement shall be included in information provided to persons at the Contract OHS induction and a copy shall also be supplied to each sub-contractor.

HS1.7.2 MANAGEMENT

- Details of the personnel and management systems to be put in place to prepare, manage, implement, conduct and monitor the Health and Safety Plan for the project.

Broadly speaking your:-

- Organization's internal structure that establishes SHE (Safety, Health and Environmental) ROLES, RESPONSIBILITIES, ACCOUNTABILITIES, and REPORTING RELATIONSHIPS,
- SHE (Safety, Health and Environmental) PLANS, POLICIES, PROCEDURES, DIRECTIVES and STANDARDS that provide instructions as to how activities and functions are to be carried out,
- SHE (Safety, Health and Environmental) CONTROLS, INSPECTIONS, REVIEWS, etc. built into construction operations to ensure that performance is consistent with SHE (Safety, Health and Environmental) objectives and requirements,
- SHE (Safety, Health and Environmental) COMMUNICATION MECHANISMS for collecting, handling and reporting information.

In other words Management Systems that specifies WHO is going to do WHAT, WHERE, WHEN, WHY and HOW.

- Details of relevant qualifications and experience held by the persons nominated above, including recent health and safety education and training undertaken.
- Procedures for determining the competence of contractors engaged on the project, whether employed by the contractor directly or by others, to fulfil their duties under the Construction Regulations 2014 No. 10113 promulgated 07 February 2018.

HS1.7.3 HAZARD IDENTIFICATION, RISK MANAGEMENT AND CONTROL

- The Principal Contractor / Sub-Contractor shall detail and implement procedures that will identify hazards, assess risks and determine suitable control measures as they arise throughout term of the contract. These procedures shall both comply with and be implemented and managed in accordance with the specification.
- The Principal Contractor / Sub-Contractor shall detail and implement procedures that ensure control measures are evaluated for effectiveness and modified as necessary. The evaluation procedure shall detail the responsibilities, timelines and records that will be kept as part of the process.
- Where Risk is controlled through administrative control measures, the Principal Contractor / Sub-Contractor shall ensure that the administrative measures are:
 - a) Clearly documented and those personnel responsible for implementation and management are explicitly defined;
 - b) Understood by all relevant personnel through training and assessment;
 - c) Implemented as documented and promptly reviewed for effectiveness following initial implementation;
 - d) Amended and authorised as required;
 - e) Adequately supervised, managed and audited to ensure continuing compliance;
 - f) Available at all times wherever the measures are being implemented.
- ❖ Any piece of plant or equipment not complying with the specification shall cease operation until the Principal Contractor / Sub-Contractor can demonstrate to the satisfaction of the Client / Client's Agent that the piece of non-conforming plant or equipment conforms to these requirements.

HS1.8 HEALTH AND SAFETY PLAN

The Principal Contractor / Sub-Contractor shall develop a Health & Safety Plan to reflect variations in design or changes in site conditions and liaise with the Employer's Agent.

The Principal Contractor shall develop this Health and Safety Plan so that it:

- a) Incorporates the contractor's approach to managing the construction work to ensure the health and safety of all persons carrying out the construction work and all persons who may be affected by their work.
- b) Includes the risk assessments prepared by all Contractors under their duties set out in the Construction Regulations 2014 and any other relevant legislation (i.e. the OHS Act and Regulations, etc).
- c) Includes the arrangements for ensuring that, where appropriate or specifically requested, all Contractors / Sub-Contractors prepare suitable and sufficient method statements for their construction works which incorporate adequate measures for ensuring the health and safety of all persons who may be affected by these works.
- d) Incorporates the common arrangements for site safety, statutory notices and registers etc.
- e) Includes the site rules to be adopted for controlling the risks to health and safety during the construction phase(s) or the project.
- f) Includes reasonable arrangements for monitoring compliance with health and safety legislation and site rules.
- g) Includes reasonable measures to ensure co-operation between all Contractors and Sub-Contractors in respect of health and safety provisions and prohibitions.
- h) Includes the steps to be taken to ensure that only authorised persons are allowed into any premises or parts of the site / premises where construction work is being carried out.
- i) Includes arrangements for emergency procedures.
- j) Includes arrangements for ensuring that, so far as is reasonably practicable, every Contractor and Sub-Contractor is provided with comprehensible information about the risks to health and safety of that Contractor / Sub-Contractor, or of any employees or other persons under their control, arising out of the construction works, including the emergency procedures
- k) Includes details of the arrangements for ensuring, so far as is reasonably practicable, that the employees or other persons under the control of any Contractor / Sub-Contractor, and any visitors to the site, receive adequate information about the risks to their health and safety arising out of the construction works and, where necessary, adequate training to carry out their work in a safe and healthy manner.
- l) Includes arrangements for providing all persons at work on the site and visitors to the site with the opportunity and means of discussing and offering advice on health and safety issues relating to the construction works.
- m) Includes arrangements for the reporting of any accidents, injuries or dangerous occurrences, including conforming with the statutory requirements.
- n) Can be modified as the work proceeds to take account of any information received from Contractors / Sub-Contractors, any experience gained during the course of the project or any changes necessary as a result of unforeseen circumstances or alterations to the design.

HS1.9 PROGRAMME

A time estimate required by the contractor to implement the Health & Safety Plan sufficiently for works to commence on site.

HS1.9 COST

A detailed breakdown of costs allowed in the contractor's tender for preparing, managing, implementing and monitoring the Health and Safety Plan, and for complying with the requirements imposed on the Principal Contractors under the Construction Regulations of 2014 No. 10113 promulgated 07 February 2018.

HS1.10 GENERAL SITE SAFETY

HS1.10.1 SAFETY TRAINING & EDUCATION

The Principal Contractor shall detail the OHS competencies and training received by its contract management personnel.

The Principal Contractor's Health and Safety Plan shall have a detailed register of the skills and competencies for all personnel for the activities that the personnel will undertake under the contract. (E.g. Mobile plant operators, crane operators etc.)

The Principal Contractor shall demonstrate and maintain documentary evidence of competencies on site for the duration of the contract.

HS1.10.2 INDUCTION TRAINING

The Principal Contractor / Sub-Contractor shall develop and detail a Site Induction Training Programme as part of the Occupational Health and Safety Plan to be submitted to the Client prior to commencement of construction that includes as a minimum:

- a) Training related to hazards likely to be encountered on Site and control measures that have been developed in response to these hazards;
- b) Roles and Responsibilities;
- c) The requirements of the Health and Safety Plan submitted and approved
- d) Address the identified issues in the Fire Safety, Emergency, Evacuation and Rescue Plan to ensure that all Site personnel are aware of procedures in the event of an incident or emergency occurring;

The Principal Contractor / Sub-Contractor shall evaluate all persons undertaking the site Induction Training through a written test to ensure that inductees have an understanding of the OHS (Occupational Health and Safety) requirements for the contract. The written tests shall be signed and dated by the person undertaking the induction training to attest to their understanding and be retained by the Principal Contractor / Sub-Contractor as a record that the training has been completed.

HS1.10.3 INDUCTION TRAINING FOR SPECIFIED WORK

The Principal Contractor / Sub-Contractor shall conduct Site Specific Occupational Health and Safety Induction Training for all personnel, the Client and all visitors not escorted on Site by inducted persons.

The Principal Contractor / Sub-Contractor shall evaluate all persons undertaking the Site Induction Training through a written test to ensure that inductees have an understanding of the OHS (Occupational Health and Safety) requirements for the contract. The written tests shall be signed and dated by the person undertaking the induction training to attest to their understanding and be retained by the Principal Contractor / Sub-Contractor as a record that the training has been completed.

HS1.10.4 RECORDING & REPORTING OF INJURIES

Make arrangements for all contractors to report accidents, ill health and dangerous occurrences notifiable to the Department of Labour under Section 24 of the OHS Act (Occupational Health and Safety Act, Act 85 of 1993) (Reporting to DOL (Department of Labour) Inspector regarding certain incidents).

All lost time incidents associated with the contract works or reportable as defined by **Section 24** of the OHS Act shall be immediately reported to the Client.

The Principal Contractor / Sub-Contractor shall provide a detailed report of all accidents / incidents, including events that could have become lost time incidents were it not for fortuitous circumstances to the Client within 5 days of the incident occurring. The Principal Contractor / Sub-Contractor shall provide copies of all reports and information associated with the incidents to the Client. Copies of reports must be placed on the Health and Safety File.

Where the Principal Contractor / Sub-Contractor has been:-

- Served with a prohibition, contravention or improvement notice under the OHS Act; or
- Required to comply with any order issued by an inspector for the Department of Labour;
- The Principal Contractor / Sub-Contractor shall immediately supply a copy of that notice, order or notification to the Client.
- Where the Principal Contractor / Sub-Contractor have been served with a summons or is convicted of any offence in relation to occupational health and safety, the Principal Contractor / Sub Contractor shall immediately supply a copy of that summons to the Client.
- The Principal Contractor / Sub-Contractor shall detail the reporting and investigation procedures for incident investigation. The procedures shall include the investigating officer responsible and the time limits imposed for reporting and investigating the incident and to implement corrective action in a timely manner so as to prevent a recurrence.
- The client may participate in or undertake an investigation into the incident, injury or illness at its discretion and the Principal Contractor / Sub-Contractor shall cooperate with and provide assistance to the investigation organized and undertaken by the Client.

HS1.10.5 FIRST AID

- Establish and implement a first-aid programme to provide emergency treatment to victims of accidents, chemical substances or excessive exposure to toxic substances.

The programme shall include:

- proper first aid facilities administered by qualified personnel,
- first-aid boxes,
- first-aid room, where there are 500 or more workers on site,
- training and re-training of first-aiders,
- first-aid treatment procedures,
- standard procedures,
- special procedures, e.g. for poisoning,
- maintenance of first-aid facilities
- All first-aid provisions shall comply with the OHS Act (Act 85 of 1993)

HS1.10.6 FIRE PROTECTION AND PREVENTION

- Appropriate measures must be taken to avoid the risk of fire.
- Sufficient and suitable storage must be provided for flammable liquids, solids and gases.
- Smoking must be prohibited and notices in this regard must be prominently displayed in all places containing readily combustible or flammable materials;
- Combustible materials must not accumulate on the construction site.
- Welding, flame cutting and other hot work may only be done after the appropriate precautions have been taken to reduce the risk of fire.
- Suitable and sufficient fire-extinguishing equipment must be placed at strategic locations and such equipment must be maintained in good working order.
- A sufficient number of workers must be trained in the use of fire-extinguishing equipment.

HS1.10.7 SITE EMERGENCY PROCEDURES

The Principal Contractor / Sub-Contractor shall establish an Emergency Evacuation and Rescue plan.

The plan shall include the following detail:

- The role and responsibility of every individual in the work area on fire safety emergency evacuation and rescue;
- General work area precautions, fire prevention, detection, protection and warning alarm systems;
- Fire fighting and rescue equipment including types of fire extinguishers;
- Fire safety measures for Site accommodation;
- Escape and communication;
- Fire brigade access, facilities and coordination;
- Fire drills and training including the use of fire fighting equipment;
- Material storage including flammable liquids, gasses and waste;

The Principal Contractor / Sub-Contractor shall ensure that all procedures, precautionary measures and safety standards stipulated in the Plan are communicated, implemented and complied with by all workers including other interfacing contractors on Site.

The Principal Contractor / Sub-Contractor shall practice their emergency preparedness within six (6) weeks of the commencement of work and at least four (4) monthly intervals thereafter.

The Principal Contractor / Sub-Contractor shall review and ensure the adequacy of the Plan as the work progress.

The Principal Contractor / Sub-Contractor shall conduct monthly checks on fire fighting equipment and test alarms and detection devices installed on Site and document findings in a register which shall be on site at all times for inspection.

The Principal Contractor / Sub-Contractor shall conduct weekly inspections of escape routes, fire brigade access, fire fighting facilities and working areas to ensure that the requirements stipulated in the Fire Safety, Emergency, Evacuation and Rescue Plan are complied with. All inspection records shall be documented in registers and kept in the Health and Safety file for inspection at any time.

HS1.10.8 HOUSEKEEPING

Suitable housekeeping must continuously be implemented on the construction site, including:

- proper storage of materials and equipment
- removal of scrap, waste and debris at appropriate intervals;

Loose materials shall not be placed or allowed to accumulate on the site so as to obstruct access and egress from workplaces and passageways.

HS1.10.9 STACKING & STORAGE

- Adequate storage areas must be provided.
- Storage areas must be kept neat and under control.

HS1.10.10 ILLUMINATION

Provide adequate artificial lighting when work is carried out after dark or inside buildings.

HS1.10.11 SANITATION / HYGIENE

Provision of site hygiene facilities:

- One sanitary facility for every 30 workers.
- Adequate washing facilities.
- One shower facility for every 15 workers;

Drying sheds, huts, rooms or other accommodation for sheltering during bad weather, storing clothes and taking meals. Facilities should include tables and chairs, suitable means for boiling water and a supply of wholesome drinking water.

The contractor shall provide reasonable and suitable living accommodation for the workers at construction sites which are remote from their homes and where adequate transportation between the site and their homes, or other suitable living accommodation, is not available.

HS1.10.12 PERSONAL PROTECTIVE EQUIPMENT

The Principal Contractor / Sub-Contractor shall provide and maintain suitable PPE (Personal Protective Equipment) for all employees employed on the Site.

The Principal Contractor / Sub-Contractor shall ensure that such PPE comply with the requirements of the OHS Act (Occupational Health and Safety Act, Act 85 of 1993).

The Principal Contractor / Sub-Contractor shall also ensure that all equipment is properly used by his / her employees during the course of their work.

The Principal Contractor / Sub-Contractor shall record all issues of all equipment to his / her employees in documented registers and such registers shall be kept in the Health and Safety File on site and made available for inspection at all times.

The Principal Contractor / Sub-Contractor shall provide the Client / Client's Agent with a colour code by which employees will be identified with regard to occupations, responsibilities, accountabilities, reporting relationships and access to different locations on site. (e.g. hard hats, overalls).

PPE shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards.

All personal protective equipment shall be of safe design and construction for the work to be performed.

HS1.10.13 PERMIT TO WORK REQUIREMENTS

Institute a "hot work" permit system in respect of:

- metalwork flame cutting,
- site welding,

HS1.10.14 LOCK-OUT

Institute a "Lock-out" procedure in respect of controlling energy so as to prevent unexpected operation or activation of machinery or equipment. This procedure must include a written policy, specific procedures, rules and supervisory follow-up, covering the positive locking of switches and valves to ensure that alterations, maintenance, set-up and or other work can be performed safely.

HS1.10.15 MONTHLY HEALTH AND SAFETY AUDITS

The Principal Contractor shall carry out monthly Health and Safety Audits on the measures contained within his / her Health and Safety Plan submitted to the Client as well as Health and Safety Plans submitted by Sub-Contractors appointed by the Principal Contractor to demonstrate that the required level of health and safety are being achieved and maintained and compile a full report to the Client on such audit.

The Client will audit the Principal Contractor as well as his / her Sub-contractor's Health and Safety Plans from time to time and will advise the Principal Contractor of any matter with which he / she is not satisfied and the Principal Contractor shall take such steps as are necessary to satisfy the Client.

The Client will carry out such audits as he / she considers necessary but not less than monthly.

The Principal Contractor shall make available, specialist personnel as the Client may consider necessary for the performance of such audits.

The Principal Contractor shall develop and maintain an Audit Schedule that details the audits planned to be undertaken by the Principal Contractor of the work under the contract, including sub-contractors, for the duration of the contract. The Audit Schedule shall form part of the Health and Safety Plan that needs to be submitted by the Principal Contractor.

Audit reports shall detail the scope of the audit, the audit questions and the audit findings.

The Client shall be promptly provided with copies of all audit reports together with other documentation to show that all matters raised have been appropriately addressed.

Unless otherwise directed by the Client the Principal Contractor / Sub-Contractor shall undertake its initial OHS Audit within 4 weeks of commencement of work. The Principal Contractor / Sub-Contractor shall undertake subsequent OHS Audits at a frequency not less than once every 3 months.

All Principal Contractor's OHS Audits shall include an assessment of Sub-Contractor compliance with the approved OHS Plan.

HS1.10.16 MANAGEMENT REVIEW

The Principal Contractor shall undertake an independent review of the Health and Safety Plan for the contract in accordance with the requirements of the OHS Act, relevant Regulations and in particular the Construction Regulations 2014.

A review shall be undertaken 3 months after commencement of the contract and every 6 months thereafter for the duration of the contract.

Following the completion of the review, the Principal Contractor shall submit a written report that details the suitability, adequacy and effectiveness of the OHS Plan and to certify that the Site procedures, practices and operations are in accordance with the contract.

HS1.10.17 PROVISION OF INFORMATION

- Provide Sub-Contractors appointed by him / her with the relevant sections of the Health and Safety specifications pertaining to the construction work which has to be performed.

- Where changes are brought to the design and construction, provide sufficient information and appropriate resources to the Sub-Contractor to execute the work safely.
- Discuss and negotiate with Sub-Contractors the contents of the Health and Safety Plan / Plans submitted by them and finally approve such plans for implementation.
- Ensure that copies of Health and Safety plans compiled by the Principal Contractor and his / her Sub-Contractors are available on request to an employee, DOL Inspector, contractor, Client.
- The Principal Contractor / Sub-Contractor shall detail procedures that will ensure that personnel are suitably consulted and communicated with during the planning and application of work activities associated with the contract.
- The Principal Contractor / Sub-Contractor shall detail the procedures for the identification, assessment and control of hazards associated with the day-to-day work activities. These procedures shall include requirements for consultation with personnel involved in the work activity.
- The Principal Contractor / Sub-Contractor shall have procedures for ensuring that OHS information is communicated to and from its personnel. The Principal Contractor / Sub-Contractor shall hold OHS meetings with all personnel or their representatives at the site on a weekly basis.
- Minutes shall be recorded for all OHS meetings and posted on OHS notice boards within 48 hours of the meeting.
- The Principal Contractor / Sub-Contractor shall maintain at the Site an OHS Notice Board located in a prominent position and accessible to all personnel, for the distribution of OHS information.
- The Principal Contractor / Sub-Contractor shall as a minimum, establish and implement procedures for reporting relevant and timely information with regard to OHS Performance and incidents.
- The Principal Contractor / Sub-Contractor shall establish, implement and maintain a controlled copy of all Contract OHS documentation on Site.
- Where the Principal Contractor / Sub-Contractor's Health and Safety Plan references other documentation including the contract, the Principal Contractor / Sub-Contractor shall ensure that section and clause numbers are clearly denoted in its Health and Safety Plan. All documentation referenced in the Health and Safety Plan shall be available on Site for the duration of the contract.
- Ensure that Health and Safety Files kept by Sub-Contractors appointed by the Principal Contractor is kept on site and made available to an inspector, Client.
- Hand over a consolidated health and safety file to the Client upon completion of construction work, including all drawings, designs, materials used and other similar information concerning the completed structure.
- In addition to the Health and Safety File compile a comprehensive and updated list of all contractors on site accountable to the Principal Contractor as well as the agreements between the parties and the type of work done by them.

HS1.10.18 STOP THE EXECUTION OF CONSTRUCTION WORK

Stop any construction / construction related work conducted by any person on the construction site, which is not in accordance with the Principal Contractor's health and safety plan and or the health and safety plans of Sub-Contractors which possess a threat to the health and or safety of persons.

HS1.10.19 HANDING OVER OF PROJECT HEALTH AND SAFETY FILE

- Hand over a consolidated health and safety file to the Client upon completion of construction work, including all drawings, designs, materials used and other similar information concerning the completed structure.

- In addition to the Health and Safety File compile and hand over a comprehensive and updated list of all contractors on site accountable to the Principal Contractor as well as the agreements between the parties and the type of work done by them.

HS1.10.20 RECORDS AND RECORDS MANAGEMENT

- The control of records shall be in accordance with the Principal Contractor's / Sub-Contractor's approved Health and Safety Plan for the contract.
- Records shall be registered, ordered and retained on Site in the Health and Safety File for the duration of the contract.

HS1.11.1 CHEMICAL HAZARDS

The following construction materials and substances to be used in the works have been identified as potentially posing special health and/or safety hazards during the project:

NOTE:

The above mentioned is not a definitive list of all potential harmful products. Other materials and substances commonly used during construction may also present health or safety hazards, however, it is deemed that these should be familiar to the average competent Contractor as part of routine risk and OHS (Occupational Health, Safety and Hygiene) assessments and are therefore not included here.

Adopt all precautionary measures provided by manufacturers for storage, use and application of specified materials.

Data sheets for these, and any other materials that will be used for the works, are to be obtained by the contractor from the manufacturers.

HS1.11.2 SAFETY HAZARDS

HS1.11.2.1 TOOLS

C3.7.5.1.1 Hand tools

- Employers shall not issue or permit the use of unsafe hand tools.
- Wrenches, including adjustable, pipe, end, and socket wrenches shall not be used when jaws are sprung to the point that slippage occurs.
- Impact tools, such as drift pins, wedges, and chisels, shall be kept free of mushroomed heads.
- The wooden handles of tools shall be kept free of splinters or cracks and shall be kept tight in the tool.

HS1.11.2.2 PORTABLE ELECTRICAL TOOLS

No person shall use a portable electric tool with an operating voltage which exceeds 50 to earth unless:

- it is connected to a source of electrical energy incorporating an earth leakage protection device which meets the requirements of section 36 of the OHS Act or,
- it is connected to a source of high frequency electrical energy derived from a generator which is used solely for supplying energy to such portable electric tool and which arrangement is approved by the chief inspector; or
- it is clearly marked that it is constructed with double or reinforced insulation.

Portable electric tools, together with its flexible cord and plug shall be maintained in a serviceable condition.

HS1.12 EXCAVATIONS

- The contractor shall ensure that all excavation work is carried out under the supervision of a competent person who has been appointed in writing.
- The contractor shall evaluate the stability of the ground before excavation work begins.
- The Contractor shall take suitable and sufficient steps in order to prevent any person from being buried or trapped by a fall or dislodgement of material in an excavation;
- The contractor shall not permit any person to work in an excavation which has not been adequately shored or braced.
- Shoring and bracing may not be necessary where-
 - the sides of the excavation are sloped to at least the maximum angle of repose measured relative to the horizontal plane; or
 - such an excavation is in stable material:
 - Provided that-
- permission being given in writing by the appointed competent person upon evaluation by him or her of the site conditions; and
- where any uncertainty pertaining to the stability of the soil still exists, the decision from a professional Employer's Agent or a professional technologist competent in excavations shall be decisive and such a decision shall be noted in writing and signed by both the competent person and a professional Employer's Agent or technologist, as the case may be;
- Take steps to ensure that the shoring or bracing is designed and constructed in such manner rendering it strong enough to support the sides of the excavation in question;
- Ensure that no load, material, plant or equipment is placed or moved near the edge of any excavation where it is likely to cause its collapse and thereby endangering the safety of, any person, unless precautions such as the provision of sufficient and suitable shoring or bracing are taken to prevent the sides from collapsing;
- Cause convenient and safe means of access to be provided to every excavation in which persons are required to work and such access shall not be further than 6m from the point where any worker within the excavation is working;
- Cause every excavation, including all bracing and shoring, to be inspected-
 - (i) daily, prior to each shift;
 - (ii) after every blasting operation;
 - (iii) after an unexpected fall of ground;
 - (iv) after substantial damage to supports; and
 - (v) after rain,
- by a competent person in order to pronounce the safety of the excavation to ensure the safety of persons, and those results are to be recorded in a register kept on site and made available to an inspector, client, client's agent, contractor or employee upon request;
- Cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, to be-
 - adequately protected by a barrier or fence of at least one meter in height and as close to the excavation as is practicable; and
 - provided with warning illuminates or any other clearly visible boundary indicators at night or when visibility is poor
 - Cause warning signs to be positioned next to an excavation within which persons are working or carrying out inspections or tests.

HS1.13 FORMWORK & SUPPORT WORK

The contractor shall ensure that:

- all formwork and support work operations are carried out under the supervision of a competent person who has been appointed in writing for that purpose;
- all formwork and support work structures, are adequately designed, erected, supported, braced and maintained so that they will be capable of supporting all anticipated vertical and lateral loads that may be applied to them and also that no loads are imposed onto the structure that the structure is not designed to withstand.
- The designs of formwork and support work structures are done with close reference to the structural design drawings and where any uncertainty exists, the structural designer should be consulted.
- All drawing pertaining to the design of formwork or support work structures are kept on the site and are available on request by an inspector, contractor, client, client's agent or employee.
- All equipment used in the formwork or support work structure are carefully examined and checked for suitability by a competent person, before being used.
- All formwork and support work structures are inspected by a competent person immediately before, during and after the placement of concrete or any other imposed load and thereafter on a daily basis until the formwork and support work structure has been removed and the results have been recorded in a register and made available on site.
- If, after erection, any formwork and support work structure is found to be damaged or weakened to such a degree that its integrity is affected, it shall be safely removed or reinforced immediately.
- Adequate precautionary measures are taken in order to-
- Secure any deck panels against displacement, and
- Prevent any person from slipping on support work or formwork due to the application of formwork or support work release agents.
- The health of any person is not affected through the use of solvents or oils or any other similar substances.
- Upon casting concrete, the support work or formwork structure should be left in place until the concrete has acquired sufficient strength to support safely, not only its own weight but also any imposed loads and not removed until authorization has been given by a competent person.
- Provision is made for safe access by means of secure ladders or staircases for all work to be carried out above the foundation bearing level.

- All employees required to erect, ,move or dismantle formwork and support work structures are provided with adequate training and instruction to perform these operations safely
- The foundation conditions are suitable to withstand the weight caused by the formwork and support work structure and any imposed loads, such that the formwork and support work structure are stable.

HS1.14 CONSTRUCTION VEHICLES

The contractor shall ensure that all construction vehicles and mobile plants-

- are of an acceptable design and construction;
- are maintained in a good working order;
- are used in accordance with their design and the intention for which they were designed, having due regard to safety and health;
- are operated by workers who-
 - i. have received appropriate training and been certified competent and been authorised to operate such machinery; and
 - ii. are physically and psychologically fit to operate such construction vehicles and mobile plant by being in possession of a medical certificate of fitness;
- have safe and suitable means of access;
- are properly organized and controlled by providing adequate signaling or other control arrangements to guard against the dangers. relating to the movement of vehicles and plant, in order to ensure their continued safe operation;
- are prevented from falling into excavations, water or any other area lower than the working surface by installing adequate edge protection, which may include guardrails and crash barriers;

- where appropriate, are fitted with structures designed to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn;
- are equipped with an electrically operated acoustic signalling device and a reversing alarm;
- are on a daily basis inspected prior to use, by a competent person who has been appointed in writing and the findings of such inspection is recorded in a register.

The contractor shall furthermore ensure that:

- no person rides or be required or permitted to ride on any construction vehicle or
 - mobile plant otherwise than in a safe place provided thereon for that purpose;
- every construction site is organized in such a way that pedestrians and vehicles can move safely and without risks to health;
- the traffic routes are suitable for the persons using them, sufficient in number, in suitable positions and of sufficient size;
- every traffic route is, where necessary indicated by suitable signs.
- all construction vehicles and mobile plant left unattended at night, adjacent to a freeway in normal use or adjacent to construction areas where work is in progress, shall have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, in order to identify the location of the vehicles or plant;
- bulldozers, scrapers, loaders, and other similar mobile plant are, when being repaired or when not in use, fully lowered or blocked with controls in a neutral position, motors stopped and brakes set;
- whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation;
- tools and material are secured in order to prevent movement when transported in the same compartment with employees;
- vehicles used to transport employees have seats firmly secured and adequate for the number of employees to be carried; and
- when workers are working on or adjacent to public roads, reflective indicators are provided and worn by the workers.

HS1.15 ELECTRICAL INSTALLATIONS

- Before construction commences and during the progress thereof, adequate steps must be taken to ascertain the 'presence of and guard against danger to workers from any electrical cable or apparatus.
- All parts of electrical installations and machinery must be of adequate strength to withstand the working conditions on construction sites;
- In working areas where the exact location of underground electric power lines unknown, employees using jackhammers, shovels or other hand tools which may make contact with a power line, must be provided with insulated protective gloves or otherwise that the handle of the tool being used is insulated;
- All temporary electrical installations must be inspected at least once a week and electrical machinery on a daily basis before use on a construction site by competent persons and the records of these inspections must be recorded in a register to be kept on site.
- The control of all temporary electrical installations on the construction site must be designated to a competent person who has been appointed in writing.

HS1.16 USE & STORAGE OF FLAMMABLE LIQUIDS

- Where flammable liquids are being used, applied or stored it must be done in such a manner that would cause no fire or explosion hazard, and that the workplace is effectively ventilated:
 - Provided that where the workplace cannot effectively be ventilated-
 - i. every employee involved is provided with a respirator, mask or breathing apparatus of a type approved by the chief inspector, and
 - ii. steps are taken to ensure that every such employee, while using or applying flammable liquid, uses the apparatus supplied to him or her;
- No person smokes in any place in which flammable liquid is used or stored, and the contractor shall affix a suitable and conspicuous notice at all entrances to any such areas prohibiting such smoking;

- Flammable liquids on a construction site is stored in a well-ventilated reasonably fire resistant container, cage or room and kept locked with proper access control measures in place;
- An adequate amount of efficient fire-fighting equipment is installed in suitable locations around the flammable liquids store with the recognized symbolic signs;
- Only the quantity of flammable liquid needed for work on one day is to be taken out of the store for use;
- All containers holding flammable liquids are kept tightly closed when not in actual use and, after their contents have been used up, to be removed from the construction site and safely disposed of;
- Where flammable liquids are decanted, the metal containers are bonded or earthed;
- No flammable material such as cotton waste, paper, cleaning rags or similar material is stored together with flammable liquids.

HS1.17 WELDING & CUTTING

No contractor shall require or permit welding or flame cutting operations to be undertaken, unless:

- the person operating the equipment has been fully instructed in the safe operation and use of such equipment and in the hazards which may arise from its use;
- effective protection is provided and used for the eyes and respiratory system and, where necessary, for the face, hands, feet, legs, body and clothing of persons performing such operations, as well as against heat, incandescent or flying particles or dangerous radiation;
- leads and electrode holders are effectively insulated; and
- the workplace is effectively partitioned off and where not practicable all other persons exposed to the hazards are warned and provided with suitable protective equipment.

No contractor shall require or permit electric welding to be undertaken in wet or damp places, inside metal vessels or in contact with large masses of metal, unless:

- the insulation of the electrical leads is in a sound condition;
- the electrode holder is completely insulated to prevent accidental contact with current-carrying parts;
- the welder is completely insulated by means of boots, gloves or rubber mats; and
- at least one other person who has been properly instructed to assist the welder in case of an emergency is and remains in attendance during operations

No contractor shall require or permit welding, flame cutting, grinding, soldering or similar work to be undertaken in respect of any tube, tank, drum, vessel or similar object or container where such object or container –

- is completely closed, unless a rise in internal pressure cannot render it dangerous; or
- contains any substance which, under the action of heat, may –
 - i. ignite or explode; or
 - ii. react to form dangerous or poisonous substances,

Where hot work involving welding, cutting, brazing or soldering operations is carried out at places, other than workplaces which have been specifically designated and equipped for such work, the Employer shall take steps to ensure that proper and adequate fire precautions are taken.

HS1.18 BLASTING & USE OF EXPLOSIVES

HS1.18.1 SAFETY DISTANCES

The contractor shall:

- apply the safety distances for the respective categories of explosives as stipulated in Annexure 1 of the Explosives regulations;
- where less than five kilograms of explosives is used, apply to the chief inspector of occupational health and safety for a determination of a safety distance which the Employer shall enforce.

HS1.18.2 SUPERVISION OF EXPLOSIVES

In order to ensure that the provisions of the Act and its regulations in relation to explosives workplaces are complied with, the contractor shall in writing appoint a competent and certified person in a full-time capacity to be explosives manager in respect of every workplace where explosives are being used, tested, stored or manufactured:

The contractor shall appoint one or more persons, who are suitably qualified and experienced, as authorized supervisors to assist the explosives manager.

The contractor shall ensure that:

- the explosives manager
 - a. approves in writing the rules, methods, materials, equipment and tools to be used in the danger area;
 - b. ensures that all persons under his or her control are informed of the hazards related to their tasks and are thoroughly trained in safe work procedures, in particular with respect to shock, friction risk of fire, or static electricity, and are familiar with the requirements of the Explosives regulations
 - c. prescribes all protective clothing and equipment to be used in the danger area
 - d. ensures that the processes and equipment specified in schedule licences are safe and appropriate for the manufacturing processes envisaged for the workplace.
- the supervising official
 - a. is at all times in a position to exercise control over the operations
 - b. reports without delay to the explosives manager any plant or
 - c. equipment under his or her control that has or may have posed a risk:
 - d. ensures that all rules implemented in the interest of health and safety are at all times complied with;
 - e. stops all work involving explosives if he or she becomes aware of any risk posed to the health and safety of persons.

HS1.18.3 SAFE HANDLING OF EXPLOSIVES

The contractor shall ensure that:-

- all explosives or ingredients thereof are at all times free of foreign material;
- all reasonable precautions are taken to prevent the spillage of explosives;
- cleaning procedures in the case of a spillage of explosives are prescribed in writing by the explosives manager: Provided that where no cleaning procedures have been prescribed any unusual spillage of explosives shall be reported immediately to the supervising official:
- all waste, paper, timber, rags, cotton and similar materials that have been in contact with explosives or an ingredient of an explosive are disposed of in a manner prescribed in writing by the explosives manager: Provided that at the end of the working day all waste and floor sweepings from danger areas shall be deposited in the designated places;
- the explosives or partly mixed explosives are conveyed as soon and as carefully as possible and taking such precautions and in such a manner as will effectively guard against any accidental ignition or explosion
- only containers provided for the conveyance of explosives are used for transporting explosives or partly mixed explosives and that such containers are at all times kept clean, free from grit and in a good state of repair:
- vehicles containing explosives are left unattended only in designated places

The contractor shall ensure that: -

- all material, equipment, tools or similar articles used in a danger area are decontaminated after such use, and that no person makes use of any such article that has not been decontaminated after use in a contaminated area;
- the certification of the decontamination process is certified and approved by the explosives manager or a person authorized by the explosives manager.
- Unless permission has been granted by the chief inspector of occupational health and safety, no contractor shall use:

- explosives in workplaces other than explosives workplaces approved by the chief inspector of occupational health and safety;
- any explosives for which no provision is made in Explosives regulations.
 - No contractor shall allow unauthorized access to such explosives or bury, dump, hide or abandon any explosives.
 - No contractor shall use any explosive material for blasting purposes unless
 - he or she is in possession of a written permission issued by or under the authority of the chief inspector of occupational health and safety;
 - he or she is undergoing training while using such blasting material under the immediate and constant supervision of a person who is in possession of permission

HS1.18.4 DANGEROUS AREAS

The contractor shall ensure that entry and exit from danger areas is only permitted:

- at the permanent authorized point of entry or exit: Provided that entry or exit at any other point may be authorized by the explosives manager or a person authorized by him if the authorized gatekeeper has been informed thereof;
- for persons and vehicles authorized thereto by the explosives manager or a person authorized by him;
- to visitors under escort by an authorized person who is aware of the hazards attached to the danger area.

The contractor shall keep a register of the entries and exits and that register shall be available on the premises for inspection by an inspector.

No person shall enter the danger area with:

- a. tobacco;
- b. matches, cigarette lighters or other devices capable of generating heat or spark sources;
- c. intoxicating liquor or narcotics;
- d. food, medicine or drinkable fluids: Provided that authorization to enter with such articles may be granted by the explosives manager for purposes of consumption in licensed mess rooms and smoking areas: Provided further that special rules for the control of such consumption and smoking, approved by the chief inspector of occupational health and safety shall be made in writing and shall be enforced by the Employer, self-employed person or user; or
- e. radio transmitters or cellular telephones; or
- f. The contractor shall ensure that hazard warning signs are clearly displayed at the entrance to any danger area.

HS1.18.5 VESSELS UNDER PRESSURE

HS1.18.6 MANUFACTURER'S DATA PLATE

Every user of a boiler or pressure vessel shall cause a manufacturer's plate with the following minimum particulars to be securely fixed in a conspicuous place to the shell of every such a boiler or pressure vessel:-

- a) Name of manufacturer;
- b) country or origin;
- c) year of manufacture;
- d) manufacturer's serial number;
- e) name, number and date of the standard of design;
- f) design gauge pressure in Pascal's; (design pressure)
- g) maximum permissible operating pressure in Pascal's;
- h) operating temperature;
- i.) capacity in cubic meters; and
- j) mark of an approved inspection authority.

No person shall remove such a manufacturer's plate or wilfully damage or alter the particulars stamped thereon.

HS1.18.7 PORTABLE GAS CONTAINERS

No user shall use or require or permit a portable gas container to be used, and no user shall fill, place in service, handle, modify, repair, inspect or test any portable gas container, other than in compliance with standards incorporated into the Vessels under Pressure regulations.

HS1.18.8 HAND HELD FIRE EXTINGUISHERS

No user shall use, require or permit the use of a hand held fire extinguisher unless designed, constructed, filled, recharged, reconditioned, modified, repaired, inspected or tested in accordance with a safety standard incorporated into the Vessels under Pressure regulations.

No person shall fill, recharge, recondition, modify, repair, inspect or test any hand held fire extinguisher unless a holder of a permit issued by the South African Bureau of Standards in terms of SABS 1475.

HS1.18.9 GAS FUEL USE, EQUIPMENT AND SYSTEMS

No person shall handle, store or distribute a gas fuel in any manner, including the filling of a container, other than in accordance with a health and safety standards.

HS1.18.10 INSPECTION AND TEST

Any user of a boiler or pressure vessel shall cause, where reasonably practicable, such a boiler or pressure vessel, including the appurtenances and automatic controls and indicators, to be subjected to an internal and external inspection, and a hydraulic pressure test to 1.25 times the maximum permissible safe operating pressure as the case may be:

- by an approved inspection authority before commissioning after installation, re-erection or repairs;
- by a person appointed in writing by the user and who is competent to do such inspections and tests by virtue of their training, knowledge and experience in the operation, maintenance, inspection and testing of a boiler or pressure vessel within 36 months from the date of the previous internal and external inspection and hydraulic pressure test: Provided that where a pressure vessel is not subjected to corrosion, the user may dispense with the internal inspection and hydraulic pressure test subject to the written approval of an approved inspection authority:

- Provided further that an inspector may require a specific boiler or pressure vessel to be inspected or tested more frequently or permit a specific boiler or pressure vessel to be inspected or tested less frequently.

HS1.18.11 RECORDKEEPING

Any user of a vessel under pressure shall keep on his premises a record which shall be open for inspection by an inspector in which the results of inspections, tests, modifications and repairs shall be recorded, dated and signed by the competent person.

HS1.18.12 MAINTENANCE

No user shall use, cause or permit a vessel under pressure or gas fuel system, including all automatic controls, indicators and appurtenances, to be used unless it is at all times maintained in a safe working condition and the efficiency thereof is proved by regular testing.

No user shall use or cause or permit a vessel under pressure to be used unless it is kept clean and free from any:

- ❖ carbonized oil or other inflammable material which may ignite under working conditions;
- ❖ material which may cause corrosion; or
- ❖ material which is liable to chemical reaction which may cause an uncontrolled rise in pressure.

HS1.18.12 PHYSICAL HAZARDS

HS1.18.13 ERGONOMICS

- Ensure that assigned tasks do not exceed the limits of the performance capacities of the worker.
- Prevent injury or any detrimental effects to the health of the worker
- Provide that tasks and working conditions will not lead to impairments.

HS1.18.14 NOISE

No contractor shall require or permit an employee to work in an environment in which he is exposed to an equivalent noise level equal to 85 dB(A) or higher. The contractor shall reduce the equivalent noise level to below 85 dB(A) or, where this is not reasonably practicable, he shall reduce the level to as low as is reasonably practicable and take all reasonable steps to isolate the source of the noise acoustically. Where the equivalent noise level in any workplace cannot be reduced to below 85 Db (A) the contractor shall:-

- prohibit any person from entering a noise zone unless such person wears hearing protectors.
- The contractor shall provide, free of charge, hearing protectors to each employee who works in or, to any person who is required or permitted to enter a noise zone, and no contractor shall require or permit any person to work in or enter such noise zone, and no person shall work in or enter such noise zone, unless he wears such hearing protectors in the correct manner.

Provided that where the equivalent noise level to which employees are exposed, is such that the attenuation of the hearing protectors does not reduce the said noise to below 85 dB(A) the Employer concerned shall limit the time during which employees work in that noise zone in such a way that they are not exposed to an equivalent noise level equal to 85 dB(A) or higher.

The contractor shall properly instruct any person who is required to wear hearing protectors in the use of such protectors and inform him of noise zones where the wearing thereof is compulsory.

The contractor shall:

- ensure that every employee employed in a noise zone is subjected to audiometric examinations conducted in accordance with section 7 of SABS 083, by an audiometrist approved by the chief inspector;

- keep records of the results of each audiometric examination and make such records available for inspection by an inspector if he so requires; and
- keep such records for a minimum period of 30 years after termination of employment: Provided that if the Employer ceases activities all such records shall be forwarded to the regional director.

HS1.18.14 VIBRATION

Whole-body vibration occurs when the body is supported on a surface which is vibrating (e.g., when sitting on a seat which vibrates, standing on a vibrating floor or recumbent on a vibrating surface). Whole-body vibration occurs in all forms of transport and when working near some industrial machinery.

Hand-transmitted vibration is the vibration that enters the body through the hands. It is caused by various processes where vibrating tools or work pieces are grasped or pushed by the hands or fingers. Exposure to hand-transmitted vibration can lead to the development of several disorders.

HS1.18.15 SITE WIDE ELEMENTS

HS1.18.15.1 SITE ACCESS AND EGRESS

- Access to the site will involve crossing the public footpath.
- Store materials and plant away from means of access for the general public and occupants.
- Remove rubbish and demolition materials regularly. Do not allow to accumulate on flat roofs.
- Maintain free access through designated means of escape at all times
- Agree with the Employer's Agent delivery points for materials before commencing works.

HS1.18.15.2 VISITORS TO THE SITE

- All visitors to report to the Principal Contractor's reception area for OHS Induction training.
- All visitors to sign the visitor's registration document.
- All visitors to be provided with a Visitors Permit to enable them to access the construction site.
- All un-inducted visitors must be accompanied on the construction site by an inducted person.
- No visitors shall be allowed to access the construction site without wearing the necessary PPE.

HS1.18.16 DELIVERIES

Access will involve crossing the public footpath.

HS1.18.17 EMERGENCIES

Ensure that there are adequate escape routes and that they are kept clear at all times.

HS1.18.18 LOCATION OF TEMPORARY SITE ACCOMMODATION

See Site Lay-out Plan.

HS1.18.19 LOCATION OF MATERIALS UNLOADING AND STORAGE

Materials are to be unloaded and stored in locations which will not in any way affect access or egress to the site nor the works.

HS1.19.1 TRAFFIC AND PEDESTRIAN ROUTES

The road, public footpaths and access way are to be kept open at all times. All necessary signage and barriers are to be put in place to protect pedestrians at the site entrance and access and egress points.

HS1.19.2 SAFETY

- Ensure that all employees are aware of the Health and Safety policy and put into place arrangements to ensure that all visitors and workers new to the site are aware of the site safety provisions.
- Locate underground electricity cables, mark and take precautions to avoid.
- Ensure that cartridge operated tools are operated by trained personnel and in accordance with the maker's instructions that the gun is cleaned regularly and kept in a secure place when not in use.
- Protect people who may be exposed to health risks arising from hazardous substances.

HS1.19.3 CONTINUING LIAISON

The procedures for consideration and evaluation of the health and safety implications of Contractor designed elements of the works must follow the recognised principles of prevention and protection and take account of the issues highlighted in this OHS Specification.

The following information is to be submitted by the Contractor to the Employer's Agent in sufficient time to allow adequate consideration by the Employer's Agent and, where appropriate, the design team, and the provision of relevant information to those persons affected by the works, prior to the commencement of the relevant works:

- Suitable and sufficient information to demonstrate that health or safety issues have been adequately considered.
- Risk assessments.
- A list of health and/or safety hazards identified which cannot be designed out.
- A list of any materials or substances which are specified or inherent in the design which is potentially hazardous to health and/or safety.

HS1.19.4 UNFORESEEN EVENTUALITIES

The following action is to be taken in the event of unforeseen eventualities arising during the construction stage of the project which require significant design changes, or affect the resources required to carry out the work without risk to health and/or safety, or have other health or safety implications.

The Client / Client's Agent and, where possible, the Principal Contractor are to be advised as soon as possible.

Full details of the relevant health and safety issues involved are to be reviewed with the Client / Client's Agent and Principal Contractor as soon as possible.

Full details of any revised designs, risk assessments and identified hazards and/or hazardous materials and substances are to be issued to the Client / Client's Agent and Principal Contractor in sufficient time to allow for the revision of the Health and Safety Plan and notification of all persons affected by the health and/or safety implications of the changes prior to the commencement of the affected works.

HS1.19.5 SITE LIAISON

Liaise with all other contractors and implement any agreed changes to the Health and Safety Plan arising from such liaison. Set up regular training for all operatives including induction training for all staff upon arrival to site.

HS1.19.6 HEALTH AND SAFETY FILE

Provide the Planning Supervisor with any relevant information which the contractor believes should be incorporated into the Health and Safety File.

HS1.19.7 DESIGN DEVELOPMENT

Provide the Client with all design information prepared by sub-Contractors.

Arrange liaison meetings with sub-contractors to discuss and review health and safety issues arising from the sub-contractors' designs.

HS1.19.8 CONCLUSION

The hazards listed above were identified posing potential threats to the health and or safety of persons that will work on the contract. Although every effort were made to ensure that every possible hazard was identified the Employer cannot guarantee this, therefore it is imperative for the contractor to conduct a comprehensive risk identification and hazard assessment in order to make certain that all hazards are identified.

HS1.19.9 MANAGEMENT

Management of the works

The management of the site shall be in accordance with the provisions of the SANS Standard Specification for Road and Bridge Works for State Authorities (1998 edition).

C3.6 HIV AND AIDS SPECIFICICATIONS

1. **SCOPE**

This specification contains all requirements applicable to the Contractor for creating HIV/AIDS awareness amongst all of the Workers involved in this project for the duration of the construction period, through the following strategies:

- Raising awareness about HIV/AIDS through education and information on the nature of the disease, how it is transmitted, safe sexual behaviour, attitudes towards people affected and people living with HIV/AIDS, how to live a healthy lifestyle with HIV/AIDS, the importance of voluntary testing and counselling, the diagnosis and treatment of Sexually Transmitted Infections and the closest health Service Providers
- Informing Workers of their rights with regard to HIV/AIDS in the workplace
- Providing Workers with access to condoms and other awareness material that will enable them to make informed decisions about sexual practices

2. **DEFINITIONS AND ABBREVIATIONS**

2.1 **Definitions**

Service Provider: The natural or juristic person recognised and approved by the Makhado Municipality as a specialist in conducting HIV/AIDS awareness programmes.

Service Provider Workshop Plan: A plan outlining the content, process and schedule of the training and education workshops, presented by a Service Provider which has been approved by the Employer's Agent.

Worker: Person in the employ of the Contractor or under the direction or supervision of the Contractor or any of his Sub-contractors, who is on site for a minimum period of 30 days in all.

2.2 **Abbreviations**

- HIV: Human Immunodeficiency Virus
- AIDS: Acquired Immune Deficiency Syndrome
- STI: Sexually Transmitted Infection

3. BASIC METHOD REQUIREMENT

The Contractor shall, through a Service Provider, conduct onsite workshops with the Workers.

The Service Provider shall develop and compile a Service Provider Workshop Plan to be presented at the workshops and which will be best suited for this project to achieve the specified objectives with regard to HIV/AIDS awareness.

The Service Provider Workshop Plan shall be based on the following information provided by the Contractor:

- Number of Workers and Sub-contractors on site
- When new Workers or Sub-contractors will join the construction project
- Duration of Workers and Sub-contractors on site
- How the maximum number of Workers can be targeted with workshops
- How the Contractor prefers workshops to be scheduled, *e.g.* three hourly sessions per Worker, or one 2.5 hour workshop per Worker
- Profile of Workers, including educational level, age and gender (if available)
- Preferred time of day or month to conduct workshops
- A Gantt chart reflecting the construction programme, for scheduling of workshops

Suitable venues for workshops The Contractor shall submit the Service Provider Workshop Plan for approval within 21 days after the tender acceptance date. After approval by the Employer's Agent, the Contractor shall make available a suitable venue that will be conducive to education and training.

The Service Provider Workshop Plan shall address, but will not be limited to the following:

- 3.1 The nature of the disease;
- 3.2 How it is transmitted;
- 3.3 Safe sexual behaviour;
- 3.4 Post exposure services such as voluntary counselling and testing (VCT) and nutritional plans for people living with HIV/AIDS;
- 3.5 Attitudes towards other people with HIV/AIDS;
- 3.6 Rights of the Worker in the workplace;
- 3.7 How the Awareness Champion will be equipped prior to commencement of the HIV/AIDS awareness programme with basic HIV/AIDS information and the necessary skills to handle questions regarding the HIV/AIDS awareness programme on site sensitively and confidentially;
- 3.8 How the Service Provider will support the Awareness Champion;
- 3.9 Location and contact numbers of the closest clinics, VCT facilities, counselling services and referral systems;
- 3.10 How the workshops will be presented, including frequency and duration;
- 3.11 How the workshops will fit in with the construction programme;
- 3.12 How the Service Provider will assess the knowledge and attitude levels of attendees to structure workshops accordingly;
- 3.13 How the video will be used;
- 3.14 How the Service Provider will elicit maximum participation from the Workers;
- 3.15 A questions and answers slot (interactive session)

The Service Provider Workshop Plan shall encompass the Specific Learning Outcomes (SLO) as stipulated.

4. HIV/ AIDS AWARENESS EDUCATION AND TRAINING

4.1 Workshops

The Contractor shall ensure that all Workers attend the workshops.

The workshops shall adequately deal with all the aspects contained in the Service Provider Workshop Plan. A video of HIV/AIDS in the construction industry, which can be obtained from all Offices of the Makhado Municipality, is to be screened to Workers at workshops. In order to enhance the learning experience, groups of not exceeding 25 people shall attend the interactive sessions of the workshops.

4.2 Recommended practice

4.2.1 Workshop Schedule

Presenting information contained in the Service Provider Workshop Plan can be divided in as many workshop sessions as deemed practicable by the Contractor, provided that all Workers are exposed to all aspects of the workshops as outlined in the Service Provider Workshop Plan. Breaking down the content of information to be presented to Workers into more than one workshop session however, has the added advantage that messages are reinforced over time while providing opportunity between workshop sessions for Workers to reflect and test information. Workers will also have an opportunity to ask questions at a following session.

4.2.2 Service Providers

A database of recommended Service Providers is available from all Offices of the Makhado Municipality.

4.2.3 HIV/AIDS Specific Learning Outcomes and Assessment Criteria

Workers shall be exposed to workshops for a minimum duration of two-and-a-half hours. In order to set a minimum standard requirement, the following specific learning outcomes and assessment criteria shall be met

4.2.3.1 UNIT 1: The nature of HIV/AIDS

After studying and understanding this unit, the Worker will be able to differentiate between HIV and AIDS and comprehend whether or not it is curable. The Worker will also be able to explain how the HI virus operates once a person is infected and identify the symptoms associated with the progression of HIV/AIDS.

Assessment Criteria:

1. Define and describe HIV and AIDS
2. List and describe the progression of HIV/AIDS

4.2.3.2 UNIT 2: Transmission of the HI virus

After studying and understanding this unit, the Worker will be able to identify bodily fluids that carry the HI virus. The Worker will be able to recognise how HIV/AIDS is transmitted and how it is not transmitted.

Assessment Criteria:

1. Record in what bodily fluids the HI virus can be found
2. Describe how HIV/AIDS can be transmitted
3. Demonstrate the ability to distinguish between how HIV/AIDS transmitted and misconceptions around transmittance of HIV/AIDS

4.2.3.3 UNIT 3: HIV/AIDS preventative measures

After studying and understanding this unit, the Worker will comprehend how to act in a way that would minimise the risk of HIV/AIDS infection and to use measures to prevent the HIV virus from entering the bloodstream.

Assessment Criteria:

1. Report on how to minimise the risk of HIV/AIDS infection
2. Report on precautions that can be taken to prevent HIV/AIDS infection
3. Explain or demonstrate how to use a male and female condom.
4. List the factors that could jeopardize the safety of condoms provided against HIV/AIDS transmission

4.2.3.4 UNIT 4: Voluntary HIV/AIDS counselling and testing

After studying and understanding this unit, the Worker will be able to recognise methods of testing for HIV/AIDS infection. The Worker will be able to understand the purpose of voluntary HIV/AIDS testing and pre- and post-test counselling.

Assessment Criteria:

1. Describe methods of testing for HIV/AIDS infection
2. Report on why voluntary testing is important
3. Report on why pre- and post-test counselling is important

4.2.3.5 UNIT 5: Living with HIV/AIDS

After studying and understanding this unit, the Worker will be able to recognise the importance of caring for people living with HIV/AIDS and be able to manage HIV/AIDS.

Assessment Criteria:

1. List and describe ways to manage HIV/AIDS
2. Describe nutritional needs of people living with HIV/AIDS
3. Describe ways to embrace a healthy lifestyle as a person living with HIV/AIDS
4. Explain the need for counselling and support to people living with HIV/AIDS

4.2.3.6 UNIT 6: Treatment options for people with HIV/AIDS

After studying and understanding this unit, the Worker will be familiar with the various treatments available to HIV/AIDS infected or potentially HIV/AIDS infected people.

Assessment Criteria:

1. Discuss anti-retroviral therapy
2. List methods of treatment to prevent HIV/AIDS transmission from mother-to-child
3. Describe the need for treatment of opportunistic diseases for people living with HIV/AIDS
4. Describe post exposure prophylactics.

4.3 **Displaying of plastic laminated posters and distribution of information booklets**

The Contractor shall obtain a set of four laminated posters conveying different key messages and information booklets, which are available from Offices of the Makhado Municipality.

The above-mentioned posters and information booklets have been prepared to raise awareness and to share information about HIV/AIDS and STI's.

Posters or display stands shall be displayed on site as soon as possible, but not later than 14 days after the date of site handover.

Posters shall be displayed in areas highly trafficked by Workers, including toilets, rest areas, the site office and compounds.

The posters on display must always be intact, clear and readable.

Information booklets must be distributed to all Workers as soon as possible, but not later than 14 days after site handover, or as soon as the Worker joins the site.

4. PROVIDING WORKERS WITH ACCESS TO CONDOMS

The Contractor shall provide and maintain condom dispensers and make both male and female condoms, complying with the requirements of SABS ISO 4074, available at all times to all Workers at readily accessible points on site, for the duration of the contract. The Contractor may obtain condom dispensers from the Department of Health and condoms may be obtained from the Local Clinic or the Department of Health.

At least one male and one female condom dispenser and a sufficient supply of condoms, all to the approval of the Representative/Agent, shall be made available on site within 14 days of site hand over. Contractors should note that arrangements to obtain condoms from the Department of Health Clinics prior to site hand over may be necessary, to ensure that condoms are available within 14 days of site handover.

Condoms shall be made available in areas highly trafficked by Workers, including toilets, the site office and compounds.

6 ENSURING ACCESS TO HIV/AIDS TESTING AND COUNSELLING FACILITIES AND TREATMENT OF SEXUALLY TRANSMITTED INFECTIONS (STI)

The Contractor shall provide Workers with the names of the closest Service Providers that provide HIV/AIDS testing and counselling and Clinics providing Sexually Transmitted Infection (STI) diagnosis and treatment. Information on these Service Providers and Clinics must be displayed on a poster of a size not smaller than A1 in an area highly trafficked by Workers.

7. APPOINTMENT OF AN HIV/AIDS AWARENESS CHAMPION

Within 14 days of site handover the Contractor shall appoint an Awareness Champion from amongst the Workers, who speaks, reads and writes English, who speaks and understands all the local languages spoken by the Workers and who shall be on site during all stages of the instruction period.

The Contractor shall ensure that the Awareness Champion has been trained by the Service Provider on basic HIV/AIDS information, the support services available and the necessary skills to handle questions regarding the HIV/AIDS programme in a sensitive and confidential manner.

The Awareness Champion shall be responsible for:

- 7.1 Liaising with the Service Provider on organizing awareness workshops;
- 7.2 Filling condom dispensers and monitoring condom distribution;
- 7.3 Handing out information booklets;
- 7.4 Placing and maintaining posters

8 MONITORING

The Contractor shall grant to the Representative/Agent reasonable access to the construction site, in order to establish that the Contractor complies with his obligations regarding HIV/AIDS awareness under this contract.

The Contractor must report problems experienced in implementing the HIV/AIDS requirements to the Representative/Agent.

C3.7 ENVIRONMENTAL MANAGEMENT SPECIFICATIONS

PD ENVIRONMENTAL PROTECTION AND CONTROL SPECIFICATIONS

CONTENTS

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PD3	VEGETATION CLEARANCE
PD4	PROTECTION OF VEGETATON
PD5	PROTECTION OF FAUNA
PD6	ARCHAEOLOGICAL ARTEFACTS
PD7	SCENIC QUALITY
PD8	WORKING AREA
PD9	ACCESS BUILDINGS
PD10	FIRES
PD11	FENCING
PD12	TOPSOIL
PD13	BORROW PITS AND QUARRIES
PD14	EROSION PREVENTION
PD15	EARTHWORKS
PD16	SPOIL AND WASTE MATERIAL
PD17	BLASTING
PD18	PREVENTION OF OIL POLLUTION
PD19	REFUSE DISPOSAL
PD20	ABLUTION FACILITIES
PD21	CLEARANCE OF SITE ON COMPLETION
PD22	ENVIRONMENTAL AWARENESS OF EMPLOYEES
PD23	COMPLIANCE WITH ENVIRONMENTAL PROTECTION SPECIFICATIONS
PD24	SUBCONTRACTED WORK
PD25	MEASUREMENT AND PAYMENT

PD1 PLANS

Prior to establishment of the site camp(s), the Contractor shall produce a plan showing the positions of all buildings, laydown yards, vehicle wash areas, fuel storage areas, batching areas and other infrastructure for approval by the Employer's Agent or the Environmental Officer.

PD2 USE OF LAND

The Contractor shall not use the land forming the Site of, or connected with the Works, for any purpose whatsoever other than for the proper carrying out of the Works under the Contract and shall place any camps that may be required for himself and his employees only on sites approved by the Employer's Agent. No trees or bushes shall be damaged or cut down by the Contractor or by any of his employees whether for use on the works or otherwise without the written consent of the Employer's Agent or the Environmental Officer and then only where and in the manner as they may direct.

PD3 VEGETATION CLEARANCE

PD3.1 Woody vegetation

Prior to the start of construction, woody vegetative matter shall be stripped. This material shall either be spread randomly throughout the surrounding veld so as to provide biomass for the other micro-organisms and habitats for small mammals and birds, or it may be stockpiled for later redistribution over the reinstated top-soiled surface.

No vegetative matter shall be burnt or remove for firewood.

PD3.2 Herbaceous vegetation

During clearing of woody vegetation no basal cover or grass and topsoil shall be removed and damage to this layer shall be minimized as far as possible.

PD3 PROTECTION OF VEGETATION

The Contractor shall ensure that all works are undertaken in such a manner that vegetation outside the Works area is not damaged under any circumstances.

PD4.1 Vegetation outside the Works area

The following provisions shall apply with respect to the protection of areas of vegetation adjacent to the marked Works areas.

No tree or shrub outside the Works area shall be felled, lopped, cut or pruned until it has been clearly marked for this purpose by the Employer's Agent or the Environmental Officer. The method of marking will be specified by the Employer's Agent or the Environmental Officer, and the Contractor will be informed in writing.

No tree outside the Works area shall be burned for any reason.

For every tree protected by these specifications which is removed or, in the opinion of the Employer's Agent or Environmental Officer, is unduly damaged by the Contractor, the Contractor shall pay a penalty of **R5 000.00** per tree to the client.

PD4.2 Vegetation within or adjacent to the Works area

No tree or shrub within the works area shall be felled, lopped, cut or pruned without the prior written approval of the Employer's Agent or the Environmental Officer.

Trees which have been selected for preservation by the Employer's Agent or the Environmental Officer within or adjacent to the Works area shall be fenced around their drip line. The fence shall be clearly marked with danger tape. No open fires shall be allowed within this fenced area, nor shall vehicles be parked underneath these trees.

If trees are located within the working width of the pipeline, the pipeline shall be aligned to avoid these trees wherever possible.

PD4.3 Transplantation of rare and endangered plant species

Prior to vegetation clearing any rare or endangered plant species which have been identified by the Environmental Officer or Employer's Agent must be removed and transplanted as instructed by these persons.

PD4.3.1 Transplanting of small trees (1 to 1,5m height) and shall shrubs (0,5 to 1m height).

- a) Trees and shrubs shall only be transplanted between the months April and September. Deciduous trees and shrubs shall be transplanted only when they are in leafless conditions.
- b) Holes for transplanting trees and shrubs shall be dug before these plants are dug out. Trees shall be planted in holes of 1m x 1m x 1m and shrubs shall be transplanted in holes of 600mm x 600mm.
- c) Trees and shrubs shall be planted so that their stems or trunks are at the same depth as in their original location. The orientation of the transplanted plants must be the same as in their original location (i.e. the north-facing side must remain north facing).
- d) Transplanted plants shall be pruned to limit transpiration. Plants shall also be sprayed with an evapo-transpiration retardant liquid if they are evergreen.
- e) Transplanted plants shall be watered once a week for 5 weeks and thereafter once every 2 weeks.

PD4.3.2 Transplanting of Aloes, succulents and bulbous plants

- a) Aloes, succulents and evergreen bulbous plants may be transplanted at any time of the year. Deciduous bulbous plants shall be transplanted when they are leafless.
- b) Aloes and bulbous plants shall be planted in similar soil conditions and to the same depth as they were before removal.
- c) Transplanted aloes and bulbs shall be watered once directly after transplanting to settle the soil.

PD4.4 Alien vegetation

The Contractor shall remove all alien vegetation from the works area for the duration of construction. Such vegetation will be identified by the Environmental Officer and the method of eradication will be specified by him.

PD5 PROTECTION OF FAUNA

The Contractor shall ensure that all Works are undertaken in a manner which minimizes the impact on the local fauna and shall apply the following specifications with respect to fauna management and protection.

Under no circumstances shall any animals be handled, removed, killed or interfered with by the Contractor, his employees, his subcontractors or his subcontractor's employees.

The Contractor and his employees shall not bring any domestic animals onto the site.

The Contractor shall ensure that the work site is kept clean and tidy and free from rubbish which would attract animal pest species.

There shall be no feeding of animals.

The Contractor shall ensure that domestic and native animals belonging to the local community are kept away from unprotected works.

PD6 ARCHAEOLOGICAL ARTEFACTS

The Contractor shall engage an archaeologist to demarcate archaeological sites identified during the impact study.

Archaeological sites shall be protected by a three strand fence which will be at least 2m outside the extremities of the site. The fence shall be clearly marked with danger tape.

Should the Contractor expose any archaeological artifacts during excavation, work on the area where the artifacts were found shall cease immediately and the Employer's Agent or the Environmental Officer shall be notified as soon as possible.

Upon receipt of such notification, the Employer's Agent or the Environmental Officer will arrange for the excavation to be examined by an Archaeologist as soon as practicable. Acting upon advice from the Archaeologist, the Employer's Agent will advise the Contractor of necessary actions to be taken. The Employer's Agent will take all necessary actions to ensure that delays are minimized.

Under no circumstances shall archaeological artifacts be removed, destroyed or interfered with by the Contractor, his employees, his subcontractors or his subcontractor's employees.

The Contractor shall ensure that none of his employees gain access to any archaeological areas (whether fenced or unfenced), except when authorized to do so by the Employer's Agent or the Environmental Officer.

PD7 SCENIC QUALITY

The Contractor shall not establish or undertake any activities which, in the opinion of the Resident Employer's Agent or Environmental Officer, are likely to adversely affect the scenic quality of the area. The Employer's Agent may direct the Contractor to refrain from such activities or to take ameliorative actions to reduce the adverse effect of such activities on the scenic quality of the environment.

No painting or marking of natural features shall be done. Marking for surveying and other purposes shall only be done with pegs and beacons.

All cut and fill forms shall be rounded at the edges to blend then with the surrounding landforms.

All packed rock and exposed rock cuttings shall be treated in order to blend their colour with the colour of the natural weathered rocks of the adjacent environment.

PD8 WORKING AREA

The area of construction along the pipelines shall be contained within 5m servitude. Any work done outside the servitude, e.g. stockpiling of excavated material, use for access, etc shall only be done after discussion with and obtaining the written approval of the affected land owners.

The servitude shall be temporarily fenced for the portion under construction at any one time. The fence shall be progressively erected and removed as the work proceeds. The location and extent of the fence shall be determined by the Employer's Agent or the Environmental Officer.

PD9 ACCESS BUILDINGS

No new permanent access buildings shall be developed by the Contractor other than those determined or approved by the Employer's Agent.

Existing buildings shall be used as far as possible for inspection purposes.

Topsoil shall be stripped as described under item PD12 "Topsoil" prior to construction and reinstated on completion of use of the building.

PD10 FIRES

No open fires shall be permitted except in areas specifically prepared and controlled for this purpose.

PD11 FENCING

Fencing shall be erected around sensitive natural or cultural elements to protect them from damage. No pedestrian or vehicular access shall be allowed to such fenced areas.

In places where temporary fencing is required, the Contractor shall erect such fencing when and where required by the Site Employer's Agent, and re-erect and maintain temporary fencing as necessary. Temporary fencing shall remain in position either until it is replaced by permanent fencing or until completion of the whole of the Works, unless the Contractor requires, or the Employer's Agent or the Environmental Officer directs, its earlier removal. The Contractor shall erect and maintain the aforementioned temporary fencing in the locations and for the period described in the Contract.

If temporary fencing is removed temporarily for the execution of any part of the Works it shall be reinstated as soon as practicable by the Contractor.

The clearing for permanent fencing shall be limited to the removal of trees and shrubs within 1m of the fence line. There shall be no removal of the grass cover or topsoil within this width.

Any fences damaged by the Contractor shall be repaired as soon as practicable at his cost.

PD12 TOPSOIL

PD12.1 Source of topsoil

Topsoil shall be stripped from all areas that are to be utilized during the construction period and where permanent structures and access is required. These areas will include all areas to be excavated, temporary and permanent access buildings, construction camps and borrow pits.

Topsoil shall be stripped after clearing of woody vegetation and before excavation or construction commences.

The topsoil is regarded as the top 300mm of the soil profile irrespective of the fertility and composition of the soil.

PD12.2 Topsoil stripping

Soil shall be stripped to a minimum depth of 150mm or to the depth of bedrock where soil is shallower than 150mm. herbaceous vegetation, overlying grass and other fine organic matter shall not be removed from the stripped soil.

The topsoil is regarded as the top 300mm of the soil profile irrespective of the fertility and composition of the soil.

PD12.3 Topsoil stockpiling

Stripped topsoil shall be stockpiled on sites adjacent to where it has been stripped which have been approved by the Employer's Agent. Soil stockpile shall not take the form of windrows, unless this can be placed far enough away from the working area. This is to prevent the soil from being spread out or mixed with the other spoil during construction.

Topsoil stripped from different soil zones shall be stockpiled separately and clearly identified as such. Topsoil obtained from different sites shall not be mixed.

Soil stockpiles shall not be higher than 2,5m, and the slopes of soil stockpiles shall not have a vertical horizontal gradient exceeding 1:2,5.

No vehicles shall be allowed access onto the stockpiles after they have been placed. Topsoil stockpiles shall be clearly demarcated in order to prevent vehicle access and later identification as the resource for rehabilitation and vegetation establishment.

Soil stockpiles shall not be allowed to become contaminated with oil, diesel, petrol, garbage or any other material which may inhibit the later growth of vegetation in the soil.

After topsoil stockpiling has been completed, the Contractor shall apply soil conservation measure to the stockpiles to the approval of the Employer's Agent or Environment Officer.

PD12.4 Topsoil placement

Topsoil shall be placed to a minimum depth of 150mm over all areas where it has been stripped and over disused borrow pits after construction in those areas has ceased. Topsoil placement shall be done concurrent with construction as soon as construction in an area has ceased.

All areas onto which topsoil is to be spread shall be graded to the approximate original landform with maximum slopes of 1:2,5 and shall be ripped prior to topsoil placement. The entire area to be topsoiled shall be ripped parallel to the contours to a minimum depth of 150mm.

Topsoil shall be placed in the same soil zone from which it had been stripped. However, if there is insufficient topsoil available from a particular soil zone to produce minimum specified depth, topsoil of similar quality may be brought from other reservoir sites.

Where insufficient topsoil that has been stripped by the Contractor to provide the minimum specified depth, the Contractor shall obtain suitable material from other sources at no cost to the Employer. The suitability of the substitute material shall be determined by means of a soil analysis which is acceptable to the Employer's Agent or the Environmental Officer.

No vehicles shall be allowed access onto topsoil after it has been placed.

After topsoil placement is complete, cleared and stockpiled vegetation matter shall be spread randomly by hand over the topsoil area as instructed by the Environmental Officer.

PD13 BORROW PITS AND QUARRIES

If a borrow pit is to be developed or an existing one is to be extended, all topsoil from the area that is to be quarried must be stripped and stored for later rehabilitation of the pit.

Stripping and excavation actions shall be progressive in such manner that those parts of a borrow pit or quarry where work is complete can be rehabilitated while other areas are still being quarried.

Cut slopes of borrow pits and quarries shall not have a vertical horizontal gradient of not steeper than 1:3, preferably 1:5.

Borrow pits shall be used as dump sites for excess rock spoil. On completion of spoiling the pits shall be reshaped and covered with a layer of topsoil. On no account may spoil or rock be placed in drainage ways without prior consent being obtained from the Employer's Agent.

Stormwater cut off drains shall be provided at the top of the cut slope, where identified as necessary by the Employer's Agent, to prevent erosion of the rehabilitated surface of the borrow pit or quarry.

No borrow pit shall be used as a dump site for refuse material or for toxic material e.g. cement, oil, diesel, rubber and similar materials.

PD14 EROSION PREVENTION

The Contractor shall take measures, to the approval of the Employer's Agent, to ensure that there is no undue stormwater damage and soil erosion resulting from the construction activities inside and outside the construction camp and Works areas.

Surface stormwater shall, where possible, not be allowed to be concentrated and to flow down cut or fill slopes without erosion protection measures being in place.

Overflow and/or scour channels shall be lined with stone pitching along their length and at their points of discharge to prevent soil erosion. The point of discharge shall be at a point where there is dense natural grass cover. These channels shall not discharge straight down the contours but shall be aligned at such an angle to the contours that they have the least possible gradient.

PD15 EARTHWORKS

All cut and fill forms should be rounded on the edges to allow them to blend with the surrounding landforms.

PD16 SPOIL AND WASTE MATERIAL

The Contractor shall load and haul excess spoil to fill in the borrow pits or to dump sites approved by the Employer's Agent. The dumped material must be finally rounded off to have slopes not steeper than 1:3.

The Contractor shall remove all foundations and similar waste and transport all such waste material off site to dump areas which have been approved by the Employer's Agent.

PD17 BLASTING

Contractor shall take measure to limit flying rock during blasting operations.

Fly rock 150mm and larger which falls beyond and cleared working area shall be collected and removed together with the rock spill.

When blasting under power lines the Contractor shall arrange for power to be temporarily switched off or have the lines moved or comply with the requirements of ESKOM who will be advised in reasonable time of the intention to blast.

PD18 PREVENTION OF OIL POLLUTION

Waste run-off water from the vehicle wash bays, workshops and diesel/fuel tan areas shall be collected in a series of covered conservancy tanks with oil baffles/oil traps. The oil sludge thus collected shall be disposed of at an approved toxic waste disposal site. Water from conservancy tanks shall be drained to retention areas to allow silt settlement.

Above mentioned areas should be dished concrete floor slabs which drain into the conservancy tanks.

All spillage of oil onto concrete surfaces shall be controlled by the used of an approved absorbent material such as Oclansorb or Drizit.

All old oils shall be retained for re-cycling by the supplier.

All soil contaminated by oil, fuel, etc. shall be collected immediately and disposed of at an acceptable disposal site to the approval of the Employer's Agent or the Environmental Officer.

PD19 REFUSE DISPOSAL

The Contractor shall dispose of all refuse generated by him or his subcontractor on a weekly basis at an approved refuse disposal site.

PD20 ABLUTION FACILITIES

Portable toilets shall be placed within easy access of the Contractor's employees. These shall be moved to follow the progression of the works.

PD21 CLEARANCE OF SITE ON COMPLETION

On completion of the Works the Contractor shall clear away and remove from the works areas all constructional plant, surplus rock and other materials, foundations, plumbing and other fixtures, rubbish and temporary works of every kind. Areas thus cleared shall be graded and scarified to restore the ground to its original profile as near as practicable before topsoil placement.

PD22 ENVIRONMENTAL AWARENESS OF EMPLOYEES

The Contractor shall arrange that all his employees and those of his subcontractors receive environmental training before the commencement of construction to the satisfaction of the Employer's Agent or Environmental Officer, in order that these employees:-

- a) Acquire a basic understanding of the key environmental features of the work site and environs;
- b) Are thoroughly familiar with the requirements of the Environmental Protection and Control Specifications as they apply to the Works;
- c) Receive basic training in the identification of archaeological artefacts, and rare and endangered flora and fauna that may be encountered along the route;
- d) Are made aware of any other environmental matters which are deemed to be necessary by the Employer's Agent or the Environmental Officer.

PD23 COMPLIANCE WITH ENVIRONMENTAL PROTECTION SPECIFICATIONS

All persons employed by the Contractor or his subcontractors shall abide by the requirements of these Specifications as they apply to the works.

Any employees of the Contractor or his subcontractors found to be in breach of any of the Environmental Protection Specifications may be ordered by the Employer's Agent to leave the site forthwith. The order may be given orally or in writing. Confirmation of an oral order will be given as soon as practicable but lack of confirmation in writing shall not be a cause for the offender to remain on site. No extension of time will be granted for any delay or impediment to Contractor brought about by a person ordered to leave the site.

Supervisory staff of the Contractor or his subcontractors shall not direct any person to undertake any activities which would place such person in contravention of the Environmental Protection and Control Specifications.

For every tree protected by these specifications which is removed or, in the opinion of the Employer's Agent or the Environmental Officer, is unduly damaged by the Contractor, the Contractor shall pay a penalty of R5 000.00 per tree.

PD24 SUBCONTRACTED WORK

Subcontractors and their employees shall comply with all the requirements of the Environmental Protection and Control Specifications that apply to the Contractor. Absence of specific reference to the subcontractor in any specification does not imply that the subcontractor is not bound by that specification.

PD25**MEASUREMENT AND PAYMENT**

The reinstatement of borrow pits, pipe trenches and work areas shall be included in the contractor's rates for earthworks and excavations. Erosion protection such as construction of berms for stormwater drainage shall be included in the rates for pipe trenches and excavations of earthworks. Only gabions, where instructed by the Employer's Agent will be paid separately.

C4 SITE INFORMATION

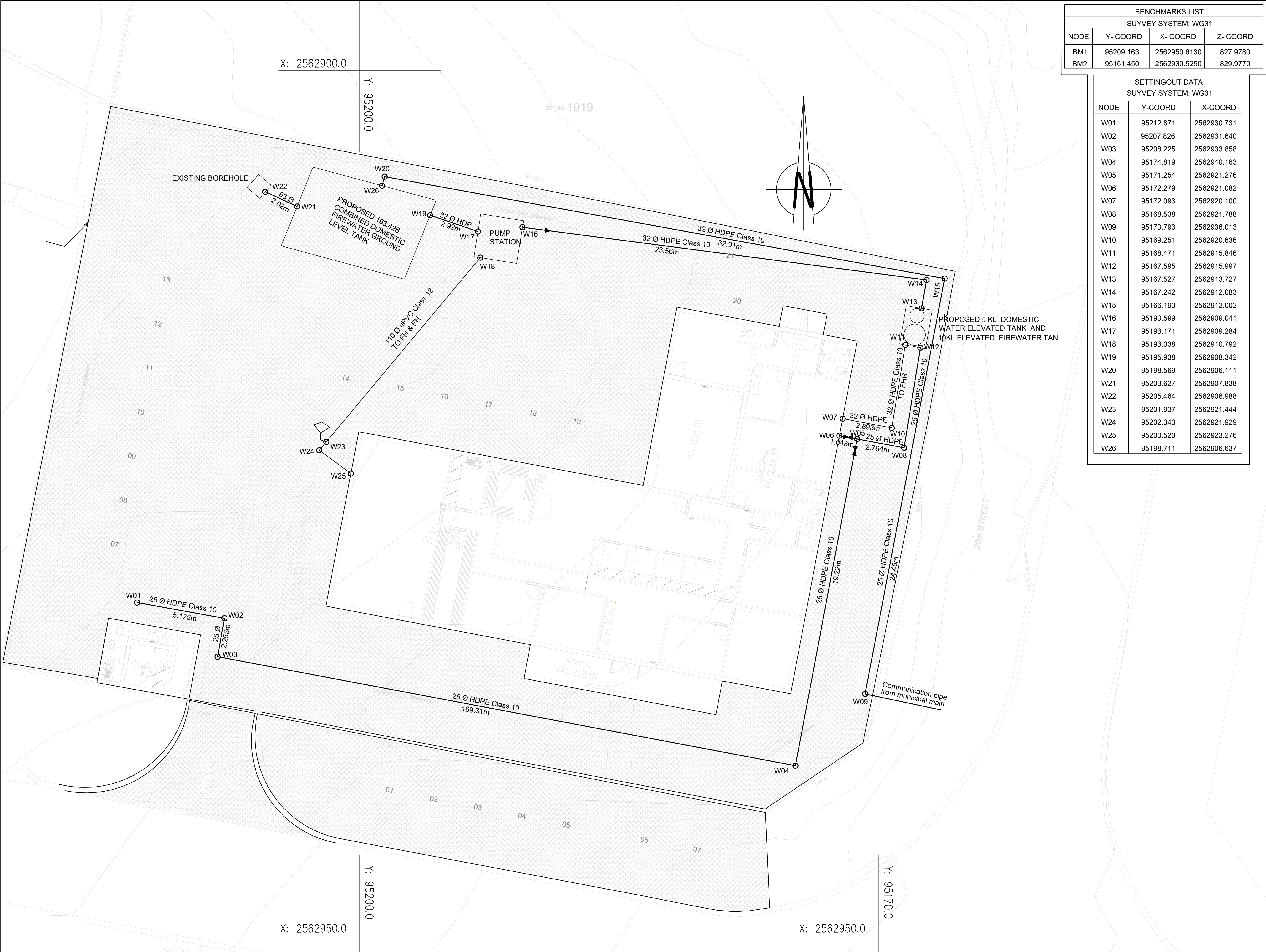
C4.1 SITE INFORMATION

Please see the attached site layout plan which is part of the tender drawings package.

C4.2 TENDER DRAWINGS

Please see the attached tender drawings package.

PART C4.2 TENDER DRAWINGS



BENCHMARKS LIST			
SUYVEY SYSTEM: WG31			
NODE	Y- COORD	X- COORD	Z- COORD
BM1	95209.163	2562950.6130	827.9780
BM2	95161.450	2562930.5250	829.9770

SETTINGOUT DATA SUYVEY SYSTEM: WG31		
NODE	Y-COORD	X-COORD
W01	95212.871	2562930.731
W02	95207.826	2562931.640
W03	95208.225	2562933.858
W04	95174.819	2562940.163
W05	95171.254	2562921.276
W06	95172.279	2562921.082
W07	95172.093	2562920.100
W08	95168.538	2562921.788
W09	95170.793	2562936.013
W10	95169.251	2562920.636
W11	95168.471	2562915.846
W12	95167.595	2562915.997
W13	95167.527	2562913.727
W14	95167.242	2562912.083
W15	95166.193	2562912.002
W16	95190.599	2562909.041
W17	95193.171	2562909.284
W18	95193.038	2562910.792
W19	95195.938	2562908.342
W20	95198.569	2562906.111
W21	95203.627	2562907.838
W22	95205.464	2562906.988
W23	95201.937	2562921.444
W24	95202.343	2562921.929
W25	95200.520	2562923.276
W26	95198.711	2562906.637

No.	Date	AMMENDMENT	D.P.W

COORDINATE SYSTEM
WG31

- NOTES
- ALL MATERIALS AND WORKMANSHIP MUST COMPLY WITH:
- THE DPW & SANS CODES OF PRACTICE STANDARDS AND SPECIFICATION.
- NATIONAL BUILDING REGULATIONS, THE HEALTH & SAFETY ACT & REGULATIONS.
- MANUFACTURERS INSTRUCTIONS.
 - FIGURED DIMENSIONS TO BE USED INSTEAD OF SCALED DIMENSIONS.
 - ON COMPLETION OF ANY EXCAVATION & BEFORE PLACING PERMANENT WORK THE CONTRACTOR SHALL REQUEST THE ENG. TO EXAMINE THE FOUNDING MATERIAL.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING OUT THE WORKS AND THE CHECKING OF THE SETTING OUT BY THE ENGINEER SHALL IN NO WAY RELIEVE THE CONTRACTOR OF THE CORRECTNESS OF THE SETTING OUT ALL WORKS SHALL BE INSPECTED BY THE ENG. PRIOR TO BACKFILLING.
 - THE CONTRACTOR SHALL DRAW THE ENG.'S ATTENTION TO ANY DISCREPANCY BEFORE EXECUTION OF THE AFFECTED WORKS.
 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS, SPECIFICATIONS & CONTRACT DOCUMENTS. CONFLICTING INFORMATION SHALL BE REPORTED TO THE ENGINEER.

- WATER/ FIRE RETICULATION
- PIPES TO BE uPVC CLASS 6/9 TO SANS 966 PRESSURE PIPES WITH APPROVED SPIGOT AND SOCKET JOINTS.
 - ALL STAND PIPE CONNECTIONS TO BE HIGH DENSITY POLYETHYLENE (HDPE) TYPE IV CLASS 12 TO SANS 533 WITH PLASSON TYPE COMPRESSION COUPLINGS OR SIMILAR.
 - ALL BEDDING TO PIPES TO BE TOTAL GRANULAR SURROUND FOR FLEXIBLE PIPES TO SANS 1200 SERIES.
 - MINIMUM COVER TO PIPES TO BE:
i) GENERAL AREAS 900mm MINIMUM.
ii) ROAD RESERVES 1200mm MINIMUM.
 - BENDS TO BE uPVC PRESSURE BENDS.
 - ALL FITTINGS TO BE C.I. ADAPTABLE FOR uPVC PIPES.
 - AT ALL BENDS THRUST BLOCKS ARE TO BE PROVIDED INCLUDING AT VALVES, TEES.

LEGEND
NEW SERVICES

- Fire Hydrant
- Valve
- Non Return Valve
- Pipe Crossing Pipes Not Joined
- End Cap
- Domestic Water Line
- Fire Water Line
- Flow Meter

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Client

MAKHADO MUNICIPALITY

consultant

SHUMBA ENGINEERING SERVICES
SES CAMPUS, 38 JASANYI STREET, FLORA PARK, POLKOWANE, 0699
Box 4050, Polokwane, 0700
Tel : 015 265 7003 Fax : 086 606 3734

discipline
service

MAKHADO MUNICIPALITY
REFURBISHMENT OF
WATERVAL REGIONAL OFFICE

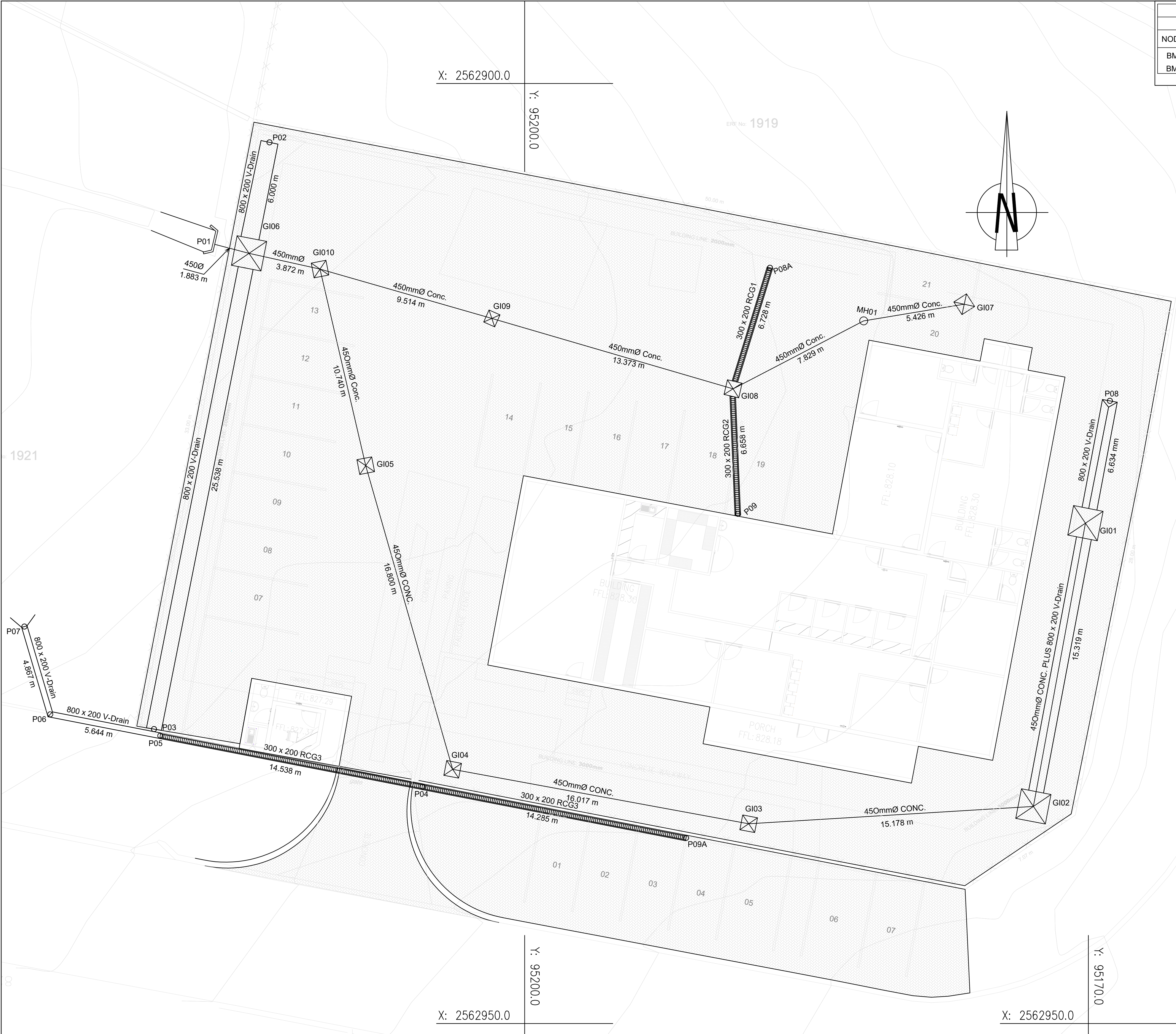
Project number MLM 47/2018

drawing title

WATER AND
FIREWATER LAYOUT

ref no.	designed	AM
scale	1:100	drawn
date	11/03/2021	checked
AM		
Drawing number		
SES/054/C/200		0

ISSUED FOR DRAFT TENDER



BENCHMARKS LIST			
SUYVEY SYSTEM: WG31			
NODE	Y- COORD	X- COORD	Z- COORD
BM1	95209.163	2562950.6130	827.9780
BM2	95161.450	2562930.5250	829.9770

STORMWATER SETTINGOUT DATA		
SUYVEY SYSTEM: WG31		
NODE	Y- COORD	X- COORD
G01	95170.156	2562923.386
G02	95172.927	2562938.453
G03	95188.077	2562939.375
G04	95203.830	2562936.480
G05	95208.457	2562920.329
G06	95210.888	2562909.869
G07	95214.669	2562909.031
G08	95176.609	2562911.738
G09	95188.908	2562916.241
G10	95201.745	562912.495
G11	95210.888	2562909.869
P01	95216.124	2562908.655
P02	95213.578	2562903.131
P03	95219.728	2562934.340
P04	95205.437	2562937.405
P05	95219.391	2562934.693
P06	95225.248	2562933.554
P07	95226.624	2562928.886
P08	95186.949	2562909.802
P09	95188.647	2562922.894

No.	Date	AMMENDMENT	BY

COORDINATE SYSTEM
WG31

NOTES

1. ALL MATERIALS AND WORKMANSHIP MUST COMPLY WITH:

- THE DPW & SANS CODES OF PRACTICE STANDARDS AND SPECIFICATION.
- NATIONAL BUILDING REGULATIONS, THE HEALTH & SAFETY ACT & REGULATIONS.
- MANUFACTURER'S INSTRUCTIONS.

2. FIGURED DIMENSIONS TO BE USED INSTEAD OF SCALED DIMENSIONS.

3. ON COMPLETION OF ANY EXCAVATION & BEFORE PLACING PERMANENT WORK THE CONTRACTOR SHALL REQUEST THE ENG. TO EXAMINE THE FOUNDING MATERIAL.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING OUT THE WORKS AND THE CHECKING OF THE SETTING OUT BY THE ENGINEER SHALL IN NO WAY RELIEVE THE CONTRACTOR OF THE CORRECTNESS OF THE SETTING OUT.ALL WORKS SHALL BE INSPECTED BY THE ENG. PRIOR TO BACKFILLING.

5. THE CONTRACTOR SHALL DRAW THE ENG.'S ATTENTION TO ANY DISCREPANCY BEFORE EXECUTION OF THE AFFECTED WKS.

6. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS, SPECIFICATIONS & CONTRACT DOCUMENTS.CONFLICTING INFORMATION SHALL BE REPORTED TO THE ENGINEER.

STORMWATER DRAINAGE

1. ALL WORKS MUST BE UNDERTAKEN IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS .

2. ALL STORMWATER PIPES TO BE PRECAST CONCRETE PIPE CULVERTS CLASS 7SD WITH SPIGOT AND SOCKET JOINTS TO SANS 677.

LEGEND

NEW STORMWATER SERVICES

STORMWATER PIPE

MANHOLE

GRID INLET

RECTANGULAR CHANNEL WITH GRATING

PIPE CULVERT

cad file name

page type
A 1

Client

MAKHADO MUNICIPALITY

consultant

SES CAMPUS, 38 JASANYI STREET, FLORA PARK, POLOKWANE, 0809
P.O. Box 4660, Polokwane, 0700
Tel: 015 265 7003 Fax: 086 608 3734

discipline

CIVIL

service

REFURBISHMENT OF
WATERVAL REGIONAL OFFICE
CIVIL ENGINEERING SERVICES

Project number

MLM 47/2018

drawing title

STORMWATER LAYOUT PLAN

ref no.	designed	AM	
scale	1:100	drawn	F.M
date	31/05/2021	checked	A.M
Drawing number	REV		
SES/054/C/210			0

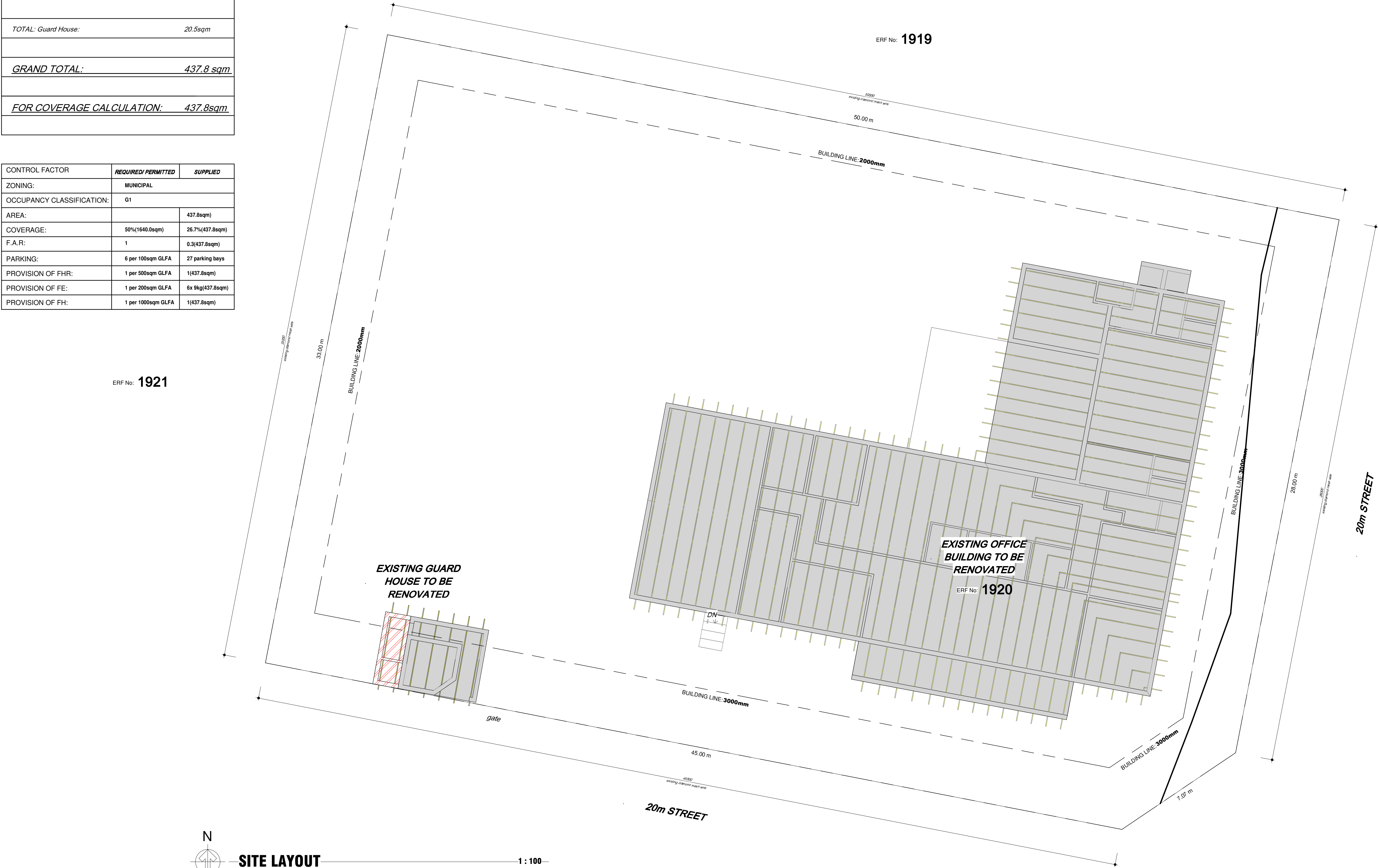
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ref. no.	designed	A.M
scale 1:100	drawn	F.M
date 31/05/2021	checked	A.M
Drawing number SES/054/C/220	REV 0	

AREA SCHEDULE	
AREA OF SITE:	1640sqm
OFFICE BUILDING	
Ground floor - Main Office Block:	417.3sqm
GUARD HOUSE	
Ground floor - Existing Guard House:	15.5sqm
Ground floor - Extension to Guard House:	5.0sqm
TOTAL: Guard House:	20.5sqm
GRAND TOTAL:	437.8 sqm
FOR COVERAGE CALCULATION:	437.8sqm

CONTROL FACTOR	REQUIRED/ PERMITTED	SUPPLIED
ZONING:	MUNICIPAL	
OCCUPANCY CLASSIFICATION:	G1	
AREA:		437.8sqm
COVERAGE:	50%(1640.0sqm)	26.7%(437.8sqm)
F.A.R:	1	0.3(437.8sqm)
PARKING:	6 per 100sqm GLFA	27 parking bays
PROVISION OF FHR:	1 per 500sqm GLFA	1(437.8sqm)
PROVISION OF FE:	1 per 200sqm GLFA	6x 9kg(437.8sqm)
PROVISION OF FH:	1 per 1000sqm GLFA	1(437.8sqm)



REV	Description	Date


REVISION SCHEDULE		

NOTES

CAD FILEPAGE TYPE


A1

CLIENT



MAKHADO MUNICIPALITY
PEACE HARMONY PROSPERITY

CONSULTANT



SHUMBA ENGINEERING SERVICES
Courage and Ability Take You Forward
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P.O Box 4690, Polokwane 0700
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Fax: (086) 606 2734
Email: info@shumba.co.za

DISCIPLINE

ARCHITECTURAL

SERVICE

MAKHADO MUNICIPALITY
REFURBISHMENT OF
WATERVAL REGIONAL OFFICE

PROJECT NUMBER

MLM 47/2018

DRAWING TITLE

SITE LAYOUT

ERF NO

1920 WATERVAL

DRAWN BY

TRN

DRAWING SCALE

1 : 100

PROJECT LEADER

AM

DRAWING DATE

09 MARCH 2021

CHECKED BY

AM

DRAWING No.

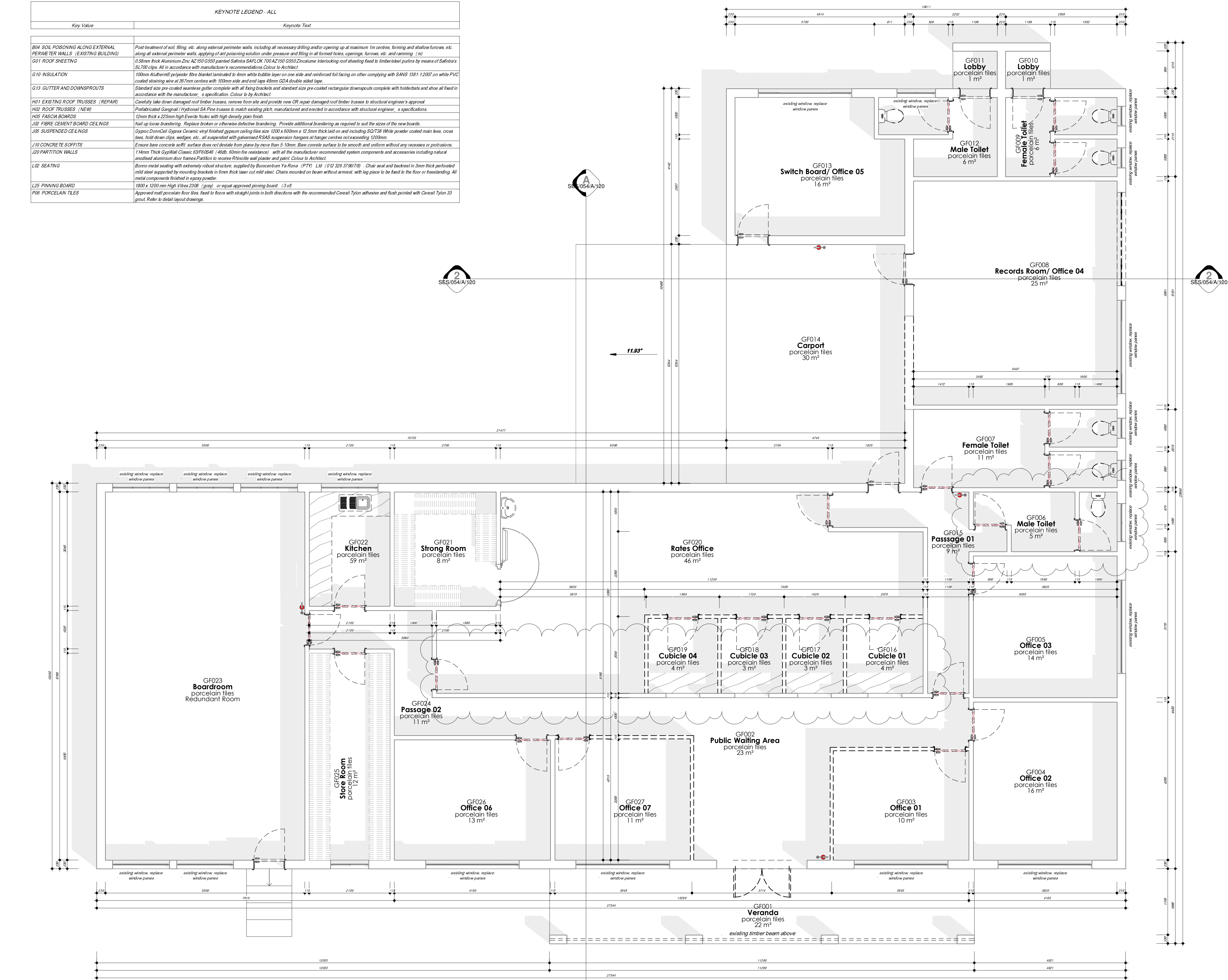
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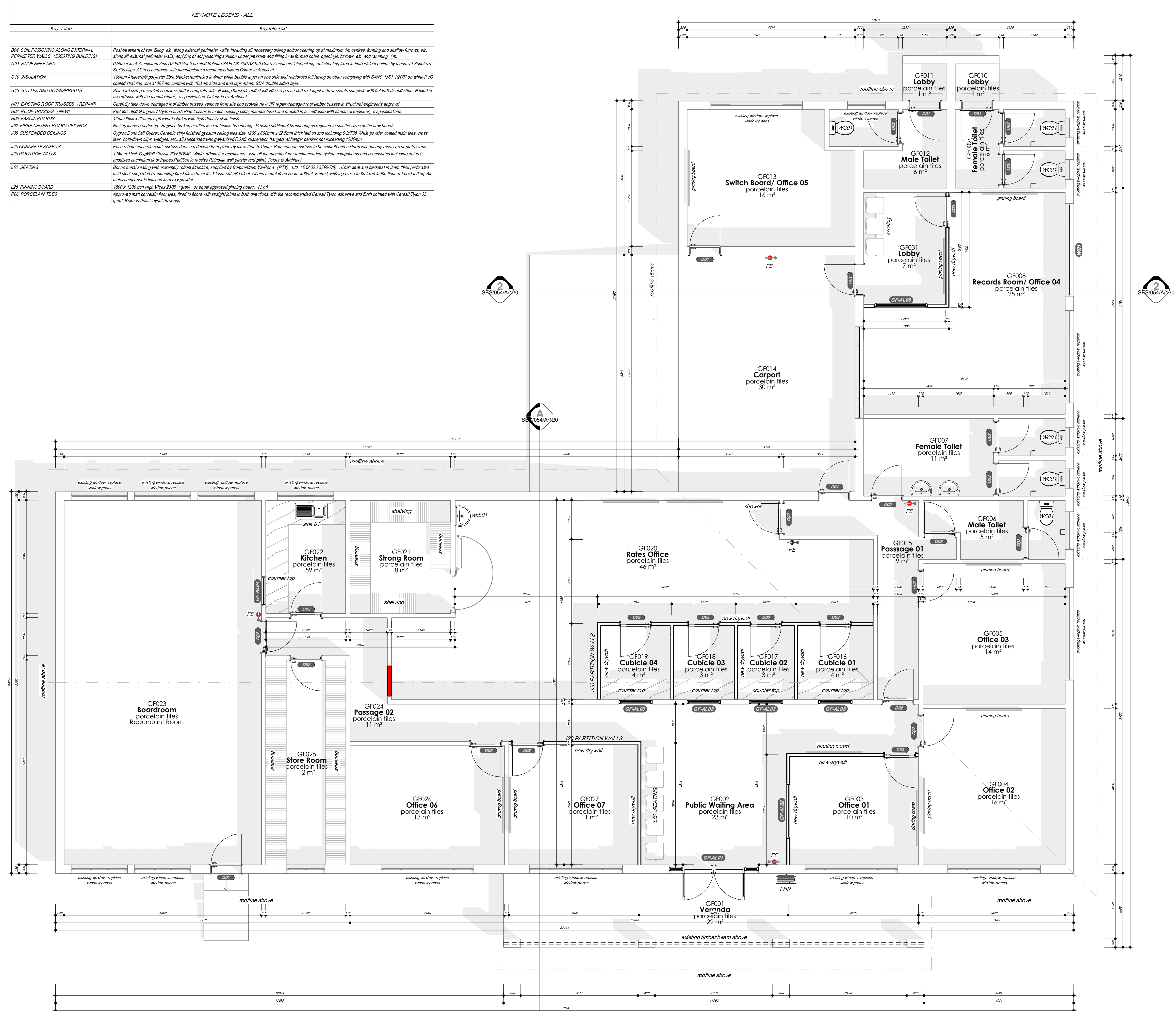
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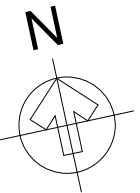
KEYNOTE LEGEND - ALL		
Key Value	Keynote Text	
B04 SOIL POISONING ALONG EXTERNAL PERIMETER WALLS (EXISTING BUILDING)	Post treatment of soil, filling, etc. along external perimeter walls, including all necessary drilling and/or opening up at maximum 1m centres, forming and shallow furrows, etc. along all external perimeter walls, applying of anti poisoning solution under pressure and filling in all formed holes, openings, furrows, etc. and ramming (m)	
G01 ROOF SHEETING	0.56mm thick Aluminium Zinc AZ 150 G550 painted Safintra SAFLOK 700 AZ 150 G550 Zincalume interlocking roof sheeting fixed to timber/steel purlins by means of Safintra's SL730 clips. All in accordance with manufacturer's recommendations Colour to Architect	
G10 INSULATION	100mm Alutherm® polyester fibre blanket laminated to 4mm white bubble layer on one side and reinforced foil facing on other complying with SANS 1381-1:2007 on white PVC coated straining wire at 307mm centres with 100mm side and end laps 48mm GDA double sided tape.	
G13 GUTTER AND DOWNSPOUTS	Standard size pre-coated seamless gutter complete with all fixing brackets and standard size pre-coated rectangular downspouts complete with hold-downs and shoe all fixed in accordance with the manufacturer, s specification. Colour to be by Architect.	
H01 EXISTING ROOF TRUSSES (REPAIR)	Carefully take down damaged roof timber trusses, remove from site and provide new OR repair damaged roof timber trusses to structural engineer's approval	
H02 ROOF TRUSSES (NEW)	Prefabricated Gangnall / Hydronal SA Pine trusses to match existing pitch, manufactured and erected in accordance with structural engineer, s specifications.	
H05 FASCIA BOARDS	12mm thick x 225mm high Everite Natic with high density plain finish.	
J02 FIBRE CEMENT BOARD CEILINGS	Nail up loose boarding. Replace broken or otherwise defective boarding. Provide additional boarding as required to suit the sizes of the new boards.	
J05 SUSPENDED CEILINGS	Gyproc/DannCell Gyproc Ceramic vinyl finished gypsum ceiling tiles size 1200 x 600mm x 12,5mm thick laid on and including SQ/738 White powder coated main tees, cross tees, hold-down clips, wedges, etc., all suspended with galvanised RSAS suspension hangers at hanger centres not exceeding 1200mm.	
J10 CONCRETE SOFFITS	Ensure bare concrete soffit surface does not deviate from plane by more than 5-10mm. Bare concrete surface to be smooth and uniform without any recesses or protrusions. 14mm Thick Opplidat Classic GFG0340 (400, 60mm fire resistance) with all the manufacturer recommended system components and accessories including natural anodised aluminium door frames.Partition to receive Rhinoflex wall plaster and paint. Colour to Architect.	
J20 PARTITION WALLS	Bona metal seating with extremely robust structure, supplied by Bucoentum Ye-Rona (PTY) Ltd (012 326 3796/7/8) Chair seat and backrest in 3mm thick perforated mild steel supported by mounting brackets in 6mm thick laser cut mild steel. Chairs mounted on beam without armrest, with leg piece to be fixed to the floor or freestanding. All metal components finished in epoxy powder.	
L02 SEATING	1800 x 1200 mm High Vitrex 2308 (grey) or equal approved pinning board (3x6)	
L25 PINNING BOARD	Approved matt porcelain floor tiles, fixed to floor with straight joints in both directions with the recommended Ceresit Tylon adhesive and flush pointed with Ceresit Tylon 33 grout. Refer to detail layout drawings.	
P06 PORCELAIN TILES		



KEYNOTE LEGEND - ALL	
Key Value	Keypoint Text
B04 SOIL POISONING ALONG EXTERNAL PERIMETER WALLS (EXISTING BUILDING)	Post treatment of soil. Filling etc. along external perimeter walls including all necessary drilling and/or opening up at maximum 1m centres, forming and shallow furrows etc. along entire external perimeter walls, applying of soil poisoning solution under pressure and filling in all foretold holes, openings, furrows, etc. and/or ramming (m).
G01 ROOF SHEETING	0.58mm thick Aluminium Zine 150/50 painted Safinox SAFLOK 70A1Z150 G550 Zincalume Interlocking roof sheeting fixed to timberbeats joists by means of Safinox SL700 clips. All in accordance with manufacturer's recommendations Colour to Alchitect.
G10 INSULATION	100mm Aluminex polypropylene fibre blanket laminated to 4mm white bubble layer on one side and reinforced foil facing on other complying with SANS 1361-12007, on white PVC coated slating mat at 387mm centres with 100mm side and end lap films G24 double sided tape.
G13 GUTTER AND DOWNSPOUTS	Standard size pre-coated seamless gutter complete with all fitting brackets and standard size pre-coated rectangular downspouts complete with holdbrats and shoe at fixed in accordance with the manufacturer, s specification. Colour to Alchitect.
H01 EXISTING ROOF TRUSSES (REPAIR)	Carefully take down damaged roof trusses, remove from site and provide new OR repair damaged roof trusses to structural engineer's approval.
H02 ROOF TRUSSES (NEW)	Prefabricated Gangsaw / Hydranal SA Pine trusses to match existing pitch, manufacturer and spaced in accordance with structural engineer, s specifications.
H05 FASCH DASHES	12mm thick x 220mm High Evacrite Nubs with high density plastic finish.
J02 FURSE CEILING BOARD CEILINGS	Knill up loose boarding, replace broken or otherwise defective boarding. Provide additional boarding as required to suit the sizes of the new boards.
J05 SUSPENDED CEILINGS	Gypsum/Durock/Ceprax Ceramic vinyl finished gypsum ceiling tiles provide 600mm x 125mm thick laid on and including SOTAS White powder coated main rails, cross tees, hold down clips, wedges, etc.. all suspended with galvanneal RSAS suspension hangers at hanger centres not exceeding 1200mm.
J10 CONCRETE SOFFITS	Ensure bare concrete soffit surface does not deviate from plane by more than 5-10mm. Bare concrete surface to be smooth and uniform without any recesses or protrusions.
J20 PARTITION WALLS	116mm thick Gyproc/Kiesle G3/P6846 (40db, 05mm fire resistance) wall panels with all the manufacturer recommended system components and accessories including natural anodised aluminium door frames, Partiton fire rated doors, etc. Colour to Alchitect.
L02 SEATING	Brown metal slatted structure, supported by Brunswick Van Rens (PTY) Ltd (012 326 3786/87). Chair seat and backrest in 3mm thick perforated mild steel supported by mounting brackets in 6mm thick laser cut mild steel. Chairs mounted on beam without armrest, with leg piece to be fixed to the floor or reestanding. All metal components finished in epoxy powder.
L26 PINNING BOARD	1800 x 1200 High Vitrex 2308 (gray) or equal approved pinning board.
P06 PORCELAIN TILES	Approved matt porcelain floor tiles fixed to floors with sgrafting joints in both directions with the recommended Cersaie Nylon adhesive and flush pointed with Cersaie Tylon 33 self leveling to desired finish elevations.

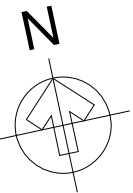


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REVISION SCHEDULE		
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CAD FILE	PAGE TYPE	A1
CLIENT		
		
CONSULTANT		
 SHUMBA ENGINEERING SERVICES <i>Courage and Ability Takes You Forward!</i> SES CAMPUS, 38 Jasmyn Street, Flora Park, Polokwane, 0699 P.O Box 4690, Polokwane 0700 Tel: (015) 295 9170 Fax: (086) 606 3734 Email:		
DISCIPLINE		
ARCHITECTURAL		
SERVICE		
MAKHADO MUNICIPALITY REFURBISHMENT OF WATERVAL REGIONAL OFFICE		
PROJECT NUMBER		
MLM 47/2018		
DRAWING TITLE		
GROUND FLOOR LAYOUT - OFFICES BLOCK_ NEW CONSTRUCTION		
ERF NO		
1920 WATERVAL		
DRAWN BY		
TRN		
DRAWING SCALE		
1 : 50		
PROJECT LEADER		
AM		
DRAWING DATE		
07 AUGUST 2021		
CHECKED BY		
AM		
DRAWING No.		
SES/054/A/102		
REV		
01		



GROUND FLOOR - GUARD HOUSE
DEMOLISHING LAYOUT

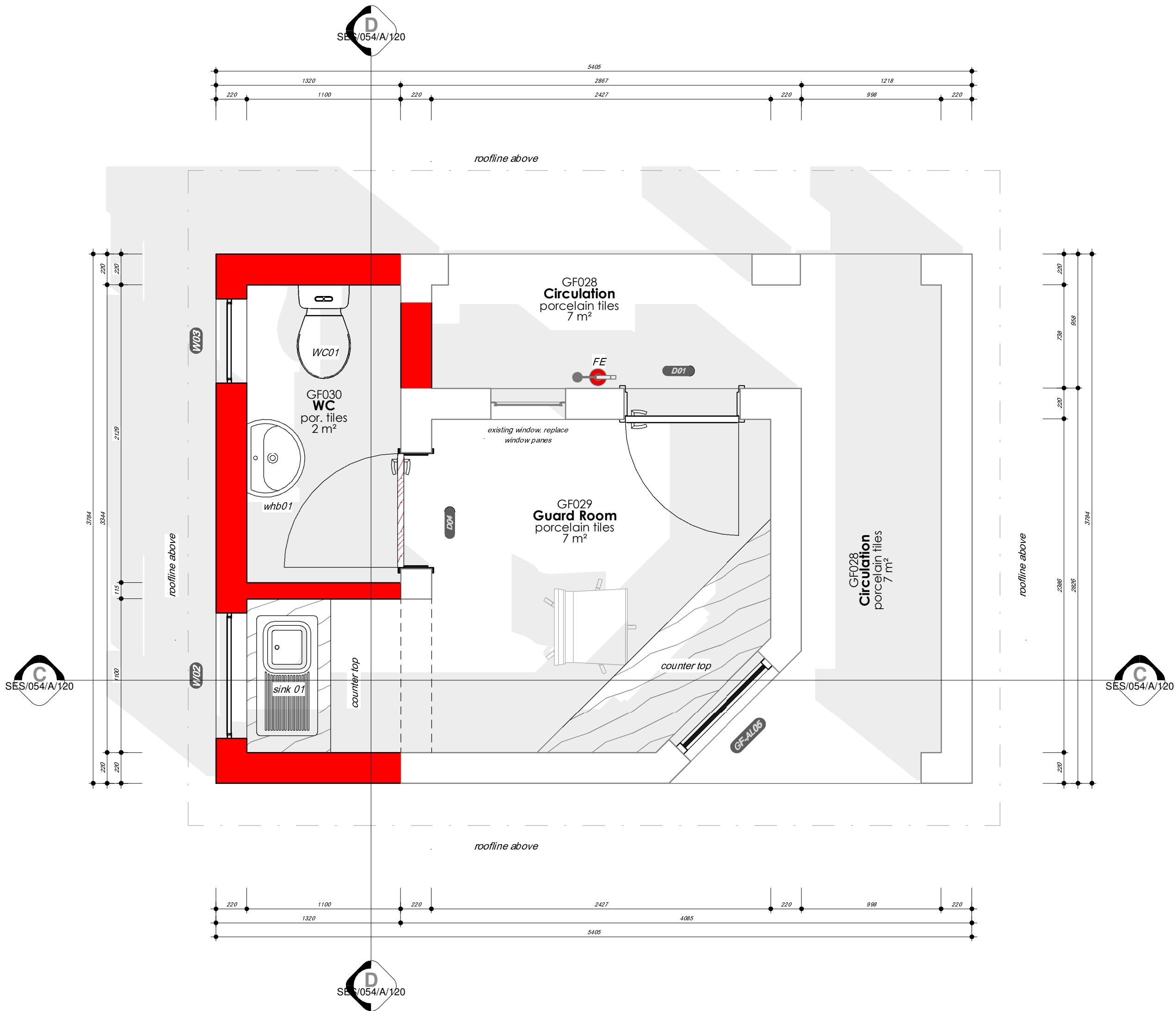
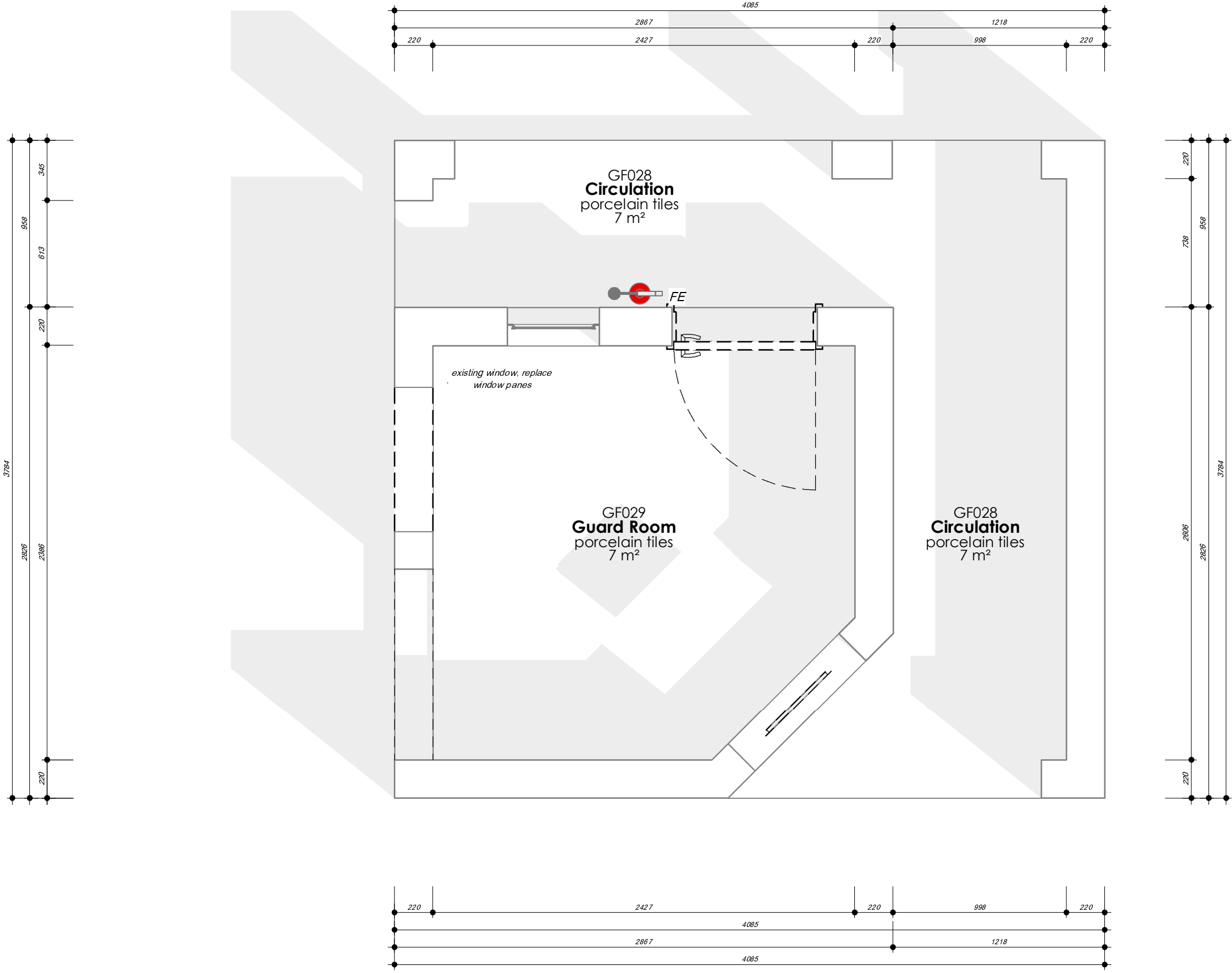
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GROUND FLOOR - GUARD HOUSE
NEW CONSTRUCTION

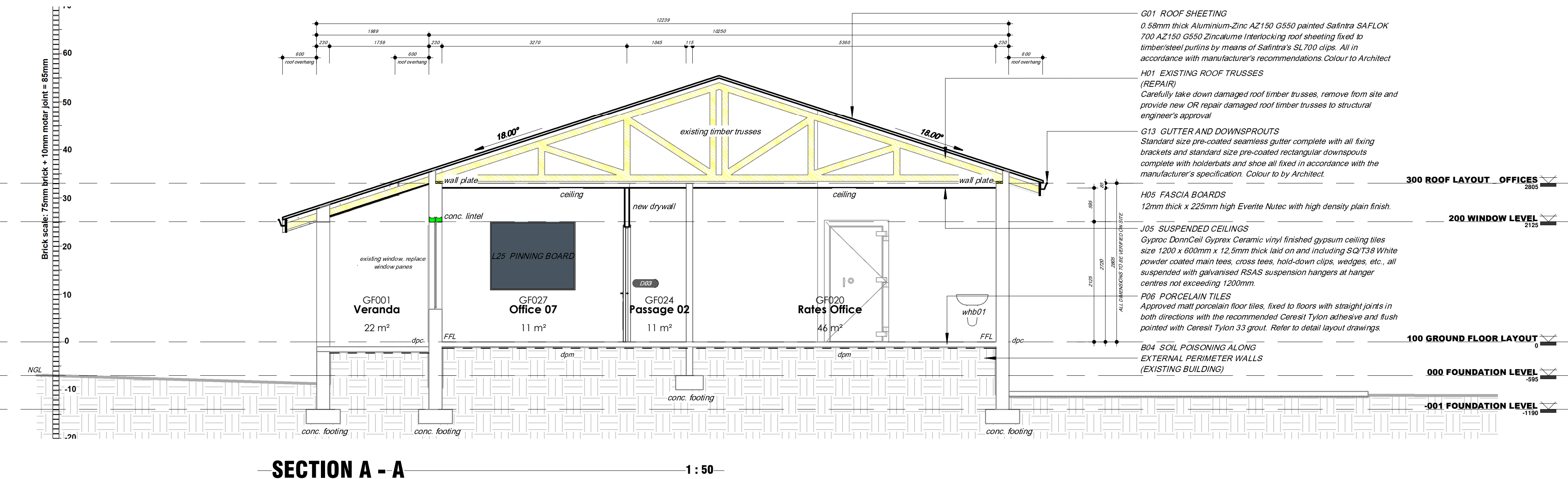
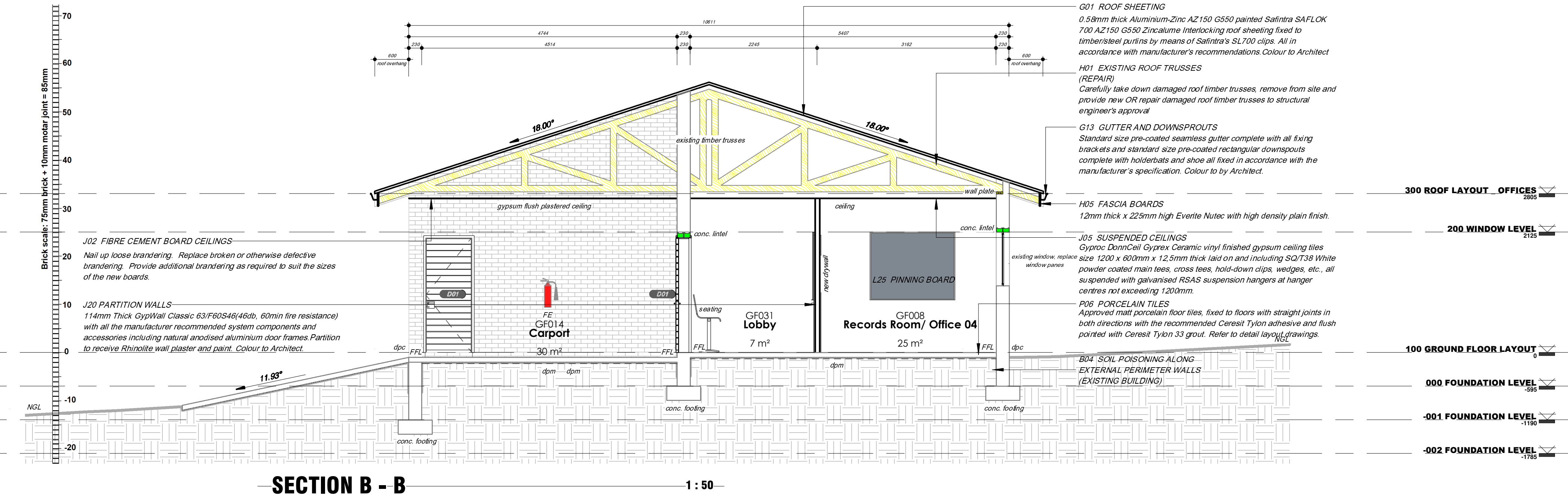
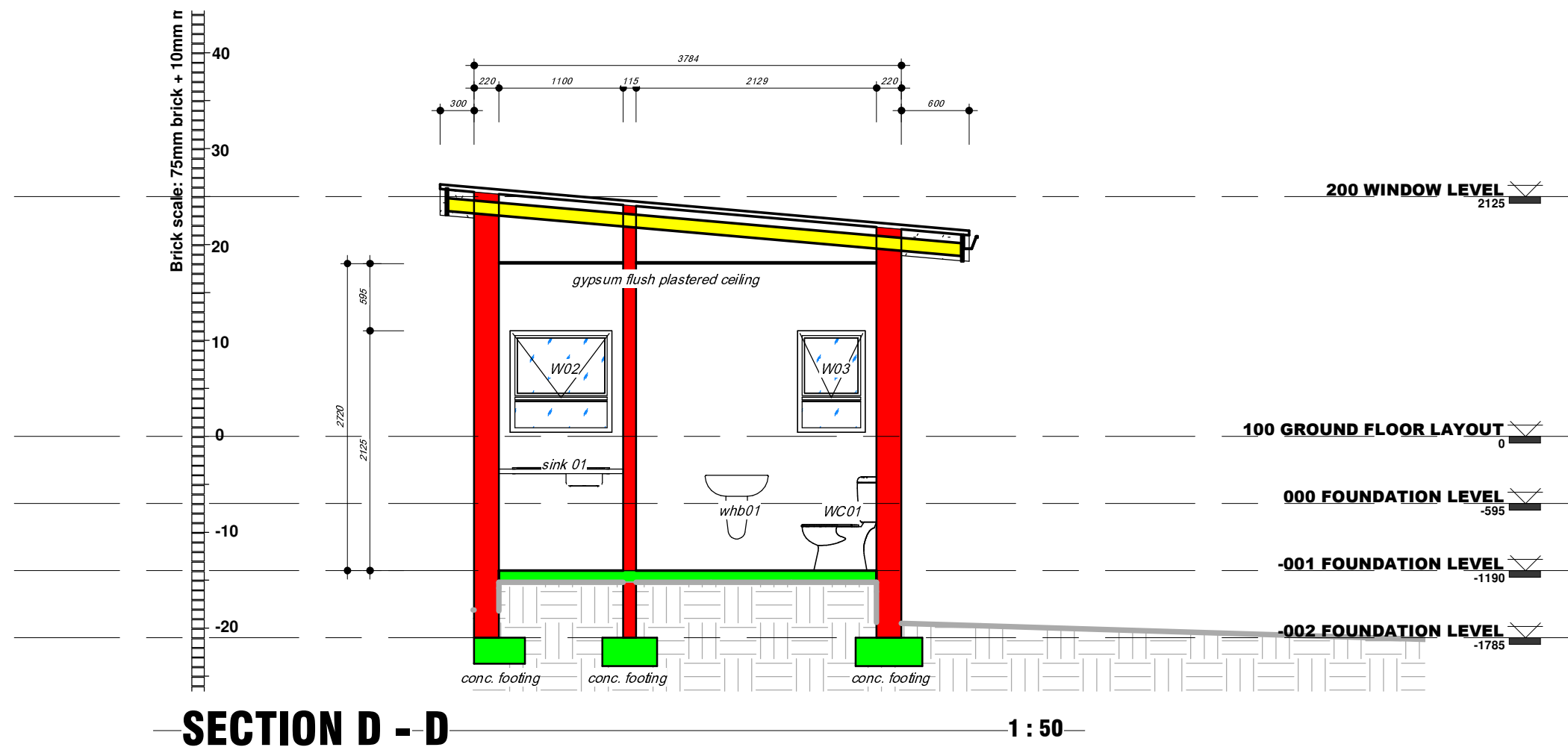
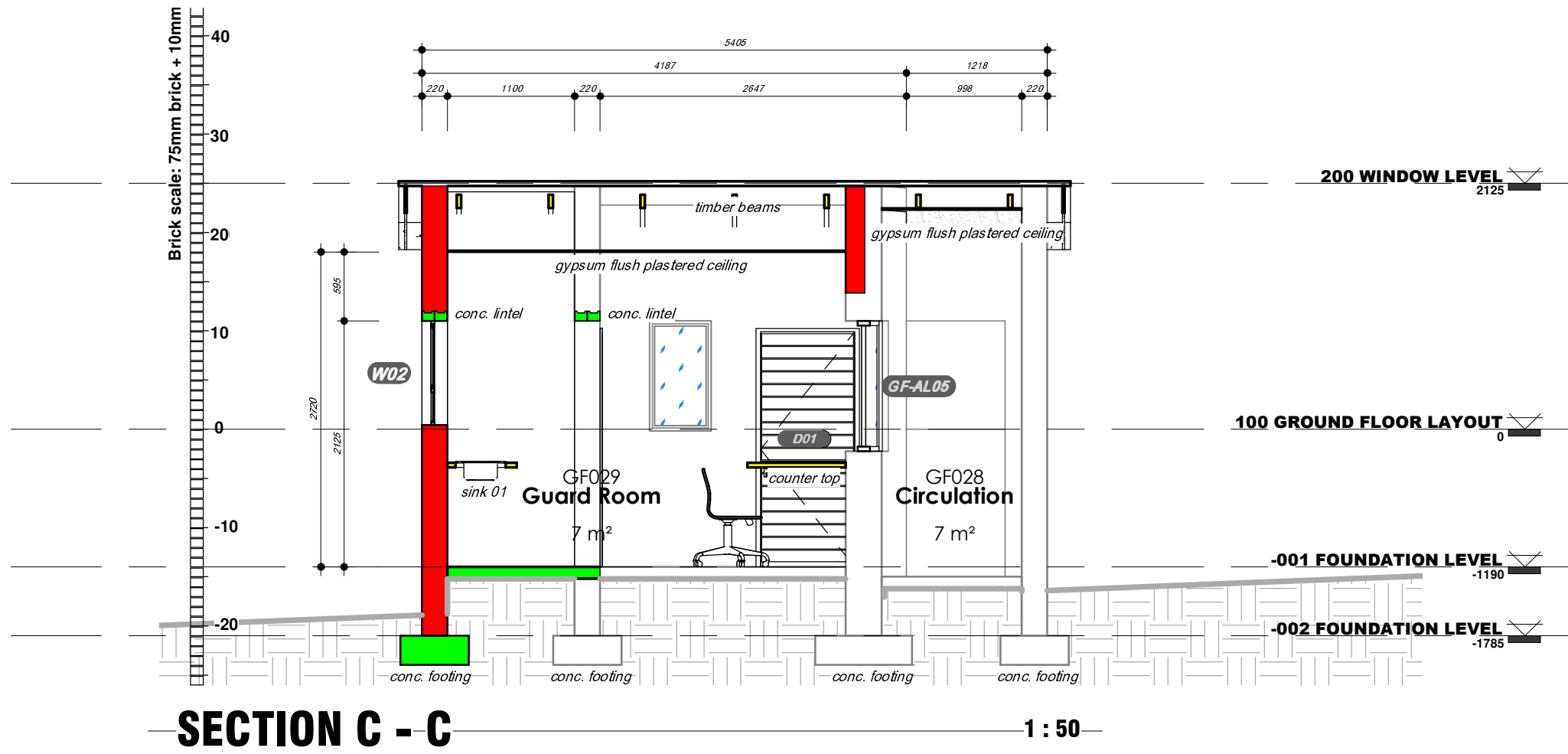
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KEYNOTE LEGEND - ALL	
Key Value	Keynote Text
B04 SOIL POISONING ALONG EXTERNAL PERIMETER WALLS (EXISTING BUILDING)	Post treatment of soil, filling, etc. along external perimeter walls, including all necessary drilling and/or opening up to maximum 1m centres, forming and shallow furrows, etc. along all external perimeter walls, applying of anti poisoning solution under pressure and filling in all formed holes, openings, furrows, etc. and ramming (m)
G01 ROOF SHEETING	0,50mm thick Aluminium Zinc AZ 150 G550 painted Safintra SAFLOK 700 AZ 150 G550 Zincalume interlocking roof sheeting fixed to timber/steel purlins by means of Safintra's SL700 clips. All in accordance with manufacturer's recommendations Colour to Architect
G10 INSULATION	100mm Alutherm® polyester fibre blanket laminated to 4mm white bubble layer on one side and reinforced foil facing on other complying with SANS 1381-1:2007 on white PVC coated straining wire at 307mm centres with 100mm side and end laps 48mm GDA double sided tape.
G13 GUTTER AND DOWNSPROUTS	Standard size pre-coated seamless gutter complete with all fixing brackets and standard size pre-coated rectangular downspouts complete with hold-downs and shoe all fixed in accordance with the manufacturer, s specification. Colour to be by Architect.
H01 EXISTING ROOF TRUSSES (REPAIR)	Carefully take down damaged roof timber trusses, remove from site and provide new OR repair damaged roof timber trusses to structural engineer's approval
H02 ROOF TRUSSES (NEW)	Prefabricated Gangnall / Hydronal SA Pine trusses to match existing pitch, manufactured and erected in accordance with structural engineer, s specifications.
H05 FASCIA BOARDS	12mm thick x 225mm high Everite Nulite with high density plain finish.
J02 FIBRE CEMENT BOARD CEILINGS	Nail up loose branding. Replace broken or otherwise defective branding. Provide additional branding as required to suit the sizes of the new boards.
J05 SUSPENDED CEILINGS	Gyproc DonnCell Gyproc Ceramic vinyl finished gypsum ceiling tiles size 1200 x 600mm x 12,5mm thick laid on and including SQ/T38 White powder coated main tees, cross tees, hold-down clips, wedges, etc., all suspended with galvanised RSAS suspension hangers at hanger centres not exceeding 1200mm.
J10 CONCRETE SOFFITS	Ensure bare concrete soffit surface does not deviate from plane by more than 5-10mm. Bare concrete surface to be smooth and uniform without any recesses or protrusions. 14mm Thick Gypflor Classic GFG0340 (4000, 60mm fire resistance) with all the manufacturer recommended system components and accessories including natural woodseed aluminium door frames.Partition to receive Rhinoflex wall plaster and paint. Colour to Architect.
J20 PARTITION WALLS	
L02 SEATING	Bonno metal seating with extremely robust structure, supplied by Buccercentum Ye-Rona (PTY) Ltd (012 326 3796/7/8) Chair seat and backrest in 3mm thick perforated mild steel supported by mounting brackets in 6mm thick laser cut mild steel. Chairs mounted on beam without armrest, with leg piece to be fixed to the floor or freestanding. All metal components finished in epoxy powder.
L25 PINNING BOARD	1800 x 1200 mm High Vitrax 2308 (grey) or equal approved pinning board (3x6)
P06 PORCELAIN TILES	Approved matt porcelain floor tiles, fixed to floors with straight joints in both directions with the recommended Ceresit Tylon adhesive and flush pointed with Ceresit Tylon 33 grout. Refer to detail layout drawings.



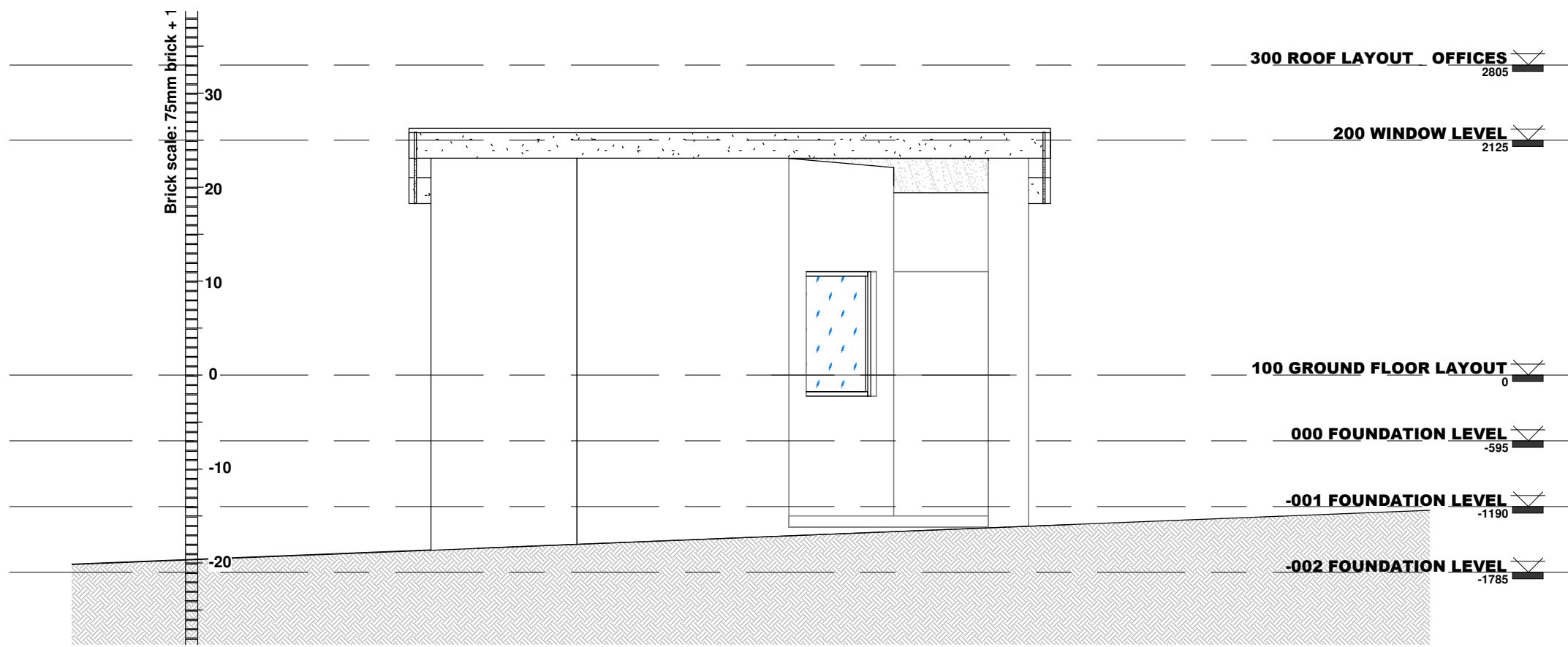
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 SHUMBA ENGINEERING SERVICES Courage and Ability Face You Forward SES CAMPUS, 38 Isomyn Street, Flora Park, Polokwane, 0699 P.O Box 4690, Polokwane 0700 Tel: (015) 295 9170 Fax: (086) 606 3734 Email: info@shumba.co.za		
DISCIPLINE		
ARCHITECTURAL		
SERVICE		
MAKHADO MUNICIPALITY REFURBISHMENT OF WATERVAL REGIONAL OFFICE		
PROJECT NUMBER		
MLM 47/2018		
DRAWING TITLE		
GROUND FLOOR - GUARD HOUSE _DEMOLISHING LAYOUT AND NEW CONSTRUCTION		
ERF NO	DRAWN BY	
1920 WATERVAL	TRN	
DRAWING SCALE	PROJECT LEADER	
1 : 25	AM	
DRAWING DATE	CHECKED BY	
07 AUGUST 2021	AM	
DRAWING No.	REV	
SES/054/A/105	01	

FOR TENDER



REV	Description	Date
REVISION SCHEDULE		
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CONSULTANT		
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DISCIPLINE		
ARCHITECTURAL		
SERVICE		
MAKHADO MUNICIPALITY REFURBISHMENT OF WATERVAL REGIONAL OFFICE		
PROJECT NUMBER		
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DRAWING TITLE		
SECTIONS		
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1920 WATERVAL		
DRAWING SCALE		
1 : 50		
DRAWING DATE		
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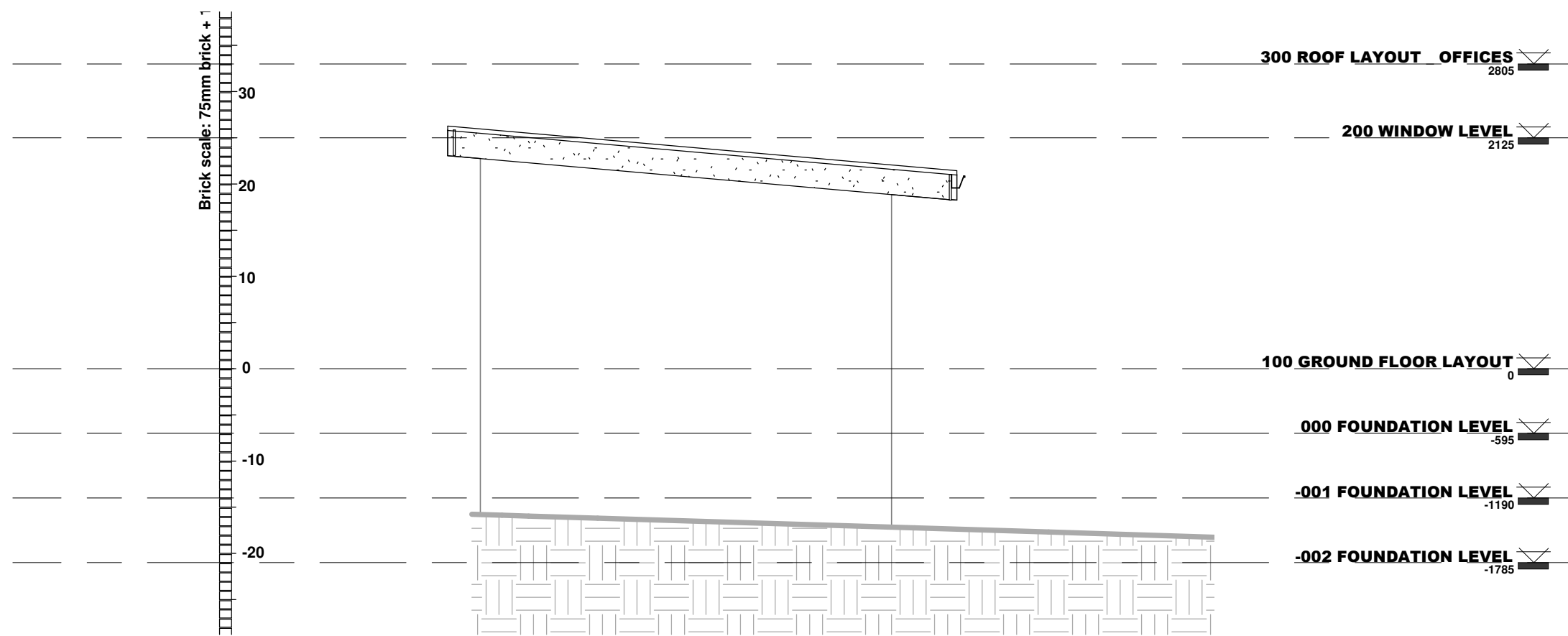
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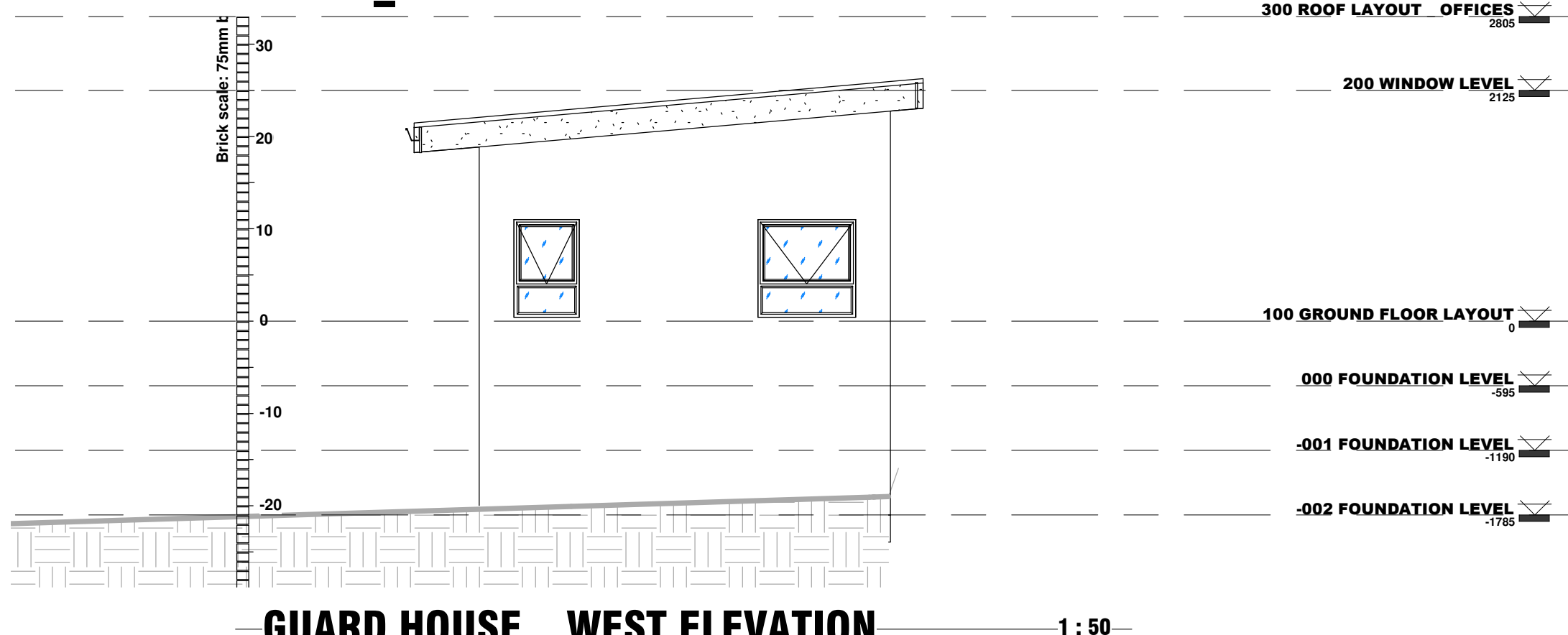
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—GUARD HOUSE _ NORTH ELEVATION— 1 : 50 —



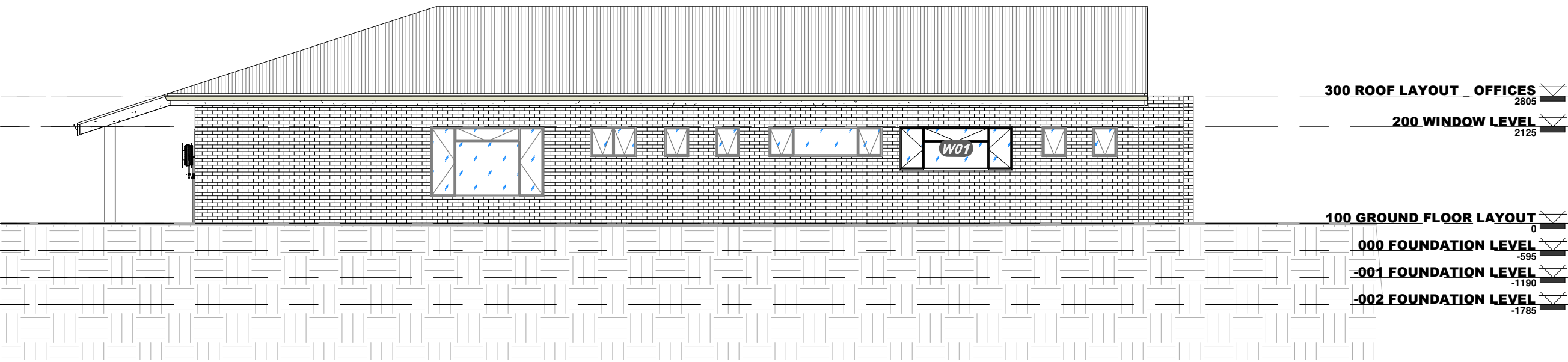
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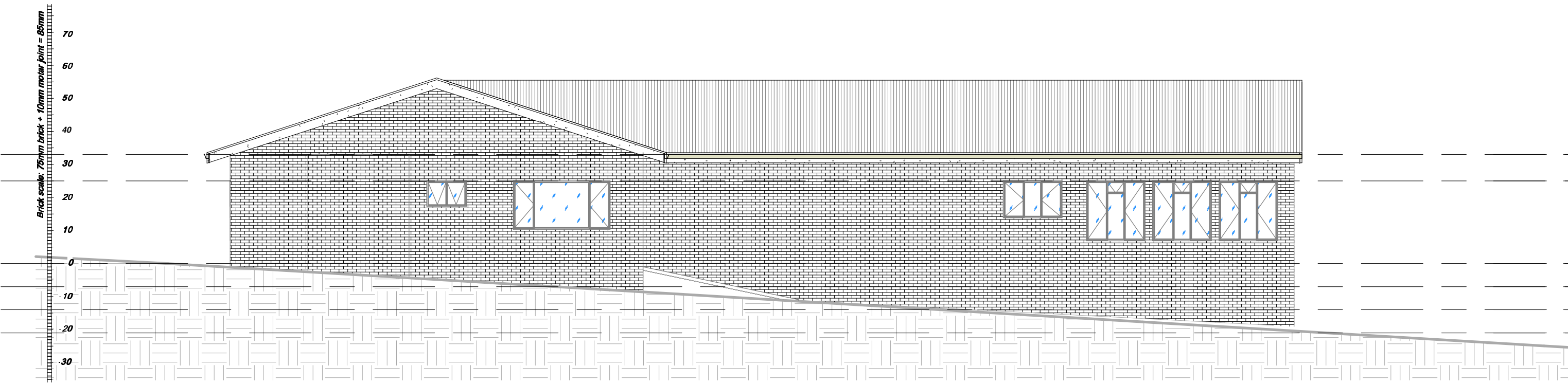
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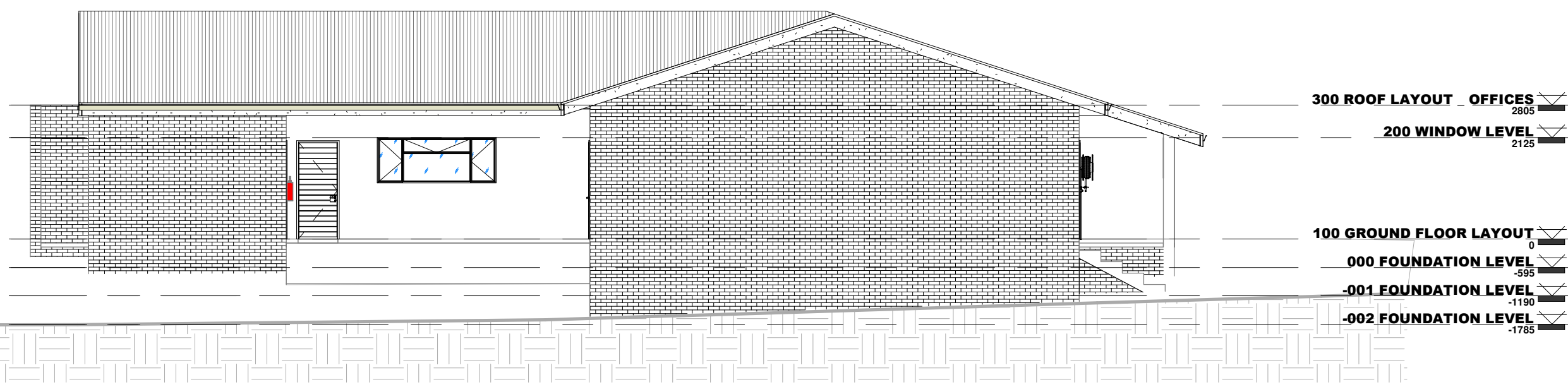
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—OFFICE BLOCK _ EAST ELEVATION— 1 : 100 —



—OFFICE BLOCK _ NORTH ELEVATION— 1 : 100 —



—OFFICE BLOCK _ WEST ELEVATION— 1 : 100 —

REV	Description	Date
REVISION SCHEDULE		
NOTES		
CAD FILE	PAGE TYPE	A1
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CONSULTANT	 SHUMBA ENGINEERING SERVICES Courage and Ability Take You Forward SES CAMPUS, 38 Isamyn Street, Flora Park, Polokwane 0700 P.O. Box 4690, Polokwane 0700 Tel: (015) 295 9170 Fax: (086) 606 3734 Email: info@shumba.co.za	
DISCIPLINE	ARCHITECTURAL	
SERVICE	MAKHADO MUNICIPALITY REFURBISHMENT OF WATERVAL REGIONAL OFFICE	
PROJECT NUMBER	MLM 47/2018	
DRAWING TITLE	ELEVATIONS	
ERF NO	1920 WATERVAL	DRAWN BY TRN
DRAWING SCALE	As indicated	PROJECT LEADER TRN
DRAWING DATE	DECEMBER 2020	CHECKED BY TRN
DRAWING No.	SES/054/A/130	REV 00

FOR TENDER

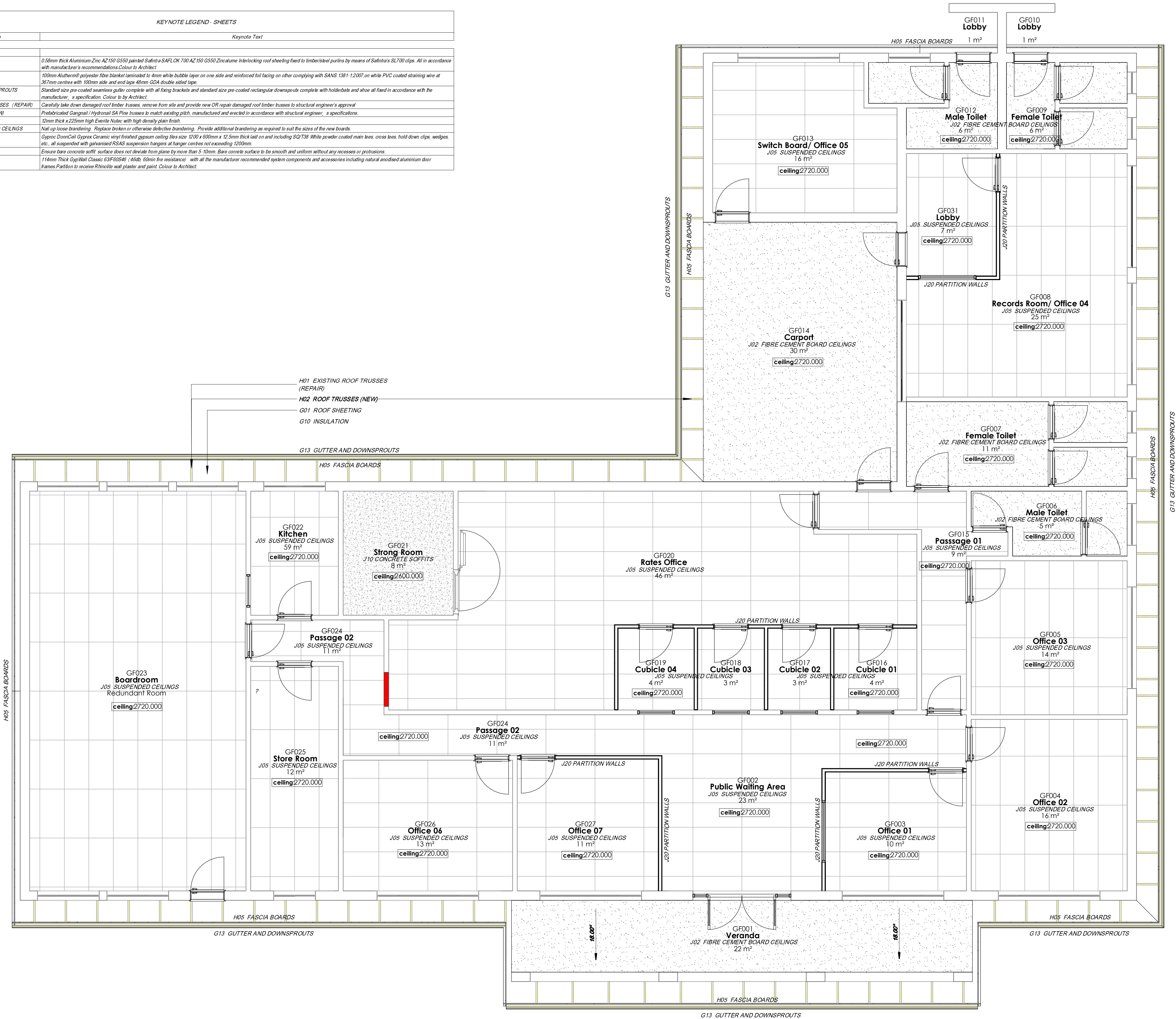
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CEILING LAYOUT _ OFFICE BLOCK

1 : 50

KEYNOTE LEGEND - SHEETS	
Key Value	Keynote Text
G01 ROOF SHEETING	0.58mm thick Aluminium Zinc AZ 150 G550 painted Safnitra SAFLOK 7.00 AZ 150 G550 Zincalume interlocking roof sheeting fixed to timber/steel purlins by means of Safnitra's SL700 clips. All in accordance with manufacturer's recommendations.Colour to Architect.
G10 INSULATION	100mm Authen® polyester fibre blanket (finished to 4mm white bubble layer on one side and reinforced foil facing on other complying with SANS 1381-12007 on white PVC coated straining wire at 367mm centres with 100mm side and end laps 45mm GDA double sided tape.
G13 GUTTER AND DOWNSPROUTS	Standard size pre-coated seamless gutter complete with all fixing brackets and standard size pre-coated rectangular downspouts complete with holder/bats and shoe all fixed in accordance with the manufacturer, s specification. Colour to by Architect.
H01 EXISTING ROOF TRUSSES (REPAIR)	Carefully take down damaged roof timber trusses, remove from site and provide new OR repair damaged roof timber trusses to structural engineer's approval
H02 ROOF TRUSSES (NEW)	Pre fabricated Garguati/ Hydrosail SA Pine trusses to match existing pitch, manufactured and erected in accordance with structural engineer, s specifications.
H05 FASCIA BOARDS	12mm thick x225mm high Everite Nuts with high density plain finish.
J02 FIBRE CEMENT BOARD CEILINGS	Nail up loose branding. Replace broken or otherwise defective branding. Provide additional branding as required to suit the sizes of the new boards.
J05 SUSPENDED CEILINGS	Gyproc DomnCel Gyproc Ceramic vinyl finished gypsum ceiling tiles size 1200 x 600mm x 12.5mm thick laid on and including SQ/T38 White powder coated main tees, cross tees, hold-down clips, wedges, etc., all suspended with galvanised RSAS suspension hangers at hanger centres not exceeding 1200mm.
J10 CONCRETE SOFFITS	Ensure bare concrete soffit surface does not deviate from plane by more than 5-10mm. Bare concrete surface to be smooth and uniform without any recesses or protrusions.
J20 PARTITION WALLS	114mm Thick GypWall Classic 63F05046 (40db, 60min fire resistance), with all the manufacturer recommended system components and accessories including natural anodised aluminium door frames Partition to receive Rhinocelle wall plaster and paint. Colour to Architect.



REV	Description	Date
REVISION SCHEDULE		
NOTES		
CAD FILE	PAGE TYPE	A1
CLIENT		
CONSULTANT	 SHUMBA ENGINEERING SERVICES George and Abby Tsebe Trust SES CAMPUS, 38 Isomyn Street, Flora Park, Polokwane, 0699 P.O. Box 4690, Polokwane 0700 Tel: (015) 295 9170 Fax: (086) 606 3734 Email: info@shumba.co.za	
DISCIPLINE	ARCHITECTURAL	
SERVICE	MAKHADO MUNICIPALITY REFURBISHMENT OF WATERVAL REGIONAL OFFICE	
PROJECT NUMBER	MLM 47/2018	
DRAWING TITLE	CEILING LAYOUTS	
ERF NO	1920 WATERVAL	DRAWN BY TRN
DRAWING SCALE	1 : 50	PROJECT LEADER AM
DRAWING DATE	07 AUGUST 2021	CHECKED BY AM
DRAWING No.	SES/054/A/140	REV

FOR TENDER

[illegible]

NOTES

CLIENT



The logo of Makhado Municipality is a shield-shaped emblem. At the top, the word "MAKHADO" is written in white capital letters on a blue background. Below this, a green sun with yellow rays is positioned above a green mountain range. A yellow banner with a wavy pattern is situated in front of the mountains. The word "MUNICIPALITY" is written in white capital letters on a blue background below the mountain. The shield is flanked by two yellow banners. At the bottom, a white banner with a blue border contains the words "PEACE HARMONY PROSPERITY" in black capital letters.

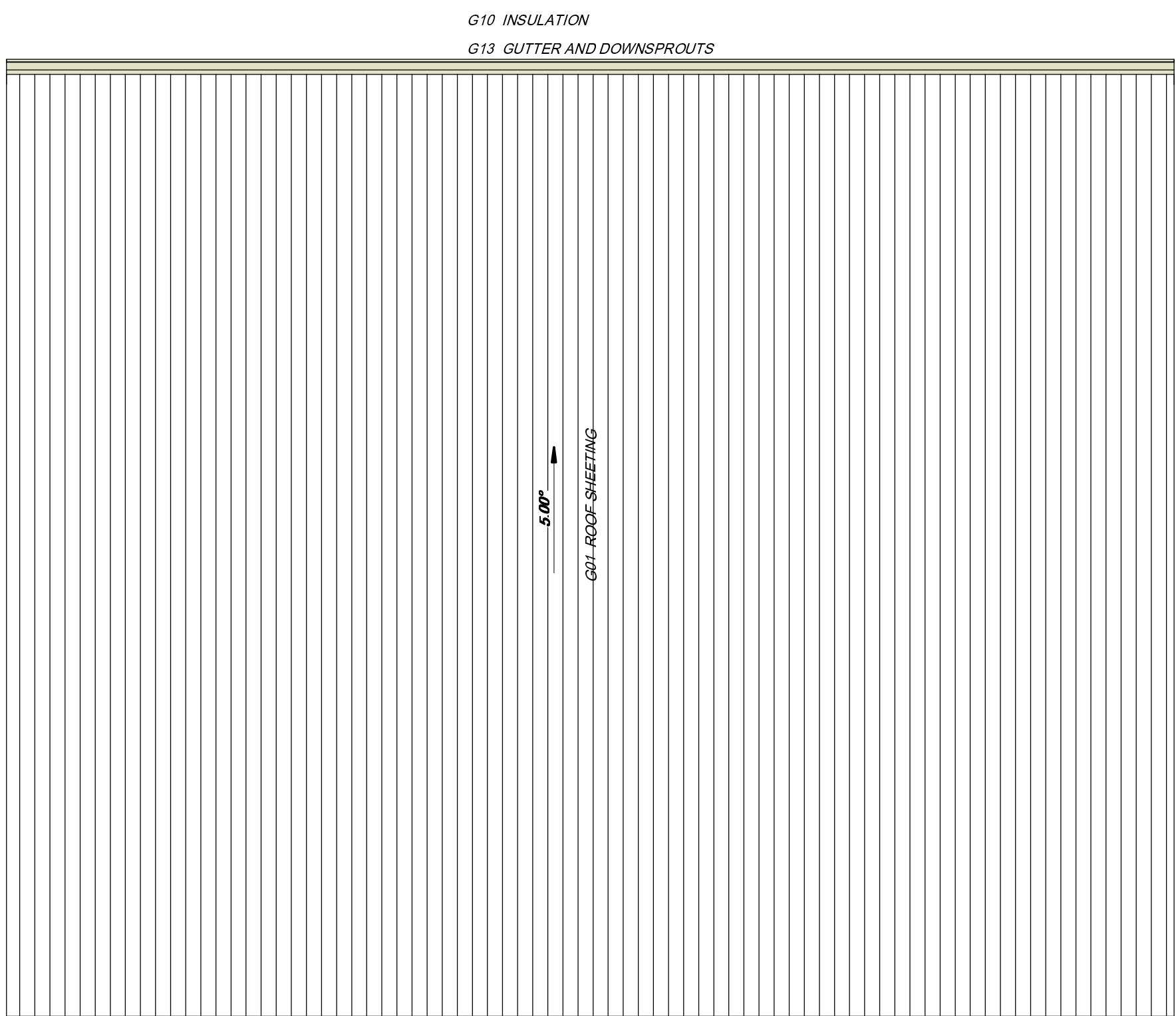
DISCIPLINE

ARCHITECTURAL

SERVICE

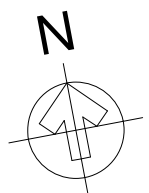
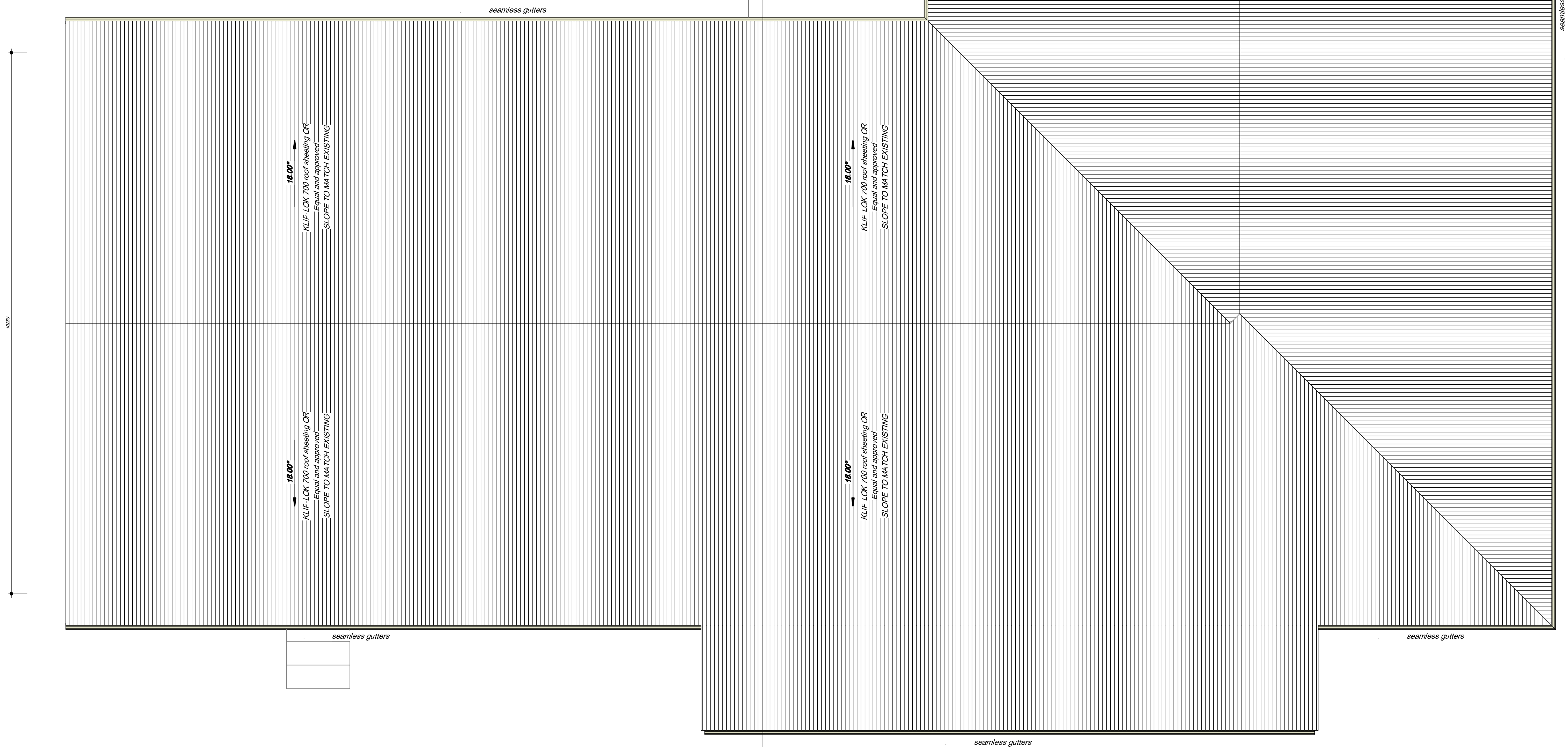
**MAKHADO MUNICIPALITY
REFURBISHMENT OF
WATERVAL REGIONAL OFFICE**

ERF NO 1920 WATERVAL	DRAWN BY TRN
DRAWING SCALE 1 : 25	PROJECT LEADER AM
DRAWING DATE 07 AUGUST 2021	CHECKED BY AM
DRAWING No. SES/054/A/141	REV



DRAWING No.	REV
SES/054/A/141	

B01 SEAL POISSONING ALONG EXTERNAL PERIMETER WALLS (EXISTING BUILDING)	Post-tensioned steel coil filling; ext. along external perimeter walls, including all necessary drilling and opening at maximum 1m centres, forming and shallow furrows, etc. along all external perimeter walls; applying of pottinging solution under pressure and filling all formed holes, openings, furrows, etc. and ramming (run).
G01 ROOF SHEETING	0.68mm thick Aluminium Zinc AZ100 G5500 painted Safintra S40M CO70 AZ100 G5500 Zincalume interlocking roof sheeting fixed to timber/painted joists by means of Safintra S5700 clips. All
G10 INSULATION	100mm Aurotherm polyisocyanurate thermal insulation to 4mm white bubble layer on top and reinforced foil facing on outer complying with SANS 1301-1:2007 on both PVC coated strapping wire at 367mm centres with 100mm side and laps 69mm GSDA double sided tape.
G13 GUTTER AND DOWNSPOUTS	Standard size pre-coated seamless gutter complete with all fixing brackets and standard size pre-coated rectangular downspout complete with holdbrass and shoe fixed and installed according with manufacturer's specification. Colour to be Aschleht.
H01 EXISTING ROOF TRUSSES (REPAIR)	Carefully take down damaged roof trusses, remove from site and provide new OR repair damaged roof trusses to structural engineer's approval
H02 ROOF TRUSSES (NEW)	Provide Standard High / Hydronail SA Pine trusses to match existing pitch, manufactured and erected in accordance with structural engineer's specifications.
H06 FASCIA BOARDS	12mm thick x 225mm High Eucalyt Nune with high density paint finish.
J02 FERRE CEMENT BOARD CEILING	Nail up loose boarding. Replace broken or otherwise defective boarding. Provide additional boarding as required to suit the sizes of the new boards.
J09 SUSPENDED CEILINGS	Gypsum/Dome/Gypex cement/fibre finished gypsum ceiling tiles size 1200 x 600mm x 12,5mm thick and end including SG708 White powder coated main rails, cross bars and hangers, and suspended RSAC suspension hangers at stagger centre not exceeding 1200mm.
J10 CONCRETE SOFFITS	Ensure bare concrete self-suff. surface does not deviate from plane by more than 5+10mm. Bare concrete surface to be smooth and uniform without any recesses or protrusions.
J10 PARTITION WALLS	14mm brick Gypsolite Classic CSR60546 + 460lb. 60mm fire resistance) with the manufacturer recommended system components and accessories including natural aluminium dural door frame Partion to receive Rhinofill wall panel and paint. Colour to be Aschleht.
L02 SEATING	Bonno metal seating with externally robust structure, supplied by Eurocortina Ya Rona (PTY) Ltd. (012 326 3796/87). Chair seat and backrest in 3mm thick perforated mild steel supported by moulding brackets in 6mm thick laser cut mild steel. Chairs mounted on beam without arrest, with leg piece to be fixed to the floor or freestanding. All metal components finished in grey powder.
L25 FINISH BOARD	1800 x 1200 mm High Vinyl ZBac (grey) or equal approved painting board. 3 mounted
P06 PORCELAIN TILES	Approved matt porcelain floor tiles, fixed to floors with straight joints in both directions with the recommended Ceresit TXon adhesive and flush pointed with Ceresit TXon grout. Refer to detail layout drawings.



OFFICES _ ROOF LAYOUT

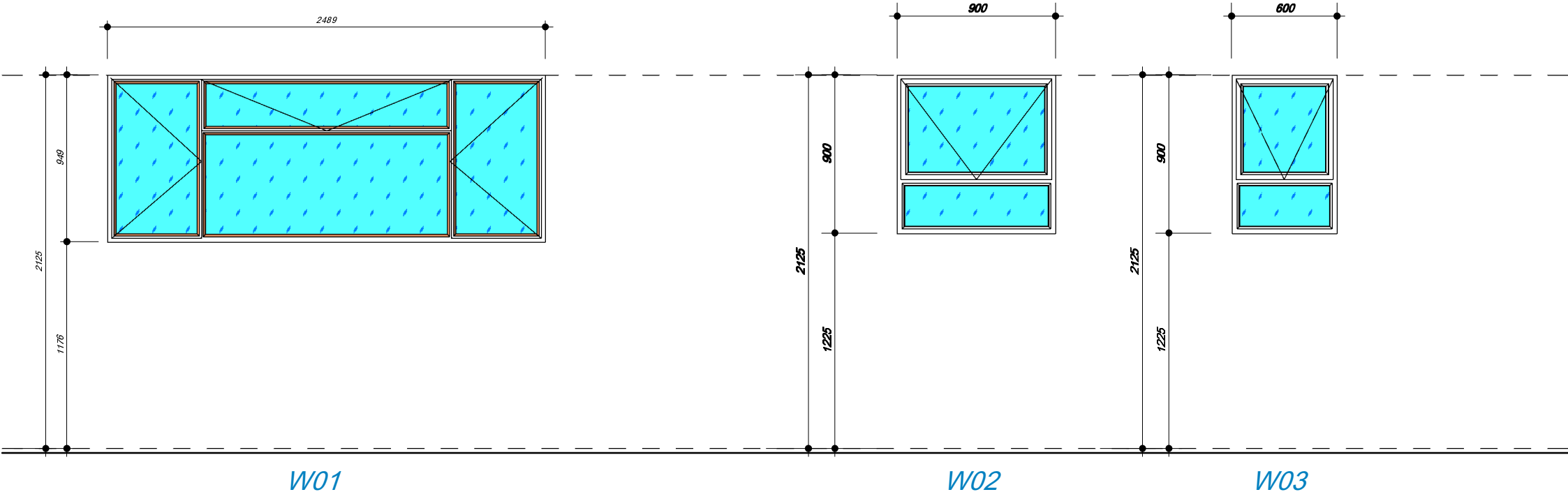
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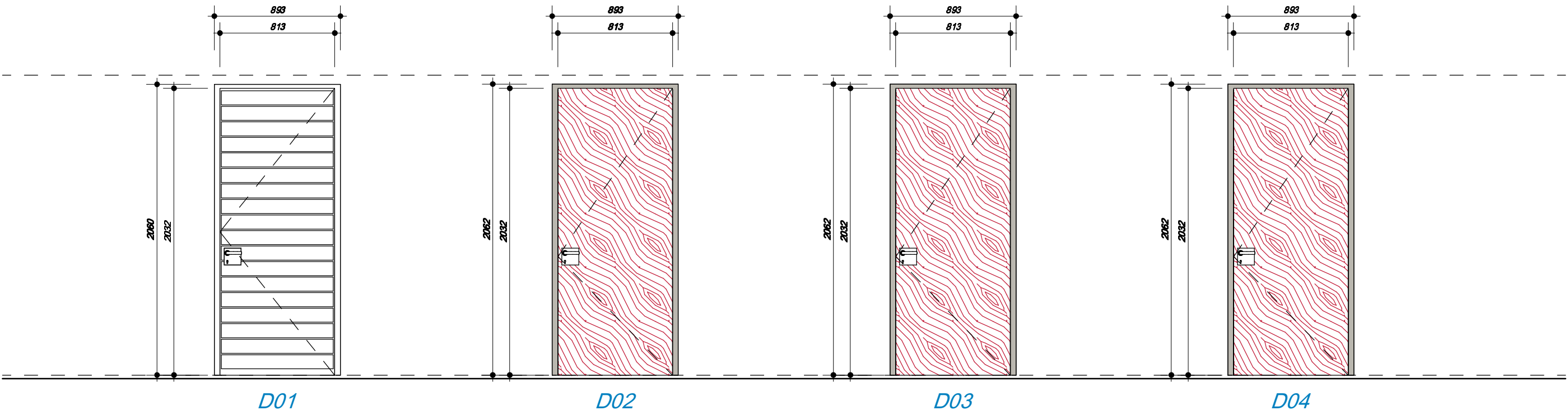
FOR TENDER

Copyright is vested in the practice in terms of the act (act 98 of 1978)

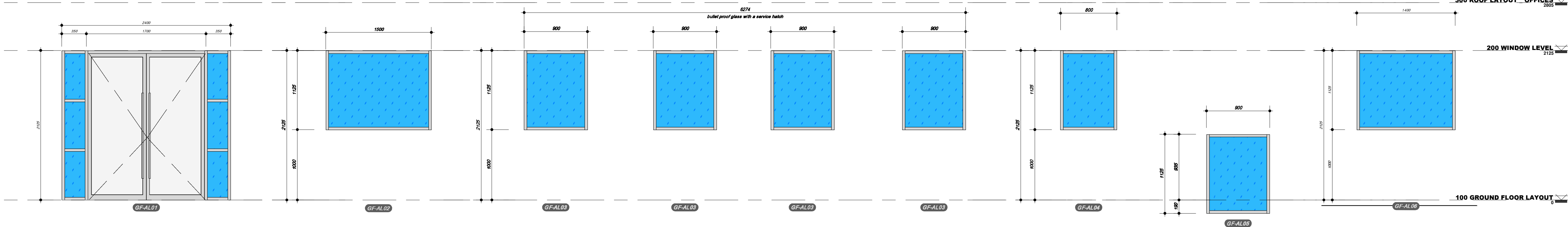
WINDOW SCHEDULE								
Type/Mark	Description	FINISH	Glazing	Accessories	Head Height	Width	Height	Count
W01	Durowin NC Type NC12F residential open out steel window with one shop coat red oxide size 2489 x 949mm high with 10mm square burglar bars at 150mm centres (bars on opening sections only) .	Apply one coat Plascon Merit Universal undercoat and two coats Plascon Velvagio Polyurethane Velvet enamel paint. Colour as per architect	PG SmartGlass® ColourVue® E Range Cool Grey normal strength low emissivity laminated glass, complying with SANS 1263 Part 1 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137 OR EQUAL AND APPROVED.	Complete with accessories as supplied with supplier and horizontal burglar bars fitted to all opening sections.	2125 Above FFL	2489	949	2
W02	900 x 900mm high KAL Aluminium Series 340 top hung grade AA20 aluminium window code 679 glazed with safety glass (elsewhere specified) with clip on glazing beads with neoprene seats and plugged to brickwork.	Matt Bronze powder coating (for architectural applications) , applied by a certified markholder of SANS 1578 and SANS 1796	PG SmartGlass® ColourVue® E Range Cool Grey normal strength low emissivity laminated glass, complying with SANS 1263 Part 1 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137 OR EQUAL AND APPROVED.	Complete with accessories as supplied with supplier and horizontal burglar bars fitted to all opening sections.	2125 Above FFL	900	900	1
W03	600 x 900mm high KAL Aluminium Series 340 top hung grade AA20 aluminium window code 679 glazed with safety glass (elsewhere specified) with clip on glazing beads with neoprene seats and plugged to brickwork.	Matt Bronze powder coating (for architectural applications) , applied by a certified markholder of SANS 1578 and SANS 1796	PG SmartGlass® ColourVue® E Range Cool Grey normal strength low emissivity laminated glass, complying with SANS 1263 Part 1 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137 OR EQUAL AND APPROVED.	Complete with accessories as supplied with supplier and horizontal burglar bars fitted to all opening sections.	2125 Above FFL	600	900	1
Grand total: 4								



DOOR SCHEDULE					
Type/Mark	Description	Door Finish	Frame Type	Frame Finish	Ironmongery
D01	813 x 2032mm high AC Doors 44mm thick meranti HS 15 horizontally slatted double sided door single door.	Sand down timber surface to a fine smooth surface and apply three coats Nova 15 Timberseal Clear Wood Stainer prior to installation, all in accordance with manufacturer's recommendations.	Durowin double rebated with one shop coat red oxide pressed steel door frame 1.2mm thick to suit left or right hand door size 813 x 2032mm high, for 115/230mm wall.	Touch up Red oxide factory applied finish, apply one coat Plascon Merit Universal undercoat and finish with two coats Plascon Velvagio Polyurethane Velvet enamel paint.Colour by Architect.	As per the ironmongery specialist
D02	40mm thick hardboard medium duty interior flush semi-solid door with four concealed edges, size 813 x 2032mm high.	Apply one coat Plascon Merit Universal undercoat and two coats Plascon Velvagio Polyurethane Velvet enamel paint. Colour as per client	Durowin double rebated with one shop coat red oxide pressed steel door frame 1.2mm thick to suit left or right hand door size 813 x 2032mm high, for 115/230mm wall.	Touch up Red oxide factory applied finish, apply one coat Plascon Merit Universal undercoat and finish with two coats Plascon Velvagio Polyurethane Velvet enamel paint.Colour by Architect.	As per the ironmongery specialist
D03	40mm thick hardboard medium duty interior flush semi-solid door with four concealed edges, size 813 x 2032mm high.	<varies>	<varies>	<varies>	<varies>
D04	40mm thick hardboard medium duty interior flush semi-solid core door with four concealed edges, size 813 x 2032mm high.	Apply one coat Plascon Merit Universal undercoat and two coats Plascon Velvagio Polyurethane Velvet enamel paint. Colour as per client	Durowin double rebated with one shop coat red oxide pressed steel door frame 1.2mm thick to suit left or right hand door size 813 x 2032mm high, for 115/230mm wall.	Touch up Red oxide factory applied finish, apply one coat Plascon Merit Universal undercoat and finish with two coats Plascon Velvagio Polyurethane Velvet enamel paint.Colour by Architect.	As per the ironmongery specialist
Grand total: 31					



ALUMINIUM SCHEDULE								
Type/Mark	Description	Finish	Safety Glazing	Ironmongery	Length	Height	Area	Count
GF-AL01	Units consisting of 2.5mm thick shopfront sections (WISPECO SHEERFRONTCLIP 15 SYSTEM of similar and approved) and 50mm minimum for aluminium door frames.	Matt Bronze powder coating (for architectural applications) , applied by a certified markholder of SANS 1578 and SANS 1796	PG SmartGlass® ColourVue® E Range Cool Grey normal strength low emissivity laminated glass, complying with SANS 1263 Part 1 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137 OR EQUAL AND APPROVED.	As per the ironmongery specialist and door manufacturer	2400		5 m²	1
GF-AL02	Units consisting of 2.5mm thick shopfront sections (WISPECO SHEERFRONTCLIP 15 SYSTEM of similar and approved) and 50mm minimum for aluminium door frames.	Matt Bronze powder coating (for architectural applications) , applied by a certified markholder of SANS 1578 and SANS 1796	PG SmartGlass® ColourVue® E Range Cool Grey normal strength low emissivity laminated glass, complying with SANS 1263 Part 1 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137 OR EQUAL AND APPROVED.	As per the ironmongery specialist and door manufacturer	1500		2 m²	1
GF-AL03	Pay window model PW2 with Speakeasy with a stainless steel clad base as per manufacturer: SA Bullet Resistant Glass CO - tel: 011 493 66634	As per manufacturer's specification	38mm Anti Bandit Glass with Speak Easy	As per manufacture's specification	900		1 m²	4
GF-AL04	Units consisting of 2.5mm thick shopfront sections (WISPECO SHEERFRONTCLIP 15 SYSTEM of similar and approved) and 50mm minimum for aluminium door frames.	Matt Bronze powder coating (for architectural applications) , applied by a certified markholder of SANS 1578 and SANS 1796	PG SmartGlass® ColourVue® E Range Cool Grey normal strength low emissivity laminated glass, complying with SANS 1263 Part 1 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137 OR EQUAL AND APPROVED.	As per the ironmongery specialist and door manufacturer	800		1 m²	1
GF-AL05	Units consisting of 2.5mm thick shopfront sections (WISPECO SHEERFRONTCLIP 15 SYSTEM of similar and approved) and 50mm minimum for aluminium door frames.	Matt Bronze powder coating (for architectural applications) , applied by a certified markholder of SANS 1578 and SANS 1796	PG SmartGlass® ColourVue® E Range Cool Grey normal strength low emissivity laminated glass, complying with SANS 1263 Part 1 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137 OR EQUAL AND APPROVED.	As per the ironmongery specialist and door manufacturer	900		1 m²	1
GF-AL06	Units consisting of 2.5mm thick shopfront sections (WISPECO SHEERFRONTCLIP 15 SYSTEM of similar and approved) and 50mm minimum for aluminium door frames.	Matt Bronze powder coating (for architectural applications) , applied by a certified markholder of SANS 1578 and SANS 1796	PG SmartGlass® ColourVue® E Range Cool Grey normal strength low emissivity laminated glass, complying with SANS 1263 Part 1 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137 OR EQUAL AND APPROVED.	As per the ironmongery specialist and door manufacturer	1400		2 m²	1
Grand total: 9								



FOR TENDER

REV

Description

Date

REVISION SCHEDULE


NOTES

CAD FILE

PAGE TYPE


A1

CLIENT



MAKHADO MUNICIPALITY
PEACE HARMONY PROSPERITY

CONSULTANT



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DISCIPLINE

ARCHITECTURAL

SERVICE

MAKHADO MUNICIPALITY
REFURBISHMENT OF
WATERVAL REGIONAL OFFICE

PROJECT NUMBER

MLM 47/2018

DRAWING TITLE

TIMBER DOORS AND
ALUMINIUM DOOR & WINDOW
SCHEDULES

ERF NO

1920 WATERVAL

DRAWN BY

TRN

DRAWING SCALE

1 : 30

PROJECT LEADER

AM

DRAWING DATE

09 MARCH 2021

CHECKED BY

AM

DRAWING No.

SES/054/A/160

REV

01