



health

Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

CONVERSION OF EXISTING WARD 13 TO ICU

AT JST HOSPITAL, RUSTENBURG

TENDER No. NWDOH 17/2026

Building, Electrical & Mechanical Works

**NORTH WEST PROVINCE
DEPARTMENT OF HEALTH**

Cnr. Sekame and First Street
New Office Park
Mafikeng
2745
Contact: Reboane Setena
Supply Chain Management
Telephone +27 (18) 391 4150
Email: rpsetena@nwpg.gov.za

Tenderer

CIDB Registration No.

Total of the prices inclusive of value added tax: R

Amount in words:

..... :

Preferences claimed for:

B-BBEE Status Level of Contribution:

Preference claimed for tendered contract participation goal is %



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DRAWINGS

DEPARTMENT OF HEALTH NORTH WEST PROVINCE

CONVERSION OF EXISTING WARD 13 TO ICU

AT JST HOSPITAL, RUSTENBURG

PART T1

TENDERING PROCEDURES

CONVERSION OF EXISTING WARD 13 TO ICU

AT JST HOSPITAL, RUSTENBURG

PART C1

AGREEMENTS AND CONTRACT DATA


health

Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

TENDER No. NWDOH 17/2026
CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL, RUSTENBURG

Part 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 :

CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL, RUSTENBURG

The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable 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 PRICES INCLUSIVE OF VALUE ADDED TAX IS:

..... Rand (in words);
R.....(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)	Date
Name(s) .....	.....
Capacity .....	.....
for the tenderer .....	.....

Name and	
signature	
of witness	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.

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 Project Manager (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. Failure to fulfill 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 copy of the original document, including the schedule of deviations (if any). Unless the tenderer (now Contractor) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the parties.

Signature(s)	.....	Date	.....
Name(s)	.....		.....
Capacity	.....		.....

**for the
Employer** Department of Health - Northwest Province
 Cnr Sekame and First Street
 New Office park
 Mafikeng
 2745

Name and signature of witness		Date	
-------------------------------------	-------	------	-------

Schedule of Deviations

Notes:

- 1 The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender
- 2 A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid become the subject of agreements reached during the process of Offer and acceptance, the outcome of such agreement shall be recorded here
- 3 Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract,
- 4 Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.

1	Subject	.....
	Details	.....
		
		
		
2	Subject	.....
	Details	.....
		
		
		
3	Subject	.....
	Details	.....
		
		
		
4	Subject	.....
	Details	.....
		
		
		
5	Subject	.....
	Details	.....
		
		
		

By the duly authorised representatives signing this agreement, the Employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the 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.

DEPARTMENT OF HEALTH NORTH WEST PROVINCE

**CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL,
RUSTENBURG**

PRINCIPAL BUILDING AGREEMENT

The Joint Building Contracts Committee® - NPC

CONTRACT DATA

For use by ORGANS OF STATE and other PUBLIC SECTOR Bodies

Principal Building Agreement

Edition 6.2 - May 2018

JBCC®

The Joint Building Contracts Committee® NPC (JBCC®) is representative of building owners and developers, professional consultants and general and specialist contractors who contribute their knowledge and experience to the compilation of the JBCC® documents. The JBCC® documents portray the consensus view of the constituent members and are published in the interests of standardisation and good practice with an equitable distribution of contractual risk

Application of JBCC® agreements

The definitions contained in the JBCC® Principal Building Agreement apply to this document. A word or phrase in bold type in the text has the same meaning assigned to it in the definitions of such agreement. Where a word or phrase is not in bold type it has the meaning consistent with the context of its use

This contract data contains changes made to the JBCC® Principal Building Agreement to suit Organs of State and other Public Sector Bodies' requirements, as well as unique requirements applicable to the project and variables referred to in the JBCC® Principal Building Agreement and the JBCC® General Preliminaries. The information provided in this document is complete and accurate at the time of calling for tenders. Where additional information becomes available, all tenderers will be informed in writing. Reference to clause numbers in the JBCC® Principal Building Agreement are shown in [square brackets] in this contract data eg [3.2.1]. Spaces requiring information must be filled in, or marked as 'not applicable' but not left blank

Where the contractor is appointed, the contract documents comprise the completed and signed Form of Offer and Acceptance, the signed JBCC® Principal Building Agreement, this completed contract data, the priced document, drawings and other listed documents

Endorsement of JBCC® agreements

The JBCC® Edition 6.2 agreements have been endorsed by Construction Industry Development Board (CIDB) for use by Organs of State and other Public Sector Bodies

Warning!

The JBCC® Principal Building Agreement Edition 6.2 has been coordinated with the JBCC® Nominated/Selected Subcontract Agreement Edition 6.2, the JBCC® General Preliminaries and the JBCC® certificate forms and support documents. Forms from previous editions are not compatible with the JBCC® Principal Building Agreement Edition 6.2

Persons entering into or preparing contracts using the JBCC® suite of contract agreements and support documents are warned of the dangers inherent in modifying any part of it

Experience has shown that changes drafted by others, including members of the building professions, often have unintended results that may be prejudicial to either, or both, parties

Disclaimer

While the JBCC® aims to ensure that its publications represent best practice it does not accept or assume any liability or responsibility for any events or consequences which derive from the use of JBCC® documents

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A PROJECT INFORMATION

A 1.0 Works [1.1]

Project name	Conversion of Existing Ward 13 to ICU at JST Hospital, Rustenburg
Reference number	NWDOH 17/2026
Works description	Conversion of Existing Ward 13 to ICU at JST Hospital, Rustenburg

A 2.0 Site [1.1]

Erf / stand number	JST HOSPITAL
Township / Suburb	Rustenburg
Site address	JST Hospital, Bosch Street, GPS co-ordinates: -25.6777652, 27.2452006
Local authority	Rustenburg Local Authority

A 3.0 Employer [1.1]

Official Name of Organ of State / Public Sector Body	Department of Health North West		
Business registration number	N/A		
VAT/GST number	N/A		
Country	South Africa		
Employer's representative: Name	Mr Roelof De Jager		
E-mail	rdejager@nwpg.gov.za	Telephone number	
Mobile number	060 980 1547		
Postal address			
		Postal code	
Physical address			
	Cnr. Sekame and First Street New Office Park Mafikeng	Postal code	2745

A 4.0 Principal agent [1.1]

Name			
Legal entity of above		Contact person	
Practice number		Telephone number	

		Mobile number	
Country		E-mail	
Postal address		Postal code	
Physical address		Postal code	
A 5.0 Agent [1.1; 6.2]	Discipline		

Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address		Postal code	
Physical address		Postal code	

A 6.0 Agent [1.1; 6.2]	Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address		Postal code	
Physical address		Postal code	

A 7.0 Agent [1.1; 6.2]	Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address		Postal code	
Physical address		Postal code	

A 8.0 Agent [1.1; 6.2]	Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address		Postal code	
Physical address			

		Postal code	
--	--	-------------	--

A 9.0 Agent [1.1; 6.2]

Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address			
		Postal code	
Physical address			
		Postal code	

A 10.0 Agent [1.1; 6.2]

Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address			
		Postal code	
Physical address			
		Postal code	

A 11.0 Agent [1.1; 6.2]

Discipline	
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Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address			
		Postal code	
Physical address			
		Postal code	

A 12.0 Agent [1.1; 6.2]

Discipline	
------------	--

Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address			
		Postal code	
Physical address			

		Postal code	
--	--	-------------	--

B CONTRACT INFORMATION

B 1.0 Definitions [1.1]

Bills of quantities: System/Method of measurement	Standard System of Measuring Building Work (as amended) published and issued by the Association of South African Quantity Surveyors (Seventh Edition (Revised) 2015),
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B 2.0 Law, regulations and notices [2.0]

Law applicable to the works , state country [2.1]	South Africa
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B 3.0 Offer and acceptance [3.0]

Currency applicable to this agreement [3.2]	Rand (R)
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B 4.0 Documents [5.0]

The original signed agreement is to be held by the principal agent [5.2], if not, indicate by whom	Employer
Number of copies of construction information issued to the contractor at no cost [5.6]	3

Documents comprising the agreement	Page numbers
The JBCC ® Principal Building Agreement, Edition 6.2 May 2018	1 to 30
The JBCC ® Principal Building Agreement - Contract Data for Organs of State and other Public Sector Bodies, Edition 6.2 May 2018	1 to 14
The JBCC ® General Preliminaries for use with the JBCC ® Principal Building Agreement, Edition 6.2 May 2018	1 to 7
Performance Guarantee	11-13
Insurances	12
Construction Programme	30
Health and Safety Plan	1-83

Contract drawings – description	Number	Revision	Date
Refer to scope of work			

B 5.0 Employer's agents [6.0]

Authority is delegated to the following agents to issue contract instructions and perform duties for specific aspects of the works [6.2] Architect Structural Engineer Civil Engineer Mechanical Engineer Electrical Engineer Fire Engineer
Principal agent's and agents' interest or involvement in the works other than a professional interest [6.3] No other interests

B 6.0 Insurances [10.0]

Insurances by employer		Amount including tax	Deductible amount including tax
Yes/no?	No		
Contract works insurance:			
	New works [10.1.1] (contract sum or amount)		
or	Works with practical completion in sections [10.2] (contract sum or amount)		
or	Works with alterations and additions [10.3] (reinstatement value of existing structures with or including new works)		
	Direct contractors [10.1.1; 10.2] where applicable, to be included in the contract works insurance		
	Free issue [10.1.1; 10.2] where applicable, to be included in the contract works insurance		
	Escalation, professional fees and reinstatement costs if not included above		
Total of the above contract works insurance amount			
Supplementary insurance [10.1.2; 10.2]			

Public liability insurance [10.1.3; 10.2]				
Removal of lateral support insurance [10.1.4; 10.2]				
Other insurances [10.1.5]				
Yes/no?	No	If yes, description 1		
Yes/no?	No	If yes, description 2		

and/or

Insurances by contractor			Amount including tax	Deductible amount including tax
Yes/no?	Yes			
	New works [10.1.1] (contract sum or amount)		Contract Sum + 20%	
or	Works with practical completion in sections [10.2] (contract sum or amount)			
or	Works with alterations and additions [10.3] (reinstatement value of existing structures with or including new works)			
	Direct contractors [10.1.1; 10.2] where applicable, to be included in the contract works insurance			
	Free issue [10.1.1; 10.2] where applicable, to be included in the contract works insurance			
	Escalation, professional fees and reinstatement costs if not included above			
Total of the above contract works insurance amount				
Supplementary insurance [10.1.2]				
Public liability insurance [10.1.3]			5 000 000,00	
Removal of lateral support insurance [10.1.4]			N/A	
Other insurances [10.1.5]: Refer B17.0				
Yes/no?	Yes	If yes, description 1		
Hi Risk Insurance [10.1.5.1]				
Yes/no?	Yes	If yes, description 2		
SASRIA – Coupon Policy				

B 7.0 Obligations of the employer [12.1]

Existing premises will be in use and occupied [12.1.2]		Yes/no?	Yes
If yes, description	The hospital will still be functional during construction		
Restriction of working hours [12.1.2]		Yes/no?	No
If yes, description			

Natural features and known services to be preserved by the contractor [12.1.3]		Yes/no?	No
If yes, description			
Restrictions to the site or areas that the contractor may not occupy [12.1.4]		Yes/no?	Yes
If yes, description	The contractor to hoard around each building that he will be working on		
Supply of free issue [12.1.10]		Yes/no?	No
If yes, description			

B 8.0 Nominated subcontractors [14.0]

Yes/no?	No	If yes, description of specialisation
Specialisation 1		
Specialisation 2		
Specialisation 3		
Specialisation 4		
Specialisation 5		

B 9.0 Selected subcontractors [15.0]

Yes/no?	No	If yes, description of specialisation
Specialisation 1		
Specialisation 2		
Specialisation 3		
Specialisation 4		
Specialisation 5		

B 10.0 Direct contractors [16.0]

Yes/no?	No	If yes, description of extent of work
Extent of work [12.1.11]		
Extent of work [12.1.11]		
Extent of work [12.1.11]		
Extent of work [12.1.11]		
Extent of work [12.1.11]		

B 11.0 Description of sections [20.1]

Section 1	Theatre Building
Section 2	

Section 3		
Section 4		
Section 5		
Section 6		
Section		Remainder of the works

B 12.0 Possession of site [12.1.5], practical completion [19.0; 20.0] and penalty [24.0]

Practical completion for the works as a whole	Intended date of possession of the site Refer B17.0 [12.1.5; 12.2.22]	Period for inspection by the principal agent [19.3]	The date for practical completion shall be the period as indicated below from the date of possession of the site by the contractor [12.2.7; 24.1]	Penalty for late completion [24.1]
		working days	Period in months	Penalty amount per calendar day
			18	Refer to schedule

or where **sections** are applicable

Practical completion of a section of the works	Intended date of possession of a section Refer B17.0 [12.1.5; 12.2.22]	Period for inspection by the principal agent [19.3]	The date for practical completion shall be the period as indicated below from the date of possession of the site by the contractor [12.2.7; 24.1]	Penalty for late completion [24.1]
		working days	Period in months	Penalty amount per calendar day
Section 1			10	Refer to schedule
Section 2				
Section 3				
Section 4				
Section 5				
Section 6				
Section 7				
Section 8				
Remainder of the works			18	Refer to schedule

Criteria to achieve **practical completion** not covered in the definition of **practical completion**

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B 13.0 Defects liability period [21.0]

Extended defects liability period: Refer B17.0 [21.13]		Yes/no?	Yes
If yes, description of applicable elements	eg: Electrical reticulation / Air conditioning system / Landscaping 13.1 Electrical and Electronic Installation 13.2 Mechanical Installation 13.3 Landscaping 13.4 13.5 13.6		

B 14.0 Payment [25.0]

Date of month for issue of regular payment certificates [25.2]	25th of each month		
Contract price adjustment / Cost fluctuations [25.3.4; 26.9.5]	Yes/no?	Yes	
If yes, method to calculate	JBCC Contract Price Adjustment Provisions CPAP Indices		
Employer shall pay the contractor within: [25.10]	Thirty (30) calendar days		

B 15.0 Dispute resolution [30.0]

Adjudication [30.6.1; 30.10] Name of nominating body	Association of Arbitration (Southern Africa)		
Applicable rules for adjudication [30.6.2]			
Arbitration [30.7.4; 30.10] If Yes, name of nominating body * If No, then dispute will be referred to litigation	Yes/no? *	Yes	Association of Arbitration (Southern Africa)
Applicable rules for arbitration [30.7.5]			

B 16.0 JBCC® General Preliminaries - selections

Provisional bills of quantities [P2.2]	Yes/no?	Yes	
Availability of construction information [P2.3]	Yes/no?	Yes	
Previous work - dimensional accuracy - details of previous contract(s) [P3.1]			
Previous work - defects - details of previous contract(s) [P3.2]			
Inspection of adjoining properties - details [P3.3]			
Handover of site in stages - specific requirements [P4.1]			
Enclosure of the works - specific requirements [P4.2]			
Geotechnical and other investigations - specific requirements [P4.3]			
Existing premises occupied - details [P4.5]	The hospital will be in operation during construction		

Services - known - specific requirements [P4.6]				
Water [P8.1]	By contractor	Yes/no?	Yes	
	By employer	Yes/no?	No	
	By employer – metered	Yes/no?	No	
Electricity [P8.2]	By contractor	Yes/no?	No	
	By employer	Yes/no?	No	
	By employer – metered	Yes/no?	Yes	
Ablution and welfare facilities [P8.3]	By contractor	Yes/no?	Yes	
	By employer	Yes/no?		
Communication facilities - specific requirements [P8.4]				
Protection of the works - specific requirements [P11.1]				
Protection / isolation of existing works and works occupied in sections - specific requirements [P11.2]		Hoarding required where necessary		
Disturbance - specific requirements [P11.5]				
Environmental disturbance - specific requirements [P11.6]				

B 17.0 Changes made to JBCC® documentation

Reference may be made to other documents forming part of this **agreement**

1.1 Definitions

AGREEMENT: The completed Form of Offer and Acceptance, the completed **JBCC®** Principal Building Agreement and **JBCC® contract data for organs of state and other public sector bodies**, the **contract drawings**, the **priced document** and any other documents reduced to writing and signed by the authorised representatives of the **parties**

CONSTRUCTION PERIOD: The period commencing on the date of possession of the **site** by the **contractor** and ending on the date of **practical completion**

CONTRACT DATA FOR ORGANS OF STATE AND OTHER PUBLIC SECTOR BODIES: The document listing the Organs of State and other Public Sector Bodies' requirements and the project specific information

INTEREST: The interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be the rate as determined by the Minister of Finance from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No 1 of 1999), calculated as simple interest, in respect of debts owing to the State, and will be the rate as determined by the Minister of Justice and Constitutional Development from time to time, in terms of section 1(2) of the Prescribed Rate of Interest Act, 1975 (Act No 55 of 1975), calculated as simple interest, in respect of debts owing by the State

PRINCIPAL AGENT: The person or entity appointed by the **employer** and named in the **contract data for organs of state and other public sector bodies**. In the event of a **principal agent** not being appointed, then all the duties and obligations of a **principal agent** as detailed in the **agreement** shall be fulfilled by the employer's representative as named in the **contract data for organs of state and other public sector bodies**.

3.0 Offer and Acceptance

Amend 3.3 to read as follows:

This **agreement** shall come into force on the date as stated on the Form of Offer and Acceptance and continue to be of force and effect until the end of the **latent defects** liability period [22.0] notwithstanding termination [29.0] or the certification of **final completion** [21.0] and final payment [25.0]

6.0 Employer's Agents

Add the following as 6.7:

In terms of the clauses listed hereunder, the **employer** has retained its authority and has not given a mandate to the **principal agent**. The **employer** shall sign all documents in relation to clauses 4.2, 14.1.2, 14.1.4, 14.4.1, 14.6, 23.1, 23.2, 23.3, 23.7, 23.8, 26.1, 26.7, 26.12 and 28.4

9.0 Indemnities

9.2.7: Add the following to the end of the first sentence: ".... due to no fault of the **contractor**"

10.0 Insurances

Add the following as 10.1.5.1:

Hi Risk Insurance

In the event of the project being executed in a geological area classified as a "High Risk Area", that is an area which is subject to highly unstable sub-surface conditions that might result in catastrophic ground movement evident by sinkhole or doline formation the following will apply:

10.1.5.1.1 Damage to the works

The contractor shall, from the date of possession of the **site** until the date of the **certificate of practical completion**, bear the full risk of and hereby indemnifies and holds harmless the **employer** against any

damage to and/or destruction of the **works** consequent upon a catastrophic ground movement as mentioned above. The **contractor** shall take such precautions and security measures and other steps for the protection of the **works** as he may deem necessary

When so instructed to do so by the **principal agent**, the **contractor** shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the **works** and to rebuild, restore, replace and/or repair the **works**, at the **contractor's** own costs

10.1.5.1.2 Injury to persons or loss of or damage to property

The **contractor** shall be liable for and hereby indemnifies and holds harmless the **employer** against any liability, loss, claim or proceeding arising at any time during the period of the contract whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above

The **contractor** shall be liable for and hereby indemnifies the **employer** against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable, or immovable property, or personal property, or property contiguous to the **site**, whether belonging to or under the control of the **employer** or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the period of the contract

10.1.5.1.3

It is the responsibility of the **contractor** to ensure that he has adequate insurance to cover his risk and liability as mentioned in 10.1.5.1.1 and 10.1.5.1.2. Without limiting the **contractor's** obligations in terms of the contract, the **contractor** shall, within twenty-one (21) **calendar days** of the date of possession of the site, but before commencement of the **works**, submit to the **employer** proof of such insurance policy, if requested to do so

10.1.5.1.4

The **employer** shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the **contractor's** default of his obligations as set out in 10.1.5.1.1; 10.1.5.1.2 and 10.1.5.1.3. Such losses or damages may be recovered from the **contractor** or by deducting the same from any amounts still due under this contract or under any other contract presently or hereafter existing between the **employer** and the **contractor** and for this purpose all these contracts shall be considered one indivisible whole

11.0 Securities

Amend 11.10 to read as follows:

There shall be no lien or right of retention held by any **contractor** in respect of the **works** executed on **site**

12.0 Obligations of the Parties

Amend 12.1.5 to read as follows:

Give possession of the **site** to the **contractor** within ten (10) **working days** of the **contractor** complying with the terms of 12.2.22

12.2.2: Not applicable

Add the following as 12.2.22:

Within fifteen (15) **working days** of the date of the **agreement** submit to the **principal agent** an acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993)

19.0 Practical Completion

19.5: Delete the words "subject to the **contractor's** lien or right of continuing possession of the **works** where this has not been waived"

21.0 Defects Liability Period and Final Completion

Add the following as 21.13:

The ninety (90) **calendar days** defects liability period for the **works** [21.1] is replaced with a period of three hundred and sixty-five (365) **calendar days** in respect of the listed applicable elements

25.0 Payment

25.7.5: Not applicable

25.10: Delete the words “and/or **compensatory interest**”

25.14.2: Not applicable

27.0 Recovery of Expense and/or Loss

27.1.5: Not applicable

29.0 Termination

Add the following after 29.1.3:

or where ...

29.1.4: The **contractor's** estate has been sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa29.1.5: The **contractor** has engaged in corrupt or fraudulent practices in competing for or in executing the contract**C TENDERER'S SELECTIONS****C 1.0 Securities [11.0]**

Guarantee for construction: Select Option A or B

☐

Option A	Guarantee for construction (variable) by contractor [11.1.1]
Option B	Guarantee for construction (fixed) by contractor [11.1.2]
Guarantee for payment by employer [11.5.1; 11.10]	Not applicable
Advance payment, subject to a guarantee for advance payment [11.2.2; 11.3]	Not applicable

C 2.0 Contractor's annual holiday periods during the construction period

Year 1 contractor's annual holiday period	start date		end date	
Year 2 contractor's annual holiday period	start date		end date	
Year 3 contractor's annual holiday period	start date		end date	

C 3.0 Payment of preliminaries [25.0]**Contractor's selection**

Select Option A or B

☐

Where the **contractor** does not select an option, Option A shall apply

Payment methods

Option A	The preliminaries shall be paid in accordance with an amount prorated to the value of the works executed in the same ratio as the amount of the preliminaries to the contract sum , which contract sum shall exclude the amount of preliminaries . Contingency sum(s) and any provision for cost fluctuations shall be excluded for the calculation of the aforesaid ratio
Option B	The preliminaries shall be paid in accordance with an amount agreed by the principal agent and the contractor in terms of the priced document to identify an initial establishment charge, a time-related charge and a final dis-establishment charge. Payment of the time-related charge shall be assessed by the principal agent and adjusted from time to time as may be necessary to take into account the rate of progress of the works

Lump sum contract

Where the amount of **preliminaries** is not provided it shall be taken as 7.5% (seven and a half per cent) of the **contract sum**, excluding contingency sum(s) and any provision for cost fluctuations

C 4.0 Adjustment of preliminaries [26.9.4]

Contractor's selection

Select Option A or B

☐

Where the **contractor** does not select an option, Option A shall apply

Provision of particulars

The **contractor** shall provide the particulars for the purpose of the adjustment of **preliminaries** in terms of his selection. Where completion in **sections** is required, the **contractor** shall provide an apportionment of **preliminaries per section**

Option A	An allocation of the preliminaries amounts into Fixed, Value-related and Time-related amounts as defined for adjustment method Option A below, within fifteen (15) working days of the date of acceptance of the tender
Option B	A detailed breakdown of the preliminaries amounts within fifteen (15) working days of possession of the site . Such breakdown shall include, inter alia, the administrative and supervisory staff, the use of construction equipment , establishment and dis-establishment charges, insurances and guarantees, all in terms of the programme

Adjustment methods

The amount of **preliminaries** shall be adjusted to take account of the effect which changes in time and/or value have on **preliminaries**. Such adjustment shall be based on the particulars provided by the **contractor** for this purpose in terms of Options A or B, shall preclude any further adjustment of the amount of **preliminaries** and shall apply notwithstanding the actual employment of resources by the **contractor** in the execution of the **works**

Option A	The preliminaries shall be adjusted in accordance with the allocation of preliminaries amounts provided by the contractor, apportioned to sections where completion in sections is required Fixed - An amount which shall not be varied Value-related - An amount varied in proportion to the contract value as compared to the contract sum. Both the contract sum and the contract value shall exclude the amount of preliminaries, contingency sum(s) and any provision for cost fluctuations Time-related - An amount varied in proportion to the number of calendar days extension to the date of practical completion to which the contractor is entitled with an adjustment of the contract value [23.2; 23.3] as compared to the number of calendar days in the initial construction period [26.9.4]
Option B	The adjustment of preliminaries shall be based on the number of calendar days extension to the date of practical completion to which the contractor is entitled with an adjustment of the contract value [23.2; 23.3] as compared to the number of calendar days in the initial construction period [26.9.4]

	The adjustment shall take into account the resources as set out in the detailed breakdown of the preliminaries for the period of construction during which the delay occurred
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Failure to provide particulars within the period stated

Option A	Where the allocation of preliminaries amounts for Option A is not provided, the following allocation of preliminaries amounts shall apply: Fixed - Ten per cent (10%) Value-related - Fifteen per cent (15%) Time-related - Seventy-five per cent (75%) Where the apportionment of the preliminaries per section is not provided, the categorised amounts shall be prorated to the cost of each section within the contract sum as determined by the principal agent
Option B	Where the detailed breakdown of preliminaries amounts for Option B is not provided, Option A shall apply

Lump sum contract

Where the amount of **preliminaries** is not provided it shall be taken as 7.5% (seven and a half per cent) of the **contract sum**, excluding contingency sum(s) and any provision for cost fluctuations

DEPARTMENT OF HEALTH NORTH WEST PROVINCE

CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL,

RUSTENBURG

**C1.2 Contract Data for CONVERSION OF EXISTING WARD
13 TO ICU AT JST, RUSTENBURG**

CONTRACT No. NWDOH 17/2026

The additions to the JBCC Principal Agreement are:

Clause	Additions
A1	A1.0 Labour intensive component of the works A1.1 Payment of labour –intensive component of the works. Payment for works identified in the Scope work as being labour-intensive shall only be made in accordance with the provision of the Contract if the works are constructed strictly in accordance with the provisions of the Scope of work. Any non-payment for such works shall not relieve the Contractor in any way from his obligation either in contract or in delict. A1.2 Applicable labour laws The Ministerial Determination, Special Public Works Programme, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice N° R63 of 25 January 2002, as reproduced below, shall apply to works described in the Scope of Work as being labour intensive and which are undertaken by unskilled or semi-skilled workers. 1 Introduction 1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on a Special Public Works Programme (SPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.

	1.3 In this document – (a) “department” means any department of the State, implementing agent or contractor; (b) “employer” means any department, implementing agency or contractor that hires workers to work in elementary occupations on SPWP (c) “workers” means any person working in an elementary occupation on a SPWP; (d) “elementary occupation” means any occupation involving unskilled or semi-skilled work; (e) “Management” means any person employed by a department or implementing agency to administer or execute an SPWP; (f) “task” means a fixed quantity of work; (g) “task-based work” means work in which a worker is paid a fixed rate for performing a task; (h) “task-rated worker” means a worker paid on the basis of the number of tasks completed. (i) “time-rated worker” means a worker paid on the basis of the length of the worked. 2 Terms of work 2.1 Workers on a SPWP are employed on a temporary basis. 2.2 A worker may NOT be employed for longer than 24 Months in any five-year cycle on a SPWP. 2.3 Employment on a SPWP does not qualify as employment as a contributor for the purpose of the Unemployment Insurance Act 30 of 1966. 3. Normal Hours of Work 3.1 An employer may not set tasks or hours of work that require a worker to work- (a) more than forty hours in any week; (b) on more than five days in any week; and (c) for more than eight hours on any day. 3.2 An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day. 3.3 A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40 hour week) to that worker. 4 Meal breaks 4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration. 4.2 An employment and worker may agree on longer meal breaks 4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.
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	5 Special Conditions for Security Guards 5.1 A security guard may work up to 55 hours per week and up to eleven hours per day. 5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each. 6 Daily Rest Period Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day. 7 Weekly Rest Period Every worker must have two days off every week. A worker may only work on their off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ('emergency work'). 8 Work on Sundays and Public Holidays 8.1 A worker may only work on a Sunday or public holiday to perform emergency or security work. 8.2 Work on Sundays is paid at double the ordinary rate of pay. 8.3 A task-rated worker who works on a public holiday must be paid- (a) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday; (b) double the worker's daily rate of pay, if the worker works for more than four hours on the public holidays 9 Sick Leave 9.1 Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause. 9.2 A worker who is unable to work on account of illness or injury is entitled to claim One day's paid sick leave for every full month that the worker has worked in terms of a contract. 9.3 A worker may accumulate a maximum of twelve day's sick leave in a year. 9.4 Accumulated sick-leave may not be transferred from one contract to another contract. 9.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave. 9.6 An employer must pay a time-rated worker the worker's daily task rate for a day's sick leave.
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	9.7 An employer must pay a worker sick pay on worker's usual payday. 9.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is- (a) absent from work for more than two consecutive days; or (b) absent from work on more than two occasions in any eight-week period. 9.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorized to issue medical certificate indicating the duration and reason for incapacity. 9.10 A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act. 10. Maternity Leave 10.1 A worker may take up to four consecutive months' unpaid maternity leave. 10.2 A worker is not entitled to any payment or employment-related benefits during maternity leave. 10.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work. 10.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so. 10.5 A worker may begin maternity leave – (a) four weeks before the expected date of birth; or (b) on an earlier date – (i) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or (ii) if agreed to between employer and worker; or (c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health. 10.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth. 10.7 A worker, who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the SPWP on which she was employed has ended. 11 Family responsibility leave
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	11.1 Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances- (a) when the employee's child is born; (b) when the employee's child is sick (c) in the event of a death of (i) the employee's spouse or life partner; (ii) employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling. 12 Statement of Conditions 12.1 An employer must give a worker a statement containing the following details at the start of employment – (a) the employer's name and address and the name of the SPWP; (b) the tasks or job that the worker is to perform; and (c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract; (d) the worker's rate of pay and how this is to be calculated; (e) the training that the worker will receive during the SPWP. 12.2 An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement. 12.3 An employer must supply each worker with a copy of these conditions of employment. 13 Keeping records 13.1 Every employer must keep a written record of at least the following – (a) the worker's name and position (b) in the case of a task-rated worker, the number of tasks completed by the worker; (c) in the case of a time-rated worker, the time worked by the worker; (d) payments made to each worker. 13.2 The employer must keep this record for a period of at least three years after the completion of the SPWP. 14 Payment 14.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account. 14.2 A task-rated worker will only be paid for tasks that have been completed. 14.3 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer. 14.4 A time-rated worker will be paid at the end of each month. 14.5 Payment must be made in cash, by cheque or by direct deposit into a bank account
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	designated by the worker. 14.6 Payment in cash or by cheque must take place- (a) at the workplace or at a place agreed to by the worker; (b) during the worker's working hours or within fifteen minutes of the start or finish of work; (c) in a sealed envelope which becomes the property of the worker. 14.7 An employer must give a worker the following information in writing- (a) the period for which payment is made (b) the numbers of tasks completed or hours worked; (c) the worker's earnings; (d) any money deducted from the payment; (e) the actual amount paid to the worker. 14.8 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it. 14.9 If a worker's employment is terminated, the employer must be pay all monies owing to that worker within one month of the termination of employment. 15 Deductions 15.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law. 15.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay. 15.3 An employer who deduct money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirement specified in the agreement law, court order or arbitration award concerned. 15.4 An employer may not require or allow a worker to – (a) repay any payment except an overpayment previously made by the employer by mistake; (b) state that the worker received a greater amount of money than the employer actually paid to the worker; or (c) pay the employer or any other person for having been employed. 16 Health and Safety 16.1 Employers must take all reasonable steps to ensure that the working environment is health and safe. 16.2 A worker must – (a) work in a way that does not endanger his/her health and safety or that of any other person; (b) obey any health and safety instruction ;
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	(c) obey all health and safety rules of the SPWP; (d) use any personal protective equipment or clothing issued by the employer; (e) report any accident, near-miss incident or dangerous behavior by another person to their employer or manager. 17 Compensation for Injuries and Diseases 17.1 It is the responsibility of the employers (other than a contract) to arrange for all persons employed on a SPWP to be covered in terms of the Compensation Injuries and Diseases Act, 130 of 1993. 17.2 A worker must report any work-related injury or occupational disease to their employer or manager. 17.3 The employer must report the accident or disease to the Compensation Commissioner. 17.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home. 18 Termination 18.1 The employer may terminate the employment of a worker for good cause after following a fair procedure. 18.2 A worker will not receive severance pay on termination. 18.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement. 18.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period. A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available of the 24-month period. 19 Certificate of Service (a) the worker's full name; (b) the name and address of the employer (c) the SPWP on which the worker worked; (d) the work performed by the worker; (e) any training received by the worker as part of the SPWP;
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	(f) the period for which the worker worked on the SPWP; (g) any other information agreed on by the employer and worker.
A2	A2.0 Expanded Public Works Programme A2.1 The Contractor will be required to employ staff which satisfy the EPWP requirements as per the Guidelines for the implementation of labour-intensive infrastructure projects under the EPWP and as Stipulated in this Contract.
A3	A3.0 Mandatory Training A3.1 The Contractor will be required to provide training to sub-contractors. An allowance for this has been made in the final summary of the bills of quantities, which will be treated as a budgetary allowance which the Contractor can use for training and which may be deducted in part or in whole from the project should it not be used.

1.1 The Employer is the **Department of Health, North West Provincial Government**

Telephone: 018-391 4550

Facsimile : 086 241 5156

Address (physical): Cnr Sekame & First Street, New Office Park, Mafikeng; 2745

Address (postal): Private Bag x2068, Mmabatho, 2735

5.1 The Principal Agent is:

Telephone:

Facsimile :

Address (physical):

Address (postal):

Email:

1.1.1 The **works** (Refer to document C3 – Scope of Works)

1.1.1 The **site** (Refer to document C4 – Site Information)

1.1.1 The **Works** or installation to be undertaken by **direct contractors** comprises.

2.2 NONE

41.0 The Employer is an organ of **State**

31.11.2

11.2 The Interest rate as determined by the Minister of Finance, from time to time, in terms of section 80 (1)(b) of the Public Finance Management Act, 1999 (Act No 1 of 1999) will apply.

31.4.2 Lateral support insurance is to be effected by the **contractor**

26.1.2 Payment will be made for materials and goods

Extended **defects** liability period will apply to the following elements:

Electrical Installation

Mechanical Installation
Landscaping

- 15.2.1 Possession of the **site** is to be given within ten (10) **working days** of the **contractor** complying with the terms of 15.1
- 15.3 The period for the commencement of the **works** after the **contractor** takes possession of the site is ten (10) **working days**.

For the **works** as a whole

The date for **practical completion** is **[36 months]** after contractual commencement date
The **penalty** per **calendar day** is as per attached penalty schedule
Or

The date for practical completion and the penalty per calendar day is as follows:

Section	Duration	Penalty Amount
Section 1 MOU Building	24 Months	As per Schedule
Section 2 Remainder of the works	12 Months	As per Schedule
Section 3 n/a		
1.2	The law applicable to the agreement shall be that of the Republic of South Africa	
10.1; 10.2 And 12.1	Contract insurance is to be effected by the contractor .	
10.1 10.2	Contract works insurance is to be effected by the contractor for sum not less than the contract sum plus 20% with a deductible in an amount that the contractor deems appropriate.	
12.1 11.1, 12.1	Public liability insurance to be effected by the contractor for an amount of R5, 000, 000.00 with a deductible in an amount as determined by the contractor's insurance company.	
11.2, 12.1	Support insurance to be effected by the contractor for the sum of NOT APPLICABLE with a deductible in an amount that the contractor deems appropriate.	
3.3, 15.1.3, 31.16.2	A waiver of the contractor's lien or right of continuing possession is not required.	
3.7	Three copies of the construction document are to be supplied to the contractor free of charge.	
3.4	JBCC Engineering General Conditions are not to be included in the contract document.	
31.5.3	The contract value is to be adjusted using CPAP indices. The base month for the application of CPAP is the month of the closing of the tender. The listing of additional items for exclusion by Contractors, as contained in clause 3.4.3 of the CPAP Indices Application Manual, will only be permitted where the Schedule for Imported Material and Equipment form provided has been fully completed	

- 31.3 The is no latest day of the month for the issue of an interim payment certificate.
- 14.5 The employer will not provide advanced payments against an advanced payment guarantee.
- 14.2 and 14.4 The **construction guarantee** is to be a fixed guarantee in an amount of 7.5% of the contract sum and payment reduction, not more than 10%
- 40.0 Dispute resolution shall be by Arbitration

Part 2: Contract Data completed by the Contractor

Clause Item and data

1.2 The name of the Contractor is

The address of the contractor is:

Telephone:

Facsimile :

Address (physical):

.....

.....

Address (postal):

.....

.....



health

Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH NORTH WEST PROVINCE

CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL, RUSTENBURG

C1.2 Construction Guarantee

GUARANTOR DETAILS AND DEFINITIONS

Guarantor means

Physical address

Guarantor's signatory 1 Capacity

Guarantor's signatory 1 Capacity

Employer means **DEPARTMENT OF HEALTH NORTH WEST PROVINCE**
New Office park
Cnr Sekame& First Street
Mafikeng
2754

Contractor means

Agent means

Works means . .

**CONSTRUCTION OF NEW MATERNITY UNIT AND GENERAL REFURBISHMENT OF
EXISTING BUILDINGS INCLUDING EXTERNAL SERVICES**

Site means . . **JST HOSPITAL**

Agreement means the JBCC Series 2000 Principal Building Agreement

Contract Sum i.e. the total of prices in the Form of Offer and Acceptance inclusive of VAT

Contract

Part C: Contract Data

Reference No.

Amount in figures **R**

Amount in words.....(Rand)

Guaranteed Sum means the maximum aggregate amount of R

Amount in words.....(Rand)

1 The Guarantor's liability shall be limited to the amount of the Guaranteed Sum as follows:

GUARANTOR'S LIABILITY	PERIOD OF LIABILITY
Maximum Guaranteed Sum (not exceeding 10 % of the contract sum) in the amount of: (Rands) (R.....)	From and including the date of issue of this Construction Guarantee and up to and including the date of the only practical completion certificate or the last practical completion certificate where there are sections, upon which this Construction Guarantee shall expire.

2 The Guarantor hereby acknowledges that:

2.1 Any reference in this Guarantee to the Agreement is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship.

2.2 Its obligation under this Guarantee is restricted to the payment of money.

3 Subject to the Guarantor's maximum liability referred to in clauses 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in subclauses 3.1 to 3.3:

3.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Principal Agent in an interim or final payment certificate has not been made in terms of the Agreement and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of subclause 2.2

3.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) calendar days has elapsed since the first written demand in terms of sub-clause 4.1 and that the sum certified has still not been paid therefore the Employer calls up this Guarantee and demands payment of the sum certified from the Guarantor.

3.3 A copy of the said payment certificate which, entitles the Employer to receive payment in terms of the Agreement of the sum certified in clause 3.
Subject to the Guarantor's maximum liability referred to in clause 1, the Guarantor undertakes to pay the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Guarantee stating that:

- 4.1** The Agreement has been cancelled due to the Contractor's default and that the Guarantee is called up in terms of clause 4. The demand shall enclose a copy of the notice of cancellation; or
- 4.2** A provisional sequestration or liquidation court order has been granted against the Contractor and that the Guarantee is called up in terms of clause 4. The demand shall enclose a copy of the court order.
- 5** It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of clauses 3 and 4 shall not exceed the Guarantor's maximum liability in terms of clause 1.
- 6** Where the Guarantor is a registered insurer and has made payment in terms of clause 4, the Employer shall upon the date of issue of the final payment certificate submit an expense account to the Guarantor showing how all monies received in terms of the Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
- 7** Payment by the Guarantor in terms of clause 3 or 4 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
- 8** The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which, the Employer deems fit and the Guarantor shall not have the right to claim his release from this Guarantee on account of any conduct alleged to be prejudicial to the Guarantor
- 9** The Guarantor chooses the physical address as stated above for all purposes in connection herewith.
- 10** This Guarantee is neither negotiable nor transferable and shall expire in terms of clause 1, or payment in full of the Guaranteed Sum or on the Guarantee expiry date, whichever is the earlier, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired
- 11** This Guarantee, with the required demand notices in terms of clauses 3 or 4, shall be regarded as a liquid document for the purpose of obtaining a court order.
- 12** Where this Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at Date

Guarantor's

Signatory 1 Signatory 2

Witness 1 Witness 2

Guarantor's seal or stamp



DEPARTMENT OF HEALTH NORTH WEST PROVINCE

CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL, RUSTENBURG

C1.3

ADJUDICATOR'S CONTRACT

This agreement is made on the day of between:
..... (name of company / organisation)
of
..... (address) and
..... (name of company / organisation)
of
..... address)
the Parties) and
..... (name)
of
..... (address)
(the Adjudicator).

Disputes or differences may arise/have arisen* between the Parties under a Contract dated
and known as

and these disputes or differences shall be/have been* referred to adjudication in accordance with
the JBCC Series 2000 Adjudication Rules, (hereinafter called "the Procedure") and the
Adjudicator maybe or has been requested to act.

* Delete as necessary

IT IS NOW AGREED as follows:

- 1 The rights and obligations of the Adjudicator and the Parties shall be as set out in the JBCC Series 2000 Adjudication Rules.
2. The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the JBCC Series 2000 Adjudication Rules.

3. The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses as set out in the Contract Data.

4. The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavor to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.
5. The Adjudicator shall inform the Parties if he intends to destroy the documents which been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of either Party.

SIGNED by: _____ SIGNED by: _____ SIGNED by: _____

Name: _____ who warrants that he / she is duly authorised to sign for and on behalf of the first Party in the presence of	Name: _____ who warrants that he / she is duly authorised to sign for and on behalf of the first Party in the presence of	Name: _____ who warrants that he / she is duly authorised to sign for and on behalf of the first Party in the presence of
---	---	---

Witness:	Witness:	Witness:
----------------	----------------	----------------

Name:	Name:	Name:
-------------	-------------	-------------

Address:	Address:	Address:
----------------	----------------	----------------

Date:	Date:	Date:
-------------	-------------	-------------

Contract Data

1	The Adjudicator shall be paid at the hourly rate of R in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
2	The Adjudicator shall be reimbursed in respect of all disbursements properly made including, but not restricted to: (a) Printing, reproduction and purchase of documents, drawings, maps, records and photographs. (b) Telegrams, telex, faxes, and telephone calls. (c) Postage and similar delivery charges. (d) Travelling, hotel expenses and other similar disbursements. (e) Room charges. (f) Charges for legal or technical advice obtained in accordance with the Procedure.
3	The Adjudicator shall be paid an appointment fee of R This fee shall become payable in equal amounts by each Party within 14 days of the appointment of the Adjudicator, subject to an Invoice being provided. This fee will be deducted from the final statement of any sums which shall become payable under item 1 and/or item 2 of the Contract Data. If the final statement is less than the appointment fee the balance shall be refunded to the Parties.
4	The Adjudicator is/is not* currently registered for VAT
5	Where the Adjudicator is registered for VAT it shall be charged additionally in accordance

with the rates current at the date of invoice



health

Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH NORTH WEST PROVINCE

CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL,

RUSTENBURG

C2.1 Pricing Instructions

1. The Bills of Quantities have been drawn up in accordance with the Standard System of Measuring Building Work (as amended) published and issued by the Association of South African Quantity Surveyors (Seventh Edition (Revised)), 2015. Where applicable the:

- a) civil engineering work has been drawn up in accordance with the provisions of the latest edition of SABS 1200 Standardised Specifications for Civil Engineering Works.
- b) mechanical work has been drawn up in accordance with the provisions of the Model Bills of Quantities for Mechanical Work, published by the South African Association of Quantity Surveyors, July 2005).
- c) electrical work has been drawn up in accordance with the provisions of the Model Bills of Quantities for Electrical Work, published by the South African Association of Quantity Surveyors, (July, 2005).

2 The agreement is based on the JBCC Series 2000 Principal Building Agreement, prepared by the Joint Building Contracts Committee, Edition 6,2, July 2018. The additions, deletions and alterations to the JBCC Principal Building Agreement as well as the contract specific variables are as stated in the Contract Data or Preliminaries. Only the headings and clause numbers for which allowance must be made in the Bills of Quantities are recited.

3 Preliminary and general requirements are based on the various parts of SANS 1921, Construction and management requirements for works contracts. The additions, deletions and alterations to the various parts of SANS 1921 as well as the contract specific variables are as stated in the Specification Data in the Scope of Work. Only the headings and clause numbers for which allowance must be made in the Bills of Quantities are recited.

4 It will be assumed that prices included in the Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.stanza.org.za or www.iso.org for information on standards).

5 The drawings listed in the Scope of Works used for the setting up of these Bills of Quantities are kept by the Principal Agent or Engineer and can be viewed at any time during office hours up until the completion of the works.

6 Reference to any particular trademark, name, patent, design, type, specific origin or producer is

purely to establish a standard for requirements. Products or articles of an equivalent standard may be substituted by approval of the Employer's representative

7 Where any item is not relevant to this specific contract, such item is marked N/A (signifying “not applicable”)

8 The Contract Data and the standard form of contract referenced therein must be studied for the full extent and meaning of each and every clause set out in Section 1 (Preliminaries) of the Bills of Quantities

9 The Bills of Quantities is not intended for the ordering of materials. Any ordering of materials, based on the Bills of Quantities, is at the Contractor's risk.

10 The value related amount of the Preliminaries to be included in each monthly payment certificate shall be assessed as an amount prorated to the value of the work duly executed in the same ratio as the preliminaries bear to the total of prices excluding any contingency sum, the amount for the Preliminaries and any amount in respect of contract price adjustment provided for in the contract.

11 Where the initial contract period is extended, the monthly charge shall be calculated on the basis as set out in 10 but taking into account the revised period for completing the works.

12 The amount or items of the Preliminaries shall be adjusted to take account of the theoretical financial effect which changes in time or value (or both) have on this section. Such adjustments shall be based on adjustments in the following categories as recorded in the Bills of Quantities:

- a) an amount which is not to be varied, namely Fixed (F)
- b) an amount which is to be varied in proportion to the contract value, namely Value Related (V); and
- c) an amount which is to be varied in proportion to the contract period as compared to the initial construction period excluding revisions to the construction period for which no adjustment to the contractor is not entitled to in terms of the contract, namely Time Related (T).

13 Where no provision is made in the Bills of Quantities to indicate which of the three categories in 12 apply or where no selection is made, the adjustments shall be based on the following breakdown:

- a) 10 percent is Fixed;
- b) 15 percent is Value Related
- c) 75 percent is Time Related.

14 The adjustment of the Preliminaries shall apply notwithstanding the actual employment of resources in the execution of the works. The contract value used for the adjustment of the Preliminaries shall exclude any contingency sum, the amount for the Preliminaries and any amount in respect of contract price adjustment provided for in the contract. Adjustments in respect of any staged or sectional completion shall be prorated to the value of each section.

15 The prices and rates in these bills of quantities are fully inclusive of prices for the work described under the item. Such rates and prices cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the Scope of Works, and shall cover the cost of all general risks, liabilities, and obligation set forth and implied in the Contract Data, as well as overhead and charges and profit. These prices will be used as a basis for assessment of total payment and payment for additional work that may have to be carried out.

16 An item against which no price is entered will be considered to be covered by the other prices or rates in the Bills of Quantities. However, this is to be avoided and all items in the bill of quantities / schedule of rates must be priced. A single lump sum will apply should a number of items be grouped together for pricing purposes.

CALCULATION OF PENALTIES

CALCULATION OF PENALTY PER DAY (EXCLUDING VAT)

CONTRACT PERIOD	RATE PER R100 OF ESTIMATE
1 month	27,5 cents
1,5 months	22 cents
2 months	16,5 cents
2,5 months	13,5 cents
3 months	11 cents
3,5 months	9,5 cents
4 months	8,5 cents
4,5 months	7,5 cents
5 months	6,25 cents
6 months	5,75 cents
7 months	4,75 cents
8 months	4 cents
9 months	3,75 cents
10 months	3,5 cents
11 months	3 cents
12 months	2,75 cents
14 months	2,5 cents
15 months	2,25 cents
16 months	2 cents
18 months	1,75 cents
20 months	1,5 cents
21 months	1,5 cents
24 months	1,25 cents
30 months	1 cent
36 months	1 cent
42 months	1 cent

PENALTY PER DAY ROUNDED OFF AS FOLLOWS:

R0	-	R500	nearest	R5
R501	-	R1 000	nearest	R10
R1 001	-	R5 000	nearest	R50
R5 001	-	and above	nearest	R100

EXAMPLE

Estimated contract value	=	R2 500 000 (excluding VAT)
Contract period	=	12 months
		$R2\ 500\ 000 \times \frac{0,0275}{100}$
	=	R687,50/day

Therefore rounded off to the nearest R10.00

= R690,00/day

PENALTIES ON CONTRACTS IN PHASES

Penalties must be calculated proportionally on the estimated contract value of each phase

DEPARTMENT OF HEALTH NORTH WEST PROVINCE
CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL,
RUSTENBURG

PART C2

PRICING DATA

DEPARTMENT OF HEALTH NORTH WEST PROVINCE

CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL, RUSTENBURG

SECTION No. 1

PRELININARIES AND GENERAL

PRELIMINARIES

The attached pro-forma Preliminaries are to be dealt with as follows:

Section A

Section A lists the clauses of and refers directly to the JBCC Principal Building Agreement (Edition 6.2 - May 2018), as well as those clauses that have been changed in Clause B18.0 of the Contract Data for Organs of State and other Public Sector Bodies

Section B

Section B lists the clauses of and refers directly to the JBCC General Preliminaries (May 2018)

Section C

Section C contains specific preliminary items. All items must be scrutinised and any item which is not appropriate must be marked N/A (Not Applicable)

Any new items which may be necessary for a particular service must be inserted at the end of Section C

SECTION 1

PRELIMINARIES

MEANING OF TERMS "TENDER / TENDERER"

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

BUILDING AGREEMENT AND PRELIMINARIES

The **JBCC** Principal Building Agreement (Edition 6.2 - May 2018) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described to be read in conjunction with the **Contract Data for use by organs of state and other public sector bodies** issued with the tender.

The **JBCC** General Preliminaries (May 2018) published by the Joint Building Contracts Committee for use with the **JBCC** Principal Building Agreement (Edition 6.2 - May 2018) shall be deemed to be incorporated in these **bills of quantities** / lump sum document, amended as hereinafter described

The **contractor** is deemed to have referred to the abovementioned documents for the full intent and meaning of each clause

The clauses in the abovementioned documents are hereinafter referred to by clause number and heading only

Where any item is not relevant to this **agreement** such item is marked N/A signifying "not applicable"

Where standard clauses or alternatives are not entirely applicable to this **agreement** such amendments, modifications, corrections or supplements as will apply are given under each relevant clause heading and such amendments, modifications, corrections or supplements shall take precedence notwithstanding anything to the contrary contained in the abovementioned documents

TENDERER'S SELECTIONS

Before submission of his tender the **contractor** is to complete the tenderer's selections in the **contract data for organs of state and other public sector bodies**

STRUCTURE OF THIS PRELIMINARIES BILL

Section A : A recital of the headings of the individual clauses in the aforementioned **JBCC** Principal Building Agreement

Section B : A recital of the headings of the individual clauses in the aforementioned **JBCC** General Preliminaries

Section C : Any special clauses to meet the particular circumstances of the project

PRICING OF PRELIMINARIES

Should the **contractor** select Option A in the **contract data for organs of state and other public sector bodies** for the adjustment of **preliminaries**, the amounts entered against the relevant items in these **preliminaries** are to be divided into one or more of the three categories provided namely fixed (F), value related (V) and time related (T)

PRICING OF BILLS OF QUANTITIES

The **contractor** is to allow opposite each item for all costs in connection therewith. All prices to include, unless otherwise stated, for all materials, fabrication, conveyance and delivery, unloading, storing, unpacking, hoisting, labour, setting, fitting and fixing in position, cutting and waste (except where to be measured in accordance with the standard system of measurement), patterns, models and templates, plant, temporary works, returning of packaging, duties, taxes (other than Value Added Tax), imposts, establishment charges, overheads, profit and all other obligations arising out of this **agreement**.

Items left unpriced will be deemed to be covered in prices against other items throughout these **bills of quantities** and no claim for any extras arising out of the **contractor's** omission to price any item will be entertained

Prices for all **construction equipment**, temporary works, services and other items shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary

VALUE ADDED TAX

Provision is made in the summary page of these **bills of quantities** / lump sum document for the inclusion of Value Added Tax (VAT)

SECTION A: PRINCIPAL BUILDING AGREEMENT

INTERPRETATION

A1.0

DEFINITIONS AND INTERPRETATION

Clause 1.0

The following definitions replace corresponding definitions or are added to the definitions in the JBCC PRINCIPAL BUILDING AGREEMENT (Edition 6.2 of May 2018), whatever the case may be

ADVERSE WEATHER CONDITIONS: Adverse weather and inclement weather has the same meaning and used interchangeably and means any weather conditions i.e.: Rain, wind, snow, frost, temperature (cold or heat) that are not in the norm for the area where the construction takes place and during which no work is possible on site

AGREEMENT: The completed Form of Offer and Acceptance, the completed JBCC® Principal Building Agreement and contract data for organs of state and other public sector bodies, the contract drawings, the priced document and any other documents reduced to writing and signed by the authorised representative or representatives of the parties

CONSTRUCTION PERIOD: The period commencing on the date of possession of the **site** by the **contractor** and ending on the date of **practical completion**

CONTRACT PERIOD: The period commencing on the date of the letter of acceptance and ending on the date of final completion

COST FLUCTUATION shall mean contract price adjustment provision (CPAP) for the adjustment of fluctuation in the cost of labour, plant, material and goods as stated in the schedule

DEFAULT INTEREST: No Clause

GUARANTEE FOR CONSTRUCTION: A security in terms of the DPWI's Guarantee for Construction form/s, obtained by the contractor from an institution approved by the employer [CD]

INTEREST: The interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be the rate as determined by the Minister of Finance from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No 1 of 1999) as amended, calculated as simple interest, in respect of debts owing to the State, and will be the rate as published by the Minister of Justice and Correctional Services from time to time, in terms of section 1(2) of the Prescribed Rate of Interest Act, 1975 (Act No 55 of 1975) as amended, calculated as simple interest, in respect of debts owing by the State

LETTER OF ACCEPTANCE: The letter of formal acceptance of the Contractor's or Service Provider's Tender / Bid, issued and signed by the Employer

PAYMENT CERTIFICATE: A certificate issued at regular agreed intervals [CD] by the principal agent to the parties certifying the amount due and payable in terms of Clause 25.3

PRINCIPAL AGENT: The person or entity appointed by the **employer** and named in the **contract data for organs of state and other public sector bodies**. In the event of a **principal agent** not being appointed, then all the duties and obligations of a **principal agent** as detailed in the **agreement** shall be fulfilled by the employer's representative as named in the **contract data for organs of state and other public sector bodies**

TARGETED SUBCONTRACTORS: Subcontractors that must be appointed to a total of 30% or more of the contract sum, by the contractor, projects with a contract sum of the amount determined by the Minister in terms of the latest Preferential Procurement regulations, as may be amended from time to time.

F:..... V:..... T:.....
Item

A2.0 LAW, REGULATIONS AND NOTICES

Clause 2.0

F:..... V:..... T:.....
Item

A3.0 OFFER AND ACCEPTANCE

Replace Clause 3.3 with the following:

This **agreement** shall come into force on the date of **letter of acceptance** and continue to be of force and effect until the end of the **latent defects** liability period [22.0] notwithstanding termination [29.0] or the certification of **final completion** [21.0] and final payment [25.0]

F:..... V:..... T:.....
Item

A4.0 CESSION AND ASSIGNMENT

Clause 4.0

Ref Clause 6.7 [CD] - Clause 4.2

Replace Clause 4.3 with the following:

Where a **contractor** cedes any right or any monies due to or to become due under this **agreement** as security in favour of a financial institution, the prior written consent of the **employer**, which consent shall not be unreasonably withheld, must be obtained

F:..... V:..... T:.....
Item

SECTION 1: PRELIMINARIES (SECTION A)

Each Item Carried to Collection

A5.0 **DOCUMENTS**

Clause 5.0

Replace last sentence of Clause 5.2 with the following:

The original signed **agreement** shall be held by the **Employer**

Replace Clause 5.4 with the following:

The Bills of Quantities shall not be used as a specification of material and goods or methods unless so instructed by the Principal Agent. The contractor may not use the Bills of Quantities for purpose of ordering material. All dimensions and quantities must be determined on site before ordering. In the event of discrepancy between the drawings and Bills of Quantity, the drawings shall take preference

Replace Clause 5.5 with the following:

The parties may publish or disclose on any platform only the contract scope and contract amount

F:.....

V:.....

T:.....

Item

A6.0 **EMPLOYER'S AGENTS**

Clause 6.0

Replace Clause 6.5 with the following:

Where the principal agent and/or an agent fails to act or is unable to act or ceases to be the principal agent or an agent in terms of this agreement, the employer shall appoint another principal agent and/or an agent

Add the following as Clause 6.7:

In terms of the clauses listed hereunder, the employer has retained its authority and has not given a mandate to the principal agent, notwithstanding other provisions in the contract. The employer shall sign all documents in relation to clauses 4.2, 14.1.4, 14.4.1, 14.6, 15.1.4, , 15.4.1, 23.1, 23.2, 23.3, 23.7, 23.8, 26.1, 26.7, 26.12

F:.....

V:.....

T:.....

Item

A7.0 **DESIGN RESPONSIBILITY**

Clause 7.0

Replace first sentence of Clause 7.2 with the following:

Any design responsibility undertaken by a subcontractor shall not devolve on the contractor except for items that require specific component design and or compatibility design and or shop drawings and or the assembly thereof

F:.....

V:.....

T:.....

Item

INSURANCES AND SECURITIES

A8.0 **WORKS RISK**

Clause 8.0

Replace Clause 8.4 with the following:

The **contractor** shall bear the full risk of damage to and/or destruction of the **works** by whatever cause during construction of the **works** and hereby indemnifies and holds harmless the **employer** against any such damage. The **contractor** shall take such precautions and

security measures and other steps for the protection and security of the **works** as the **contractor** may deem necessary

F:.....

V:.....

T:.....

Item

A9.0

INDEMNITIES

Clause 9.0

Add the following to the end of the first sentence of Clause 9.2.7:

“.... due to no fault of the **contractor**

9.2.9 No Clause

9.2.10 No Clause

Add the following as clause 9.3:

The employer's rights to claim damages for the contractor's omissions and actions will not be affected.

F:.....

V:.....

T:.....

Item

A10.0

INSURANCES

Clause 10.0

Replace Clause 10.1 with the following:

The party responsible shall effect and keep the respective insurances [CD] in force, in favour of the employer as beneficiary , from the date of possession of the site until the issue of the certificate of practical completion and with an extension to cover the contractors obligations after the date of practical completion [8.2.2]

Add the following as Clause 10.1.5.1:

Hi Risk Insurance

In the event of the project being executed in a geological area classified as a “High Risk Area”, that is an area which is subject to highly unstable sub-surface conditions that might result in catastrophic ground movement evident by sinkhole or doline formation the following will apply

Add the following as Clause 10.1.5.1.1 Damage to the works

The contractor shall, from the date of possession of the **site** until the date of the **certificate of practical completion**, bear the full risk of and hereby indemnifies and holds harmless the **employer** against any damage to and/or destruction of the **works** consequent upon a catastrophic ground movement as mentioned above. The **contractor** shall take such precautions and security measures and other steps for the protection of the **works** as he may deem necessary

When so instructed to do so by the **principal agent**, the **contractor** shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the **works** and to rebuild, restore, replace and/or repair the **works**, at the **contractor's** own costs

10.1.5.1.2 Injury to persons or loss of or damage to property

The **contractor** shall be liable for and hereby indemnifies and holds harmless the **employer** against any liability, loss, claim or proceeding arising at any time during the period of the contract whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above

The **contractor** shall be liable for and hereby indemnifies the **employer** against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable, or immovable property, or personal property, or property contiguous to the **site**, whether

belonging to or under the control of the **employer** or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the period of the contract

10.1.5.1.3 Replace Clause with the following:

It is the responsibility of the **contractor** to ensure that he has adequate insurance to cover his risk and liability as mentioned in 10.1.5.1.1 and 10.1.5.1.2. Without limiting the **contractor's** obligations in terms of the contract, the **contractor** shall, within twenty-one (21) **calendar days of the date of letter of acceptance**, but before commencement of the **works**, submit to the **employer** proof of such insurance policy.

10.1.5.1.4 Replace Clause with the following:

The **employer** shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the **contractor's** default of his obligations as set out in 10.1.5.1.1; 10.1.5.1.2 and 10.1.5.1.3. Such losses or damages may be recovered from the **contractor** or by deducting the same from any amounts still due under this contract or under any other contract presently or hereafter existing between the **employer** and the **contractor** and for this purpose all these contracts shall be considered one indivisible whole

10.2 Replace Clause with the following:

Where practical completion in sections is required [20.0), or where the works is for alterations and additions, the contractor shall effect and keep in force contract works insurance [10.1.1], supplementary insurance [10.1.2], public liability insurance [10.1.3] and where applicable, removal of lateral support insurance [10.1.4] and other insurances [10.1.5) in favour of the employer as beneficiary

10.6 No Clause

Add the following as Clause 10.11

In the event that an insurer dispute the amount of the claim to be paid to the employer, the contractor shall be liable to the employer for the difference between the claim (as determined by the employers QS appointed on the project) made by the employer and the amount that the insurer is willing to pay

F:.....

V:.....

T:.....

Item

A11.0

SECURITIES

Add the following as to the relevant related Clauses as follows:

Add the following to Clause 11.1:

In respect of contracts with a contract sum up to R1 million, the security to be provided by the contractor to the employer will be a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT).

In respect of contracts with a contract sum above R1 million, the contractor shall have the right to select the security to be provided in terms of C 1.0 Securities, as stated in the schedule. Such security shall be provided to the employer within fifteen (15) working days from commencement date. Should the contractor fail to select the security to be provided or should the contractor fail to provide the employer with the selected security within fifteen (15) working days from commencement date, the security in terms of C 1.0 Option C shall be deemed to have been selected.

The payment reduction of the value certified in a payment certificate shall be mutatis mutandis in terms of 25.12.1 - 25.12.5

11.1.1 No Clause

11.1.2 No Clause

11.2.2 No Clause

11.3 No Clause

Replace Clause 11.4.1 with the following:

Hand over the site to the contractor and withhold an amount equal to ten per cent (10%) of each interim payment certificate until practical completion is achieved. The value certified shall be subject to the adjustments in terms of 25.12.6 to 25.12.10.

11.5 No Clause

11.6 No Clause

11.7 No Clause

11.8 No Clause

11.9 No Clause

11.10 No Clause

Add the following as Clause 11.11:

Where the security as a cash deposit of ten per cent (10%) of the contract sum (excluding VAT) has been selected:

Add the following as Clause 11.11.1:

The contractor shall furnish the employer with a cash deposit equal in value to ten percent (10%) of the contract sum (excluding VAT) within fifteen (15) working days from commencement date. Failure to furnish the employer with a cash deposit within fifteen (15) working days Clause 11.4 will apply mutatis mutandis.

Add the following as Clause 11.11.2:

The employer shall be entitled to recover expense and loss from the cash deposit in terms of Clause 27.0 provided that the employer notifies the Contractor in which event the employer's entitlement shall take precedence over his obligations to refund the cash deposit security or portions thereof to the contractor.

Add the following as Clause 11.11.3:

Within fifteen (15) working days of the date of practical completion of the works the employer shall reduce the cash deposit to an amount equal to three per cent (3%) of the contract value (excluding VAT) and refund the balance to the contractor

Add the following as Clause 11.11.4:

Within fifteen (15) working days of the date of final completion of the works the employer shall reduce the cash deposit to an amount equal to one per cent (1%) of the contract value (excluding VAT) and refund the balance to the contractor.

Add the following as Clause 11.11.5:

On the date of payment of the amount in the final payment certificate, the employer shall refund the remainder of the cash deposit to the contractor.

Add the following as Clause 11.11.6:

The parties expressly agree that neither the employer nor the contractor shall be entitled to cede the rights to the deposit to any third party.

Add the following as Clause 11.12:

Where security as a variable construction guarantee of ten percent (10%) of the contract sum (excluding VAT) has been selected:

Add the following as Clause 11.12.1:

The contractor shall furnish the employer with an acceptable variable construction guarantee equal in value to ten per cent (10%) of the contract sum (excluding VAT) within fifteen (15) working days after issuance of the letter of acceptance. Failure to submit an acceptable

variable construction guarantee within fifteen (15) working days Clause 11.4 will apply mutatis mutandis.

Add the following as Clause 11.12.2:

The variable construction guarantee shall reduce and expire in terms of the Variable Construction Guarantee form included in the invitation to tender.

Add the following as Clause 11.12.3:

The employer shall return the variable construction guarantee to the contractor within fourteen (14) calendar days of it expiring.

Add the following as Clause 11.12.4:

Where the employer has a right of recovery against the contractor in terms of 27.0, the employer shall issue a written demand in terms of the variable construction guarantee.

Add the following as Clause 11.13:

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

Add the following as Clause 11.13.1:

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

Add the following as Clause 11.13.2:

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

Add the following as Clause 11.13.3:

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

Add the following as Clause 11.13.4:

The payment reduction of the value certified in a payment certificate shall be mutatis mutandis in terms of 25.12.1 - 25.12.5.

Add the following as Clause 11.13.5:

Where the employer has a right of recovery against the contractor in terms of 27.0, the employer shall be entitled to issue a written demand in terms of the fixed construction guarantee or may recover from the payment reduction or from both.

Add the following as Clause 11.14.1:

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

Add the following as Clause 11.14.2:

The contractor shall furnish the employer with a cash deposit equal in value to five per cent (5%) of the contract sum (excluding VAT) within fifteen (15) working days from commencement date. Failure to submit a cash deposit within fifteen (15) working days Clause 11.4 will apply mutatis mutandis.

Add the following as Clause 11.14.3:

Within fifteen (15) working days of the date of practical completion of the works the employer shall refund the cash deposit in total to the contractor.

Add the following as Clause 11.14.4:

The payment reduction of the value certified in a payment certificate shall be mutatis mutandis in terms of 25.12.1 - 25.12.5.

Add the following as Clause 11.14.5:

Where the employer has a right of recovery against the contractor in terms of 27, the employer may recover from the payment reduction or cash deposit or from both.

Add the following as Clause 11.15:

Where security as a payment reduction of ten per cent (10%) of the value certified in the payment certificate (excluding VAT) has been selected.

Add the following as Clause 11.15.1:

The payment reduction of the value certified in a payment certificate shall be mutatis mutandis in terms of 25.12.6 to 25.12.10.

Add the following as Clause 11.15.2:

The employer shall be entitled to recover expense and loss from the cash deposit in terms of 27.0 provided that the employer notifies the Contractor in which event the employer's entitlement shall take precedence over his obligations to refund the cash deposit security or portions thereof to the contractor.

Add the following as Clause 11.16:

Payments made by the guarantor to the employer in terms of the fixed or variable construction guarantee shall not prejudice the rights of the employer or contractor in terms of this agreement.

Add the following as Clause 11.17:

Should the contractor fail to furnish the security in terms of 11.2 the employer, in his sole discretion, and without notification to the contractor, is entitled to change the contractor's selected form of security to that of a ten per cent (10%) payment reduction of the value certified in the payment certificate (excluding VAT).

F:..... V:..... T:.....
Item

EXECUTION

A12.0 OBLIGATIONS OF THE PARTIES

Clause 12.0

12.1.1 No Clause

Replace Clause 12.1.5 with the following:

Give possession of the site to the contractor within ten (10) working days after approval of the Health and Safety Plan or the issue of a construction permit by the Department of Labour, if applicable, after the contractor complied with the terms of 12.2.22

12.1.6 No Clause

12.1.8 No Clause

Replace Clause 12.2.2 with the following:

The priced Bills must be submitted to the Employer within fourteen (14) calendar days from date of request. Where the priced document contains errors or discrepancies and/or prices considered by the employer or principal agent to be imbalanced or unreasonable the employer or principal agent and the contractor shall adjust such prices without any change to the contract sum

Replace Clause 12.2.5 with the following :

Effect and keep in force insurances in favour of the employer as beneficiary where the contractor is responsible for providing insurances [10.0) [CD]

Replace Clause 12.2.13 with the following:

Designate a competent person full time on site to continuously administer and control the

works on site and to receive and implement notices and contract instructions on behalf of the contractor

Add the following as Clause 12.2.22:

Within fourteen (14) working days of the date of the letter of acceptance submit to the principal agent an acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993)

Add the following as Clause 12.2.23:

The contractor shall within reasonable time inform the agents regarding inspection of the works before covering / closing [B 12.0]

Offices

The **contractor** shall provide, maintain and remove on completion of the **works** an office for the exclusive use of the **principal agent**, minimum size 4 x 3 x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times [12.2.18]

F:.....

V:.....

T:.....

Item

Main notice board

The **contractor** shall provide, erect where directed, maintain and remove on completion of the **works** a notice board size 3 x 3m as type Drawing GEN 063, constructed of suitable boarding with flat smooth surface and with edging bead 19mm thick round outer edges and projecting 12mm from face of boarding and rounded on front edge. The board shall be securely fixed to hoarding, where hoarding is provided, or fixed to and including a suitable supporting structure of timber or tubular posts and braces. The board is to be painted ivory white and the bead and 12mm wide dividing lines dark green. All wording shall be inscribed in dark green as per the coat of arms for SA. All wording shall be inscribed in dark green painted sans serif lettering [12.2.18]

F:.....

V:.....

T:.....

Item

A13.0 SETTING OUT

Clause 13.0

F:.....

V:.....

T:.....

Item

A14.0 NOMINATED SUBCONTRACTORS

Clause 14.0

Ref Clause 6.7 [CD] - Clause 14.1.4

14.1.5 No Clause

Replace "principal agent " with "employer" [6.7 [CD]] in Clause 14.4.1

Ref Clause 6.7 [CD] - Clause 14.6

F:.....

V:.....

T:.....

Item

SECTION 1: PRELIMINARIES (SECTION A)

Each Item Carried to Collection

Item		R	c
A15.0	SELECTED SUBCONTRACTORS Clause 15.0 Ref Clause 6.7 [CD] - Clause 15.1.4 & Clause 15.5 15.1.5 No Clause Replace Clause 15.1.2 with the following: The principal agent shall call for tenders from a list of tenderers agreed between the contractor and the employer Replace “principal agent ” with “employer” [6.7 [CD]] in Clause 15.4.1 F:..... V:..... T:..... Item		
A16.0	DIRECT CONTRACTORS Clause 16.0 F:..... V:..... T:..... Item		
A17.0	CONTRACT INSTRUCTIONS Clause 17.0 Replace Clause 17.4 with the following: The contractor shall comply with and duly execute all contract instructions except any contract instruction for additional work issued after the date of practical completion other than making good physical loss and repairing damage to the works in terms of 8.0 and 21 Add the following clause as Clause 17.6: Minutes of meetings shall not constitute a site instruction unless reduced to a written contract instruction issued by the principal agent in terms of this contract / agreement. F:..... V:..... T:..... Item COMPLETION		
A18.0	INTERIM COMPLETION Clause 18.0 F:..... V:..... T:..... N/A	-	-
A19.0	PRACTICAL COMPLETION Clause 19.0 Replace Clause 19.5 with the following: On issue of the only or last certificate of practical completion the employer shall be entitled to possession of the works and the site. On issue of the certificate of practical completion for a section, the employer shall be entitled to possession of such section Add the following as Clause 19.8: WORKS COMPLETION (1) Within seven (7) calendar days of the date of practical completion the principal agent		

shall issue to the contractor a works completion list defining the outstanding work and defects apparent at the date of practical completion to be completed or rectified to achieve works completion.

- (2) Where, in the opinion of the contractor, the works completion list has been completed the contractor shall notify the principal agent who shall inspect within seven (7) calendar days of receipt of such a notice. Where, in the opinion of the principal agent, the Works Completion list:

(2)(a) Has been satisfactorily completed, the principal agent shall forthwith issue a certificate of Works Completion to the contractor with a copy to the employer

(2)(b) Has not been satisfactorily completed, the principal agent shall forthwith identify the works completion list items that are not yet complete and inform the contractor thereof. The contractor shall repeat the procedure in terms of 19.8(2)

- (3) Should the principal agent not issue a works completion list, in terms of 19.8 (1) or 19.8 (2)(b), within seven (7) calendar days from the end of the inspection period, the contractor shall notify the employer and principal agent. Should the principal agent not issue such Works Completion list within seven (7) calendar days of receipt of such notice, the employer may within seven (7) calendar days issue to the contractor a Works Completion list. Should the employer:

(3)(a) Not issue such works completion list within seven (7) calendar days, then the certificate of Works Completion shall be deemed to have been issued on the date of expiry of the initial notice period and works completion shall be deemed to have been achieved on such date

(3b) Issue a works completion list and the work on Works Completion list not have been completed or where further defects have become apparent, the employer shall forthwith identify such items on the updated works completion list and notify the contractor. The contractor shall repeat the procedure in terms of 19.8(2)(b) until such items have been completed to the satisfaction of the employer

- (4) Should the works completion list not be completed to the satisfaction of the employer within a period of twenty one (21) working days of the issue first works completion list the contractor shall be liable to a daily penalty as described in B12.0

- (5) The defects liability period in terms of 21.1 shall commence with the issue or deemed issue of the certificate of Works Completion in terms of 19.8(2)(a) or 19.8(3).

F:.....

V:.....

T:.....

Item

A20.0 COMPLETION IN SECTIONS

Clause 20.0

Add the following as Clause 20.2.1.A

A certificate of Works Completion [19.8]

F:.....

V:.....

T:.....

Item

A21.0 DEFECTS LIABILITY PERIOD AND FINAL COMPLETION

Clause 21.0

Replace Clause 21.1 with the following:

The defects liability period for the works shall commence on the calendar day following the date of works completion and end at midnight (00:00) ninety (90) calendar days from the date of works completion [CD] or when work on the list for completion has been satisfactorily

attended to [21.6], whichever is the later (if we use works completion)

Replace Clause 21.6 with the following:

On the expiry of the ninety (90) calendar days defects liability period [21.1] for items not indicated as items with an extended liability as indicated in B14 and on receipt of the contractor's notice to the principal agent

And/or

On the expiry of the defects liability period as indicated in B14, for items indicated in B14 and on receipt of the contractor's notice to the principal agent, the principal agent shall:

- (1) inspect the works And within ten (10) working days either issue a list for final completion detailing all outstanding work or defects that must be attended to, or rectified to achieve final completion or
- (2) issue the certificate of final completion to the contractor with a copy to the employer for that part of the works where defects liability period has expired

21.6.1 Omit Clause

21.6.2 Omit Clause

Add the following as Clause 21.13:

The ninety (90) calendar days defects liability period for the works [21.1] is replaced with an extended defects liability period of three hundred and sixty-five (365) calendar days in respect of the listed applicable elements in B14

Add the following as Clause 21.14:

Penalties will be applied if the items on the completion list have not been attended to within a period of ninety (90) calendar days [21.1]. If additional defect items have being added to the list during this period, then the Principal Agent and Contractor will agree on a revised completion date. Failing in achieving the revised date will result in penalties being applied.[B12.0]

F:.....

V:.....

T:.....

Item

A22.0

LATENT DEFECTS LIABILITY PERIOD

Clause 22.0

22.3.2 No Clause

F:.....

V:.....

T:.....

Item

A23.0

REVISION OF THE DATE FOR PRACTICAL COMPLETION

Clause 23.0

Ref Clause 6.7 [CD] – Clause 23.1

Ref Clause 6.7 [CD] – Clause 23.2

23.2.13 No Clause

Replace Clause 23.3 with the following:

Further circumstances that delays practical completion due to any other cause beyond the contractor's reasonable control that could not have reasonably been anticipated and provided for which the contractor may be entitled to a revision of the date for practical completion, with or without an adjustment of the contract value as determined by the Employer [6.7 CD]

Ref Clause 6.7 [CD] - Clause 23.7

Ref Clause 6.7 [CD] - Clause 23.8

F:.....

V:.....

T:.....

Item

A24.0

PENALTY FOR LATE OR NON-COMPLETION

Clause 24.0

Replace Clause 24.1 with the following:

Where the contractor fails to bring the works, or a section thereof, to practical-, works-, or final-completion by the applicable completion date [CD], or the revised applicable completion date, the contractor shall be liable to the employer for the penalty [CD]

Replace Clause 24.2 with the following:

Where the employer elects to levy such penalty the employer, or the principal agent on instruction from the employer, shall give notice thereof to the contractor. The principal agent shall determine the penalty due from the later of the date for practical- works-, or final-completion [CD], or the revised date for practical- works-, or final- completion, up to and including the earlier of:

Replace Clause 24.2.1 with the following:

The actual or deemed date of practical- works-, or final- completion, of the works, or a section thereof [23.7.1]

F:.....

V:.....

T:.....

Item

PAYMENT

A25.0

PAYMENT

Clause 25.0

Replace Clause 25.2 with the following:

The principal agent shall issue at regular agreed intervals [CD] payment certificates, to the contractor with a copy to the employer, up to and including practical completion. Interim Payment certificates may be issued to the contractor between practical completion and the final payment certificate. A payment certificate may be for a nil or negative amount

Add the following to Clause 25.3:

25.3.12 Monthly Local content report,

25.3.13 EPWP / NYS payment register, labour reports and certified ID document of EPWP/ NYS beneficiaries, Contract between Contractor and EPWP/ NYS beneficiaries, attendance register. (if applicable)

25.3.14 Tax Invoice

25.3.15 Labour intensive report

25.3.16 Contract participation goal reports

25.5 No Clause

Replace Clause 25.6 with the following:

Materials and goods will only be certified and paid for upon providing proof of full payment to the supplier and proof of transfer of ownership from the supplier to the contractor by the contractor. Once paid, material and goods shall become the property of the employer and shall not be removed from site without the written authority of the Employer.

25.7.5 No clause.

Replace Clause 25.10 with the following:

The employer shall pay the contractor the amount stipulated in an issued payment certificate, correct in all material respects, within thirty (30) calendar days from the date of receiving the payment certificate, invoice and all other substantiating documentation for items certified in the payment certificate

Replace Clauses 25.12 to 25.12.3 with the following:

The value certified shall be subject to the following percentage adjustments :

(Clauses 25.12.1 to 25.12.5 shall be applicable to a contract sum up to R1 million. In the event of a contract sum more than R1 million for Options D & E (C 1.0 Securities [11.0]) Clauses 25.12.1 to 25.12.5 shall be applicable)

25.12.1 Where a security is selected in terms of C 1.0 Securities [11.0], the value of the works in terms of 25.1 and of the materials and goods in terms of 25.4 shall be certified in full. The value certified shall be subject to the following percentage adjustments:

25.12.2 Ninety-five per cent (95%) of such value in interim payment certificates issued up to the date of practical completion

25.12.3 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion

25.12.4 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms of 26

25.12.5 One hundred per cent (100%) of such value in the final payment certificate in terms of 26 except where the amount certified is in favour of the employer. In such an event the payment reduction shall remain at the adjustment level applicable to the final payment certificate.

(Clauses 25.12.6 to 25.12.10 shall be applicable to a contract sum more than R1 million for Option C (C 1.0 Securities [11.0])

25.12.6 Where security is a payment reduction in term of C 1.0 Option C, value of the works in terms of 25.1 and materials and goods in terms of 25.4 shall be certified in full. The value certified shall be subject to the following percentage adjustments:

25.12.7 Ninety per cent (90%) of such value in interim payment certificates issued up to the date of practical completion

25.12.8 Ninety-seven per cent (97%) of such value in interim payment certificates issued on the date of practical completion and up to but excluding the date of final completion

25.12.9 Ninety-nine per cent (99%) of such value in interim payment certificates issued on the date of final completion and up to but excluding the final payment certificate in terms of 26

25.12.10 One hundred per cent (100%) of such value in the final payment certificate in terms of 26 except were the amount certified is in favour of the employer. In such an event the payment reduction shall remain at the adjustment level applicable to the final payment certificate

F:.....

V:.....

T:.....

Item

A26.0

ADJUSTMENT OF THE CONTRACT VALUE AND FINAL ACCOUNT

SECTION 1: PRELIMINARIES (SECTION A)

Each Item Carried to Collection

Clause 26.0

Ref Clause 6.7 [CD] – Clause 26.1

Omit Clause 26.4.3

Ref Clause 6.7 [CD] – Clause 26.7

Replace Clause 26.10 with the following:

The principal agent shall prepare the final account in consultation with the employer and issue the final account, to the contractor within sixty (60) working days of the date of practical completion

Ref Clause 6.7 [CD] – Clause 26.12

F:.....

V:.....

T:.....

Item

A27.0 RECOVERY OF EXPENSE AND/OR LOSS

Clause 27.0

Replace Clause 27.1.2 with the following:

Interest due to late payment only

Replace Clause 27.1.4 with the following:

Interest due to late payment only

27.1.5 No Clause

Replace Clause 27.5 with the following:

Where the employer decides to recover an amount due in terms of 27.2 from a construction guarantee, cash deposit or retention money held as security, the employer shall issue a written demand to the contractor before recovering the amount. Should such amount not be paid to the employer within fourteen (14) calendar days of the date-of notice by the employer, the employer may recover such an amount from the security

Add the following as Clause 27.6:

Where a provisional sequestration or provisional liquidation order has been granted or where an order has been granted which commences sequestration, liquidation, bankruptcy, receivership, winding-up or any similar effect, against the contractor or this agreement is cancelled in terms of 29, the employer may issue a demand to the guarantor in terms of the construction guarantee or advance payment guarantee held as security

F:.....

V:.....

T:.....

Item

SUSPENSION AND TERMINATION

A28.0 SUSPENSION BY THE CONTRACTOR

Clause 28.0

28 No Clause

28.1 No Clause

28.1.1 No Clause

28.1.2 No Clause

28.1.3 No Clause

28.1.4 No Clause

28.1.5 No Clause

28.2 No Clause

SECTION 1: PRELIMINARIES (SECTION A)

Each Item Carried to Collection

28.3 No Clause
28.4 No Clause

F:.....
Item

V:.....

T:.....

A29.0 TERMINATION

Clause 29.0

Add the following as Clause 29.1.4:

The contractor's estate has been sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa

Add the following as Clause 29.1.5:

The contractor has engaged in corrupt or fraudulent practices in competing for or in executing the contract

Add the following as Clause 29.1.6:

Honour his obligations in terms of Clauses 10.1.5.1.3, 11.4.1 and 12.2. sub Clauses 5, 6, 8, 9, 10, 11, 12, 13, 15, 16, 19, 20, 22.

Replace Clause 29.7 with the following:

The employer, on notice to the contractor, may recover damages from the contractor from the date of termination including, but not limited to, additional costs incurred in the completion, consultant cost, rental of alternative accommodation, invitation of completion tenders, salaries of officials and safeguarding the site, of the remaining work [25.3.7; 27.1.3]

Replace Clause 29.9 with the following:

The employer has the right of recovery against the contractor, where applicable, [CD] from:

The guarantee for construction (variable) until the final payment has been made;

or

The guarantee for construction (fixed) until the date of practical completion;

or

The payment reduction until the final payment is made;

or

The cash deposit made as security until the final payment is made

29.14.1 No Clause

29.14.3 No Clause

29.14.4 No Clause

29.14.5 No Clause

29.14.6 No Clause

29.14.7 No Clause

29.15 No Clause

29.16 No Clause

29.17.3 No Clause

29.17.6 No Clause

29.21.5 No Clause

29.22 No Clause

29.23 No Clause

29.25.3 No Clause

29.25.4 No Clause

29.27 No Clause

F:.....

V:.....

T:.....

Item

DISPUTE RESOLUTION

A30.0

DISPUTE RESOLUTION

Clause 30.0

Replace Clause 30.2 with the following:

Where such disagreement is not resolved within ten (10) working days of receipt of such notice it shall be deemed to be a dispute and shall be submitted to Mediation as a first method of dispute resolution failing which the parties will resort to Litigation

30.3 to 30.7.7 No Clauses**Replace Clause 30.8 with the following:**

The parties may, by agreement and at any time before Litigation, refer a dispute to mediation, in which event:

30.8.1 No Clause**Replace Clause 30.8.2 with the following:**

The appointment of a mediator, the procedure, and the status of the outcome shall be agreed between the parties

Replace Clause 30.8.3 with the following:

Regardless of the outcome of a mediation the parties shall bear their own costs concerning the Mediation and equally share the costs of the mediator and related expenses

Replace Clause 30.9 with the following:

Institution of Litigation shall be commenced and process served within three (3) year from the date of existence of the dispute, failing which the dispute shall lapse

30.10 No Clause

30.12 No Clause

F:.....

V:.....

T:.....

Item

Item				R	c
	SECTION B: GENERAL PRELIMINARIES				
B1.0	DEFINITIONS AND INTERPRETATION				
B1.1	Definitions				
	F:..... Item	V:.....	T:.....		
B1.2	Interpretation				
	F:..... Item	V:.....	T:.....		
B2.0	DOCUMENTS				
B2.1	Checking of documents				
	F:..... Item	V:.....	T:.....		
B2.2	Provisional bills of quantities				
	F:..... Item	V:.....	T:.....		
B2.3	Availability of construction information				
	F:..... Item	V:.....	T:.....		
B2.4	Ordering of materials and goods				
	F:..... Item	V:.....	T:.....		
B3.0	PREVIOUS WORK AND ADJOINING PROPERTIES				
B3.1	Previous work - dimensional accuracy				
	F:..... Item	V:.....	T:.....		
B3.2	Previous work - defects				
	F:..... Item	V:.....	T:.....		
B3.3	Inspection of adjoining properties				
	F:..... Item	V:.....	T:.....		
B4.0	THE SITE				
B4.1	Handover of site in stages				
	F:..... Item	V:.....	T:.....		
B4.2	Enclosure of the works				
	F:.....	V:.....	T:.....		

SECTION 1: PRELIMINARIES (SECTION B)

Each Item Carried to Collection

Item				R	c
	Item				
B4.3	Geotechnical and other investigations				
	F:..... Item	V:.....	T:.....		
B4.4	Encroachments				
	F:..... Item	V:.....	T:.....		
B4.5	Existing premises occupied				
	F:..... Item	V:.....	T:.....		
B4.6	Services - known				
	F:..... Item	V:.....	T:.....		
B5.0	MANAGEMENT OF CONTRACT				
B5.1	Management of the works				
	F:..... Item	V:.....	T:.....		
B5.2	Progress meetings				
	F:..... Item	V:.....	T:.....		
B5.3	Technical meetings				
	F:..... Item	V:.....	T:.....		
B6.0	SAMPLES, SHOP DRAWINGS AND MANUFACTURER'S INSTRUCTIONS				
B6.1	Samples of materials				
	F:..... Item	V:.....	T:.....		
B6.2	Workmanship samples				
	F:..... Item	V:.....	T:.....		
B6.3	Shop drawings				
	F:..... Item	V:.....	T:.....		
B6.4	Compliance with manufacturer's instructions				
	F:..... Item	V:.....	T:.....		
B7.0	DEPOSITS AND FEES				

SECTION 1: PRELIMINARIES (SECTION B)

Each Item Carried to Collection

Item			R	c
B7.1	Deposits and fees			
	F:..... Item	V:.....	T:.....	
B8.0	TEMPORARY SERVICES			
B8.1	Water			
	F:..... Item	V:.....	T:.....	
B8.2	Electricity			
	F:..... Item	V:.....	T:.....	
B8.3	Ablution and welfare facilities			
	F:..... Item	V:.....	T:.....	
B8.4	Communication facilities			
	F:..... Item	V:.....	T:.....	
B9.0	PRIME COST AMOUNTS			
B9.1	Responsibility for prime cost amounts			
	F:..... Item	V:.....	T:.....	
B10.0	ATTENDANCE ON SUBCONTRACTORS			
B10.1	General attendance			
	The contractor shall at his own expense provide the following general attendance on the subcontractors: Access to the site and places where the subcontract work is to be carried out, including the reasonable use of any temporary personnel hoists erected by the contractor The provision of water and lighting and single phase electric power to a position within 50 metres of the place where the subcontract work is to be carried out but excluding water, fuel and power for commissioning of any installation The provision of an area for the subcontractor to establish temporary office accommodation and workshops and for the storage of plant and materials The use of erected scaffolding belonging to the contractor, in common with others having the like right, while it remains erected on the site The use, at reasonable times by arrangement of the contractor's erected hoisting equipment			
	F:..... Item	V:.....	T:.....	

SECTION 1: PRELIMINARIES (SECTION B)

Each Item Carried to Collection

Item				R	c
B10.2	Special attendance				
	F:..... Item	V:.....	T:.....		
B11.0	GENERAL				
B11.1	Protection of the works				
	F:..... Item	V:.....	T:.....		
B11.2	Protection/isolation of existing works and works occupied in sections				
	F:..... Item	V:.....	T:.....		
B11.3	Security of the works				
	F:..... Item	V:.....	T:.....		
B11.4	Notice before covering work				
	F:..... Item	V:.....	T:.....		
B11.5	Disturbance				
	The contractor shall keep the site , structures, etc well watered during operations to prevent dust and shall provide and erect and remove on completion of the works all necessary temporary dust screens all to the satisfaction of the principal agent				
	F:..... Item	V:.....	T:.....		
B11.6	Environmental disturbance				
	F:..... Item	V:.....	T:.....		
B11.7	Works cleaning and clearing				
	F:..... Item	V:.....	T:.....		
B11.8	Vermin				
	F:..... Item	V:.....	T:.....		
B11.9	Overhand work				
	F:..... Item	V:.....	T:.....		

SECTION 1: PRELIMINARIES (SECTION B)

Each Item Carried to Collection

Item				R	c
B11.10	Tenant installations				
	F:..... Item	V:.....	T:.....		
B11.11	Advertising				
	F:..... Item	V:.....	T:.....		

SECTION C: SPECIFIC PRELIMINARIES

Section C contains specific preliminary items which apply to this contract except where N/A (Not Applicable) appears against an item

C1.0 CONTRACT DRAWINGS

* Select relevant paragraph and delete whichever is not applicable depending on whether the contract is based on a **bills of quantities** or lump sum document

* The drawings issued with the tender documents do not comprise the complete set but serve as a guide only for tendering purposes and for indicating the scope of the work to enable the tenderer to acquaint himself with the nature and extent of the **works** and the manner in which they are to be executed

* A full set of drawings is issued with the tender documents indicating the full scope of the work to enable the tenderer to acquaint himself with the nature and extent of the **works** and the manner in which they are to be executed

Should any part of the drawings not be clearly understood by the tenderer he shall, before submitting his tender, obtain clarification in writing from the **principal agent**

F:.....

V:.....

T:.....

Item

C2.0 PREAMBLES

The document "Construction Works: Specifications: General Specification (PW371-A) Edition 2.1" is obtainable on the Department's website (<http://www.publicworks.gov.za/> under "Consultants Guidelines"), and shall be read in conjunction with the **bills of quantities** / lump sum document and be referred to for the full descriptions of work to be done and materials to be used

The document "Construction Works: Specifications: Particular Specification (PW371-B) Edition 2.2" is issued together with the drawings and shall be read in conjunction with the drawings and the **bills of quantities** / lump sum document

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T:.....

Item

C3.0 TRADE NAMES

Wherever a trade name for any product has been described in the **bills of quantities** / lump sum document, the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the **principal agent** being obtained prior to the closing date for submission of tenders

If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for

F:.....

V:.....

T:.....

Item

C4.0 IMPORTED MATERIALS AND EQUIPMENT

Where imported items are listed in the tender documents, the tenderer shall provide all the information called for, failing which the price of any such item, materials or equipment shall be excluded from currency fluctuations. (refer to Schedule of Imported Materials and Equipment DPW-23(EC) to be completed by tenderer)

Notwithstanding any provisions elsewhere regarding the adjustment of contract prices, the

**SECTION 1: PRELIMINARIES (SECTION C)
Collection**

Each Item Carried to

price of any item, material or equipment listed in terms of this clause shall be excluded from the Contract Price Adjustment Provisions (if applicable)

F:..... V:..... T:.....
Item

C5.0 VIEWING THE SITE IN SECURITY AREAS

The **site** is situated in a security area and the tenderer must arrange with the unit commander or other responsible officer to obtain permission to enter the **site** for tendering purposes

F:..... V:..... T:.....
Item

C6.0 COMMENCEMENT OF WORKS IN SECURITY AREAS

As the **works** falls within a security area the **contractor** must give the unit commander or other responsible officer notice before commencement of the **works**. Should the **contractor** fail to make such arrangements, admission to the **site** may be refused and any additional costs will be for the **contractor's** account

F:..... V:..... T:.....
Item

C7.0 ENTRANCE PERMITS TO SECURITY AREAS

As the **works** falls within a security area the **contractor** shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under the control of the Defence Force, Police or chief security officer

F:..... V:..... T:.....
Item

C8.0 SECURITY CHECK OF PERSONNEL

The **principal agent** may require the **contractor** to have his personnel and workmen, or a certain number of them, security classified

In the event of the **principal agent** requesting the removal of a person or persons from the **works** for security reasons, the **contractor** shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the **works** and the **site** and/or to any document or information relating to the **works**

F:..... V:..... T:.....
Item

C9.0 PROHIBITION ON TAKING OF PHOTOGRAPHS

In terms of article 119 of the Defence Act, 44 of 1957, it is prohibited to sketch or to take photographs of any military site or installation or any building or civil works thereon or to be in possession of a camera or other apparatus used for taking of photographs except when authorized thereto by or on behalf of the Minister

The same prohibition is also applicable to all correctional institutions in terms of article 44.1(e) of the Correctional Services Act 8 of 1959

F:..... V:..... T:.....
Item

C10.0 HIV/AIDS AWARENESS

SECTION 1: PRELIMINARIES (SECTION C) Collection

Each Item Carried to

It is required of the **contractor** to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the **bills of quantities** / lump sum document. Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained

The **contractor** must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the **principal agent**, notwithstanding the provisions of Clause A 25.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress **payment certificate** until the **contractor** provides satisfactory proof of compliance. The **contractor** shall not be entitled to any compensation of whatsoever nature, including **interest**, due to such delay of payment

C10.1 AWARENESS CHAMPION

Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification

F:..... V:..... T:.....
Item

C10.2 AWARENESS WORKSHOPS

Selection and appointment of a competent Service Provider approved by the **principal agent**, provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification

F:..... V:..... T:.....
Item

C10.3 POSTERS, BOOKLETS, VIDEOS, ETC.

Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the **construction period**, all in accordance with the HIV/AIDS Specification

F:..... V:..... T:.....
Item

C10.4 ACCESS TO CONDOMS

Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the **construction period**, all in accordance with the HIV/AIDS Specification

F:..... V:..... T:.....
Item

C10.5 MONITORING

Monitoring HIV/AIDS awareness of workers, providing the **principal agent** with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the **construction period** and close out, all in accordance with the HIV/AIDS Specification

F:..... V:..... T:.....

SECTION 1: PRELIMINARIES (SECTION C) Collection

Each Item Carried to

Item

C11.0 **OCCUPATIONAL HEALTH AND SAFETY ACT**

The **contractor** shall comply with all the requirements as set out in the Construction Regulations, 2014 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993)

It is required of the **contractor** to thoroughly study the Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the **bills of quantities** / lump sum document

The **contractor** must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the **principal agent**, notwithstanding the provisions of Clause A25.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress **payment certificate** until the **contractor** provides satisfactory proof of compliance. The **contractor** shall not be entitled to any compensation of whatsoever nature, including **interest**, due to such delay of payment

Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained

F:.....

V:.....

T:.....

Item

C12.0 **EMPLOYMENT AND TRAINING OF YOUTH WORKERS ON THE EXPANDED PUBLIC WORKS PROGRAMME (EPWP) INFRASTRUCTURE PROJECTS: NATIONAL YOUTH SERVICE (NYS)**

The **contractor** shall comply with all the requirements as set out in the "Additional Specification SL: Employment and Training of Youth Workers on the Expanded Public Works Programme (EPWP) Infrastructure Projects: National Youth Service (NYS)" as attached to these **bills of quantities** / lump sum document

The **contractor** shall identify a minimum number of youth workers from a priority list, and shall employ them at the statutory labour rates for a minimum period and train them, all as per the aforementioned specification and as elsewhere measured in these **bills of quantities** / lump sum document

The **contractor** shall liaise and co-ordinate with the **employer** and the EPWP Training Service Provider with regard to the priority list, the selection of youth workers, and the employment and training of the identified youth workers

The **contractor** shall avail the services of an adequately qualified foreman specifically for the EPWP-NYS youth workers, to act as their construction supervisor. The foreman will be responsible for continually monitoring the progress of the youth workers and for addressing questions and issues that may arise from the youth workers

Separate items which will be subject to remeasurement have been included elsewhere in these **bills of quantities** / lump sum document to cover the direct costs associated with the employment and training of the youth workers. Any additional requirements in respect of the aforementioned specification are deemed to be priced hereunder and no additional claims in this regard shall be entertained

F:.....

V:.....

T:.....

Item

C13.0 **IMPLEMENTATION OF LABOUR-INTENSIVE INFRASTRUCTURE PROJECTS UNDER THE****SECTION 1: PRELIMINARIES (SECTION C)**
Collection**Each Item Carried to**

EXPANDED PUBLIC WORKS PROGRAMME (EPWP)

The **contractor** shall comply with all the requirements of the “Code of Good Practice for Employment and Conditions of Work for Special Public Works Programmes” issued in terms of the “Basic Conditions of Employment Act, 1997 (Act No 75 of 1997)” and the related “Ministerial Determination”, for the employment of locally employed temporary workers on a labour-intensive infrastructure project under the Expanded Public Works Programme (EPWP)

The **contractor** shall maintain daily records with regard to the workers employed and shall, on a monthly basis, submit a report to the **principal agent** in the prescribed format. Compulsory indicators such as the project budget, actual project expenditure, number of job opportunities created, demographic characteristics of workers employed, minimum daily wage rate, number of person-days of employment created and number of training person-days, shall be included in said report, all as defined in the “Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)”

Provision for pricing of compliance with the aforementioned is made under this clause and it is explicitly pointed out that all requirements in respect of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained

F:..... V:..... T:.....
Item

**SECTION 1
PRELIMINARIES
COLLECTION**

COLLECTION		AMOUNT		
Item		Page	R	c
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A2.0	Law, regulations and notices	2		
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A4.0	Cession and assignment	2		
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A6.0	Employer's agents	2		
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A8.0	Works risk	3		
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	Execution			
A12.0	Obligations of the parties	3		
A13.0	Setting out	4		
A14.0	Nominated subcontractors	4		
A15.0	Selected subcontractors	4		
A16.0	Direct contractors	4		
A17.0	Contract instructions	4		
	Completion			
A18.0	Interim completion	4	N/A	-
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A20.0	Completion in sections	4		
A21.0	Defects liability period and final completion	4		
A22.0	Latent defects liability period	5		
A23.0	Revision of the date for practical completion	5		
A24.0	Penalty for late and non-completion	5		
	Payment			
A25.0	Payment	5		
A26.0	Adjustment of the contract value and final account	5		
A27.0	Recovery of expense and/or loss	5		
		Carried forward R		

SECTION 1: PRELIMINARIES: COLLECTION

Effective date: 20 July 2022

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A29.0	Termination	5		
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B1.1	Definitions	6		
B1.2	Interpretation	6		
B2.0	Documents			
B2.1	Checking of documents	6		
B2.2	Provisional bills of quantities	6		
B2.3	Availability of construction information	6		
B2.4	Ordering of materials and goods	6		
B3.0	Previous work and adjoining properties			
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B3.2	Previous work - defects	6		
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B4.0	The site			
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B4.2	Enclosure of the works	6		
B4.3	Geotechnical and other investigations	6		
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B5.0	Management of contract			
B5.1	Management of the works	7		
B5.2	Progress meetings	7		
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SECTION 1: PRELIMINARIES: COLLECTION

Effective date: 20 July 2022

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				Carried forward R	Brought forward R
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B8.1	Water		7		
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B8.3	Ablution and welfare facilities		7		
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B9.0	Prime cost amounts				
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B10.0	Attendance on subcontractors				
B10.1	General attendance		8		
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B11.1	Protection of the works		8		
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SECTION 1: PRELIMINARIES: COLLECTION

Effective date: 20 July 2022

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	SECTION 1 PRELIMINARIES			
	CARRIED TO FINAL SUMMARY		R	

SUBTOTALS:	R	c
Category: Fixed R		
Category: Value R		
Category: Time R		

SECTION 1: PRELIMINARIES: COLLECTION

Effective date: 20 July 2022

DEPARTMENT OF HEALTH NORTH WEST PROVINCE

CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL, RUSTENBURG

SECTION No. 2

BILLS OF QUANTITIES

Item No		Quantity	Rate	Amount
	<u>PART C2:</u> <u>SECTION 2</u> <u>BILL 1</u> <u>ALTERATIONS</u> <u>PREAMBLES</u> NOTE : Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill. <u>SUPPLEMENTARY PREAMBLES</u> Tenderers are advised that this Bill or any items within this Bill or any combination of the other Bills or items may be omitted from the contract should their tender be successful. Rates should therefore allow for the possibility that the contract might only consist of this Bill or any combination of some of these Bills or items. No claim whatsoever will be entertained for change of scope resulting from adjudicating the Bills individually <u>Old materials to be become the property of the contractor</u> Old materials from alterations, except where described to be re-used or handed over, become the property of the contractor, who must allow credit for same against the appropriate item <u>Old materials to be carted away</u> Old materials from the alterations, except where described to be re-used or handed over, as well as rubbish etc, must be regularly carted from the site and not be allowed to accumulate on or around the site.			
	Carried to Collection		R	
	Section No. 1 Builder's Work Bill No. 1 Alterations (Provisional)			

Old materials not to be re-used

None of the old materials are to be used for new work except where specifically described as being set aside for re-use.

Handing over of materials

Where certain materials or articles from demolitions or where articles are described as to be handed over by the contractor to the Regional Representative or Representative/Agent, such materials or articles shall be properly stored by the contractor until handing over thereof.

The contractor must obtain an official receipt listing the materials or articles and dates of handing over. If the contractor fails to submit the receipt when requested, it shall be deemed that the materials or articles are still in his possession and he will be held liable to the Department for the full replacement value thereof, which amount will be deducted from any monies due to the contractor.

DEFINITIONS

Removal from site where "remove from" or spoil occurs in terms it shall include for all loading and carting away from the site to a suitable dumping site found by the Contractor and the Contractor shall pay all fees, etc., in this regard

GENERAL NOTES TO TENDERERS

Tenderers are to inspect the drawings issued with these Bills of Quantities and to satisfy themselves as to the nature and the requirements of the Contract works. Failure to do so will be the complete responsibility of the Tenderer and no claims whatsoever will be entertained in this regard

Carried to Collection

R

Section No. 1
Builder's Work
Bill No. 1
Alterations (Provisional)

Tenderers are to read the descriptions, which are intended as a means of identifying various facets of the work, in conjunction with the drawings. Tenderers shall allow for all costs in connection with the various items taking full cognisance of both the drawings and the Bills of Quantities.

Tenderers shall notify the Quantity Surveyor in writing of any discrepancies encountered upon which clarification will be given by the Quantity Surveyor in writing to the Tenderer. Failure to do so will be the complete responsibility of the Tenderer and no claims whatsoever will be entertained in this regard

Tenderers are to note that setting out of the works will be the complete responsibility of the Tenderer and they should therefore acquaint themselves with the site boundaries, site co-ordinates, datum levels etc. Failure to do so will be the complete responsibility of the Tenderer and no claims whatsoever will be entertained in this regard

All sizes and dimension stated herein are approximate and deemed only sufficient to identify the item of work concerned

No allowance for overbreak has been made to any of the adjoining structures, wall finishes, etc. where removals or pockets occur (the nett opening size, etc. has been made good in later items of these bills of quantities where such making good has not been included with the item) and the tenderer is therefore to allow, in his rates, for making good any overbreak that may occur

All necessary propping etc. required to ensure the safety and stability of the structure during the contract period and the removal thereof at completion shall be deemed to be included in the descriptions of the relevant items

The contractor has to provide all necessary additional barricades, screens, overhead protections, etc. required to ensure the safety of persons, property, etc. and to remove on completion

The contractor has to allow for watering the works sufficiently to prevent nuisance from dust

Carried to Collection

R

Section No. 1
Builder's Work
Bill No. 1
Alterations (Provisional)

<u>REMOVAL OF EXISTING WORK</u>					
<u>Breaking up and removing reinforced concrete including cutting off and removing reinforcement</u>					
1	170mm Thick slabs	m2	3		
<u>Breaking down and removing brickwork etc</u>					
2	Half brick wall	m2	94		
3	One brick wall	m2	185		
<u>Taking out and removing doors, windows, etc including thresholds, sills, etc (building up openings elsewhere)</u>					
4	Timber single door and frame not exceeding 2,5m2 (Credit R.....)	No	19		
5	Timber double door and frame exceeding 2,5m2 (Credit R.....)	No	4		
<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>					
6	Acoustic tile suspended ceilings including suspension grid, hangers, etc. (Credit R.....)	m2	577		
<u>Taking out and removing joinery fittings etc</u>					
7	Timber shelving with steel frame, five shelves x 600mm wide (Credit R.....)	m	15		
8	Timber wall and floor cupboards, 600mm wide x 900mm high (Credit R.....)	m	9		
9	Timber nurse station counter, 2,750 x 2,300 x 900mm high (Credit R.....)	No	1		
<u>Taking up and removing vinyl floor coverings, carpeting, etc</u>					
10	Vinyl sheet floor covering with welded joints including preparing screed for new vinyl floor covering	m2	577		
Carried to Collection				R	
Section No. 1					
Builder's Work					
Bill No. 1					
Alterations (Provisional)					

	<u>Taking out and removing ironmongery</u>				
11	Bumper rail including fixing bracket etc. (Credit R.....)	m	93		
12	Chromium plated towel rail not exceeding 3000mm long (Credit R.....)	No	34		
13	Chromium plated toilet paper holder (Credit R.....)	No	9		
14	Chromium plated hat and coat hook (Credit R.....)	No	9		
	<u>Taking out/off and removing sundry metalwork</u>				
15	Steel trellis double gate and framework exceeding 2,5m2 and not exceeding 5m2 (Credit R.....)	No	2		
16	Steel wire mesh burglar proofing with framing 1,500 x 1,000mm high bolted to brickwork and making good brickwork (Credit R.....)	No	9		
	<u>Hacking up/off and removing granolithic, screeds, plaster, etc from concrete or brickwork and preparing surfaces for new screeds, plaster, etc</u>				
17	40mm Screed from floors	m2	577		
18	Internal plaster from walls and columns	m2	1 116		
	<u>Hacking up/off and removing ceramic tile floor and wall finishes including removing mortar bed or backing and preparing concrete or brick surfaces for new screed, plaster or tile finishes</u>				
19	200 x 200mm Tiles to walls	m2	178		
	<u>Taking out and removing piping, sanitary fittings, etc including disconnecting piping from fittings and making good floor and wall finishes (making good tiling and paintwork elsewhere)</u>				
20	Vitreous china wash hand basin (Credit R.....)	No	19		
	Carried to Collection			R	
	Section No. 1				
	Builder's Work				
	Bill No. 1				
	Alterations (Provisional)				

6

	<u>Breaking out for and forming openings through brick walls for new doors and frames including necessary precast concrete lintels and making good plaster on both sides and into reveals and with 230mm concrete thresholds with steel trowelled finish (new doors and frames and making good paintwork elsewhere)</u>				
32	Opening for door with steel frame approximately 900 x 2,100mm high overall through 230mm brick wall	No	1		
33	Opening for door with steel frame approximately 1,800 x 2,125mm high overall through 230mm brick wall	No	4		
	<u>Breaking out for and forming openings through brick walls for new windows including necessary precast concrete lintels and making good plaster on both sides and into reveals and with sloping 120mm brick-on-edge plastered sill on outside and flat 110mm flat plastered sill on inside (new windows and making good paintwork elsewhere)</u>				
34	Opening for window (NE1) 533 x 654mm high through 230mm brick wall	No			
35	Opening for window (NE4) 1,511 x 654mm high through 230mm brick wall	No	1		
Carried to Collection					R
Section No. 1					
Builder's Work					
Bill No. 1					
Alterations (Provisional)					

Section No. 1

Builder's Work

Bill No. 1

Alterations (Provisional)

COLLECTION

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Section No. 1
Builder's Work
Bill No. 1
Alterations (Provisional)

R

Item No		Quantity	Rate	Amount
	<u>PART C2:</u> <u>SECTION 2</u> <u>BILL 2</u> <u>MASONRY</u> <u>PREAMBLES</u> NOTE : Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill. <u>SUPPLEMENTARY PREAMBLES</u> Supplementary preamble items as described in Bill No. 1, shall equally apply to this Bill. <u>GENERAL NOTES TO TENDERERS</u> General notes, described in Bill No. 1, shall equally apply to this Bill. <u>BRICKWORK</u> <u>Sizes in descriptions</u> Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick <u>Hollow walls etc</u> Descriptions of hollow walls shall be deemed to include leaving every fifth perpend of the bottom course of the external skin open as a weep hole. <u>Face bricks</u> Bricks shall be ordered timeously to obtain uniformity in size and colour			
	Carried to Collection		R	
	Section No. 1 Builder's Work Bill No. 2 Masonry			

Pointing

Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc

SAMPLES

Samples of all masonry building units, except those for walls described as "load bearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site

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

1	Half brick walls	m2	64
2	One brick walls	m2	127

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class I mortar**BRICKWORK SUNDRIES****Brickwork reinforcement**

3	75mm Wide reinforcement built in horizontally	m	278
4	150mm Wide reinforcement built in horizontally	m	302

Prestressed fabricated lintels

5	110 x 75mm Lintels in lengths not exceeding 3m	m	83
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Turning pieces

6	115mm Wide turning piece to lintels etc	m	7
7	230mm Wide turning piece to lintels etc	m	2

FACE BRICKWORK

Carried to Collection

R

Section No. 1
Builder's Work
Bill No. 2
Masonry

<u>"Corobrick - Agate Satin FBX" or other approved clay FBX face brick pointed with recessed horizontal and vertical joints to comply with SABS 227</u>	m	6	R
8 Brick-on-edge header course lintel	m	6	
<u>Brick-on-edge header course copings, sills, etc of "Corobrick - Agate Satin FBX" or similar approved face bricks pointed with recessed joints on all exposed faces</u>			
9 120mm Wide sill set sloping and slightly projecting and with bullnose edge	m	5	
Section No. 1 Builder's Work Bill No. 2 Masonry	Carried to Collection		

Section No. 1

Builder's Work

Bill No. 2

Masonry

COLLECTION

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Amount

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Section No. 1
Builder's Work
Bill No. 2
Masonry

Item No		Quantity	Rate	Amount
	<u>PART C2:</u> <u>SECTION 2</u> <u>BILL 3</u> <u>WATERPROOFING</u> <u>PREAMBLES</u> NOTE : Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill. <u>SUPPLEMENTARY PREAMBLES</u> Supplementary preamble items as described in Bill No. 1, shall equally apply to this Bill. <u>Penetron</u> The tenderer is to allow for a Penetron approved applicator for all Penetron related works to ensure that Penetron provides their 20 year guarantee, as this guarantee will be required from contractor upon completion of the works <u>GENERAL NOTES TO TENDERERS</u> General notes, described in Bill No. 1, shall equally apply to this Bill. <u>DAMP PROOFING OF WALLS AND FLOORS</u> <u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u>			
1	In walls	m2	5	
	Carried Forward to Summary of Section No. 1			R
	Section No. 1			
	Builder's Work			
	Bill No. 3			
	Waterproofing			

14

Fixing

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

Decorative laminate finish:

Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish

GENERAL NOTES TO TENDERERS

General notes, described in Bill No. 1, shall equally apply to this Bill.

DOORS, ETC**Wrought meranti solid doors**

1	40mm Thick door with 15 horizontal slats, 813 x 2,032mm high	No	1		
	<u>Heavy duty interior quality solid flush timber door with 3mm thick maple veneer on both sides with 2 consolidated edges, all suitable for varnish and hung to steel frames</u>				
2	40mm Thick door, 700 x 2,032mm high with 300 x 600mm high opening with matching timber glazing beads both sides	No	1		
3	40mm Thick door, 813 x 2,032mm high	No	2		
4	40mm Thick door, 813 x 2,032mm high with 200 x 600mm high opening with matching timber glazing beads both sides	No	9		
5	40mm Thick door, 813 x 2,032mm high with 200 x 1,700mm high opening with matching timber glazing beads both sides	No	2		
6	40mm Thick door, 1,000 x 2,032mm high	No	8		
7	40mm Thick unequal double door, 1,500 x 2,032mm high with rebated meeting edges	No	1		

Carried to Collection

R

**Section No. 1
Builder's Work
Bill No. 4
Carpentry and Joinery**

8	40mm Thick unequal double door, 1,500 x 2,032mm high with rebated meeting edges and with 200 x 900mm high opening with matching timber glazing beads both sides	No	10		
9	40mm Thick unequal double door, 1,500 x 2,032mm high with rebated meeting edges and with 600 x 600mm high opening with matching timber glazing beads both sides	No	2		
10	40mm Thick unequal double door, 1,500 x 2,032mm high with rebated meeting edges and with 200 x 1,700mm high opening with matching timber glazing beads both sides	No	1		
11	40mm Thick equal double door, 1,800 x 2,032mm high with rebated meeting edges and with two 250 x 600mm high openings with matching timber glazing beads both sides	No	1		
<u>FITTINGS</u>					
<u>General</u>					
The following cupboard fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, glueing, blocking, planting on and screwing with countersunk screws, edge strips, decorative plastic finish, glass, ironmongery, metalwork, paint or varnish finishes, etc The references given in the descriptions are to the respective types of fittings detailed on the architect's drawings as numbered below and accompanying these bills of quantities for tender purposes The additional worktops measured separately in the corners, where there are no cupboards below, are not to be cut separately from the cupboard tops, but are to be integral with the worktops over the adjacent cupboards.					
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Nurse station counters etc.

Nurse station counters construction is based around modular component design (unless otherwise specified) utilizing components fittings, fastening, fitments and connectors for the purpose of prefabrication and ready for site assembly (see architect's drawings accompanying these bills of quantities)

The general construction material of the carcass shall be bison particle board in accordance with SANS EN 312-3:1996 supawood medium density fibreboard (MDF) in accordance with SANS 540-1:1991, melamine surfaced to both faces with Bisonlam MFB (Melamine faced board) in accordance with SANS 1763:1998 and finished in minimum 1mm thickness PVC edging

The service tops shall be of "Corian Glacier Ice" solid surface material incorporating seamless joints, size 830 x 44mm thick

The outer counter decorative face shall be of 32mm Supawood MDF (medium density fibreboard) in accordance with SANS 540-1:1991, the surface to outer face in Mahogany formica HPL (high pressure laminate with woodtex finish) in accordance with SANS ISO 4586:1995 HG/P horizontal general purpose /postform 0,8mm thick (minimum) and formica HPL in accordance with SANS ISO 4586:1995 BK 0,8mm brown backer to reverse face

Doors are to be pre drilled for hinges, drawers of 12mm particle board sides, back and front with 3,2mm hardboard bottom edged and foiled on all sides in white melamine PVC foil

Kickplates of 16 x 62mm particle board foiled in renolit PVC foil continuous along floor plinth

Carcass of 16mm particle board foiled and edged on all faces with 3,2mm hardboard back foiled melamine on exposed face in white renolit PVC foil with sides predrilled and grooved for assembly

Concealed type 95 degree hinges and piano hinges to adjoining doors

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	Tpe "D" handles in selected colours and finishes and epoxy coated steel two part telescopic drawer slides on nylon runner				
12	Nurse station U-shaped counter, size 4,440 x 1,780 x 980mm high overall with laminated bench, -tops, -front, "Surino Glacier White" solid top, stainless steel formica strips and -kick plate, drawers, etc. complete to architect's details (see architect's drawings no. 103/23A&B-Detail 1, 105/17) <u>Kitchens, Skills room, etc.</u> Kitchen cupboards etc. with worktops of 30 x 600mm ice white granite with a 20mm overhang and silicone sealant applied at back edges, doors of 16mm particle board post formed on both vertical sides and foiled wrapped in colour in renolit PVC with back of door foiled in white PVC renolit, doors are to be pre drilled for hinges, drawers of 12mm particle board sides, back and front with 3,2mm hardboard bottom edged and foiled on all sides in white melamine PVC foil with runners of epoxy coated steel two part telescopic slides running on nylon runners and fronts the same as doors, kickplates of 16 x 62mm particle board foiled in renolit PVC foil continous along floor plinth, carcass of 16mm particle board foiled and edged on all faces with 3,2mm hardboard back foiled melamine on exposed face in white renolit PVC foil with sides predrilled and grooved for assembly, concealed type 95 degree hinges and piano hinges to adjoining doors, type "D" handles in selected colours and finishes and epoxy coated steel two part telescopic drawer slides on nylon runner (see architect's drawing/s accompanying these bills of quantities)	No	1		
13	Additional worktop with support framework in corner, 600 x 600mm (no cupboard below)	No	1		
14	Wall cupboard, 3,000 x 300 x 800mm high with top, sides, bottom, division, shelf, back, one single hinged door and two pairs double hinged doors	No	1		
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15	Floor corner cupboard, 3,000mm long against one wall and 1,200mm long against other wall x 600mm wide x 900mm high with top, sides, bottom, division/s, shelf, back, one single hinged door and two pairs double hinged doors, dividing framework	No	1		
16	Sink cupboard, 3,600 x 600 x 900mm high with top, sides, bottom, division, shelf, back, one single hinged door and two pairs double hinged doors, dividing framework and one set of five drawers (including sink cut-out, but sink elsewhere) complete to architect's details (see architect's drawings no. 105/16+101/59) (JD17)	No	1		
<u>Shelving and storage systems</u>					
Shelving and storage systems shall be design and supply of solid timber with maple colour finish. Contractor to furnish shop drawings, pictures and/or sample for approval (see architect's drawings no. 105/08)					
Doors:					
Type 1 - Doors are to be 16mm particle board post formed on both vertical sides and foiled wrapped in colour in renolit PVC foil, back of doors foiled in same colour as front, door pre drilled for hinges					
Type 2 - Sliding door made from durable plastic polymer on an aluminium sliding rail with a locking mechanism					
Drawers of 12mm particle board sides, back and front with 3,2mm hardboard bottom edged and foiled on all sides in black melamine PVC foil, drawer runners shall be epoxy coated steel two part telescopic slides running on nylon runners, front's colour to be the same as the doors					
Kickplates of 16 x 62mm particle board foiled in renolit PVC foil continuous along floor plinth					
Carcass of 16mm particle board foiled and edged on all faces with 3,2mm hardboard back foiled melamine on exposed face in white renolit PVC foil with sides predrilled and grooved for assembly					
Concealed type 95 degree hinges and piano hinges to adjoining doors					
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17	Tpe "D" handles in selected colours and finishes and epoxy coated steel two part telescopic drawer slides on nylon runner Shelving cabinet type SH2, 1,350 x 450 x 1,600mm high with top, sides, bottom, division, shelves, back, drawers and ironmongery complete <u>Reception / Security counters etc.</u> Reception / Security counters construction is bases around modular component design (unless otherwise specified) utilizing components fittings, fastening, fitments and connectors for the purpose of prefabrication and ready for site assembly (see architect's drawing/s accompanying theses bills of quantities) The general construction material of the carcass shall be bison particle board in accordance with SANS EN 312-3:1996 supawood medium density fibreboard (MDF) in accordance with SANS 540-1:1991, melamine surfaced to both faces with Bisonlam MFB (Melamine faced board) in accordance with SANS 1763:1998 and finished in minimum 1mm thickness PVC edging The service tops shall be of Surino "Glacier White" solid surface material incorporating seamless joints, size 800 x 44mm thick The outer counter decorative face shall be of 32mm Supawood MDF (medium density fibreboard) in accordance with SANS 540-1:1991, the veneer surface to outer face in formica HPL (high pressure laminate with Mahogany finish) in accordance with SANS ISO 4586:1995 HG/P horizontal general purpose /postform 0,8mm thick (minimum) and formica HPL in accordance with SANS ISOO 4586:1995 BK 0,8mm brown backer to reverse face Doors are to be pre drilled for hinges, drawers of 12mm particle board sides, back and front with 3,2mm hardboard bottom edged and foiled on all sides in white melamine PVC foil Kickplates of 16 x 62mm particle board foiled in renolit PVC foil continous along floor plinth	No	3	R
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19	1,500mm long x 100mm wide x 25mm thick Softwood broom hook holder with and including 5 mild steel broom hooks plugged	No	1		
	Sluice room cupboards etc. with worktops of 30 x 600mm polished ice white granite top with 20mm overhang and silicone sealant applied at back edges, doors of 16mm particle board post formed on both vertical sides and foiled wrapped in colour in renolit PVC with back of door foiled in white PVC renolit, doors are to be pre drilled for hinges, drawers of 12mm particle board sides, back and front with 3,2mm hardboard bottom edged and foiled on all sides in white melamine PVC foil, kickplates of 16 x 62mm particle board foiled in renolit PVC foil continuous along floor plinth, carcass of 16mm particle board foiled and edged on all faces with 3,2mm hardboard back foiled melamine on exposed face in white renolit PVC foil with sides predrilled and grooved for assembly, concealed type 95 degree hinges and piano hinges to adjoining doors, type "D" handles in selected colours and finishes and epoxy coated steel two part telescopic drawer slides on nylon runner (see architect's drawing/s no. 103/19)				
20	Floor cupboard, 1,200 x 600 x 900mm high with top, sides, bottom, division, shelves, back and one pair double hinged doors (including sink cut-out, but sink elsewhere) complete to architect's details (see drawings no. 105/18)	No	1		
21	Floor cupboard, 3,983 x 600 x 900mm high with top, sides, bottom, division, shelves, back, three pairs of double hinged doors and one set of four drawers (including sink cut-out, but sink elsewhere) complete to architect's details (see drawings no. 105/18)	No	1		
	<u>Slatted benches</u>				
	Bench with slatted hadrwood seating and powdercoated mild steel frame bolted to floor including three coats timber sealer to timber slats all to architect's specifications (see architect's drawing/s)				
22	1,700mm Long x 431mm wide x 400mm high timber slatted bench with steel base (to architects details)	No	2		
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	<u>PART C2:</u> <u>SECTION 2</u> <u>BILL 5</u> <u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u> <u>PREAMBLES</u> NOTE : Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill. <u>SUPPLEMENTARY PREAMBLES</u> Supplementary preamble items as described in Bill No. 1, shall equally apply to this Bill. <u>Descriptions:</u> Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted" the bolts have been given elsewhere <u>GENERAL NOTES TO TENDERERS</u> General notes, described in Bill No. 1, shall equally apply to this Bill. <u>CEILINGS ETC.</u>			
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<u>Insulation in compliance with category of Occupancy A3 for climatic zone 1</u>					
1	120mm Thick insulation closely fitted and laid on top of brandering between roof timbers etc.	m2	577		
<u>NAILED UP CEILINGS</u>					
<u>9mm Gypsum plasterboard with 63mm wide strips of mesh scrim nailed over joints and the whole finished with gypsum skim plaster trowelled to a smooth polished surface to the thickness recommended by the manufacturer</u>					
2	Extra over ceiling for 600 x 600mm trap door including frame	No	3		
<u>SUSPENDED CEILINGS</u>					
<u>Proprietary suspended ceilings</u>					
<u>Note:</u>					
Electrical light fittings, diffusers, panels, etc generally are "lay in" units of the same dimensions as the suspension grid described and allowance must be made accordingly for their support inclusive of any flexibility inseting out that may be required (ceiling panels have not been deducted and pricing is to take cognisance thereof)					
Hangers, suspension grids, "lay-in" panels, etc are to be in accordance with the manufacturers' recommendations					
Electrical light fittings, diffusers, panels etc are generally "lay-in" units of the same dimensions as the suspension grid described and allowance must be made in the rates accordingly for their support inclusive of any flexibility in setting out that may be required (ceiling panels have not been deducted and pricing is to take cognisance thereof)					
The grid shall be suspended by means of galvanised steel L-section hangers at suitable centres, securely shot-pinned or screwed to concrete, steel or wood					
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	<u>9mm Gypsum plasterboard with 63mm wide strips of mesh scrim nailed over joints and the whole finished with gypsum skim plaster trowelled to a smooth polished surface to the thickness recommended by the manufacturer</u> Ceilings shall comprise 9mm gypsum plasterboard boards screwed to and including screw-up suspension grid consisting of main tees at 1 200mm centres and galvanised steel capped cross tees at 400mm centres and with tape fixed over joints and the whole finished with gypsum plaster trowelled to a smooth polished surface				
3	Ceilings suspended not exceeding 1m below concrete soffits (C4) <u>Pre-painted 600 x 1,200 x 15mm thick mineral fibre acoustic panels on 24mm pre-painted exposed tee suspension system including main and cross tees, necessary hangers, grids, etc. (C1)</u>	m2	2		
4	Ceilings suspended not exceeding 1m below concrete soffits (C1) <u>"Donn" or similar approved cornices, transition strips, etc. to suspended ceilings</u>	m2	577		
5	"LSM 25" shadowline pre-painted white cornices plugged to walls (C1 & C4)	m	504		
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Ceilings, Partitions and Access Flooring

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	<u>PART C2:</u> <u>SECTION 2</u> <u>BILL 6</u> <u>FLOOR COVERINGS, PLASTIC LININGS, ETC</u> <u>PREAMBLES</u> NOTE : Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill. <u>SUPPLEMENTARY PREAMBLES</u> Supplementary preamble items as described in Bill No. 1, shall equally apply to this Bill. <u>GENERAL NOTES TO TENDERERS</u> General notes, described in Bill No. 1, shall equally apply to this Bill. <u>Samples and colours of all products are to be submitted to the architect for approval prior to placing of orders</u> <u>FLOOR COVERINGS</u> <u>2,0mm Thick "Floorworx Elite" or other approved fully flexible, non-directional heavy duty vinyl sheeting manufactured to specification EN 649 laid in approved adhesive and joints hot seam welded with approved welding rods in compliance to SABS 070, spread with a notched trowel and stripped and sealed to manufacturer's specifications, colour and pattern to architects approval (F1)</u>			
1	On floors (F1)	m2	577	
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	Floor Coverings, Plastic Linings, etc			

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Item No		Quantity	Rate	Amount
	<u>PART C2:</u> <u>SECTION 2</u> <u>BILL 7</u> <u>IRONMONGERY</u> <u>PREAMBLES</u> NOTE : Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill. <u>SUPPLEMENTARY PREAMBLES</u> Supplementary preamble items as described in Bill No. 1, shall equally apply to this Bill. <u>Finishes to ironmongery</u> Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered CH Chromium plated SC Satin chromium plated SE Silver enamelled GE Grey enamelled AS Anodised silver AB Anodised bronze AG Anodised gold ABL Anodised black PB Polished brass PL Polished and lacquered PT Epoxy coated SD Sanded NP Nickel plated <u>GENERAL NOTES TO TENDERERS</u> General notes, described in Bill No. 1, shall equally apply to this Bill.			
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HINGES, BOLTS, ETC**"GEZE" or other approved**

1	150 x 20mm "120/150" SC flush bolt	No	13
2	300 x 20mm "120/300" SC flush bolt	No	13
3	""HZ3110SR - Pullman" Silver Exidor single panic bolt comp.	Sets	1.0

LOCKS**"GEZE" or other approved**

4	"625/35" S/S profile cylinder sashlock D/back latch	No	1
5	76mm "730/68" S/S profile arch sash lock	No	13
6	76mm "742/68" S/S profile cylinder deadlock	No	4
7	43mm "IG950933108M" NP half cylinder master key	No	3
8	60mm "IG955930308M" NP knob cylinder master key with "963/03" 40-55mm x 5,4mm NP patent fixing screws	No	1
9	60mm "IG950930308M" NP double cylinder master key with "963/03" 40-55mm x 5,4mm NP patent fixing screws	No	12
10	66mm "IG950933338M" NP double cylinder master key	No	1
11	"194/01 - TT001SS" Thumb turn and lock	Sets	11.0
12	"195/01" Mortice W/C indicator (disabled) lock	Sets	2.0
13	"ED910C" S/S cylinder escutcheon	Pairs	3
14	"131/69" Rebate for 700 series lock	Sets	13.0

HANDLES

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	<u>"GEZE" or other approved</u>				
15	65 x 50mm "056/76" BR/SC flush pull ring	No	5		
16	"DB171BNC01" Hoppe Tokyo lever on N/style backplate cyclinder	Pairs	1		
17	130 x 111 x 19mm "JD213/111 BT" S/S b. thr. pull handle	No	9		
18	300 x 285mm "JHB216/300 BTB" S/S back-to-back square pull handle	Pairs	7.0		
19	330 x 305 x 25mm "JD213/305 BTB" S/S back-to-back pull handle	Pairs	2.0		
20	450 x 435mm "JHB216/450 BTB" S/S square pull handle	Pairs	2		
21	600 x 575mm "JHB216/600 BTB" S/S back-to-back square pull handle	Pairs	2		
22	19mm / 165 x 165 x 1,5mm "Daytona - EDE/101C" plate cylinder handle	Pairs	13.0		
	<u>PUSH PLATES AND KICKING PLATES</u>				
	<u>1,6mm "GEZE" or other approved stainless steel grade 304 push and kick plates</u>				
23	160 x 1,232mm "079/160x1232x1.6" Push plate	No	46		
24	160 x 1,872mm "079/160x1872x1.6" Push plate	No	51		
25	160 x 600mm "080/160x600x1.6" Kick plate	No	4		
26	160 x 700mm "080/160x700x1.6" Kick plate	No	1		
27	160 x 813mm "080/160x813x1.6" Kick plate	No	26		
28	160 x 900mm "080/160x900x1.6" Kick plate	No	4		
29	160 x 1,000mm "080/160x1,000x1.6" Kick plate	No	16		
30	800 x 600mm "080/800x600x1.6" Kick plate	No	22		
31	800 x 900mm "080/800x900x1.6" Kick plate	No	26		
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DOOR CLOSERS**"GEZE" or other approved**

32	"AZ3034SR" TS3000 door closer C/W ISM guide rail	Sets	1
33	"AZ3035SR" TS3000E-ISM door closer INT SEL ELE MECH H/O SR	Sets	1
34	"AZ2003SR" TS2000G DCL with g/rail and arm SR with three "ND0501" M5 patent fixing screws	Sets	6
35	"AZ4001DA" TS4000P DA DCL C/W standard arm and pull arm and three "ND0501" M5 patent fixing screws	Sets	2.0
36	"BZ501NVSS" TS500 NV double action floor spring NSO SS	Sets	2.0
37	"AC3001SR" Silver lintel bracket	No	1

LETTERS, NAMEPLATES, ETC**"GEZE" or other approved**

38	160 x 160 x 0,9mm "079/160E/M" S/S E/Male push plate	No	1
39	160 x 160 x 0,9mm "079/160E/F" S/S E/Female push plate	No	4
40	160 x 160 x 0,9mm "079/160E/P" S/S E/Paraplegic push plate	No	2
41	160 x 160 x 0,9mm "079/160E/FHR" S/S E/FHR push plate	No	1
42	160 x 160 x 0,9mm "079/160E/FE" S/S E/F.EXT push plate	No	1
43	160 x 160 x 0,9mm "079/160E/E" S/S E/ELE push plate	No	3

PELMETS AND CURTAIN TRACKS

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	<u>To existing windows</u>				
52	To window opening, 800 x 1,000mm high (existing window)	No	1		
53	To window opening, 1,300 x 1,000mm high (existing window)	No	2		
54	To window opening, 1,700 x 1,000mm high (existing window)	No	5		
55	To window opening, 2,300 x 1,500mm high (existing window)	No	12		
56	To window opening, 2,700 x 1,000mm high (existing window)	No	1		
	<u>BATHROOM FITTINGS</u>				
	<u>"Franke" or other approved stainless steel</u>				
57	145 x 25 x 130mm Toilet roll holder manufactured from 0,9mm 18/10 stainless steel with satin finish plugged (ZF18)	No	4		
58	156 x 141 x 303mm Two toilet roll holder with spindle system manufactured from 18/10 1,5mm stainless steel, satin finish with surface treatment - InoxPlus (anti-fingerprint), cylinder lock with standard key and including wall mounting kit (ZF14)	No	5		
59	100 x 134 x 304mm Surface mounted soap dispenser manufactured from 18/10 1,2/1,5mm stainless steel with satin finish with surface treatment - InoxPlus (anti-fingerprint), soap dispenser incorporating a replaceable and refillable 1 litre container suitable for liquid and antiseptic soaps and lotions, cylinder lock with standard key and including mounting kit (ZF12)	No	6		
60	900mm long x 32mm diameter hollow satin finish aluminium shower curtain rail with minimum 10 nylon wheeled runners per metre, fixed with wall brackets etc. to manufacturer's specifications (ZF40)	No	4		
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	<u>Medium duty slotted angle free standing steel shelving units with five (5) shelf levels, standard epoxy powder coated finish including assembling together with corner gussets and complete with standard bracing, end-frame angle uprights and all necessary accessories in accordance with manufacturer's specifications, size 914mm wide x 457mm deep x 2,438mm high units (see architect's drawing/s no. 101/70A)</u>				
69	Single shelving of 914mm wide x 457mm deep x 2,438mm high units	m	31		
	<u>STEEL LOCKERS</u>				
	<u>"Symo" or other approved steel lockers with standard baked enamel finish</u>				
70	300 x 450 x 1,800mm High locker unit with two 900mm high stack lockers each with a single compartment complete with lock and bolted in position	No	8		
	<u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u>				
	<u>Laminated softboard pinning board</u>				
71	1,500mm Wide x 1,000mm high pinningboard of laminated softboard core with anodised aluminium channel surround mitred at the corners and plugged (PB1)	No	3		
72	3,000mm Wide x 1,200mm high pinningboard of laminated softboard core with anodised aluminium channel surround mitred at the corners and plugged (PB5)	No	3		
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	<u>PART C2:</u> <u>SECTION 2</u> <u>BILL 8</u> <u>METALWORK</u> <u>PREAMBLES</u> NOTE : Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill. <u>SUPPLEMENTARY PREAMBLES</u> Supplementary preamble items as described in Bill No. 1, shall equally apply to this Bill. <u>GENERAL NOTES TO TENDERERS</u> General notes, described in Bill No. 1, shall equally apply to this Bill. <u>GENERAL NOTES TO ALUMINIUM FRAMED SHOPFRONTS</u> <u>Shop Drawings</u> The successful tenderer shall provide shop drawings of all shopfronts, windows, etc. for approval by the Architect prior to putting any work in hand. The successful tenderer must also provide samples of the section that he intends using for approval prior to his appointment. <u>Glazing Specifications</u> Glazing shall be executed in strict accordance with the National Building Regulations, Part N, SABS 10137, SABS 10400, SABS 1263 and AAAMSA selection guide for safety glazing materials			
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	Section No. 1 Builder's Work Bill No. 8 Metalwork			

Aluminium Finish

Aluminium must comply with SABS and AAAMSA specifications

The colour finish to aluminium frames as specified in these Bills of Quantities is as follows: **Powder coated Matt Black.**

The successful tenderer will be required to submit samples to the Architect for approval.

Sliding tracks, etc.

Bottom sliding tracks are to be set flush with the finished floors

Ironmongery

All rates for windows, shopfronts, doors, etc. must include for taking delivery of and installation of the ironmongery to be specified and approved by the Architect.

Sub-frames

Descriptions of aluminium windows, doors, shopfronts, etc. shall be deemed to include for hardwood timber or aluminium sub-frames to the approval of the Architect and according to manufacturer's shop drawings, screwed and plugged to wall and top and sides only at approximately 250mm centres, with openings between wall and aluminium sealed with silicon sealer to match frame colour both internal and external

Protection

The Tenderer will be required to protect his work during construction, which shall be adequate and to the approval of the Architect. Such protection shall only be removed upon written instruction from the Architect.

Rates

Rates for shopfronts, doors, windows, etc. must include for all timber subframes, silicone sealant, installation of door handles, floorspring, ironmongery, etc. to ensure that the installation is waterproof, etc.

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Builder's Work
Bill No. 8
Metalwork**

Descriptions

Descriptions are referred to in these Bills of Quantities are intended for REFERENCE PURPOSES ONLY and where discrepancies between the Bill items and the drawings occur, the drawings shall take preference. Such discrepancies shall be qualified by the tenderers and failure to do so shall indemnify the Employer and/or his agents against any additional costs, etc. resulting from such discrepancies.

SUNDRY STEELWORK**"Kirk M-Trim" or other approved stainless steel corner protectors**

- | | | | |
|---|--|----|---|
| 1 | 50 x 50 x 3mm "SCP500" angle section corner protectors, 2,500mm in length with crimped wing edges, countersunk drilled holes and plugged | No | 8 |
|---|--|----|---|

PRESSED STEEL DOOR FRAMES**1,6mm Double rebated pressed mild steel door frames complete with one-and-a-half pairs 100mm heavy duty butt hinges, adjustable striking plate, rubber buffers to lock and jamb and fixing lugs, suitable for half brick walls**

- | | | | |
|---|---|----|----|
| 2 | Frame for door, 700 x 2,032mm high | No | 1 |
| 3 | Frame for door, 813 x 2,032mm high | No | 10 |
| 4 | Frame for door, 1,000 x 2,032mm high | No | 3 |
| 5 | Frame for double door, 1,800 x 2,032mm high | No | 3 |

1,6mm Double rebated pressed mild steel door frames complete with one-and-a-half pairs 100mm heavy duty butt hinges to SWING both ways, adjustable striking plate, rubber buffers to lock and jamb and fixing lugs, suitable for one brick walls

- | | | | |
|---|---|----|---|
| 6 | Frame for double door, 1,500 x 2,032mm high | No | 1 |
|---|---|----|---|

STEEL WINDOWS, DOORS, ETC

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Builder's Work
Bill No. 8
Metalwork

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Builder's Work

Bill No. 8

Metalwork

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Metalwork

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	<u>One coat cement plaster wood floated on brickwork</u>				
3	On brick walls	m2	284		
4	On narrow widths	m2	5		
	<u>One coat cement plaster with one coat gypsum skim plaster finishing coat</u>				
5	On brick walls	m2	1 218		
6	On narrow widths	m2	10		
	<u>EXTERNAL PLASTER</u>				
	<u>Cement plaster on brickwork</u>				
7	On walls	m2	115		
	<u>SPECIALIST PLASTER WALL COVERINGS</u>				
	<u>1mm Thick "Marmoran Permaspray - Rhine Castle colour" or other approved spray wall coating incorporating marble aggregate and acrylic resin, applied with a hooper gun on and including primer etc. by specialist applicator to manufacturer's specifications on plaster</u>				
8	On walls (E2)	m2	115		
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Builder's Work

Bill No. 9

Plastering

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Plastering

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Builder's Work

Bill No. 10

Tiling

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Bill No. 10
Tiling

Item No		Quantity	Rate	Amount
	<u>PART C2:</u> <u>SECTION 2</u> <u>BILL 11</u> <u>PLUMBING AND DRAINAGE</u> <u>PREAMBLES</u> NOTE : Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill. <u>SUPPLEMENTARY PREAMBLES</u> Supplementary preamble items as described in Bill No. 1, shall equally apply to this Bill. <u>Concrete pipes:</u> Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings <u>uPVC pipes and fittings:</u> Soil, waste and vent pipes and fittings shall be solvent weld jointed <u>uPVC pressure pipes and fittings:</u> Pipes for water supply shall be of the class stated Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings Pipes of 50mm diameter and greater shall have sockets and spigots with push in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints Carried to Collection Section No. 1 Builder's Work Bill No. 11 Plumbing and Drainage (Provisional)			
			R	

Copper pipes:

Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground

Fixing of pipes

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

Reducing fittings

Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained

Wire gratings

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

Exposed concrete surfaces

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

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**Section No. 1
Builder's Work
Bill No. 11
Plumbing and Drainage (Provisional)**

Excavations

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

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

Laying, backfilling, bedding, etc. of pipes

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

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

Flush pans

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

Stainless steel basins, sinks, wash troughs, urinals, etc.

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

Waste unions

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

Steel sectional water tanks

Tanks shall comply with SABS CKS 114

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**Section No. 1
Builder's Work
Bill No. 11
Plumbing and Drainage (Provisional)**

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

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

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

GENERAL NOTES TO TENDERERS

General notes, described in Bill No. 1, shall equally apply to this Bill.

SANITARY FITTINGS

Stainless steel

1	900 x 500 x 260mm Stainless steel inset single bowl wash trough manufactured from grade 304(18/10) stainless steel, fitted to sluice cupboard (cupboard elsewhere measured)	No	2		
2	1,000 x 510mm "GOX651" stainless steel inset double end bowl sink with recessed drainage ledge and folded edges, bowl to be fitted to kitchen cupboard (cupboard elsewhere measured), grade 304(18/10) stainless steel sink to comply with SABS 906 (ZA17)	No	1		
3	Model SSF Floor mounted Surgeon's Scub-up unit, length 1,200mm manufactured from grade 304 (18/10) 1.6mm stainless steel 150mm high integral splashback to back with radiused internal corners and provision for 40mm waste outlet, front and sides of unit to be double walled construction with inner wall sprayed with vermin proof bitumastic sound deadening, with 300 x 300mm removable inspection panels in the front skirting for access to fit the waste outlets in the trough, fixed to wall and floor with and including anchor bolts to manufacturer's specifications (ZB01)	No	1		

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**Section No. 1
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Plumbing and Drainage (Provisional)**

4	1,830 x 685mm "Model EC6 (350056)" combination bed pan and wash up sink manufactured from grade 304 (18/10) stainless steel - 1,6mm draining boards and 1,2mm bowls, unit to have a 150mm high integral splash back to rear and 15mm deep hospital bead 100mm apron to front and sides, fitted with two pressed seamless bowls with sluice bowl having an integral flusing rim and a 38mm inlet pipe for the flush valve, 110mm outlet on the sluice bowl, 610 x 460 x 230mm deep rinse bowl with a 40mm waste discharging into a sluice bowl, underside sprayed with vermin proof bitumastic sound deadening and has a galvanised mild steel backing sheet, complete with 11 litre stainless steel high level cistern fitted with supa flush valve and pull chain, 41mm diameter stainless steel flush pipe and 41mm chrome plated coupling which is reduced on one end to fit 38mm diameter connection unit, code C-FM8.20 compression pan connector to suit and 110mm diameter waste outlet (ZB09)	No	1		
5	540 x 540mm "Model CH" slop hopper manufactured from grade 304 (18/10) 1,2mm stainless steel with a 100mm high integral splashback to the rear and both sides, the cone has an integral flushing rim and a 110mm waste outlet for pan connector, the inlet fitted with a 38 x 250mm long vertical flush pipe for a standard flush valve, fitted with a hinged bucket grid manufactured from 10mm diameter grade 304 (18/10) stainless steel round bar complete with 40 x 40mm square stainless steel wall mounting gallow brackets and four anchor bolts, installed together with approved 11 litre stainless steel high level cistern fitted with supa flush valve and pull chain, 41mm diameter stainless steel flush pipe and 41mm chrome plated coupling which is reduced on one end to fit 38mm diameter connection unit, code C-FM8.20 compression pan connector to suit and 110mm diameter waste outlet (ZB06)	No	1		
	<u>Vitreous china etc.</u>				
6	"Tuscany" or other approved vitreous china 90 degree outlet close rim washdown pan with matching 7 litre pushbutton top dual flush cistern complete with lid and fitments, with quality approved heavy duty wooden toilet seat (ZE05)	No	9		
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	<u>"Cobra Watertech" or other approved CP</u>				
15	32mm 340 CP bottle trap	No	17		
16	40mm 345/40 CP bottle trap with tail pipe	No	1		
	<u>TAPS, VALVES, ETC</u>				
	<u>"Franke, Cobra" or other approved</u>				
17	15mm CP angle regulating valve	No	55		
18	15mm "515-21" CP elbow action pillar type sink mixer with aerated swan neck swivel outlet (ZH77)	No	3		
19	FJ6000CP "Flushmaster Junior" urinal flush valve with flush pipe	No	1		
	<u>"Franke" or other approved</u>				
20	15mm "073-Liana-SQ" 200 x 200 x 2mm square CP polymer shower head (ZJ16)	No	4		
21	400mm "023TU-400" tubular shower arm (ZJ61)	No	4		
22	600mm "002/5SQ" square minimalist type hand shower rail with sliding hand shower holder (ZJ66)	No	4		
23	15mm "Dura DU-961" single lever undertile bath/shower diverter mixer (ZH45)	No	4		
24	15mm "Dura DU-970" CP single lever sink mixer with aerated swivel outlet and angle valves (ZH47 & ZH54)	No	1		
25	15mm "NM-519-21" elbow action hose bib tap with trigger spray (ZG05)	No	2		
26	15mm "NM-859SET1" single lever elbow action wall type diverter mixer with a hand shower, hose and holder (ZG10)	No	3		
	<u>SANITARY PLUMBING</u>				
	<u>uPVC pipes</u>				
27	50mm Pipes	m	140		
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TOPS, SHELVES, DOORS, MIRRORS, ETC

6mm Silvered float glass copper backed mirrors with 10mm bevelled and polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete

5 Mirror 600 x 900mm high with four dome-head mirror screws (ZF32)

No

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Section No. 1
Builder's Work
Bill No. 12
Glazing

Section No. 1

Builder's Work

Bill No. 12

Glazing

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Builder's Work
Bill No. 12
Glazing

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<u>Three coats of super PVA external quality paint with colour to architect's approval (C4)</u>			
3	On ceilings and cornices (C4)	m2	109
<u>ON METAL</u>			
<u>Rust inhibitive prime paint base coat complying with ANSI A250.10 and other relevant SABS and international standards, undercoat complying to SABS 681 and two coats enamel paint complying to SABS 630 type 2 for finish coat</u>			
4	On door frames	m2	63
5	On windows with burglar bars	m2	146
6	On rails, bars, pipes, etc not exceeding 300 mm girth	m	16
<u>ON WOOD</u>			
<u>Three coats clear wood preservative</u>			
7	On doors	m2	139
8	On open slatted shelves, seats, etc of 50 x 30mm slats at 75mm centres (both sides measured over the full flat area)	m2	3
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Paintwork

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Builder's Work
Bill No. 13
Paintwork

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Item No		Quantity	Rate	Amount
	<u>PART C2:</u>			
	<u>SECTION 3</u>			
	<u>BILL 1</u>			
	<u>PROVISIONAL SUMS</u>			
	<u>PREAMBLES</u>			
	NOTE : Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	Supplementary preamble items as described in Section No. 1, Bill No. 1, shall equally apply to this Bill.			
	<u>GENERAL NOTES TO TENDERERS</u>			
	General notes, described in Section No. 1, Bill No. 1, shall equally apply to this Bill.			
	<u>ATTENDANCE</u>			
	The amounts allowed for "attendance" must provide for all services rendered, attendance of making good of all trades after "specialists", also for the use of any scaffolding and equipment.			
	<u>JOINERY</u>			
1	Provide the amount as indicated for supply and installation of joinery by a firm of specialists	Item		250 000.00
2	Allow for profit and attendance		%	
	<u>SIGNAGE</u>			
3	Provide the amount as indicated for signage by a firm of specialists	Item		50 000.00
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	Provisional Sums			
	Bill No. 1			
	Provisional Sums			

4	Allow for profit and attendance		%	
<u>BUDGETARY ALLOWANCES</u>				
<u>The following budgetary allowances are for work to be executed by the Contractor</u>				
Note: Work for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part, if not required, without any compensation for loss of profit				
Note: Budgetary allowances listed below are for work to be executed by the Main Contractor and will be measured and valued in terms of rates submitted against similar items in these bills.				
Note: These items are to be taken into account in the pricing of Preliminaries and General as they will not attract separate Preliminaries of their own.				
5	Provide the amount as indicated for builders work related services	Item		50 000.00
Carried to Collection				
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Provisional Sums

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Provisional Sums

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Provisional Sums

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PROPOSED CONVERSION OF WARD 13 TO AN INTENSIVE CARE UNIT (ICU)

JOB SHIMANKANA TABANE (JST) HOSPITAL, RUSTENBURG

BILL NO 1: ELECTRICAL INSTALLATION

Item	Description	Unit	Qty	Rate	Amount
1	<u>Preliminaries & Generals</u>				
	General Items				
1.1	Compliance to Occupational Health and Safety (OHS) Act requirements	Item	1		
1.2	Site Establishment	Item	1		
1.3	Isolation, stripping of existing electrical distribution board(s), removal of existing socket outlets, lights, switches, isolators, cables and conductors etc. and making safe of the entire existing installation.	Item	1		
1.4	Comprehensive maintenance, with guarantees, of all sections of the works for a period of 12 months from the date of approved practical completion of the project.	Item	1		
	Commissioning and Testing				
1.5	Inspection, commissioning and applicable testing of the entire installation including certificates of completion	Item	1		
	Manuals				
1.6	Provision of operational and maintenance manuals in hard copies and PDF's on CD/DVD	Sets	3		
	Drawings				
1.7	As-built drawings of entire installation (DWG & PDF drawings for electronic submission on CD/DVD in addition to hard copies)	Sets	3		
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PROPOSED CONVERSION OF WARD 13 TO AN INTENSIVE CARE UNIT (ICU)					
JOB SHIMANKANA TABANE (JST) HOSPITAL, RUSTENBURG					
BILL NO 1: ELECTRICAL INSTALLATION					
Item	Description	Unit	Qty	Rate	Amount
2	<u>Low Voltage Cables:</u>				
	Supply and install 600/1000V PVC/PVC/SWA/PVC copper cable laid in trenches or fixed to cable trays (cable trays measured elsewhere)				
2.1	70mm ² 4-core cable	m	450		
2.2	35mm ² 4-core cable	m	250		
2.3	16mm ² 4-core cable	m	250		
	<u>Cable Terminations:</u>				
	Supply and install cable terminations for 600/1000V PVC/PVC/SWA/PVC copper cables				
2.4	70mm ² 4-core cable	No.	2		
2.5	35mm ² 4-core cable	No.	4		
2.6	16mm ² 4-core cable	No.	4		
3	<u>Earthing:</u>				
	Bare copper earth conductor installed and strapped to cable (cable measured elsewhere) and building earthing				
3.1	50mm ² BCEW	m	450		
3.2	25mm ² BCEW	m	250		
3.3	10mm ² BCEW	m	250		
	<u>Earth Conductor Termination:</u>				
	Termination for bare insulated copper conductors including lugs and connections				
3.4	50mm ² BCEW	No.	2		
3.5	25mm ² BCEW	No.	4		
3.6	10mm ² BCEW	No.	4		
4	<u>Sleeves:</u>				
	Sleeve piping including short lengths and jointing, laid in trench (trench filling measured elsewhere)				
4.1	50mm diameter sleeve	m	300		
4.2	110mm diameter sleeve	m	300		
5	<u>Distribution Boards:</u>				
	Supply and install distribution boards complete with sheet metal tray, frames, sub-frames, bus-bars, provision for 30% future circuit breakers and legend card as per line diagram				
5.1	DB - ICU (refer to drawing: G42-JST-ICU-E-300)	Item	1		
5.2	DB - HVAC 1 (refer to drawing: G42-JST-ICU-E-300)	Item	1		
	Alteration of Main Panel in Substation Building for the feed to the proposed ICU				
5.3	Temporary isolation works of Main Panel in Substation	Item	1		
5.4	Supply, install and energise a new 150A 3P circuit breaker	No.	1		
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PROPOSED CONVERSION OF WARD 13 TO AN INTENSIVE CARE UNIT (ICU)

JOB SHIMANKANA TABANE (JST) HOSPITAL, RUSTENBURG

BILL NO 1: ELECTRICAL INSTALLATION

Item	Description	Unit	Qty	Rate	Amount
6	<u>Conduits and Accessories:</u>				
	Conduits chased into walls or fixed in ceiling voids				
6.1	20mm diameter PVC conduit	m	2,850		
6.2	25mm diameter PVC conduit	m	1,450		
6.3	20mm diameter galvanised conduit	m	250		
6.4	25mm diameter galvanised conduit	m	250		
	Conduit boxes and fittings chased into walls or fixed in ceiling voids				
6.5	100mm x 50mm x 50mm deep galvanised box	No.	50		
6.6	100mm x 100mm x 50mm deep galvanised box	No.	150		
7	<u>Conductors:</u>				
	Bare stranded copper earth conductor drawn into wireways				
7.1	2,5mm ²	m	4,850		
7.2	4mm ²	m	2,150		
	PVC Insulated stranded copper conductor drawn into wireways				
7.3	2,5mm ²	m	4,650		
7.4	4mm ²	m	3,350		
7.5	6mm ²	m	1,650		
8	<u>Cable Trays:</u>				
	Wired mesh cable tray GS50 complete with accessories, short lengths, fixed to purlines or in ceiling voids				
8.1	300mm wide cable tray with mounting accessories	m	300		
9	<u>Wiring Channel:</u>				
	Galvanized steel channel complete with accessories, cover plates suspended from steel trusses or concrete slab including hangers or steel cables				
9.1	OL8000 channel complete with mounting accessories	m	300		
10	<u>Power-Skirting:</u>				
10.1	Supply and install 2-compartment power-skirting complete with accessories and covers	m	150		
10.2	16A 3-pin shaved earth socket outlet on power-skirting	No.	50		
10.3	16A 3-pin normal socket outlet on power-skirting	No.	50		
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PROPOSED CONVERSION OF WARD 13 TO AN INTENSIVE CARE UNIT (ICU)

JOB SHIMANKANA TABANE (JST) HOSPITAL, RUSTENBURG

BILL NO 1: ELECTRICAL INSTALLATION

Item	Description	Unit	Qty	Rate	Amount
11	<u>Bedhead Trunking Service System:</u>				
	Bedhead trunking system fixed to wall and as described below:				
11.1	<u>Type A:</u> 3.5m horizontal bedhead trunking unit complete with 3x 16A dedicated earth socket outlets and 3x 16A normal socket outlets switched via a 15A double-pole MCB with red LED indicator light (power switched on), 3x punchings for gas outlets, 1x punching for nurse call outlet, 1x reading light, 1x RJ-45 data point and 1x medical rail complete with mounting brackets; Supplier: Hutz Medical	No.	1		
11.2	<u>Type B:</u> 3.5m horizontal bedhead trunking unit complete with 6x 16A dedicated earth socket outlets and 6x 16A normal socket outlets switched via a 15A double-pole MCB with red LED indicator light (power switched on), 6x punchings for gas outlets, 2x punching for nurse call outlet, 2x reading light, 2x RJ-45 data point and 2x medical rail complete with mounting brackets; Supplier: Hutz Medical	No.	1		
11.3	<u>Type C:</u> 6m horizontal bedhead trunking unit complete with 9x 16A dedicated earth socket outlets and 9x 16A normal socket outlets switched via a 15A double-pole MCB with red LED indicator light (power switched on), 9x punchings for gas outlets, 3x punching for nurse call outlet, 3x reading light, 3x RJ-45 data point and 3x medical rail complete with mounting brackets; Supplier: Hutz Medical	No.	5		
11.4	<u>Type D:</u> 9m horizontal bedhead trunking unit complete with 9x 16A dedicated earth socket outlets and 9x 16A normal socket outlets switched via a 15A double-pole MCB with red LED indicator light (power switched on), 9x punchings for gas outlets, 3x punching for nurse call outlet, 3x reading light, 3x RJ-45 data point and 3x medical rail complete with mounting brackets; Supplier: Hutz Medical	No.	1		
12	<u>Light Switches:</u>				
	Flush switch with white cover plate and chrome screws in a box measured elsewhere;				
12.1	16A 1-lever 1-way switch	No.	20		
12.2	16A 1-lever 2-way switch	No.	6		
	SUB-TOTAL : CARRIED FORWARD TO SUMMARY PAGE				R 0.00

PROPOSED CONVERSION OF WARD 13 TO AN INTENSIVE CARE UNIT (ICU)

JOB SHIMANKANA TABANE (JST) HOSPITAL, RUSTENBURG

BILL NO 1: ELECTRICAL INSTALLATION

Item	Description	Unit	Qty	Rate	Amount
13	<u>Switched Socket Outlet:</u>				
	Flush switched socket outlets with white cover plate and chrome screws, mounted in a box measured elsewhere;				
13.1	16A normal single switched socket outlet white in colour suitable to accommodate SANS 164-1 and SANS 164-2 socket outlets	No.	10		
13.2	16A normal double switched socket outlet white in colour suitable to accommodate SANS 164-1 and SANS 164-2 socket outlets	No.	35		
14	<u>Power Isolators</u>				
	Power outlets with white cover plates and chrome screws, mounted in a box, measured elsewhere:				
14.1	30A double-pole isolator in 100mm x 100mm box	No.	10		
14.2	60A double-pole isolator in 100mm x 100mm box	No.	10		
14.3	60A double-pole UPS isolator mounted in 100mm x 100mm box	No.	1		
	Power outlets in outdoor utility box for external installations				
14.4	60A double pole isolator mounted in outdoor utility box for air-conditioning units	No.	10		
14.5	60A triple pole isolator mounted in outdoor utility box for air-conditioning units	No.	10		
15	<u>Luminaires and Equipment:</u>				
	Supply and install luminaries complete with lamps, connectors, electronic gear, drivers, etc. as described in the Lighting Schedule				
15.1	Type D1 - 15W recessed LED downlight with COB antiglare <19; white die cast aluminium body and driver; overall diameter: 110*54; cut-out diameter: 90 – 95; 60° beam angle; lumen output: 1,300 lumens; CRI > 80; CCT: 4,000K; IP rating – IP54; flicker free driver;	No.	15		
15.2	Type D2 - 15W recessed LED downlight with COB antiglare <19; white die cast aluminium body and driver; overall diameter: 110*54; cut-out diameter: 90 – 95; 60° beam angle; lumen output: 1,300 lumens; CRI > 80; CCT: 4,000K; IP rating – IP65; flicker free driver;	No.	5		
15.3	Type D3 - 10W recessed LED downlight with COB antiglare <19; white die cast aluminium body and driver; overall diameter: 90*40; cut-out diameter: 75 – 80; 60° beam angle; Tiltable: 30°; Lumen output: 1,300 lumens; CRI > 80; CCT: 4,000K; IP rating – IP54; flicker free driver.	No.	5		
	SUB-TOTAL PAGE: CARRIED FORWARD TO SUMMARY PAGE				R -

BILL NO 1: ELECTRICAL INSTALLATION

Item	Description	Unit	Qty	Rate	Amount
15.4	Type D4 - 18W recessed LED downlight with COB antiglare <19; white die cast aluminium body and driver; overall diameter: 110*54; cut-out diameter: 90 – 95; 60° beam angle; lumen output: 1,300 lumens; CRI > 80; CCT: 4,000K; IP rating – IP54; flicker free driver;	No.	40		
15.5	Type F1 - Recessed 1200 x 600mm 60W side lit LED panel luminaire complete with aluminium frame; honeycomb diffuser and driver; control gear and 3m cab-tyre lead with 5A plug top. Life hours – 65,000 L70B10; UGR<19; Flicker free driver; CRI>80; CCT – 4,000K; IP42; Lumen output – 5,880 lumens;	No.	55		
15.6	Type F2 - Recessed 600 x 600mm 40W side lit LED panel luminaire complete with aluminium frame; honeycomb diffuser and driver; control gear and 3m cab-tyre lead with 5A plug top. Life hours – 65,000 L70B10; UGR<19; Flicker free driver; CRI>80; CCT – 4,000K; IP42;	No.	60		
15.7	20kVA 3-phase in / 3-phase out UPS unit to be installed in the DB room as per specifications and information schedule	No.	1		
16	Supply and install galvanised draw-wire in all conduits and sleeve pipes				
16.1	1,6mm diameter steel draw wire	m	500		
	SUB-TOTAL: CARRIED FORWARD TO SUMMARY PAGE				R -

BILL NO 1: ELECTRICAL INSTALLATION

Item	Description	Unit	Qty	Rate	Amount
BILLS OF QUANTITIES - ELECTRICAL INSTALLATION: SUMMARY PAGE					
1	SUB-TOTAL : PAGE 1			R	-
2	SUB-TOTAL : PAGE 2			R	-
3	SUB-TOTAL : PAGE 3			R	-
4	SUB-TOTAL : PAGE 4			R	-
5	SUB-TOTAL : PAGE 5			R	-
6	SUB-TOTAL : PAGE 6			R	-
	TOTAL: ELECTRICAL INSTALLATION - CARRIED FORWARD TO SUMMARY PAGE			R	-

BILL NO 2: ELECTRONICS INSTALLATION

Item	Description	Unit	Qty	Rate	Amount
1	<u>Preliminaries & Generals</u>				
	General Items				
1.1	Compliance to Occupational Health and Safety (OHS) Act requirements	Item	1		
1.2	Comprehensive maintenance, with guarantees, of all sections of the works for a period of 12 months from the date of approved practical completion of the project.	Item	1		
	Commissioning and Testing				
1.3	Inspection, commissioning and applicable testing of the entire installation including certificates of completion	Item	1		
	Manuals				
1.4	Provision of operational and maintenance manuals in hard copies and PDF's on CD/DVD	Sets	3		
	Drawings				
1.5	As-built drawings of entire installation (DWG & PDF drawings for electronic submission on CD/DVD in addition to hard copies)	Sets	3		
	SUB-TOTAL : CARRIED FORWARD TO SUMMARY PAGE				R -

PROPOSED CONVERSION OF WARD 13 TO AN INTENSIVE CARE UNIT (ICU)

JOB SHIMANKANA TABANE (JST) HOSPITAL, RUSTENBURG

BILL NO 2: ELECTRONICS INSTALLATION

Item	Description	Unit	Qty	Rate	Amount
2	Nurse Call System Installation				
	Supply, deliver, install and commission the following:				
2.1	Nurse Call System Main Control Panel for system complete with LED indicator panels and complete with power supply unit, back-up battery and necessary accessories etc.	No.	1		
2.2	Bedhead Trunking Nurse Call Unit with inline socket for handheld unit and reset button	No.	16		
2.3	Patient Handheld Unit with nurse call functions	No.	16		
2.4	Bathroom Push Call Unit	No.	2		
2.5	Bathroom Pull Call Unit with nylon string	No.	4		
2.6	Overdoor ceiling mounted indication lights	No.	17		
2.7	Nurse Call System Cabling	m	1,650		
3	Access Control & CCTV Installations				
	This contract shall involve the supply, delivery, installation and configuration of all softwares including licensing and commissioning of the Access Control equipment as specified to the full satisfaction of the Consulting Engineer and Client's Technical and End-User's personnel. Rates shall include all WIRING & accessories required to make the system functional.				
3.1	Supply and install Intelligent Field Controller including all wiring	No.	1		
3.2	Supply and install 8-H Card Reader Module	No.	3		
3.3	Supply and install Dual Cabinet with power supply (8A)	No.	1		
3.4	Supply and install 8in 2out Door module - including all wiring back to controller	No.	5		
3.5	Supply and install Universal Reader Interphase Wiagand including all wiring	No.	1		
3.6	Supply and install a 12V DC 3.2A power supply unit including a 12V DC 7A/H battery-up	No.	5		
3.7	Exit Button Steel - Surface Mount, No Touch	No.	2		
3.8	Manual Call Point, Green - resettable element with hinged clear cover	No.	5		
3.9	Supply and install T10 Reader - Mifare, Black, including all wiring back to controller	No.	10		
3.10	Ethernet Cat-6A cabling complete with terminations	m	1,500		
3.11	8-core (4-pair) flexible communication cable	Lot	1		
3.12	RJ-45 plug and boots	Lot	1		
	SUB-TOTAL : CARRIED FORWARD TO SUMMARY PAGE				R -

PROPOSED CONVERSION OF WARD 13 TO AN INTENSIVE CARE UNIT (ICU)

JOB SHIMANKANA TABANE (JST) HOSPITAL, RUSTENBURG

BILL NO 2: ELECTRONICS INSTALLATION

Item	Description	Unit	Qty	Rate	Amount
	Central Equipment				
3.13	Supply and install rack mounted Access Control Server complete with Software Suite to support a minimum 300 doors, 1,000 tags		1		
3.14	Access Control PC Host and Management Workstation - supply, install and commission including appropriate operating system license, all surge protection and other accessories to make the installation complete. Workstation to enable full integration between CCTV, Access Control and Fire Detection Systems		1		
3.15	Supply and install Mifare Card Encoder		1		
3.16	Supply and install Card Printer		1		
3.17	Supply Mifare Classic Access Card		50		
	<u>CCTV Installation</u>				
	Supply and install the following CCTV cameras and equipment:				
3.18	Supply and install 5MP 360degrees high resolution dome type camera IP66 enclosure		10		
3.19	Enterprise Recording and Storage (50TB; Storage HD 90days)		1		
	<u>Operator Workstation / Viewing Station</u>				
3.20	High performance evaluation, analysis and processing unit for networking systems with pre-installed client software and operating system		1		
3.21	42" LED Monitor - 16:9 HD, 409.8 x 230mm, 1366 x 768, VGA, including brackets 50'000:1,5ms, 16.7 mil colours		1		
4	Provisional Sum - ICT Installation				
4.1	Allow the Provisional Sum of R 750,000.00 (Seven Hundred and Fifty Thousand Rand) for the ICT Installation to the ICU	Item	1		
4.2	Profit	%	5%		
4.3	Attendance	%	5%		
	SUB-TOTAL : CARRIED FORWARD TO SUMMARY PAGE				R -

BILL NO 2: ELECTRONICS INSTALLATION

Item	Description	Unit	Qty	Rate	Amount
BILLS OF QUANTITIES - ELECTRONICS INSTALLATION: SUMMARY PAGE					
1	SUB-TOTAL : PAGE 1			R	-
2	SUB-TOTAL : PAGE 2			R	-
3	SUB-TOTAL : PAGE 3			R	-
	TOTAL: ELECTRONICS INSTALLATION - CARRIED FORWARD TO SUMMARY PAGE			R	-

SUMMARY PAGE: ELECTRICAL & ELECTRONICS INSTALLATION

Item	Description	Amount
1	Electrical Installlation	
2	Electronics Installation	
TOTAL: ELECTRICAL AND ELECTRONICS INSTALLATION - CARRIED FORWARD TO FINAL SUMMARY		

NORTH WEST DEPARTMENT OF HEALTH JST HOSPITAL ICU UNIT (WARD 13) SECTION 1M - ICU (MEDICAL GASES INSTALLATIONS) SCHEDULE 1 - ADDITIONAL P&G			
Item	Description	Unit	Amount
1	Additional P & G in accordance with the Standard and Detailed specification		
01	Site Establishment and site security and storage		
	Fixed	Item	
02	Value related	Item	
03	Time related	Item	
2	Preparation of O & M manuals and re-commissioning reports	Sum	
3	Preparation of shop drawings samples etc.	Sum	
4	Provision of As Built Drawings As specified	Sum	
7	Location and protection of existing services		
	Water and sewer pipes	Psum	R 5 000.00
	Electrical and other cables	Psum	R 5 000.00
8	Engineering, Submissions & Approvals	Sum	
9	Additional tests required by the engineer	PC Sum	R 6 500.00
10	Occupational Health and Safety		
PSA	Compliance with OHS Act and Construction Regulation 153	Sum	
11	Decommissioning of Existing equipments and making the area safe.	PC Sum	R 30 000.00
12	Comissioning of the following in the presence of Engineer, client and user client		
01	Medical gas installation	Sum	
13	Training of user client		
01	Training Of end users	Item	
18	Rigging and Crainage		
	Provision of crain equipment for rigging of equipment to roof plant room as well as all the necessary rigging of equipment on the project.	Sum	
Total carried to Summary Page			

JST HOSPITAL ICU UNIT (WARD 13)					
SECTION 2.2 - PART 3 (MEDICAL GAS INSTALLATION)					
BILL 1 -ICU -WARD 13					
Item	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Supply, deliver, install, test and commission complete medical piped gases installation in the hospital as detailed below.				
1.0	<u>Vacuum Moisture Traps</u>				
01	Vacuum moisture trap set consisting of moisture trap, brackets etc.	No.	2		
2.0	Pipework				
2.1	Medical grade copper tubes with brazed joints in accordance with BS EN 737-1 and BS EN 13348, complete with all necessary clamping and support				
01	42 mm NB	m	200		
02	35 mm NB	m	80		
03	28 mm NB	m	65		
04	22 mm NB	m	90		
05	15 mm NB	m	325		
06	12 mm NB	m	90		
07	10 mm NB	m	30		
2.2	Pipework fittings – elbows				
	Medical grade copper brazed joints in accordance with BS EN 737-1 and BS EN 13348				
01	OD 42mm	No.	15		
02	OD 35mm	No.	15		
03	OD 28mm	No.	10		
04	OD 22mm	No.	20		
05	OD 15mm	No.	30		
06	OD 12mm	No.	20		
07	OD 10mm	No.	15		
2.3	Pipework fittings – tees				
	Medical grade copper brazed joints in accordance with BS EN 737-1 and BS EN 13348				
01	OD 42mm	No.	45		
02	OD 35mm	No.	15		
03	OD 28mm	No.	10		
04	OD 22mm	No.	15		
05	OD 15mm	No.	15		
06	OD 12mm	No.	10		
07	OD 10mm	No.	10		
2.4	Pipework fittings – couplings				
	Medical grade copper brazed joints in accordance with BS EN 737-1 and BS EN 13348				
01	OD 42mm	No.	10		
02	OD 35mm	No.	10		
03	OD 28mm	No.	10		
04	OD 22mm	No.	20		
05	OD 15mm	No.	90		
06	OD 12mm	No.	20		
	Total carried forward				

JST HOSPITAL ICU UNIT (WARD 13)					
SECTION 2.2 - PART 3 (MEDICAL GAS INSTALLATION)					
BILL 1 -ICU -WARD 13					
Item	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought forward				
2.5	Pipework fittings – reducers				
	Medical grade copper brazed joints in accordance with BS EN 737-1 and BS EN 13348				
	Medical grade copper brazed joints in accordance with BS EN 737-1 and BS EN 13348				
01	42x35mm	No.	5		
02	35x28mm	No.	5		
03	28x22mm	No.	5		
04	22x15mm	No.	15		
05	15x12mm	No.	10		
06	12x10mm	No.	35		
3.0	Bedhead Units, Pendants & Panels				
3.1	ICU Ward				
	1 x Fixed Pendant Unit complete with 1 x pillar assembly - 600mm (service column & 4 x grabtube				
	complete with 8 x 16A SW/SO D/pole (blue - UPS Supply); 4 x 16A SW/SO D/Pole (Red) (Essential Supply); 1 x 50W reading light (relay switched); 1 x 5W LED night light (switch at door); 8 off medical gas installed; 1 x medical rail @ 600mm; 1 x nurse call (only provision); 1 x emergency call (only provision); 1 x RJ45 Data point/monitor point installed	No.	15		
3.2	Cath Lab				
	1 x Fixed Pendant Unit complete with 1 x pillar assembly - 600mm (service column & 4 x grabtube				
	complete with 8 x 16A SW/SO D/pole (blue - UPS Supply); 4 x 16A SW/SO D/Pole (Red) (Essential Supply); 1 x 50W reading light (relay switched); 1 x 5W LED night light (switch at door); 8 off medical gas installed; 1 x medical rail @ 600mm; 1 x nurse call (only provision); 1 x emergency call (only provision); 1 x RJ45 Data point/monitor point installed	No.	1		
	Total carried forward				

JST HOSPITAL ICU UNIT (WARD 13)					
SECTION 2.2 - PART 3 (MEDICAL GAS INSTALLATION)					
BILL 1 -ICU -WARD 13					
Item	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.7.6	Total Brought forward Threater Panel Panel as follows recessed HU12 RS stainless steel theatre panel (LxW = 2mx1,6mx2m) complete with first fix plate; 1 x pillar assembly - 600mm (servicecolumn & 4 grabtubes); 6 x 16A SW/SO D/Pole (Blue) (Ups Supply); 1 x RJ45 - data point/monitor point installed; 1 x emergency call provision; 4 x 16A D/Pole switches; 6 x 15A socket switched via D/Pole MCB; 1 x analogue clock; 1 x buzzer + mute; 1 x CD/Radio player with USB port; 1 x digital elapsed timer with remote (small); 3 isoloc indicator lights - (green/red/amber); 1 x power supply 12Vregulated; 1 x two 80W speakers; 1 x Xray viewing screen; 1 x monitor provision only plus mounting brackets (42"/32"/20"); 1 x gas alarm panel only; 1 x air conditioning control - provision only; 1 x 3A three pin euro socket switched via 15A D/pole MCB; 3 patient earth (banana plug); 13 x engraving/labels (per item); Medical Gases - 2 off oxygen; 2 off vaccum; 1 off LPA; 2 off HPA ; 1 off Nitrous Oxide; 1 off AGS; 1 x emergency call (provision only) and 1 x theatre panel	No.	1		
3.3	Isolation rooms 1 x Fixed Pendant Unit complete with 1 x pillar asseby - 600mm (service column & 4 x grabtube complete with 4 x 16A SW/SO D/pole (blue - UPS Supply); 1 x 50W reading light (relay switched); 1 x 5W LED night light (switch at door); 7 off medical gas installed; 1 x medical rail @ 600mm; 1 x nurse call (only provision); 1 x emergency call (only provision); 1 x RJ45 Data point/monitor point installed	No.	1		
4.0	Valves and valve boxes				
4.1	Valve Box				
01	Flush-mounted 3 gas valve type complete with valves	No.	2		
02	Flush-mounted 4gas valve type complete with valves	No.	1		
03	Flush-mounted 1 gas valve type complete with valves	No.	0		Rate only
4.2	Isolation valves proprietary for the gas line pressure at entrance to each building, for:				
01	Oxygen on pipe size 28mm NB(set)	No.	3		
02	Vacuum on pipe size 42mm NB (set)	No.	3		
03	Medical air (400 kPa) on pipe size 28mm NB(set)	No.	3		
04	Nitrous oxide (400 kPa) on pipe size 15mm NB(set)	No.	3		
	Total carried forward				

JST HOSPITAL ICU UNIT (WARD 13)					
SECTION 2.2 - PART 3 (MEDICAL GAS INSTALLATION)					
BILL 1 -ICU -WARD 13					
Item	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought forward				
5.0	Terminal units				
	Medical gas specific terminal units to Eminence, labelled, including guide end piece valve filter, fixed on to the provided bed head trunking and final termination of pipes to the terminal units				
01	Oxygen	No.	0		Rate only
02	Vacuum	No.	0		Rate only
03	Medical air	No.	0		Rate only
6.0	Alarms				
01	Slave alarm panel installed complete with line pressure sensors and & vacuum stats.	No.	1		
02	Alarm cabling	m	20		
03	20mm Diameter Galvanised steel conduit for control wiring.	m	20		
6.0	PIPEWORK				
	Supply and install all interconnecting pipework including requisite valves to the plant room main supply pipes				
	Oxygen	Sum	1		
	Vacuum	Sum	1		
	Medical air	Sum	1		
	N2O	Sum	1		
10.0	Colour coding of Installation	Sum	1		
11.0	TEST & COMMISSION				
11.1	Pressure testing				
01	Pressure Testing of the entire pipework to the satisfaction of the Consulting Engineer.	Item	1		
11.2	System Validation				
01	Validation of installation as necessary	item	2		
02	Commission the entire System to the satisfaction of the Consulting Engineer.	Item	1		
Total to Summary page					

NORTH WEST DEPARTMENT OF HEALTH JST HOSPITAL ICU UNIT (WARD 13) SECTION 1M - ICU (MEDICAL GASES INSTALLATIONS)		
SUMMARY		
Bill No.	Description	Amount
1.0	Preliminary and General	
2.0	Medical gas installation	
CARRIED FORWARD TO MAIN CONTRACT SUMMARY		R -

NORTH WEST DEPARTMENT OF HEALTH JST HOSPITAL ICU UNIT (WARD 13) SECTION 1M - ICU (MECHANICAL INSTALLATIONS) SCHEDULE 1 - ADDITIONAL P&G				
Item	Description	Unit	Amount	
1	Additional P & G in accordance with the Standard and Detailed specification			
	Site Establishment and site security and storage			
01	Fixed	Item		
02	Value related	Item		
03	Time related	Item		
2	Preparation of O & M manuals and re-commissioning reports	Sum		
3	Preparation of shop drawings samples etc.	Sum		
4	Provision of As Built Drawings As specified	Sum		
7	Location and protection of existing services			
	Water and sewer pipes	Psum	R	15 000.00
	Electrical and other cables	Psum	R	15 000.00
8	Engineering, Submissions & Approvals	Sum		
9	Additional tests required by the engineer	PC Sum	R	10 000.00
10	Occupational Health and Safety			
PSA	Compliance with OHS Act and Construction Regulation 153	Sum		
11	Decommissioning of Existing equipments and making the area safe.	PC Sum	R	60 000.00
12	Comissioning of the following in the presence of Engineer, client and user client			
01	HVAC installation	Sum		
02	Plumbing , Drainage & Hotwater Installation	Sum		
03	Fire Installation	Sum		
04	Medical gas installation	Sum		
13	Training of user client			
01	Training Of end users	Item		
18	Rigging and Crainage			
	Provision of crain equipment for rigging of equipment to roof plant room as well as all the necessary rigging of equipment on the project.	Sum		
Total carried to Summary Page				

NORTH WEST DEPARTMENT OF HEALTH					
SECTION 1.2 - PART 1 (HVAC)					
BILL 1 - ICU (WARD 13)					
Item	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.0	EXTRACTION SYSTEM				
	Supply, installation and setting of the following.				
1.1	Extraction Fan Unit				
01	EFU1 (through shaft 1), centrifugal exhaust dual fans for 5500L/s @ 300 Pa static pressure, installed complete with 2 off 1.5D Melanex lined attenuator, 3m riser, vibration isolation, square to round transformation, supports, bird screens, weather skirts, electric controls, 3 stage filters and safeties and all appurtenances related.	No	1		
02	EFU2 (through shaft 2), centrifugal exhaust dual fans for 1500L/s @ 300 Pa static pressure, installed complete with 2 off 1.5D Melanex lined attenuator, 3m riser, vibration isolation, square to round transformation, supports, bird screens, weather skirts, electric controls, 3 stage filters and safeties and all appurtenances related.	No	1		
1.2	EFU 1 System Ducting(Beds 5-14)				
1.2.1	Un-insulated ductwork installed complete with fixing arrangements and hangers.				
02	500X450	m	12		
01	400X400	m	15		
	300X300	m	18		
03	400 Dia	m	3		
04	350 Dia	m	5		
05	300dia	m	70		
06	200dia	m	4		
07	200 Dia Flexible duct	m	5		
08	300 Dia Flexible duct	m	5		
1.2.2	Un- insulated ductwork . Fittings				
	Transformations				
05	500X450 to 400X400	No	2		
06	500x400 to 400 Dia	No	2		
01	500x400 to 300 Dia	No	2		
02	500x400 to 350 Dia	No	4		
03	500x400 to 300x300	No	3		
04	500x400 to 300 Dia	No	3		
1.2.3	Bends 90°				
03	500X450	No	5		
04	400X400	No	5		
05	400 Dia	No	15		
	350 Dia	No	15		
	300dia	No	15		
	200dia				
1.2.5	Shoes				
01	500x400	No	0		Rate only
1.2.6	Spigots				
01	200dia	No	2		
02	300dia	No	18		
05	100dia	No	0		Rate only
1.2.7	Stop Ends				
02	300x300	No.	2		
03	400x400	No.	2		
	Total carried forward				

NORTH WEST DEPARTMENT OF HEALTH SECTION 1.2 - PART 1 (HVAC) BILL 1 - ICU (WARD 13)					
Item	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought forward				
05	300 Dia	No	1		
06	400dia	No.	5		
1.2.8	Velocity Control Dampers				
02	350x350	No	1		
03	350x300	No	1		
04	200 Dia	No.	1		
05	300Dia	No	1		
1.2.9	Curved blade extraction grille complete with OBD				
01	400x350	No	7		
02	600x600	No	8		
1.2.10	White polypropylene disc valve complete with OBD and flexible ducting.				
04	Ø 200	No	10		
1.2.11	Fire Dampers with fusible links				
01	300x300	No	1		
02	300 Dia	No	1		
	Cath Lab				
	Supply and install Packaged unit as follows. Supply, deliver to site, and installation of following fully automatically controlled Package unit suitable for outdoor use complete with 3 stage (primary-G3, secondary-F8 and HEPA-H13) filters,	No	1		
	Cooling capacity;22Kw				
	Air Supply 3 stage				
	Filteration: 2 stage, Primary, secondary & Hepa				
2.2	SUPPLY AIR SYSTEM				
	Supply and installation of Externally insulated ductwork installed complete with fixing arrangements and hangers complete with all necessary appurtenances As Follows:				
2.2.1	PAU 01 System Ducting				
03	700x400	m	5		
04	600x400	m	4		
04	500x400	m	5		
05	Ø 300	m	12		
2.2.1.2	Insulated Flexible ducting				
01	Ø 300	m	5		
2.2.1.3	Transformations				
01	700x400 to 600x400	No	2		
02	600x400 to 500x400	No	4		
03	800x550 to 350x350	No	4		
2.2.1.4	Bends 90°				
03	700x400	No	2		
05	Ø 300	No	2		
2.2.1.5	Shoes				
03	500x400	No	0		Rate only
05	Ø 300	No	0		Rate only
	Total carried forward				

NORTH WEST DEPARTMENT OF HEALTH SECTION 1.2 - PART 1 (HVAC) BILL 1 - ICU (WARD 13)					
Item	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought forward				
2.2.1.6 01	Spigots Ø 300	No	5		
	Externally insulated ductwork . Fittings				
2.2.1.7 01	Stop Ends 500x400	No	1		
2.2.1.8 03	Velocity Control Dampers 300 Dia	No	5		
2.2.1.9 01	Fire Dampers with fusible links 700x400	No	1		
2.2.1.10 01	White epoxy powder coated Supply Air 600x600 constant volume diffuser complete with flexible, plenum box, butterfly damper and mounted controllers and all appurtenances related. With neck size Ø 300	No	5		
6	Air Handling Units (AHU) Supply, deliver to site, and installation of following fully automatically controlled air handling unit suitable for outdoor use complete with 3 stage (primary-G3, secondary-F8 and HEPA-H13) filters,Hepa Partitions are sealed to the internal side of the exterior wall, roof and floor panels to ensure zero air by-pass. 50 mm thickness of insulation •The AHU must be the heat recovery type with a Heat recovery wheel, it must come complete with pressure switches for filters and fans, fan motors and inverters. •Electrical control panel complete with Direct Digital Control (DDC) controller › Internal fitting of all sensors and pressure measurement devices › Built-in temperature, humidity and CO2 sensors › Internal electrical wiring for all components. Mixing box with damper and factory-mounted actuators. Supports and fixings, Magnehelic gauges across filter bank, 1.5D Eurolon infill, Return air fans, vibration isolation, supports, , variable speed drive, Plenum lights in each chamber with light switch per light, Damper motors on mixing box dampers and bypass dampers, Intake Weather louvres on plenum boxes or fresh air units, pressure gauges and thermometers and all appurtenances necessary for the safe and efficient operation of the system. Installed AHU1 (1st Floor beds 6 to15) Supply Air Quantity : 5825L/sec Percentage Fresh Air : 100% Cooling Capacity : 70 kW Type : horizontal				
6.1 01		No	1		
	Total carried forward				

NORTH WEST DEPARTMENT OF HEALTH SECTION 1.2 - PART 1 (HVAC) BILL 1 - ICU (WARD 13)					
Item	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Total Brought forward				
2.2	SUPPLY AIR SYSTEM				
	Supply and installation of Externally insulated ductwork installed complete with fixing arrangements and hangers complete with all necessary appurtenances As Follows:				
2.2.1	AHU 01 Ducting				
03	900x400	m	15		
04	700x400	m	6		
04	600x400	m	5		
04	400x400	m	4		
05	Ø 300	m	30		
2.2.1.2	Insulated Flexible ducting				
01	Ø 300	m	16		
2.2.1.3	Transformations				
01	900x400 to 700x400	No	2		
02	700x400 to 600x400	No	2		
03	600x400 to 500x400	No	4		
04	800x550 to 350x350	No	4		
2.2.1.4	Bends 90°				
03	900x400	No	2		
05	Ø 300	No	2		
2.2.1.5	Shoes				
03	500x400	No	0		Rate only
05	Ø 300	No	0		Rate only
2.2.1.6	Spigots				
01	Ø 300	No	16		
	Externally insulated ductwork . Fittings				
2.2.1.7	Stop Ends				
01	400x400	No	3		
2.2.1.8	Velocity Control Dampers				
03	300 Dia	No	16		
2.2.1.9	Fire Dampers with fusible links				
01	900x400	No	2		
2.2.1.10	White epoxy powder coated Supply Air 600x600 constant volume diffuser complete with flexible, plenum box, butterfly damper and mounted controllers and all appurtenances related. With neck size				
01	Ø 300	No	16		
	Total carried forward				

NORTH WEST DEPARTMENT OF HEALTH					
SECTION 1.2 - PART 1 (HVAC)					
BILL 1 - ICU (WARD 13)					
Item	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3.0	Total Brought forward Fan Coil Units 4 Way Blow Cassette Type Fan Coil Units (4 pipe system) installed complete with, low sound level centrifugal condensate pump (max 650mm pump head), 2 or 3 way valve kits provided with stop/balancing valves, hot and cold water pipes with terminating valves and unions. These units should be installed on galvanised steel cantilever brackets and on vibration padding. The LCD wired remote controller should be in a suitable position to be specified by the engineer. An auxillary drain pan should be included in this installation and condensate pipes are to be routed to the nearest drain, sloped and fitted with a 'p' trap.				
01	3.5Kw	No	5		
02	5,2Kw	No	1		
03	7,2Kw	No	2		
4	Supply and installation of following: Complete with fittings and ancillaries for a complete installation				
4.1	Copper piping				
01	1 5/8"	m	40		
02	5/8"	m	25		
03	1/2"	m	30		
04	3/8"	m	30		
05	1/4"	m	50		
4.2	Refnet Joints	No	8		
4.3	BS boxes				
01	4 port	No	2		
02	2 port	No	1		
03	1 Port	No	1		
5	Split Air condition Unit Midwall Type split Units installed complete with, low sound level centrifugal condensate pump (max 650mm pump head), The units should be installed on galvanised steel cantilever brackets and on vibration padding. The LCD wired remote controller should be in a suitable position as per drawing. Condensate pipes are to be routed to the nearest drain, sloped and fitted with a 'p' trap.				
5					
01	18000Btu	No	1		
5	Supply and installation of following: Complete with fittings and ancillaries for a complete installation				
	Copper piping				
01	5/8"	m	5		
02	1/2"	m	5		
03	3/8"	m	5		
5.3	Supply and installation of following complete with couplings and accessories for a complete installation:				
	PVC piping for drainage				
01	50mm	m	15		
02	22mm	m	20		
	Total carried forward				

NORTH WEST DEPARTMENT OF HEALTH SECTION 1.2 - PART 1 (HVAC) BILL 1 - ICU (WARD 13)					
Item	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
8	Total Brought forward VRV CONDENSING UNIT Supply, Deliver to site Installation and commission of heat recovery VRV Outdoor Condensing unit of capacity as indicated below complete with plinth, vibration isolation pads and all necessary appurtenances for a complete installation.				
01	80Kw	No	1		
5	Split Air condition Unit Midwall Type split Units installed complete with, low sound level centrifugal condensate pump (max 650mm pump head), The units should be installed on galvanised steel cantilever brackets and on vibration padding. The LCD wired remote controller should be in a suitable position as per drawing. Condensate pipes are to be routed to the nearest drain, sloped and fitted with a 'p' trap.				
5.1	18000Btu	No	1		
5.2	Supply and installation of following: Complete with fittings and ancillaries for a complete installation Copper piping				
01	5/8"	m	3		
02	1/2"	m	3		
03	3/8"	m	3		
9.0	Electrical works for above installation				
01	Electrical Material and labour work to provide power from units to isolator point which will be supplied by Electrical contractor	Sum	1		
02	All control cabling associated with the above units,	sum	1		
03	Wired remote controller Wall mounted control unit in a suitable position to be specified by the engineer	No	7		
7	Testing and balancing of system HVAC installation	Item	1		
Total carried to Summary Page					

JST HOSPITAL ICU UNIT (WARD 13)					
MECHANICAL INSTALLATION					
Bill No.1 - Plumbing ICU					
Hot and Cold water reticulation					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.0	Supply, Deliver to site install the following steam heated hotwater calorifier				
1.1	Capacity Range: 2500L	ITEM	1		
	Connect to the existing steam and condensate line including re-lagging, gladding and isolation valves				
1.2	Schedule 40 steam pipe line including lagging and gladding				
01	40mm dia	m	10		
02	32mm dia	m	5		
03	25mm dia	m	5		
04	15mm dia	m	10		
1.3	Supply and installation of lagging and cladding of the steam piping.				
01	40mm dia	m	10		
02	32mm dia	m	5		
03	25mm dia	m	5		
04	15mm dia	m	10		
1.4	Supply and install steam PRV set arrangement consisting of the following:Pressure reducing valve, 2x Isolating Valves, 1x Steam separator, 2x Pressure gauges, 1x strainer, 1x Steam trap arrangement and 1x safety valve	Item	1		
1.5	Supply and installation of steam trap arrangement consisting of steam trap, strainers, non-return valves, sight glasses, steam & condensate isolating valves	Item	3		
2.0	Hot water circulating Pumps Supply, deliver, off-load and store on site and install hot water circulation pumps as specified Flow: 4.32 m ³ /h ; Head : 5m	No	2		
2.1	CONTROL PANEL Supply deliver, off-load , store on sit and install control panel including accessories as specified	No	1		
2.2	ELECTRICAL WORK Supply and install electrical work including power and control cabling and connections as specified for above installation	Item	1		
3.0	HOT WATER PIPEWORK Supply, deliver, off-load, store on site copper pipes class 2 SANS 460 including all fittings and other accessories for the plumbing work as specified and shown on the drawings sizes as follows including hangers, supports, anchors and fittings; Class 0 copper pipes : 15mm - 28mm Pipes chased into brick walls where possible and all other pipes fixed to walls in ducts with M10 rubber lined hanger brackets including M10 threaded rod not exceeding 500mm long and M10 drop-in				
01	Ø65mm	m	55		
02	Ø54mm	m	55		
03	Ø42mm	m	20		
04	Ø35mm	m	20		
05	Ø28mm	m	10		
06	Ø22mm	m	80		
07	Ø15mm	m	140		
Total carried forward					

JST HOSPITAL ICU UNIT (WARD 13)					
MECHANICAL INSTALLATION					
Bill No.1 - Plumbing ICU					
Hot and Cold water reticulation					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2.2	Total Brought forward INSULATION AND CLADDING Supply, deliver, off-load, store on site and install close cell polythene insulation complete with galvanized metal cladding for hot water pipes as specified and shown on the drawings sizes as follows:				
01	Ø65mm (50mm thick)	m	55		
02	Ø54mm (50mm thick)	m	55		
03	Ø42mm (25mm thick)	m	20		
04	Ø35mm (20mm thick)	m	20		
05	Ø28mm (15mm thick)	m	10		
06	Ø22mm (15mm thick)	m	20		
07	Ø15mm (10mm thick)	m	5		
2.3	Extra over class 0 copper pipes for capillary fittings				
01	15mm Fittings	No	85		
02	22mm Fittings	No	55		
03	28mm Fittings	No	20		
04	Ø35mm	No	15		
05	Ø42mm	No	15		
06	Ø54mm	No	20		
07	Ø65mm	No	20		
2.4	ISOLATION VALVES Supply, delivery and installation of isolation valves on hot water pipes including all fitting and accessories				
01	Ø65mm	no.	5.0		
02	Ø54mm	no.	5.0		
03	Ø42mm	no.	5		
04	Ø35mm	no.	5		
05	Ø28mm	no.	5		
06	Ø22mm	no.	15		
07	Ø15mm	no.	35		
2.5	PRESSURE REDUCING VALVES Supply deliver, off-load , store on sit and install pressure reducing valves on the cold water supply pipes to the hot water storage cylinders including all fittings and accessories	Item	1		
2.6	EXPANSION RELIEF VALVES Supply deliver, off-load , store on sit and install expansion relief valves on the hot water storage cylinders including all fittings and accessories	Item	1		
Total carried forward					

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MECHANICAL INSTALLATION					
Bill No.3 - Plumbing					
Drainage Installation					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
3.5	PIPE PROTECTION				
	Total Brought down				
	Thermal cross-linked polyethylene foam pipe insulation minimum 20mm thick				
01	Insulation to 15mm pipe and couplings	m	150		
02	Extra for wrapping around 15mm fittings	m	150		
03	Insulation to 22mm pipe and couplings	m	55		
04	Extra for wrapping around 22mm fittings	m	55		
05	Insulation to 28mm pipe and couplings	m	10		
06	Extra for wrapping around 28mm fittings	m	10		
07	Extra for wrapping around 15mm valve	m	150		
08	Extra for wrapping around 28mm valve	m	10		
4.0	DRAINAGE PLUMBING				
4.1	uPVC pipes				
01	50mm pipes	m	350		
02	110mm pipes	m	185		
4.2	Extra over uPVC pipes for fittings				
01	50mm Bend	No	85		
02	50mm Access bend	No	65		
03	50mm access junction	No	20		
04	110mm Pan connector	No	55		
05	110mm Bend	No	65		
06	110mm Access bend	No	45		
07	110mm Access junction	No	35		
08	50mm Vent valve	No	10		
09	110mm Vent valve	No	10		
4.3	WASTE UNIONS, ETC.				
01	Sink waste code to Franke kitchen system refer to sink code	No	25		
02	303 Basin waste, without chain and stay, slotted and supplied with flanged , washer, plug with stirrup, without chain and stay 62mm diameter flange, 80mm long shrank G1 1/2" MI inlet, chrome plated	No	35		
03	323CP Shower waste, rough brass and chrome plated, with 75mm diameter shower grating and RB body G1 1/2" MI inlet, RB/CP shower "P" trap, rough brass, with shallow seal and chrome plated grating G1 1/2" FI outlet, RB	No	12		
4.4	TRAPS, ETC.				
01	38 x 38mm bottle-trap	No	24		
02	50mm Shower "P" trap	No	5		
4.5	Testing				
01	Pressure testing drainage pipe system	Item	1		
Total carried to Summary Page					

JST HOSPITAL ICU UNIT (WARD 13)					
SECTION 1M - ICU (MECHANICAL INSTALLATIONS)					
Bill No: Fire Protection					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Supply, installation and setting of the following.				
1	FIRE PROTECTION				
1.1	<u>FIRE HOSE REELS</u>				
	Supply and install 30m fire hose reels complete as specified	No.	3		
1.2	PIPEWORK				
	Supply and install medium grade, seamless galvanized mild steel pipework c/w pipe supports and accessories as specified and shown on the drawings				
01	100mm dia	m	0		Rate only
02	80mm dia	m	0		Rate only
03	65mm dia	m	50		
04	50mm dia	m	5		
05	32mm dia	m	30		
06	25mm dia	m	0		Rate only
1.3	Extra over pipework as follows				
1.3.1	Bends				
01	65mm. Dia	No	10		
02	32mm. Dia	No	15		
03	25mm. Dia	No	0		Rate only
1.3.2	Tees and reducing tees				
01	100 x 80 x 100mm	No	0		Rate only
02	80 x 65 x 80mm	No	0		Rate only
03	65 x 65 x 65mm	No	4		
04	50 x 32 x 50mm	No	0		Rate only
05	50 x 25 x 50mm	No	0		Rate only
06	32 x 32 x 32mm	No	6		
07	32 x 25 x 32mm	No	0		Rate only
08	25 x 25 x 25mm	No	0		Rate only
1.4	PORTABLE FIRE EXTINGUISHERS				
	Supply and install fire extinguishers complete as specified				
01	4.5 kg DCP Dry Powder	No	6		
02	4.5 kg CO2	No	2		
03	9 kg DCP Dry Powder	No	0		Rate only
04	9 kg CO2	No	1		
	Total carried forward				

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NORTH WEST DEPARTMENT OF HEALTH					
BILL NO 7: FIRE AND SMOKE DETECTION					
CONTRACT: SECTION 1M - ICU (MECHANICAL INSTALLATIONS)					
AREA: ALL LEVELS					
ITEM No	Description	Unit	Qty	Rate	Total
	Fire and Smoke Detection				
1.0	Supply, installation, test and commissioning of the complete fire detection & Gas suppression system equipment as shown on the drawings. All equipment to comply with the relevant SABS and EN Standards. The system shall be complete with an Evacuation system. Equipment to be <u>Ziton</u> or similar and equal approved.				
01	Fire Detection 4 Loop Addressable Fire Control Panel (AFCP). • Up to 127 devices per loop. • All loop devices must incorporate switch settings enabling them to be assigned a unique address, the location of which is pinpointed & polled by the panel every two seconds. • Monitoring: Open and short circuit fault, earth leakage, sensor removed & wrong device type. • Wiring 2 core screened • User Interface • all sw and licences • Expandable system with distributed intelligence. • Programmable zones >500, event log • 4 Fire output changeover relays and 1 Fault output relay (NC), open collector outputs for Fire, Fault and pre-alarm remote indication. • fully monitored conventional sounder outputs on main panel & each sub panel • Switched outputs (standard) • printer 24 character (built into front door) • Integral rechargeable sealed lead acid battery and charger, with 24 hour back up in the event of supply mains failure • Software Firmware & site configuration programming - Flash memory • Communications ports Z-Port 1 Planner, RS 232 Z-Port 2 Network, RS 485 / fibre optic • Selectable features Common sounders, Coincidence alarm, RMC fire, RMC fault, Zone walk test • Control output, Output delays, Alarm counter, Sounder silence delay, Alarm verification • Standby batteries 2 x 12 volt sealed lead acid - up to 28 Ah accommodated inside panel enclosure.	No.	1		
02	Mimic Panel with built-in short circuit isolation will be sited at the indicated locations. It will provide system repeat facilities to repeat all of the liquid crystal display messages as well as the common indications. It will have essential alarm controls, menu facilities and an optional printer allowing it to take the role of the main system indicator for the day to day running of the system. The Annunciator Panel will be loop driven and provided with an inbuilt isolator. It will be complete with built-in battery, charger, 220V AC supply and will be located as shown in the floor layout drawings	No.	2		
03	TCP/IP communication interface. • Supply - 24V DC / 28 mA • Configuration – USB mini • Communication connection type – RJ45 • Input - Restart Switch • Windows 10	No.	1		
04	Addressable Triple Input and Triple Output Module. A loop powered device that permit the interfacing of third party equipment with the Fire Alarm Control panel using normally open dry contact connections. Key Features: Loop Powered, Status LEDs for each I/O and O/P, short-circuit loop isolator.	No.	2		
05	12VDC 8 Ah Battery	No.	8		
06	Addressable Optical Smoke Beam Detector	No.	35		
07	Addressable Heat Detector	No.	2		
	Total carried forward				

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DEPARTMENT OF HEALTH NORTH WEST PROVINCE
CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL, RUSTENBURG

PART C3

SCOPE OF WORK


health

Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

TENDER No. NWDOH 17/2026

CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL, RUSTENBURG

Part C3.1 Scope of Work

1 DESCRIPTION OF THE WORKS

1.1 Employer's objectives

Upgrade existing facilities at JST Hospital

1.2 Overview of the works

Repurposing of an existing ward.

1.3 Extent of the works

Construction of a new maternity ward, a guard house, refurbishment of existing wards and external services including upgrading of the road network and demolition of existing redundant buildings

1.4 Location of the works

Existing JST Hospital

GPS co-ordinates: -25.6777652, 27.2452006

1.5 Temporary works

No specific temporary works required

2 ENGINEERING

2.1 Design services

Works designed by, per design stage:

Concept, feasibility and overall process	Employer
Basic engineering and detail layouts to tender stage	Employer
Final design to approval for construction stage	Employer
Temporary works	Contractor
Preparation of as-built drawings	Contractor

2.2 Employer's design

The Employer is responsible for the design of the permanent works unless otherwise stated. The Contractor is responsible for the design of the temporary works and their compatibility with the permanent works.

2.3 Design brief

The Contractor shall supply all details necessary to assist the Architect in the compilation of the as-built drawings.

As-built drawings to indicate the following information:

- Construction breaks and the extent of individual concrete pours
- Routing of and junctions in all services
- Salient features for the operation and maintenance of services

and to be submitted to the following employer's required format and manner:

- A paper copy complete with approval signatures of the agent/agents bound into the operating instruction manuals
- Tiff format scanned versions of the approved paper copy
- Electronic version of approved drawings on CD in either Caddie.drw or Autocad.dwg formats

2.4 Drawings

The following drawings are applicable to the contract:

NOTE: These drawings are only for indication of the extent of the works. Full set of drawings are available on request.

Drawing number

ARCHITECTURAL DRAWINGS

See the attached drawings.

2.5 Design procedures

Not Applicable

3 PROCUREMENT

3.1 Preferential procurement deliverables

Where the contractor claims a preference in the Preferencing Schedule for subcontracting work to CIDB registered contractors having specified CIDB contractor grading designations, the contractor shall deliver deliverable C1, Provide business opportunities for targeted enterprise, in accordance with the requirements of the CIDB Specification for Social and Economic Deliverables in Construction Works Contracts (SSED) (see www.cidb.org.za) and the following associated specification data associated with SANS 1914-1 which shall have precedence in the interpretation of any ambiguity or inconsistency:

2.7	The employer's representative is the Project Manager identified in the Contract Data
2.17	A targeted enterprise is a CIDB registered contractor who has a contractor grading designation of 1, 2, 3 or 4.
	The targeting strategy is A.
	The contract participation goal is as tendered in the Preferencing Schedule for which a preference was granted.
	The contract participation goal may only be achieved by subcontracting work to one or more targeted enterprises to perform commercially useful functions in the performance of the contract.
	The targeted enterprise declaration and letters of undertaking are to be submitted within 3 months of the commencement of the contract.

The Employer reserves the right to subcontract up to 30% of the works where deemed necessary.

3.2 Provide employment and skills development opportunities to targeted labour

The contractor shall deliver Deliverable B1, provide employment and skills development opportunities to targeted labour, in accordance with the requirements of the CIDB Specification for Social and Economic Deliverables in Construction Works Contracts (SSED) (see www.cidb.org.za) and the following associated specification data, which shall have precedence in the interpretation of any ambiguity or inconsistency:

4.3.1.1	The following activities are to be carried out by temporarily employed local workers: • earthworks activities which are to be performed by hand, namely: trench excavation, compaction of backfilling to trenches in areas not subject to traffic, clearing and grubbing, shaping, loading, haul, off-loading, spreading, compaction and grassing • stone pitching and rubble masonry • manufactured elements • Sundry alteration work
4.3.2.1.2	The rate per day is as per regulated going rate in the area.
The specification data associated with SANS 1921-5 is as follows:	
	Essential data 5.1 The depth of trenches which are to be excavated by hand is 0,60 m

	Variations Compaction to filling under roads and parkings will be enhanced by machine compaction and will be as per the required density and will be tested to achieve the specified results Additional clauses State additional requirements and identify other activities to be performed by hand, as required
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The Schedule which is to be attached to payment claims in terms of clause 4.3.2.2.8 of SSED is as shown in Figure 1.

3.3 Participation goals

The participation goals are to be divided into the following categories:

- 3.3.1** Subcontracting a minimum of 40% of the contract value to contractors having a CIDB contractor grading of 1 to 4.
- 3.3.2** Employ a minimum of 40% of the total labour requirement of the contract from the local community.
- 3.3.3** The total labour requirements of the contract should be in the following proportions:
- a minimum of 40% to women;
 - a minimum of 30% to youth who are between the ages of 18 and 35 years of age; and
 - a minimum of 5% to persons with disabilities

3.4 Social and economic deliverables

The contractor shall deliver the following deliverables as described in the CIDB Specification for Social and Economic Deliverables in Construction Works Contracts (SSED) and the following associated specification data:

- 1) Deliverable
- 2) Deliverable

The Specification Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and these standards.

Each item of Specification Data given below is cross-referenced to the clause in the standard to which it mainly applies.

The associated Specification Data is as follows:

Deliverable	
Clause	Specification data
Variations:	
1).....	
2).....	
Additional clauses:	
1).....	
Deliverable	
Clause	Specification data
Variations:	
1).....	
2).....	
Additional clauses:	
1).....	

4 CONSTRUCTION

4.1 Works specification

The works specifications that are applicable to the works are marked with a cross hereunder in the relevant box(es). The specifications are obtainable on request from the Employer.

Architectural, Structural and Civil

☒	General Specification for Material and Methods to be used for Building Contracts	GP/ASC
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Electrical

☒	Standard quality specifications for Intercom Systems	GP/E1/1
☒	Standard quality specifications for Public Address Systems	GP/E1/2
☒	Standard quality specifications for Silent Call Systems	GP/E1/3
☒	Standard quality specifications for Access Control Systems	GP/E2/1
☒	Standard quality specifications for Intruder Alarm Systems	GP/E2/2
☒	Standard quality specifications for Fire Detection Systems	GP/E2/3
☒	Standard quality specifications for Standby Generators	GP/E4/1
☒	Standard quality specifications for UPS Systems	GP/E4/2
☒	Standard quality specifications for Solar Power Systems	GP/E4/3
☒	Standard quality specifications for General Installations	GP/E5/1
☒	Standard quality specifications for Material and Equipment	GP/E5/2

Mechanical

☒	Standard quality specifications for Heating Installations	GP/M2
☐	Standard quality specifications for Steam and Condensate Reticulation	GP/M4
☒	Standard quality specifications for Medical Gas and Vacuum Systems	GP/M5
☒	Standard quality specifications for Air Conditioning Installations	GP/M6
☒	Standard quality specifications for Refrigeration Services	GP/M

4.1.1 Applicable SANS 2001 standards

The Contractor shall ensure that a master installation electrician is required to oversee and certify any electrical work to the works.

4.1.2 Applicable national and international standards

4.1.3 Particular / generic specifications

4.1.4 Certification by recognised bodies

4.1.5 Agrément certificates

4.2 Plant and materials

4.2.1 Plant and materials supplied by the employer

Not applicable

4.2.2 Materials, samples and shop drawings

Samples of materials

The contractor shall furnish samples of materials and specimens of finishes as may be called for by the supervisor for his approval

Workmanship samples

The supervisor may instruct the contractor to furnish samples of workmanship for his approval. Where the supervisor requires an assembly of various elements of the building or installation which is not incorporated in the works, the contractor shall arrange such an assembly at the employer's expense and the contract value shall be adjusted accordingly

Shop drawings

Only shop drawings and samples submitted for approval by the contractor shall be considered by the supervisor. The supervisor's approval of shop drawings or samples shall be limited to checking for general conformity with design and specification and shall not alter the design responsibilities in terms of the agreement. Where shop drawings are called for:

The contractor shall:

- Prepare, or ensure that a subcontractor, manufacturer, supplier or distributor prepares shop drawings at their own expense
- Submit sufficient copies of shop drawings to the supervisor for approval
- Allow the supervisor reasonable time to approve shop drawings
- Keep a record of all shop drawings submitted to the supervisor
- Ensure that shop drawings conform to the dimensions of built work
- Submit sufficient copies of the approved shop drawings to the supervisor for his use and for use on the works
- Ensure that work is not executed from shop drawings that have not been approved by the supervisor

The supervisor shall:

- Check the shop drawings submitted by the contractor timeously
- Advise the contractor where shop drawings are approved or are to be resubmitted

4.2.3 Instruction manuals and guarantees

The Contractor shall hand over to the project manager any operating and instruction manuals, data, product guarantees or instructions required by the project manager or provided by the manufacturers, suppliers or subcontractors

Operating and instruction manuals are to be submitted to the following employer's required format and manner:

- One master manual which contains all original certificates
- Three copies of the master manual

4.2.4 Training staff of the employer

The Contractor shall train all relevant staff of the employer in the safe operating procedures of the starting up, maintaining and shutting down of equipment supplied, all to the approval of the project manager.

4.3 Construction equipment

4.3.1 Requirements for equipment

4.3.2 Equipment provided by the employer

4.4 Existing services

4.4.1 Known services

Services are existing on site and an investigation will have to be carried out to locate them

4.4.2 Dimensional accuracy

The contractor shall within 4 weeks of the access date check the existing levels, lines, profiles and the like affecting the works and satisfy himself as to the dimensional accuracy of work previously executed. The contractor shall forthwith notify the supervisor

4.4.3 Treatment of existing services

4.4.4 Use of detection equipment for the location of underground services

4.4.5 Damage to services

The Contractor is responsible for fixing services damaged by him/her or his/her employees

4.4.6 Reinstatement of services and structures damaged during construction

4.5 Site establishment

4.5.1 Services and facilities provided by the employer

Water and Electricity

The Employer does not warrant that any water or electricity supply that may exist is adequate for the proper execution of the works. Where such supply is inadequate, the contractor shall provide an adequate supply at his own expense

Service - Water

The Contractor shall make and upon completion remove all the necessary temporary plumbing connections to the Employer's water supply at designated points and make use of water free of charge for construction purposes only.

Service - Electricity

The Contractor shall make and upon completion remove all the necessary temporary installation to the Employer's electrical supply at designated points and make use of electricity free of charge for construction purposes only.

Ablution facilities

The Employer shall permit the Contractor where applicable, usage of the existing ablution facilities. The Contractor shall maintain such facilities in a thoroughly clean and tidy condition and make good any damage thereto at his

4.5.2 Facilities provided by the contractor

The Contractor shall provide, maintain and remove on completion of the works an office for the exclusive use of the project manager and supervisor, minimum size 4 x 3 x 3m high internally, suitably insulated and ventilated, provided with electric lighting and fitted with boarded floor, table and eight chairs. The office shall be kept clean and fit for use at all times.

The Contractor shall provide, maintain and remove on completion of the works sheds for the proper storage of materials and for use by the contractor's workers.

4.5.3 Storage and laboratory facilities

4.5.4 Other facilities and services

Water and Electricity

The Employer does not warrant that any water or electricity supply that may exist is adequate for the proper execution of the works. Where such supply is inadequate, the contractor shall provide an adequate supply at his own expense

Service - Water

The Contractor is to provide and remove and make good upon completion all the necessary temporary plumbing connections and purchase water from the local authority for the works at his own cost.

The Contractor shall make and upon completion remove all the necessary temporary plumbing connections and water meters to the Employer's water supply at designated points and be responsible for costs associated with all water consumption.

Service - Electricity

The Contractor is to provide and remove and make good upon completion all the necessary temporary electrical connections and installations and purchase electricity from the local authority for the works at his own cost.

The Contractor shall make and upon completion remove all the necessary installation and meters to the Employer's electrical supply at designated points and be responsible for costs associated with all electricity consumption.

Ablution facilities

The Contractor is to provide, erect where directed, and remove on completion of the works ablution facilities and shall maintain such facilities in a thoroughly clean and tidy condition.

Telecommunication facilities

The Contractor shall provide the following telecommunication facilities and shall be entitled to recover usage costs from the users thereof:

- Telephone
- Facsimile
- E-mail

Security of the works

The Contractor shall take all appropriate measures for general security of the works.

Compliance with manufacturer's instructions

The Contractor shall take delivery of, handle, store, use, apply and fix all products in strict accordance with the manufacturer's instructions.

Protection/isolation of existing/sectionally occupied works

The Contractor shall provide all temporary measures to protect/isolate the existing and/or sections of the occupied works and remove such measures on completion.

4.5.5 Vehicles and equipment**4.5.6 Advertising rights****4.5.7 Notice boards**

The Contractor shall provide, erect where directed, maintain and remove on completion of the works a notice board, size 2,44m wide and 2,89m high, according to the standard drawing available from the employer, constructed of suitable boarding with flat smooth surface and with edging bead 19mm thick round outer edges and projecting 12mm from face of boarding and rounded on front edge. The board shall be securely fixed to hoarding, where hoarding is provided, or fixed to and including a suitable supporting structure of timber or tubular posts and braces.

The lettering is to be 50mm and 100mm "sans serif" in ivory white on the blue background and in 100mm "sans serif" in navy blue on the ivory white background. The inscription, in one language only, which must bear the approval of the Project Manager. No other names or notice boards may be erected without the written approval of the Project Manager.

Sketch drawings of all proposed names or notice boards must be submitted to the Project Manager for approval, before being prepared and erected on site. These sketch drawings must not only show the full content of the proposed names or notice boards, but also the position and locality in which the boards will be erected.

4.5.8 Notice before covering work

The contractor shall give adequate notice to the project manager whenever any work or material which is subject to inspection or remeasurement is to be covered or concealed in any way. In default of such a notice being received timeously by the project manager such work shall be exposed and later made good at the contractor's expense.

4.6 Site usage**4.7 Permits and way leaves****4.8 Inspection of adjoining properties**

Before commencing with the works the project manager and contractor shall arrange with the owners of adjacent buildings and properties and representatives of local authorities to inspect, among others, the buildings, structures, pavings, kerbs, channels and fences. The contractor shall record all conditions that the works could affect and copy the project manager accordingly. The contractor shall pay particular attention to cracks, defects and existing levels related to structures, pavings, kerbs, channels and fences, which later could be claimed to have been caused or disturbed by the works.

Where instructed by the project manager, levels and photographs shall be taken by the contractor and the cost thereof shall be for the employer's account. Certified copies shall be lodged with the project manager.

4.9 Water for construction purposes**4.10 Survey control and setting out of the works****5 MANAGEMENT****5.1 Management of the works**

- 5.1.1 Applicable SANS 1921 standards**
- 5.1.2 Particular / generic specifications**
- 5.1.3 Planning and programming**
- 5.1.4 Sequence of the works**
- 5.1.5 Software application for programming**
- 5.1.6 Methods and procedures**
- 5.1.7 Quality plans and control**
- 5.1.8 Environment**
- 5.1.9 Accommodation of traffic on public roads occupied by the contractor**
- 5.1.10 Other contractors on site**
- 5.1.11 Testing, completion, commissioning and correction of defects**

Testing of plant and equipment

The Contractor shall provide all necessary test apparatus including ladders, scaffolding, tools, lighting, etc as may be necessary for inspection, examining and testing materials, workmanship and performance of any plant or equipment intended for the works.

The Contractor shall carry out preliminary tests on plant and equipment. The results of these preliminary tests shall be forwarded to the Project Manager.

Where the Contractor fails to carry out preliminary tests the project manager may engage others to execute the tests. Any expense or loss incurred by the employer resulting from such engagement may be recovered in terms of the contract.

The Contractor shall execute maintenance for the following services from completion until the defects date. Maintenance shall include for the replacement or repair of all components and include for stationary, replacement parts, lubrication, cleaning material, etc.

Preventative Maintenance

The Contractor shall:

- Visit the installation at least once per month
- Make all necessary adjustments for the correct operation of the plant
- Maintain all lubrication levels
- Clean all relevant machinery/equipment and affected plant rooms
- Record all work performed in a logbook

Scheduled Services

The Contractor shall:

- Perform all scheduled services in accordance with the operating and maintenance manuals
- Complete all maintenance schedules

- Clean all relevant machinery/equipment and affected plant rooms
- Record all services in a logbook

Break Downs

The Contractor shall:

- Attend to all call outs with due diligence
- Make good any defects due to inferior material and/or workmanship
- Clean all relevant machinery/equipment and affected plant rooms
- Record all work performed in a logbook

Vandalism

The Contractor shall:

- Attend to all call outs with due diligence
- Prove vandalised breakages
- Submit a price for repairs to the agent
- Effect repairs on receipt of instruction
- Clean all relevant machinery/equipment and affected plant rooms
- Record all work performed in a logbook

Administration

The Contractor shall:

- Submit all relevant contact details to the maintenance site foreman including the start and end dates of the maintenance period
- Supply a triplicate record type logbook for the installation to be kept in the office of the foreman
- Report to the foreman when visiting the site
- Sign off all logbook records with the foreman or his duly appointed representative
- Not shut down any part of the plant or installation without the approval of the institution management
- Convene three quarterly site meetings for the purpose of performance tracking. This meeting is to be attended by the site foreman, the employer's maintenance inspector and the agent
- Complete a site meeting record in the logbook, which must be signed by the foreman and the agent
- Submit a monthly invoice with copies of the monthly site inspection record, any service records and all relevant schedules

5.1.12 Recording of weather

The Contractor shall erect an effective rainfall gauge on the site and record daily rainfall figures in a book. Such book shall be handed to the Project Manager at site meetings. Any rainfall which is considered to justify a compensation event is to be made known to the Project Manager within 1 week of occurrence.

5.1.13 Format of communications

5.1.14 Key personnel

5.1.15 Management meetings

Site Meetings and Procedures

The Project Manager and the Contractor shall hold meetings relating to the progress of the works at regular intervals and at other such times as may be necessary. The Contractor shall attend all site meetings and shall ensure that all persons under his jurisdiction are notified timeously of all site meetings should the Project Manager require their attendance at such meetings.

The indicative duties of the *Project Manager*, *Supervisor* and *Employer* are as indicated in Annexure A

The Contractor shall keep on site a set of minutes of all site meetings, daily records of resources (people and equipment employed), a site instruction book, a complete set of contract working drawings and a copy of the procurement document and make these available at all reasonable times to all persons concerned with the contract.

5.1.16 Forms for contract administration

5.1.17 Electronic payments

5.1.18 Daily records

5.1.19 Bonds and guarantees

5.1.20 Payment certificates

Material on site must be substantiated by invoices and only 80% of the value shall be certified

Before the employer's agent issues any certificate that includes any payment in respect of work done or goods supplied by any subcontractor, the contractor is to furnish reasonable proof of payments to subcontractors. These shall be made available at all reasonable times to all persons concerned with the contract. A monthly report on job creation should be submitted together with claims signed off by contractor, construction project manager and contractor liaison officer.

5.1.21 Permits

5.1.22 Proof of compliance with the law

5.1.23 Insurance provided by the employer

5.2 Health and safety

5.2.1 Health and safety requirements

The contractor shall be responsible for compliance with the requirements of the Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993, as a principal contractor and shall manage the health and safety aspects of the works in accordance with the requirements of Specification for Occupational Health and Safety in engineering and construction works contracts contained in (See Annexure).

The abovementioned standard makes several references to the Specification Data for data, provisions and variations that make these standards applicable to this contract. The Specification Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and these standards.

The contractor shall within one week of the starting date and prior to commencing with the works, submit to the Project Manager for approval a suitable and sufficiently documented health and safety plan, based on this specification and the risk assessment that is conducted. No access to the site will be allowed to the contractor without the documented health and safety plan being submitted to and approved by the Project Manager.

Each item of Specification Data given below is cross-referenced to the clause in the standard to which it mainly applies.

Should it be found that there some materials on site contain asbestos, the contractor shall employ services of an Occupational Hygienist and his own expense to conduct a report on how the asbestos is to be removed and site. Such report shall be given to the health and safety consultant for scrutiny and approval before commencement of the works

The associated Specification Data is as follows:

Clause	Specification data
4.4.6(c)	The following needs to be taken into account in the risk assessment:

5.2.2 Protection of the public

5.2.3 Barricades and lighting

5.2.4 Traffic control on roads

5.2.5 Measures against disease and epidemics

5.2.6 Aids awareness

The Contractor as an obligation of the contract is required to promote HIV/AIDS awareness in accordance with requirements of SANS 1921-6

5.3 Annexes

Health and Safety Specification

DEPARTMENT OF HEALTH NORTH WEST PROVINCE

CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL, RUSTENBURG

PART C4

SITE INFORMATION



TENDER No. NWDOH 17/2026

CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL, RUSTENBURG

Part C4.1 Site Information

See attached site plan

C4.1 THE SITE

The site is located at J S T Hospital, GPS co-ordinates: -25.6777652, 27.2452006

C4.2 WORK AREA

The existing J S T Hospital Premises

C4.3 ACCESS

The access is through the main gate.

DEPARTMENT OF HEALTH NORTH WEST PROVINCE

CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL, RUSTENBURG

ANNEXURES

DEPARTMENT OF HEALTH NORTH WEST PROVINCE

CONVERSION OF EXISTING WARD 13 TO ICU AT JST HOSPITAL, RUSTENBURG

TECHNICAL SPECIFICATIONS

**PROPOSED CONVERSION OF WARD 13 TO AN INTENSIVE CARE UNIT (ICU) AT THE JOB
SHIMANKANE TABANE HOSPITAL, RUSTENBURG**

PART B: ELECTRICAL INSTALLATION

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SECTION 1: DETAILED PROJECT SPECIFICATIONS - ELECTRICAL INSTALLATIONS

1 GENERAL INFORMATION FOR THE CONTRACTOR

1.1 TENDER PRICE

The unit price in the bill of quantities shall be net and VAT exclusive.

1.2 CONTRACT WORK

The entire electrical installation shall be carried out entirely by the Electrical Contractor's own staff and shall not in any way be sub-let.

1.3 SITE VISIT

Tenderers must visit the site to ascertain the local conditions, and to allow in their tenders for all equipment, material, labour, and other costs to complete the work as specified.

The Job Shimankane Tabane (JST) Hospital is in the town of Rustenburg.

Permission must be obtained from the client representative before any tenderer visits the site.

No claims for extras will be allowed if the Tenderer overlooks site conditions and does not allow for these circumstances in their tender.

The tenderer must thoroughly familiarise themselves with the extent of the work being done and clear up all uncertainties beforehand.

1.4 SUPPLY AUTHORITY

The supply authority is the Rustenburg Local Municipality, and the electrical contractor must submit a certificate of compliance for the electrical installations.

This must be signed by an Electrician who is a permit holder in accordance with the requirements of the Occupational Health and Safety Act, Act 85 of 1993 as revised to the owner of the building.

A copy of the certificate of compliance will be handed to the supply authority and a copy to the Engineer.

1.5 INFORMATION TO BE SUBMITTED WITH THE TENDER

THE TENDERER'S ATTENTION IS DRAWN TO THE FACT THAT IF THE SCHEDULES OF THIS SPECIFICATION ARE NOT COMPLETED, HIS TENDER CANNOT BE ADJUDICATED AND MAY BE DISQUALIFIED.

1.6 SEQUENCY OF WORK

The sequence in which the work is to be carried-out must be determined in collaboration with the authorised representative of the Principal Contractor.

1.7 SUPERVISION

The works must under all circumstances be supervised by a qualified and experienced representative of the Contractor who must be registered as an accredited person.

The representative must be authorised by the Contractor and must be able to receive instructions on behalf of the Contractor.

1.8 MAKING GOOD

The Electrical Contractor shall carry-out, in all instances, any work to be made good such as damage to, or disturbance of the buildings or installations, caused by himself or his employees during the execution of this contract, at his own cost.

1.9 ELECTRICAL EQUIPMENT

All the equipment and material must comply with the attached General Specification and must have the approval of the Engineer.

1.10 SCOPE OF THE SUB-CONTRACT

This contract covers the supply, delivery, installation, testing and commissioning of the entire electrical installation associated with the proposed conversion of Ward 13 to an Intensive Care Unit (ICU) at the Job Shimankane Tabane Hospital, Rustenburg, North-West Province.

The scope of electrical installation works shall consist of the following and as indicated on the drawings and schedules:

- Stripping of all the existing electrical installations – the Electrical Contractor shall isolate the electrical supply to the existing building and remove luminaires, socket outlets, light switches, bedhead trunking, wiring and other electrical equipment as per the building plans and as directed by the Electrical Engineer.
- The supply and installation of all 600/1000V PVC/PVC/SWA/PVC cables with earth wire from the main distribution panel to the new main distribution board as indicated on the schematic diagrams and cable schedule.
- The supply, installation, and commissioning of a new circuit breaker in the main distribution board.
- Supply, installation, and commissioning of a 20kVA UPS units for uninterrupted power supply to critical circuits.
- The excavation and back-filling of all cable trenches.
- The supply and installation of all the required electrical distribution boards fitted with the equipment as per the single line schematics.
- The supply and installation PVC sleeves, conduits, and manholes with draw-wire for data, telephone, fire detection, alarm systems, sound distribution, and access control, CCTV System etc., for systems to be installed by others.
- The supply and installation of cable trays, ladders and trunking for cable management and reticulation in the ceiling voids and open areas
- The supply and installation of outlet boxes for data, telephone, fire detection, alarm systems, access control, CCTV System etc. as indicated on the drawings

- The supply and installation of all indoor and outdoor luminaires
- Supply and installation of switched and un-switched socket outlets, isolators, power outlets etc. as indicated on the electrical drawings.
- Earthing of all buildings and steel structures in compliance with the Electrical Machinery Regulations Clause 13: Earthing of the Occupational Health and Safety Act, Act 85 of 1993.
- Commissioning and testing of the new installation, issuing a Certificate of Compliance and submission of the "As-Built Drawings".

1.11 ELECTRICAL CONNECTION

There is an existing power supply to the hospital and Rustenburg Local Municipality is the supply authority.

Cables shall be in accordance with the cable's specifications in the General Specifications.

1.12 ELECTRICITY SUPPLY SYSTEM

The supply system is as follows:

High Voltage 11,000V 3-phase 3-wire 50Hz AC Supply

Low Voltage (No Load) 400 / 231V, 3-phase, 4-wire 50Hz AC Supply

1.13 TECHNICAL REQUIREMENTS OF THE INSTALLATION

Over and above the equipment specified in this Specification, the Contractor shall supply and install equipment and auxiliary equipment which he may consider necessary for the proper operation of the complete Electrical Installation to fully comply with the requirements of this Specification.

1.14 QUALITY CONTROL

The Contractor shall maintain adequate and effective quality control standards while installing the specified equipment. The Engineer shall have the prerogative of inspecting the equipment in the Contractor's factory at any reasonable time to ensure accuracy of dimensions, completeness, configuration, quality of workmanship, correct identification, proper use of and type of materials, equipment used and finishes to equipment.

If required, the Contractor shall provide the Engineer with equipment and facilities to examine the equipment and if necessary, test this equipment to preclude malfunctions of the equipment.

1.15 RELIABILITY AND MAINTAINABILITY OF EQUIPMENT

The equipment used in the installation shall be new and of good commercial quality, having good reliability and shall be selected for ease of maintenance.

The requirements must be considered in the Contractor's approach to the interpretation of the Engineers design and may be subject to approval by the Engineer, following demonstration of the equipment's capability by the Contractor.

1.16 TESTS

Acceptance Test Plan

Each Tenderer shall submit a draft of a recommended acceptance test plan for the equipment two months before the final completion of the installation.

The Engineer shall review the acceptance test plan and submit to the Contractor any alternative test procedure and/or testing methods and plans. Such a revised test plan shall be incorporated by the Contractor in the final acceptance test plan scheduling the test procedure in the factory and on the site.

The test shall demonstrate that the equipment fully complies with all functional electrical and mechanical requirements of this Specification.

Copies of test results of tests conducted in the factory and on site capable of reproduction shall be submitted to the Engineer.

Test Equipment

Properly calibrated standard test equipment shall be utilized at the factory of the Contractor and on site to complete the tests to comply with the final acceptance test plan.

The Contractor shall supply all the necessary temporary cables and interconnecting wires in the factory for completing the test plan in the factory.

Testing on site shall be conducted after the installation has been completed.

1.17 TERMINOLOGY

The function of and positions to which equipment is connected shall be indicated on the boards.

All equipment shall be fitted with identification labels like the type specified in General Technical Specification.

Terminology shall be in "ENGLISH".

1.18 AS BUILT DRAWINGS

On completion the Electrical Contractor must provide the Engineer with one complete set of "As Built" drawings. These drawings must show the exact installation as finally completed.

The Contractor must use the same List of Symbols, etc., used by the Engineer. Only drawing work conforming to the latest drawing office practice will be accepted.

2 CABLES

2.1 GENERAL

The Contractor must supply and install all the necessary medium and low voltage cables as required by this document and shown on the drawings.

Some sections of the LV cables shall be installed onto cable ladders/trays and a section in cable trenches as indicated on the drawings.

The tenderer must allow for this situation when pricing for cable installation.

All cables shall be manufactured in accordance with SANS 97 and shall come only from fresh stocks.

NB. All cables shall have the SABS mark of approval.

2.2 TRENCHING

The Contractor shall be responsible for all trenching and excavation.

The Contractor shall, before trenching commences, familiarise himself with the routes and site conditions and the procedure and order of doing work shall be planned in conjunction with the general construction programme for other services and building requirements.

The Contractor will be held responsible for damage to any existing services brought to his attention by the relevant authority and shall be responsible for the cost of repairs.

The Contractor shall take all the necessary precautions and provide the necessary warning signs and/or lights to ensure that the public and/or employees on site are not endangered.

The Contractor shall ensure that the excavations will not endanger existing structures and roads.

2.3 BLASTING

Should blasting be necessary and approved by the Client, the Contractor shall obtain the necessary authorisation from the Government Departments and Local Authorities.

The Contractor shall take full responsibility and observe all conditions and regulations set forth by the above Authorities.

2.4 ROUTES

Trenches shall connect the points shown on the drawings in a straight line. Any deviations due to obstructions or existing services shall be approved by the Electrical Engineer.

The Electrical Engineer reserves the right to alter any cable route or portion thereof in advance of cable laying. Payment in respect of any additional or wasted work involved shall be at the documented rates.

2.5 CABLE SLEEVES

Pipes shall be joined in accordance with the manufacturer's instructions

Sleeves shall cross the roads at right angles

All sleeves shall be graded 1:400 for water drainage

The ends of all sleeves shall be sealed with a non-hardening watertight compound after installation of cables. All sleeves intended for future use shall likewise be sealed.

2.6 BACKFILLING

The Contractor shall not commence with backfilling of trenches without prior notification of the Electrical Engineer so that the cable installation may be inspected. Should the Contractor fail to give a timeous notification, the trenches shall be re-opened at the Contractor's cost.

For high voltage cables (1kV – 11kV), a coloured plastic marking tape shall be installed 400mm above the cable. The tape shall be yellow, marked with the words "ELECTRIC CABLE / ELEKTRISIE KABEL" in red. These markings shall not be more than 1m apart from centre to centre.

Backfilling shall be undertaken with soil suitable to ensure settling without voids. The maximum allowable diameter of stones in the backfilling material shall be 75mm.

The backfill shall be compacted in layers of 150mm and sufficient allowance shall be made for final settlement. The Contractor shall maintain the refilled trench at his expense for the duration of the contract. Surplus material shall be removed from site and suitably disposed of.

On completion, the surface shall be made good to match the surrounding area.

In-case of roadways or paved areas, the excavations shall be consolidated to the original density of the surrounding material and the surface finish reinstated.

2.7 CABLE MARKERS

This shall be for high voltage cables only, except where otherwise specified.

Cable markers shall be provided along all HV cable routes but need only be provided along LV cable routes where specified.

Cable markers shall consist of concrete blocks in the shape of truncated pyramids, approximately 300mm (high), 150 x 150mm at the top and 250 x 250mm at the bottom.

Brass plates shall be cast into the tops of the blocks in such a manner that they cannot be prised loose. The wording "ELECTRIC CABLE / ELEKTRIESE KABEL" shall be stamped on the brass plates as well as direction arrows and the cable voltage rating.

2.8 INSTALLATION OF UNDERGROUND CABLES

Cables shall be installed at the following minimum depths below final ground level:

- MV Cables: 1,000mm (depth) x 450mm (width)
- LV Cables: 600mm (depth) x 300mm (width)

The depth of cable pipes beneath roads shall not be less than 1.1m below the formation level.

Where HV and LV cables must be installed in the same trench, both shall be laid at a depth of 800mm and then covered with 200mm of soil.

The soil shall then be compacted, and backfilled layer by layer and compacted until the trench is completely backfilled.

Cables for telephone, communication systems and other low voltages (less than 50V) shall be separated from power cables by at least 1m.

2.9 LOW VOLTAGE (LV) CABLES

Specifications

The low voltage cables must be of the 600/1,000V PVC insulated armoured (PVC/PVC/SWA/PVC) type.

The cables shall conform to the General Technical Specification and the following:

Condition of Services	Normal
Armouring	SWA
Conductor Material	Stranded Copper

LV Cable Terminations

LV cable terminations shall be done with cable glands, shrouds, and suitably sized cable lugs.

LV Cable Joints

Joints in LV cables will only be allowed when specifically approved by the Engineer. If joints are made, it must be done in accordance with the General Technical Specification.

Cable Routes

The low voltage cables shall be installed as specified in the schedules of this document and in the positions shown on the drawings.

2.10 CABLE SLEEVE PIPES

Supply and install all the cable sleeves in positions indicated on the drawings.

3 DISTRIBUTION BOARDS

3.1 GENERAL

The electrical contractor shall supply and install all the distribution boards as specified in the positions shown on the drawings.

The construction and wiring of the boards must be in accordance with the General Technical Specification.

Additional space for future extensions must be allowed in all distribution boards as indicated on the schematic diagrams, but in any case, not less than 30% of the equipment space required.

The Contractor must ensure that the distribution boards' dimensions are such that they fit in the spaces provided.

The boards shall have an epoxy coating finish with white on the inside (and/or red for emergency supply from the generator and blue/violet for UPS feeds) and the colour specified on the schematic diagrams on the outside.

Outdoor distribution boards shall be manufactured from 3CR12 material.

The manufacturer shall obtain the method of labelling and marking of all the distribution boards from the Engineer.

Each distribution board shall be provided with a legend card; where a distribution board consists of a normal and emergency side, two legend cards shall be provided and the same shall apply if there is a UPS fed section.

Fascia Panels of the distribution board will be equipped with pad-lockable square key catches.

3.2 BUSBARS

All three phase distribution boards shall be provided with four copper busbars installed horizontally at the top of the board, with the broad side of the busbar fixed vertically on insulators and clearly marked red, blue, yellow for the three phases in accordance the General Technical specification.

3.3 CIRCUIT BREAKERS

All MCB's shall have minimum fault capacities as specified on the schematic diagrams. The frame sizes of the MCB's shall be adequate for the size of conductors used in the installation.

3.4 ISOLATORS

All isolators shall have minimum fault capacity as specified on the schematic diagrams with enough frame size for the specified conductors.

3.5 TIME SWITCHES

All time switches shall be of the 7-day type settable in intervals not longer than 5 minutes, from an approved manufacture with 72-hour battery reserve.

3.6 INDICATING INSTRUMENTS

The voltmeters and ammeters shall be of the P.C.I. or similar approved manufacture.

3.7 SERVICES DISTRIBUTION BOARDS/DRAWBOXES

All the services distribution boards and draw-boxes must be manufactured to the same standards and finish as specified for the metering distribution boards, complete with architrave frame and doors and shall be flush mounted.

3.8 WORKING DRAWINGS

Three sets of shop drawings, of all the electrical and telephone distribution boards shall be submitted to the Engineer for his approval prior to commencement of the manufacture of these boards.

These drawings shall be submitted to the Engineer not later than six (6) weeks after the Contractor has been notified that his tender has been accepted. The Engineer will give his approval/comment within two (2) weeks.

3.9 LABELLING

All the circuits that are not wired must be marked "SPARE" on the distribution board.

Labels indicating the supply point and size of the supply cable must be provided on each distribution board.

Where switchboards are positioned behind doors of building structures such as built-in cupboards, a suitable approved electrical danger sign and an applicable distribution board label must be supplied and fitted in a suitable position on the outside top section of one of the entrance doors at such positions.

4 EARTHING OF BUILDING & INSTALLATIONS

Installations shall be effectively earthed in accordance with the "Standard Regulations" and to the requirements of the supply authority, as well as the Eskom's Representative, who may require additional earthing to meet test standards. Earthing must comply with S.A.B.S 0142 – 1993.

All hot water, cold water and waste pipes must be effectively bonded by 12.5 x 1.6mm solid or perforated copper tape (not wire) clamped by means of brass bolts and nuts. The tape is to be fixed to walls by means of roundhead brass screws at intervals not exceeding 150 mm.

The earth connection from the main earth-bar in the mainboard must be made to the cold water main and the incoming service earth conductor by means of 16mm² stranded (not solid) bare copper earth wire. Where applicable all steel roof sheeting as well as steel walkways and stairs shall be suitably earthed.

Furthermore, an earth electrode (earth spike) of at least 1,5m long must be provided and driven into the ground at the centre of each gable-end wall of each individual block. These earth electrodes shall be installed at least 1m from the building's perimeter and shall clear all aprons and water channels. These earth spikes must be driven into the ground to at least 300 mm below ground level and only after final bonding and tests have been carried out must proper backfilling and compacting of same be executed.

In each instance these earth spikes must be interconnected by means of a 16mm² stranded bare copper earth conductor which must be installed in the inside of the ridging of the roof structure, encased in 20mm flush conduits installed in the gable walls. This earth conductor must be bonded to the roof sheeting at intervals not exceeding 5m, ensuring that roof sheeting on both sides of the ridging is properly bonded, as specified in the project specification.

The overall earth resistance at the Main Distribution Boards shall not exceed 10hm. The contractor shall assess the soil and site conditions at the time of tendering and allow for this to enable him to perform the proper earthing and bonding of all installations

5 WIRING OF CIRCUITS

5.1 GENERAL

A neutral equal in size to the phase conductors and earth wire one size smaller than the phase conductors must be installed to each three-phase outlet.

Cable lugs must be used at all terminations of conductors. The lugs must be soldered or crimped to the end of the conductor with the correct amount of insulation removed to fit the lug. Strands may not be cut from the conductor.

5.2 CONDUCTOR SIZES

Refer to schematic diagrams for conductor sizes and earth wire sizes for each individual circuit.

5.3 WIRING THROUGH LIGHT FITTINGS

Where surface mounted fluorescent light fittings are installed end to end through wiring will be allowed.

An interconnecting male bush lock nut and female bush shall be provided between fittings.

6 LIGHTING

6.1 GENERAL

Supply and install the luminaries schematically indicated on the drawings and the luminaires must comply with the requirements listed hereunder.

The required luminaire types are specified in the light schedule and tie up with the types indicated on the lighting layouts.

Samples of all luminaires must be approved by the engineer before any order is placed.

All light fittings shall be supplied complete with SABS approved control gear and lamps.

The installation of luminaires must be done in accordance with the relevant clauses in the general project specification.

All luminaires must be complete with lamps and where necessary, control gear. Starters of fluorescent luminaire for starters must be covered to the approval of the client representatives.

Lamp holders for GLs lamps must be porcelain or heavy-duty brass.

All luminaires installed in the roof slab are to be accessed and serviced from the roof space.

6.2 SCHEDULE OF LIGHT FITTINGS

These prices shall include the supply, installation and connection of the following luminaries complete with control gear, drivers, mounting brackets and tubes where applicable and is as specified in the bills of quantities.

6.3 OUTSIDE LIGHTING

All wall-mounted external lights shall be installed on the outside walls - at the heights specified on the drawings.

7 CONDUITS AND WIRING OUTLETS

7.1 GENERAL

Supply and install all the outlet points in the positions shown on the drawings. The conduit installation shall be done in accordance with the General Technical Specification.

All heights specified for points are measured from finished floor level to the bottom of the outlet, except where specified to the contrary.

All outlet points shall be labelled with an engraved label riveted to the cover of the outlet. The label description shall include the circuit number and DB number.

7.2 LIGHT FITTINGS

Outlets for light fittings shall consist of round draw-boxes installed recessed in wall, roof-slab, or fixed ceiling. All down lighters and recessed fluorescent lights shall be connected by a 5A industrial type un-switched socket outlet mounted in the ceiling space with a 3m cab-tire and plug mounted on the light fitting.

The un-switched socket outlet shall be positioned in such a fashion that the socket can be unplugged through the mounting hole for the downlight in the ceiling and in such a way that the face of the socket is vertical. No sockets facing upwards or downwards will be accepted.

7.3 LIGHT SWITCHES

Outlets for light switches shall consist of a 100 x 50 x 50 mm deep draw-box installed recessed in wall or partitioning.

7.4 SOCKET OUTLETS

Outlets for socket outlets shall consist of 100 x 100 x 50 mm deep draw-box installed recessed in wall or partitioning wall.

7.5 TELEPHONE

Outlets for telephone shall consist of 100 x 50 x 50 mm deep draw-box with cover plate, installed recessed in wall or partitioning.

7.6 MANUAL FIRE CALL UNIT OUTLET

Manual fire call unit outlets shall be 100 x 100 x 50mm deep draw-box with cover plate, installed recessed in wall or partitioning.

8 SOCKET OUTLETS

All socket outlets must be 15A (single or double as specified on the drawings) switched socket outlets white or red (for shaved earth) in colour.

These shall be suitable to accommodate SANS 164-1 and SANS 164-2 socket outlets of approved manufacturer with cover plates.

Switched socket outlets shall be installed at the indicated positions on the drawings at a height of 300mm above finished floor level unless otherwise indicated.

The socket outlets shall be linked to the trunking in the ceiling void with a 20mm PVC conduit.

9 LIGHT SWITCHES

Light switches shall be installed at a nominal height of 1,400mm above finished floor level measured to the bottom of the box.

The light switches must be of the 16A type of approved manufacturer with a cover plate.

Key switches shall be of the Crabtree 2461 or Clipsal type with 2 poles.

10 PHOTOCCELL

All the exterior and area lights shall be switched directly by photocells and the photocell must be mounted where indicated on the drawings in such a manner that the luminaires will not affect the operation of the photocell.

The photocell must be wired to the distribution board by 3x 2.5mm² PVC conductors drawn in conduit in the roof space.

The photocell must comply with the following:

- Area lights must be switched ON when the illumination drops to 50lux
- Area lights must be switched OFF when the illumination is raised above 90lux.
- It must be weatherproof and must have a built-in time delay of approximately 40 seconds
- Built in protection against voltage surges must be provided
- A sample of the proposed photocell must be submitted to the Engineer for approval
- The photocell shall be 16A rated

11 TELEPHONE

All conduits, draw-boxes and outlets for this installation must be supplied and installed in the positions shown on the drawings.

All conduits shall be fitted with 2mm diameter galvanized draw-wires.

12 FIRE DETECTION

All conduits draw boxes and outlet boxes for the fire detection system as indicated on the Fire Detection drawings shall be supplied and installed by the Electrical Contractor in coordination with the Fire Detection Contractor.

13 EXTRACTION FAN

The Electrical Contractor shall supply and install a 250mm diameter extraction fan in all the areas shown on the drawings.

Each fan will be fed from a 5A unswitched socket outlet mounted not further than 600mm from the fan. The fan shall be operated from the lighting circuit in each room.

14 EQUIPMENT

Hand-Dryers

The hand dryers shall be similar or equal to and approved Stiebel Eltron Serra 2200 CA hand dryers or Costa Lambrianos Xlerator hand dryers.

30A double pole isolators in a 100mm x 100mm recessed boxes shall be mounted at 1800mm above finished floor level in each toilet for the hand dryers. From the isolator, a 20mm diameter conduit shall be taken to the position of the hand dryer at 1200mm above finished floor level.

Uninterrupted Power Supply (UPS)

The Electrical Contractor shall supply and install a 20kVA 3-phase-in / 3-phase-out UPS unit in the same room as DB – Main and this shall provide uninterrupted power supply to all the power circuits of the bedhead trunking units.

The UPS unit shall be as per the specifications as attached to this specification document and the tenderer shall complete the information schedule.

Geysers

A 30A single pole isolator in a 100mm x 100mm surface box within 600mm from the geyser. The Electrical Contractor shall liaise with the Mechanical Contractor regarding the position of the geyser.

Bedhead Trunking / Pendants

The contractor shall supply and install horizontal bedhead units as specified in the bills of quantities and these shall be complete with gas outlets, electrical outlets, Nurse Call outlets (where required), reading lights and medical rails/supports.

Connection of gas pipes shall be done by the gas piping contractor under the mechanical contract.

15 MOUNTING HEIGHTS

The mounting heights of equipment must be as detailed below, unless stated otherwise on the drawings:

ITEM	MEASUREMENT TO CENTRE OF OUTLET BOX FINISHED FLOOR LEVEL
Light switches	1,400mm
Socket outlets	300mm
Telephone outlets	300mm
Distribution boards (Flush type)	Centre of DB 1600mm above floor level, but top of architrave not higher than 2,000mm above finished floor level
Wall mounted light fittings	Refer to drawings

16 COLOUR OF EQUIPMENT

The colour of all switch cover plates, switched socket outlets, telephone outlets, isolator cover plates and blank cover plates shall be white.

The colour of all interior and exterior electrical distribution boards shall be electrical orange (Colour B26 to SABS 1091).

Fascia plates for normal sections shall be white, signal red (Colour A11 to SABS 1091) for emergency sections and blue (Colour F06 to SABS 1091) for UPS fed sections.

17 POWER SKIRTING AND ACCESSORIES

The channel and cover should be epoxy coated after manufacture.

The outlet pre-punched on a modular basis should be provided to accommodate socket outlets and future socket outlets.

Double compartment galvanised power-skirting shall be installed at the positions indicated on the drawings. The top compartment shall be used for power wiring and socket outlets, whilst the bottom compartment shall be for telephone, data, and other light current services.

The colour for the power-skirting shall be **hospital grey**.

Standard accessories as supplied by the manufacturer of the power skirting shall be used for the distribution board outlets, elbows, endcaps, and Tees.

The communication compartment of the power skirting shall be linked with 2 x 25mm diameter conduits or as specified from the 100 x 100 mm outlet box behind the power-skirting to the 300mm/200mm cable tray mounted in the ceiling void or above the roof slab.

Where socket outlets are not installed, the punched holes shall be blanked off, painted the same colour as the power-skirting and installed at the back of the covers.

These blanking plates shall be easily removable to permit future installation of socket outlets.

Trunking, conduits, and accessories shall be in accordance with General Technical Specification.

18 CABLE TRAYS

The cable trays shall be manufactured from perforated rolled steel.

The cable trays for the following areas shall be of the following standards:

- Vertical building ducts – hot dip galvanised to SANS 32 & 121
- Plant rooms, substations, service tunnels – electro-galvanised baked enamel
- Damp areas, exposed to weather – hot dip galvanised to SANS 32 & 121

Horizontal trays shall be supported at the following maximum intervals:

- 1.2mm to 1.6mm thick metal with 12mm to 19mm return trays
- 2.5mm thick metal trays with 76mm return
- Cable ladders with 76mm side rail of 2mm thickness
- 3mm thick PVC trays with 40mm return
- 4mm thick PVC trays with 60mm return

Standard accessories manufactured by the manufacturer of the wiring channels shall be used for the distribution board outlets, elbows, and Tees.

No on-site assembled accessories will be accepted.

All wiring channels must be supported from the roof structure by means of threaded rod and hangers as detailed by the manufacturer.

The cost for these supports shall be included in the tender price for the wiring channel.

19 CABLE LADDER

Cable ladder must be of the O-LINE OL76 or equal, similar, and approved by the Engineer in writing before tender closing.

Cable ladder must be finished in hot-dip galvanising.

Cable ladder must be supported as detailed by the manufacturer at intervals not exceeding 1,5m.

Only factory-made accessories for cable ladder in the same finish as that of the ladder shall be accepted.

20 EXCAVATION

Material to be excavated shall be classified as follows:

"Rock" will be held to be composed of boulders each exceeding a nominal diameter of 1 m and solid rock in bulk or banks or ledges, the practicable excavation of which would necessitate the use of explosives and or drilling and wedging.

"Soft rock" will be held to be material other than rock, the excavation of which would be economically impracticable if executed by pick and shovel or by means of an ordinary "back actor" without attaching a special mechanical ripper to it.

Soft rock material can only be excavated by either pneumatic tools or by a "back actor" with a special mechanical ripper attached to it. Soft rock shall include soil with loose boulders with nominal diameters between 300 mm and 1 m.

"Pick-able soil" will be held to be material more easily excavated and not falling into the categories of "rock" or "soft rock" such as gravel, earth, turf, scale, sand, silt and clay.

21 CONDUIT

All conduit and accessories shall be PVC conduit except where specifically indicated to the contrary

22 INNOVATIVE WIRING SYSTEMS

Only innovative wiring systems with an extruded aluminium sheath commonly known as "SURFIX" will be accepted. Twin and earth wiring systems without the extruded aluminium sheath will not be accepted.

23 OCCUPATIONAL HEALTH AND SAFETY ACT

All signs and notices as required by the Occupational Health and Safety Act shall be installed.

24 COMPLETION TIME

The tenderer shall indicate the anticipated delivery period of the offer.

25 TESTING

At the completion of the electrical installation, the Electrical Contractor shall test the following:

- Correct operation of all circuits

- Earth resistivity test with 500V Megger
- Earth leakage test on all switched socket outlets with a certified earth leakage test unit
- All luminaires to confirm correct operation of lamps, ballasts, and starters
- Ensures that the load is balanced over the three phases as far as practical

The Contractor shall supply all test equipment mentioned above.

When the Electrical Contractor has successfully done the above tests and inspections, an inspection by the Engineer and a representative of the Supply Authority shall be requested.

26 'AS-BUILT' DRAWINGS

As the successful completion of this project, the Contractor must supply the Engineer with paper prints indicating all cable and sleeve routes. The final retention money will not be released before these drawings are received.

End of Specification – Electrical Installations

SECTION 2: DETAILED PROJECT SPECIFICATIONS – NURSE CALL SYSTEM INSTALLATIONS

1. SCOPE OF CONTRACT

This contract shall cover the supply, delivery, installation, testing, handing over in working order and 12-months maintenance period after first handover of a complete Nurse's Call System at the proposed Intensive Care Unit of the Job Shimankane Tabane Hospital.

Technical considerations concerning the engineering, design, maintenance requirements etc., are of the utmost importance and will weigh heavily in the adjudication of tender received and Tenderers are advised to submit the fullest possible details with their tenders.

The successful tenderer shall ensure that he is conversant with the layouts of all other services before he commences with any work on this building.

2. POWER SUPPLY

The required power supply shall be provided by the Electrical Sub-Contractor.

The complete and full details for the required power supply for the installation shall be provided by Nurse Call Sub-Contractor to the Electrical Sub-Contractor.

3. CONSTRUCTION PERIOD

The precise construction period shall be determined by the building contract and detailed in the building programme.

It shall be expected of the successful tenderer to follow this programme.

4. EARTHING

The installation shall be properly earthed to comply with the applicable Codes of Practice, SABS 0142-1993 as amended, SABS 1063, as well as requirements in the Departmental Standards and to comply with the relevant Local Authority by-laws.

All electronic equipment pertaining to the Nurse's Call System installation shall be properly earthed by means of 2.5mm² stranded bare copper wire unless specified to the contrary.

The armouring of all cables shall be bonded to the cable end boxes and cable end plates and used as earth conductors.

After completion of the entire earthing installation, it shall be tested in the presence of the Consulting Engineer and the Department representative.

Tenderers shall provide all the labour and equipment necessary to do these tests within the contract.

5. CABLE INSTALLATIONS

This contract shall cover the supply and installation of the applicable cables required for the complete Nurses'/Emergency Call System as specified.

The drawings are scaled, and measurements can be taken from these drawings.

Conductors shall consist of stranded wires and can be terminated and connected to the control panels.

Cables shall be installed in cable trays provided by others with the routes indicated on the drawings and as resolved and agreed on site with the Engineer.

All cables must be new and delivered to site on cable drums.

Unless specifically approved by the Consulting Engineer beforehand, no joints will be allowed in cables of less than 300m length.

All cable joints shall be guaranteed on workmanship for two (2) years after final handover to the end-user.

6. INSTALLATION OF CONDUITS IN WALLS

The installation of conduits shall be done by the Electrical Sub-Contractor according to the drawings and the Nurse Call Sub-Contractor shall give indication to the Electrical Sub-Contractor should he require additional points.

7. INSTALLATION OF CABLES IN CABLE TRAYS AND LADDERS

The Sub-Contractor shall make use of cable trays and/or ladders on cable routes indicated on the diagrams.

Where applicable, the Sub-Contractor shall arrange with the Main Contractor to provide holes and access through the structure and finishes as required.

The Sub-Contractor shall supply and install supply cables in cable trays and ladders parallel to each other. Cables must present a neat appearance and must under no circumstance be bunched.

The Sub-Contractor shall clamp at maximum intervals of 3m when installed on horizontal trays and at a maximum of 600mm when installed on vertical trays.

The Sub-Contractor shall bond metal trays and ladders to the earth bar of the distribution board to which the supply cables are connected.

8. CONTROL PANEL

Supply, install, connect, test and commission the control panel as indicated on the drawings.

The control panel shall be wall mounted at the Nurse Duty Stations as per the construction drawing.

The control panel must include the room/bed numbers.

The panel must incorporate a bleeper for the Emergency and bathroom tones, a loudspeaker for the nurse call and a latching switch to attenuate the nurse call tone at night. The panel shall include a "power on" indication LED.

The exact size shall dependant on ward design and size.

The minimum paint thickness after baking shall be 0,064 mm.

Special care shall be taken that all sharp corners and edges are painted.

9. WIRING OF CIRCUITS

All circuit cables shall be installed in conduits.

PVC cables and conductors shall comply with SABS 159/1957. Conductors shall be of the stranded copper type throughout.

Conduits shall be PVC and comply with the relevant SABS code and Departmental Specification.

10. UNWIRED CONDUITS AND OUTLETS

Unwired conduits and outlets shall be provided with draw wires unless indicated otherwise on the drawings.

The outlet boxes shall be of the 100 x 100 x 50 type recessed in walls and provided with white baked enamel cover plates.

These conduits shall all be provided with 1.6mm diameter galvanised draw wires.

11. NURSE CALL SYSTEM

The Nurse Call System shall enable a patient to call a nurse for assistance from his/her bed, bath, shower, or toilet. The system shall also make provision for Emergency Call by Nurses to call for assistance.

The system must produce an intermittent audible bleeper tone at the Nurses' Duty Station when the patient nurse call or staff emergency call is enabled. Different audio tones must be produced for normal patient call, bathroom/shower call and emergency call.

A visual mimic panel indicator must be provided at the Nurse Duty Station as well as a light above the door to the passage of the activated unit and at the actual activated unit. The system is to be such that any call may only be reset at the point of origin. The system must automatically activate a nurse call when any of the handheld units is pulled out of the bedhead trunking unit.

The conduit system for the above shall be provided and installed by the Electrical Sub-Contractor.

Cut-outs on the bedhead trunking units / medical pendants for the Nurse's Call positions shall be done by the manufacturer of the bedhead units and the sub-contractor shall make use of these cut-outs.

Allow for the full commissioning and demonstration of the system.

12. UNINTERRUPTED POWER SUPPLY (UPS) AND STANDBY GENERATOR

The hospital facility has a fully functional emergency standby generator which will operate automatically and of sufficient capacity to supply all critical areas with electricity in the event of a power failure.

The contractor shall provide a battery back-up system for the Nurse Call System with the suitable back-up time as required.

13. GUARANTEES

The Sub-Contractor shall provide guarantees against any defects in the material and/or manufacturing shall unconditionally guarantee all the components for a period of 12 calendar months from the date the installation has been accepted by the client.

Should any defect in the components or installation occur before the guarantee period has expired then the Sub-Contractor shall replace same at his own expense.

Only the Sub-Contractor and no-one else shall be liable for the full responsibility related to the guarantees and ensure that allowance is made in his tender for this.

The guarantee shall not cover any intentional damage to property or negligence on behalf of the client.

14. COMPLETION TIME

The tenderer shall indicate his anticipated delivery period in his offer.

End of Specification – Nurse Call Installations

SECTION 3: SCHEDULE OF TECHNICAL INFORMATION – 20kVA UPS Unit

These prices shall include the supply, installation, and commissioning of the following 20kVA UPS unit:

Description	Unit	Requirement	Offered
Nominal Power Rating at 0,8pf	kVA	20	
Output Parameters:			
Inverter type			
Output Power	kW	25	
Output current at rated kVA	A	30A	
Output Voltage	VAC	400V	
Output Voltage Regulation	%	+/- 1%	
Output Voltage THD	%	<2% for linear loads	
Output Frequency	Hz	50	
Output Frequency Regulation	%	50Hz +/- 0.02	
Output Frequency Window	Hz	48Hz - 52Hz synch to mains	
Output Voltage Dynamic Regulation	%	+/- 5% (100% load step) recover to 2% within 5ms	
Overload Capacity in kVA	%FL	105% continuous / 110% 10min / 125% 1min	
Efficiency AC - AC	%	90% at full load and rated input voltage	
Output Protection		Circuit breaker	
Input Parameters:			
Rectifier type			
Input Voltage to rectifier	VAC	400V	
Input Voltage to Bypass	VAC	400V	
Input Voltage Range to Rectifier	VAC	400V +/- 5%	
Input Frequency	Hz	50	
Input Frequency Range for Rectifier	Hz	40Hz to 65Hz	

Input Current THD at nominal voltage	%	<6% at full load	
Input Power Factor at Nominal Voltage		>0.98	
Battery:			
Battery Type		Valve Regulated Lead Acid	
Battery Life at rated kVA	hr	8hr	
Static Bypass:			
Type		Thyristor Bridge	
Rated Current		1.5In	
Overload Capacity in kVA		200% - 1 min / 1000% - 10ms	
Physical Parameters:			
Dimensions	mm		
Weight	kg		
Protection		IP21	
Standards		IEC 62040-3, IEC60146-1-1, IEC 61000-4-2, EN 50091	
Environment:			
Operating Temperature		0 to 40 degrees Celsius	
Humidity		0 - 90% non-condensing	
Maximum Altitude		0 - 2000m without de-rating	

SECTION 4: BILLS OF QUANTITIES - ELECTRICAL & NURSE CALL SYSTEM INSTALLATION

GENERAL NOTES

1. Unless a separate rate for the supply and installation of any item is specifically called for, the supply and installation cost of any item shall be fully included in the unit price.
2. The rate for outlet boxes up to 100 x 100 mm shall be the same regardless of the number of entries. Conduit boxes shall always include the fixing to the conduit as specified.
3. Industrial switch and plug units shall include the fixing to the conduits or trunking as specified
4. Light switches, switch plugs, dimmer units, etc shall include screws, cover plates and other equipment specified
5. All fittings and accessories must always include the connections thereto.
6. 300mm additional length has been measured for conductors drawn into trunking / conduit per outlet point. Tenderers must allow in their rates for any conductor lengths required in addition to the 300mm for his own purpose.
7. All measurements are nett, and Tenderers must allow for wastage in their rates
8. Unless specifically stated in the Bills of Quantities, all prices shall allow for the following items:
 - 8.1. Supply, deliver to site and store new, unused, and undamaged of best available quality and complete with all small materials necessary for installation, testing, commissioning, and rendering in proper working order.
 - 8.2. Installation, fixing in position, running, or laying, as applicable in a thorough and workmanlike manner
 - 8.3. Making of all connections necessary
 - 8.4. All insulation and continuity tests
 - 8.5. Ensuring the proper working serviceability
 - 8.6. Commissioning on completion and maintenance during the guarantee period
 - 8.7. Complete labelling with engraved labels to indicate all functions and instructions that would otherwise be unclear to ordinary users
 - 8.8. Corrosion protection where necessary
 - 8.9. All profits, overheads, supervision, transport, and skilled and unskilled labour
 - 8.10. Inspection by the Engineer and all authorities
 - 8.11. Compliance with all relevant regulations, by-laws, and codes of practice
 - 8.12. Compliance with the Specification
9. The installation is to comply with the Detailed Technical Specification included in this document.



health

Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

CONSTRUCTION HEALTH AND SAFETY SPECIFICATION

FOR

Conversion of existing ward 13 to an ICU

**JOB SHIMANKANA TABANE PROVINCIAL TERTIARY
HOSPITAL**

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1 Introduction

Department of Health North West intends to Conversion of existing ward 13 to an ICU. Department of Health North West developed Site Specific Health and Safety Specifications (SSHSS) in line with the Baseline Risk Assessment (BRA) as required by the Construction Regulation 5 (1). The Principal Contractor should use this specification when developing the Site Specific Health and Safety Plan for this project.

1.1 Scope

This SSHSS was developed for the Department of Health North West in line with the Baseline Risk Assessment (BRA) as required by the Construction Regulation 5(1). The contractor should use this specification when developing his Site-Specific Health and Safety Plan as per the requirements of Construction Regulation 7(1)(b).

The Occupational Health and Safety Act, no 85 of 1993 and its Regulations together with SANS Codes set out minimum standards with regards to Occupational Health and Safety. Department of Health North West has developed this Occupational Health and Safety Specifications with these minimum standards in mind and in certain stages the requirements of Department of Health North West exceed the minimum legal requirements to follow best practices and to ensure a healthy and safe workplace for all.

Department of Health North West in no way assumes The Principal Contractors legal liabilities and responsibilities. The Principal Contractor is and remains accountable for the quality and execution of his health and safety programme for his employees. Furthermore, there is no acceptance of liability by the employer which may result from the Principal Contractor failing to comply with the Occupational Health and Safety Specification (OHSS), the Principal Contractor remains responsible for achieving the required performance level.

It is realized that The Principal Contractor have its own Health and Safety Management system and safe work practices. The intention of this Health and Safety Specification is not to change The Principal Contractors Health and Safety management system, but for The Principal Contractor to use its current Health and Safety management system to draw up a project specific Health and Safety plan according to these specifications as well as to legally comply with the Construction Regulations, GNR.84 of 2014.

It is the responsibility of the Principal Contractor and other Contractors to make themselves conversant and comply with the requirements and conditions contained in the various legislation pertaining to their profession and scope of works at all times.

This specification is not exhaustive of all duties imposed by the Occupational Health and Safety Act, no 85 of 1993 and its Regulations, governing the duties and obligations, of a Designer, Principal Contractor and Contractor performing duties in terms of an agreement with the client (Department of Health North West). These duties are fully described in the Occupational Health and Safety Act, no 85 of 1993 and its Regulations and it is the duty of every Designer, Principal Contractor and Contractor to acquaint themselves therewith before commencing work.

This specification is compiled to ensure that the Principal Contractor and any other Contractors working for Department of Health North West directly or through a Principal Contractor, are aware

of the Occupational Health and Safety requirements when working on a Department of Health North West contract, as well as to make them aware of their legal liabilities and responsibilities as per the Occupational Health & Safety Act, Act 85 of 1993, and its Regulations.

1.2 Overview of the Works

The construction will consist of building maintenance and external works. This requires the supply of labour, material, equipment, plant, etc. which are necessary for the maintenance on, electrical and mechanical.

1.3 Definitions and abbreviations

Act:	the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)
Agent:	means any person who acts as a representative for a client;
BRA:	Baseline Risk Assessment
CIDB:	Construction Industry Development Board
COID Act:	Compensation for Occupational Injuries and Diseases Act
DMR	Driven Machinery Regulations, GNR. 295 of 26 February 1988
HIRA:	Hazard identification and risk assessment
SDS:	Safety Data Sheet
OHS Act:	Occupational Health and Safety Act
SHE:	Safety, Health, and Environment
CR:	Construction Regulations
CHSA:	Construction Health Safety Agent
DoL:	Department of Labour
PC:	Principal Contractor

1.4 Definitions

The following definitions will apply to the SH&SS, acronyms given hereunder will apply:

Audit – A systematic and documented review of the effectiveness of implementation of processes, programmes and procedures, based on Department of Health North West process criteria

“Construction Work” means any work in connection with – the construction, erection, alteration, renovation, repair, demolition or dismantling of or an addition to a building or any similar structure, road, railway, runway, sewer or water reticulation system; or the moving of earth, clearing of land, the making of an excavation, piling, or any similar civil engineering structure or type of work.

Hazard Identification and Risk Assessment and Risk Control (HIRA) - Means a documented plan, which identifies hazards, assesses the risks and detailing the control measures and safe working procedures, which are to be used to mitigate and control the occurrence of hazards and risks during Construction or operation phases.

The Act - Means, unless the context indicates otherwise, the Occupational Health and Safety Act, 1993 (ACT NO. 85 of 1993) and Regulations promulgated there under. (OHS Act)

Hazard - Means a source of or exposure to danger (source which may cause injury or damage to persons, or property)

Risk - Means the probability or likelihood that a hazard can result in injury or damage.

Risk Assessment – A process of evaluating the risk(s) arising from hazards taking into account the adequacy of any existing controls and deciding whether or not the risk(s) is acceptable.

Contractor – An employer as defined in section 1 of the OHS Act, who performs construction work and includes Principal Contractors and Sub-Contractors.

Hazardous Chemical Agent (HCA) - Means any toxic, harmful, corrosive, irritant or asphyxiant substance, or a mixture or substances for which an occupational exposure limit is prescribed, or an occupational exposure limit is not prescribed, but which creates a hazard to health.

SHE - Safety Health and environment

Construction Plant - Encompasses all types of plant including but not limiting to, cranes, piling frames, boring machines, and excavators, dewatering equipment and road vehicles with or without lifting machines.

Health and Safety Plan (HSP) - The content of this document which will be made available on site for inspection by an inspector, Technical Officer, Agent, subcontractor, employee, registered employee organization, health and safety representative, or member of the health and safety committee.

Health and Safety File - Describes the file holding all records on health and safety for the project, which will be available at all, times for evaluation, and copy of which will be forwarded to the client upon completion of the project.

2 Health and safety policy

Principal Contractor is expected to prepare the companies Health and Safety Policy. The policy should declare their attitude and approach to the health, safety and welfare or hygiene of their employees and others. Provision must be made to review the policy regularly and the CEO or Managing Director must sign and date the policy to indicate his commitment to ensuring the health and safety of his employees.

3 Roles and responsibilities

The Principal Contractor is considered to be an employer in his own right and shall comply with all legal requirements pertaining to an employer, which include the responsibility to provide as far as reasonably practicable a safe and healthy working environment for his employees, as per Section 8 of the OHS Act. The Principal Contractor shall appoint competent employees in writing.

3.1 Appointment

Assistant to CEO

Legal Reference

OHS Act 16(2)

Health and Safety Representative	OHS Act 17(1)
Nominated Health and Safety Committee Member	OHS Act 19(3)
Principal Contractor	CR 7(1)(c)(v)
Construction Manager & Alternate Construction Manager	CR 8 (1)
Assistant Construction Manager	CR 8(2)
Health and Safety Officer	CR 8(5)
Construction Supervisor	CR 8(7)
Assistant Construction Supervisor	CR 8(8)
Risk Assessor	CR 9(1)
Structure Inspector	CR 11(2)(a)
Temporary Works Designer	CR 12(1)
Temporary Works Supervisor	CR 12(2)
Excavation Supervisor	CR 13(1)(a)
Demolition Supervisor	CR 14(1)
Competent Person in the use of Explosives	CR 14(11)
Material Hoist Inspector	CR 19(8)(a)
Bulk Mixing Plant Supervisor	CR 20(1)
Explosive actuated fastening device Inspector	CR 21(2)(b)
Explosive actuated fastening device cartridge Controller	CR 21(2)(g)(i)
Construction Vehicle & Mobile Plant Operator Authorised	CR 23(1)(d)(i)
Temporary Electrical Installation Controller	CR 24(c)
Stacking and Storage Supervisor	CR 28(a)
Fire Equipment Inspector	CR 29(h)
Incident investigator	GAR 9(2)
Lifting tackle inspector	DMR 18(10)(e)
Ladder inspector	GSR 13(a)
Certified Explosives Manager	R 12(1)
First Aider GSR	GSR 3(4)
Hazardous Chemical Substance Supervisor	

4 Implementation of the SSHSS

This project specific H&S specification (SHSS) forms an integral part of the contract, and the PC is required to make it an integral part of his contract. This specification must be read in conjunction with the OHSA and its regulations and any other standard relating to work being conducted in a safe manner. The information relative to the baseline risk assessment is to be taken into account when developing a Health and Safety Management System to mitigate any injury or health risk.

No work may commence without written approval of the Health and Safety Plan by the agent. Failure to comply with this requirement will result in a penalty, stoppage of part of, or the whole works with no extension of time or allowable claims.

In case of design changes or change in the scope of work an amended SSHSS may be issued that would incorporate the changes.

The Occupational Health and Safety Agent will visit the project monthly or more frequently depending on the prevailing conditions on site. The Agent will also conduct ad – hoc visits to ensure compliance on site. All activities on site and all appropriate documentation will be

monitored and reported to the Client, Engineer and PC. Non – Conformances will be issued and penalties or work stoppages instructions will be issued where the need arises. Communication between the OHS Agent and PC will be through the Engineer. The authority of the Client appointed OHS Agent shall be that as contemplated in Section 5 of the construction regulations.

5 Project specific risk requirements

Hazard Identification and Risk Assessment (HIRA), and are to be noted when developing the Site-Specific Health and Safety Plan and associated documentation. Identification of low or medium risks does not mean there is no risk involve. In depth's HIRA's and management systems are required to limit the exposure, likelihood and potential consequences as required by the Act and its relevant regulations. Personal Protective Equipment (PPE) will be issued by PC after analysing the hazards associated with his activities. The PPE is the last line of defence and should be used as such, meaning that it should be used after an Engineering, substitution and administrative control measures have been applied.

These are hazards that have been identified and are expected to be prevalent during the execution of the project refer to BRA.

“As built” drawing show services, however, these have been proven to be inaccurate. The contractor must treat all services as live. Electrical and water lines are to be inspected.

Public unrest - due to the volatile political climate leading up to the elections, the Principal Contractor may experience difficulties in the area. Procedure must be put in place to safeguard works and employees.

6 HSE training and competence

Where appropriate qualifications and training are registered in terms of the provisions of the National Qualifications Framework Act, 2000 (Act No. 67 of 2000), those qualifications and training must be regarded as the required qualifications and training and employees must have attended courses of the aforementioned nature to be considered competent in the task.

All employees that form part of the construction work must be trained and competent. Employees formally appointed to perform a certain duty must be in possession of a training certificate, received from an accredited registered training provider. All employees must as a minimum have received site specific safety induction training and must receive daily safe task instruction training (DSTI) before any work commences. Construction Health and Safety Officer must be registered with SACPCMP as Registered Construction Health and Safety Officer.

6.1 Training Needs

There shall be a system in place to determine the training requirements of each individual, based on the tasks that the employee will perform as well as to ensure the health and safety of fellow employees and the public is not compromised in any way. Special attention should be given to employees who are new hires, new to the task or have combined responsibilities.

6.2 Basic Safe Work Training (Induction Training)

Principal Contractor shall ensure that his employees are inducted into his own company Health and Safety Management System as well as basic safe work training (HSE Induction Training). The Principal Contractor shall ensure that his employees, Contractor's employees and visitors are inducted on site specific health and safety procedures. They will be made aware of the risks and hazards that are prevalent to site.

A Daily Safe Task Instruction (DSTI) must be conducted on site with all employees involved in the project. The DSTI must be carried out each day before work commences and proof thereof must be available on site. Each work crew may conduct their own specific DSTI to discuss the hazards, risks and control measures associated with their task for the day.

Where two or more Contractors or work in the same area, they should have a combined DSTI to ensure they know of the additional hazards the other Contractor or work crew will introduce to their operations and what precautions to put in place.

The Principal Contractor shall have evidence that employees have been trained on the relevant procedures prior to and during the project duration. The evidence will be in a form of attendance register.

6.3 Formal Training

All qualifications for which there are SAQA registered training courses, must be regarded as the minimum required qualifications and training. To be deemed "competent" an employee must have received training at a registered training provider, the training course must be registered and if there is an assessment, the employee must have been found competent after the assessment. A person cannot be deemed competent after awareness training only.

The Principal Contractor shall ensure that the employees, as well as the employees of any Contractors that may be used, have received appropriate training for the type of work that will be performed, e.g. First Aid, Mobile Plant Operator, Working on excavations, Risk Assessment training, Safe Demolition Methods, etc.

6.4 Records

Record of all training shall be kept by the employer and shall be readily available. Records shall make provision for refresher training where applicable. Where an employee is legally appointed with certain duties and responsibilities a copy of the training certificate must be attached to the appointment.

7 Duties

Various duties are imposed on the client, designer, principal Contractor and the Agent by the Construction Regulation, 2014, Sections 5, 6 & 7. Department of Health North West will comply and carry out the required duties as contemplated in Section 5 of the Construction Regulations, 07 February 2014 and it is expected from the designer and every Principal Contractor to make themselves conversant with the requirements and duties imposed on them and to ensure that they comply with the requirements of section 6 & 7 at all times.

8 Management and supervision

The Principal Contractor shall ensure that the project is managed safely, and legal compliance is ensured at all times.

A full-time competent person must be appointed as a Construction Manager to manage all construction work, including health and safety compliance. The construction manager may not be appointed to manage more than one single construction site.

The construction manager must appoint construction supervisors responsible for construction activities and ensuring occupation health and safety on the construction site.

The **Principal Contractor must appoint a full-time construction health and safety officer, who is registered with the SACPCMP**, to assist in the control of health and safety aspects on site.

9 Risk management

The Principal Contractor must follow a formal risk-based approach to ensure hazard control measures are implemented to an acceptable reasonable practical level. The Principal Contractor and his employees shall be responsible to ensure all hazards pertaining to his scope of activity are proactively identified, the risks assessed and appropriately eliminated or minimized and managed on an ongoing basis. Risk assessments shall also identify possible and potential environmental, health and hygiene issues pertaining to each hazard with potential exposures and limits.

9.1 Risk Assessment

The Principal Contractor shall, before the commencement of any construction work or work associated with the aforesaid construction work and during such work, conduct a risk assessment by a competent person, appointed in writing and the risk assessment so produced shall form part of the OH&S plan and be implemented and maintained as contemplated in Construction Regulation 9(1). Competence is a factor of training, knowledge, experience and/or appropriate qualifications.

The risk assessment shall include, as far as is reasonably practicable, at least: The task or task step; the identification of the risks and hazards to which persons may be exposed during the task or task step; The analysis and evaluation of the risks and hazards identified, inclusive of a residual risk rating methodology. The method to be used is not prescribed; a documented plan of safe work procedures, to mitigate, reduce or control those residual risks that have been identified as unacceptably high, by means of the rating system; a monitoring plan; a review plan, inclusive of dates to be adhered to; and Ergonomic related risks are to be analysed, evaluated and addressed as part of the process.

Department of Health North West has conducted a Baseline Risk Assessment as per clause 5 (1) a of the construction regulation, which must be used by The Principal Contractor to develop task specific risk assessments before work commences.

9.2 Risk Assessment Monitoring

The Principal Contractor shall ensure that a monitoring plan for all risk assessments are in place. Risk assessments must be monitored to ensure effectiveness and employee understanding. The monitoring of risk assessments shall be formal, and records thereof shall be available for audit purposes.

9.3 Review of Risk Assessment

The Principal Contractor shall review the hazard identification, risk assessments and standard safe working procedures prior to any work activity commencement and at each production planning and progress report meeting as the contract work develops and progresses and each time changes are made to the designs, plans and construction methods and processes. The Principal Contractor shall provide the Employer, Contractors and all other concerned parties with copies of any changes, alterations or amendments as contemplated above.

Activities carried out without conducting a risk assessment or found to be non-compliant with the risk assessment, will be stopped until such time a risk assessment is compiled, and work is carried out according to the risk assessment.

Risk assessments must be fully communicated to all relevant personnel and must be considered when establishing training, awareness and competency requirements.

9.4 Baseline Risk Assessment

Department of Health North West prepared a Baseline Risk Assessment from which the Health and Safety Specifications for this project was prepared. The Baseline Risk Assessment highlights all work for which The Principal Contractor must prepare safe work procedures and or work method statements. It must be noted that the Baseline Risk Assessment is not exhaustive and Principal Contractors are required to identify risks and come up with control measures, this must be identified by Principal Contractor when preparing the Issue Based Risk Assessments. During the briefing, the client will brief tenderers about the hazards and risks that are associated with the anticipated construction work.

9.5 Continuous Risk Assessment

The Principal Contractor shall continuously assess the risks of the activities that are carried out. Risk assessments must be in writing, site specific and must be reviewed continuously to ensure it is current and it address all the relevant hazards and risks associated with the specific activity at the specific site.

The Risk assessment must be discussed with the whole work crew before the activity starts and the work crew must acknowledge in writing having discussed the risk assessment and that they understand it. This acknowledgement must be on site and must be available to the client for audit purposes. The principal Contractor must appoint a competent risk assessor.

The Baseline Risk Assessment for this Project is attached at the back of this document.

10 Legal compliance and document control

a) The Principal Contractor is required to implement systems and procedures to ensure legal compliance through:

- Identification of all relevant HSE legislation, standards and codes applicable to its operations.
- Have available copies of all relevant HSE legislation, standards and codes for reference purposes.
- Update legislation, standards and codes with any changes
- Communicate to all employees any changes that may affect their accountabilities and conformance.
- Incorporate any legal requirements into their HSE management system.
- Monitor and review their HSE management system for effectiveness.

b) The Principal Contractor shall, as a minimum, comply with:

The Occupational Health and Safety Act (Act 85 of 1993) and its Regulations, an up-to-date copy of which shall be available on site at all times.

The Compensation for Occupational Injuries and Diseases Act (Act 130 of 1993), an up-to-date copy of which shall be available on site at all times.

Where work is being carried out on a “mine”, The Principal Contractor shall comply with the Mines Health and Safety Act and Regulations (Act 29 of 1960) and any other OH&S requirements that the mine may specify. An up-to-date copy of the Mines Health and Safety Act and Regulations shall be available on site at all times.

Wherever in the Construction Regulations or this specification there is reference to other regulations (e.g. Construction Regulation 24: Electrical Installations and Machinery on Construction Sites) The Principal Contractor shall be conversant with and shall comply with these regulations.

All legal appointments of The Principal Contractor regarding the Health and Safety of his employees who are to work on the project are addressed and governed by the OHS Act and applicable Regulations. Legal appointments must be in place and must reflect in the project safety file before work commences.

c) Overall Supervision and Responsibility for OH&S

Department of Health North West will appoint the Principal Contractor in terms of Construction Regulation 5(1) (k). A Mandatory agreement as per Section 37.2 of the OHS Act, shall be signed between Department of Health North West and the Principal Contractor. The Construction Health and Safety Agent can sign section 37 (2) on behalf of the Client.

It is a requirement that the Principal Contractor, when he appoints other Principal Contractors in terms of Construction Regulations 7(1)(c), 7(1)(d), 7(1)(f) and 7(3) includes in his agreement with such Principal Contractors the following:

OH&S Act (85 of 1993), Section 37(2) agreement: “Agreement with Mandatory”

OH&S Act (85 of 1993), Section 16(2) appointee(s) as detailed in his/her/their respective appointment forms. (Where applicable)

The signed Mandatory agreements shall be placed in the project file for reference and for audit trail purposes.

d) Specific Supervision Responsibilities for OH&S

The Principal Contractor shall appoint designated competent employees and/or other competent persons as required by the OHS Act and Regulations, as well as this specification. Appointments shall be in writing and the responsibilities clearly stated together with the period for which the appointment is made. This information shall be communicated to and agreed with the appointees. Where applicable, the training certificate must be attached to the appointment. Notice of appointments shall be submitted to the Employer. All changes shall also be communicated to the Employer.

It is a requirement that The Principal Contractor shall provide the Employer with an organogram of all sub-Principal Contractors that he/she has appointed or intends to appoint and keep this list updated and prominently displayed on site.

Designation of OH&S Representatives (Section 17 of the OH&S Act). Where the Principal Contractor employs more than 20 persons (including the employees of sub-Principal Contractors) he has to appoint 1 (one) OH&S representative for every 50 employees or part thereof. This is a minimum (legal) requirement. The Principal Contractor may at his own discretion appoint more OH&S representatives according to site specific requirements. General Administrative Regulation 6 requires that the appointment or election of the OH&S representatives be conducted in consultation with employee representatives or employees (Section 17 of the Act and General Administrative Regulation 6 & 7). OH&S representatives shall be designated in writing and the designation shall include the area of responsibility of the person and term of the designation. OH&S representatives must be experienced, permanently employed by The Principal Contractor or his sub-Principal Contractors, trained and able to move freely within their designated area of responsibility. The client or client representative reserves a right to instruct the Principal Contractor to appoint more Health and Safety Representatives depending on the prevailing conditions on site.

e) Duties and Functions of the OH&S Representatives (Section 18 of the OH&S Act)

The Principal Contractor shall ensure that the designated OH&S representatives perform their functions in respect of the workplace or section of the workplace for which they have been appointed. These functions include conduct continuous monitoring and monthly inspections of their respective areas of responsibility, focusing on unsafe acts and unsafe conditions and report thereon to The Principal Contractor. OH&S representatives shall participate in accident or incident investigations. OH&S representatives shall attend all OH&S committee meetings. The complete list of functions can be found in Section 18 of the OHS Act.

f) Appointment of OH&S Committee (Sections 19 and 20 of the OH&S Act)

The Principal Contractor shall establish an OH&S committee, which shall meet at least once a month, where two or more Health and Safety Representatives have been appointed. OH&S representatives must be appointed as OH&S committee members. The number of management appointed members may not exceed the number of OH&S representatives on the committee.

g) Operational integrity

The operational integrity of plant, equipment, structures and protective systems must be monitored and assured on an ongoing basis throughout the project cycle. Hazards must be identified, assessed and as far as reasonably practicable, eliminated or the risks treated to as low as reasonably practicable (ALARP).

h) Construction Plant & Equipment

The Principal Contractor shall maintain all items of plant and equipment necessary to perform the work in a safe condition.

Department of Health North West reserves the right to inspect items of plant and equipment brought to site and used on site by The Principal Contractor. Should it be found that any item is inadequate, faulty, unsafe or in any other way unsuitable for the safe and satisfactory execution of the work for which it is intended, The Principal Contractor will be advised of such observation / inspection, and The Principal Contractor shall be required to repair, make safe or remove such item from operation and replace it with a safe and adequate substitute.

The Principal Contractor shall ensure that all plant, equipment, and power tools that are brought onto and used on site are:

- Appropriate for the type of work to be performed.
- Placed on a register and inspected by a competent person or the authorized operator before use, daily or monthly dependent on Legislation and project requirements.
- Record inspection findings on a register that must be kept on site.
- The inspection register shall reflect the serial number of the plant, equipment or power tool.
- Maintained and used in accordance with the manufacturer's recommendations.
- Have adequate machine guarding fitted to all exposed rotating or moving parts, as reasonably practicable that have the potential to cause harm.
- All electrical power supply units are protected with operational earth leakage devices.
- Any defective, damaged or sub-standard equipment must be marked as unsafe for use and removed from operation as soon as possible.

i) Standards and Registers

As standard project procedures, The Principal Contractor is expected to:

- Set up an initial set of registers as per the requirements of the OHS Act and Regulations.
- Complete the registers for each piece of plant, tool and equipment brought on and used on site.
- Maintain a complete, continuous and comprehensive inspection and service history in these registers or checklists.
- Ensure daily, weekly, monthly inspections are done and recorded for all plant, tools & equipment by a competent person as required by the OHS Act and Regulations.
- Have the inspection and maintenance records available for audit purposes.

j) Working at Heights

- All work above 2m will be regarded as working at heights and subject to an approved issue-base risk assessment prior to work being undertaken including working from various forms of stationary, portable and mobile machinery and equipment.
- Working at height will include the following controls: -
 - Appointment of a trained and competent scaffold inspector and erector.
- All scaffolding and equipment used for working at heights shall to comply with the requirements of SANS 10085 and Construction Regulations 2014.
- All equipment used for working at heights shall comply with relevant approved design standards.

11 Occupational Health and Hygiene

11.1 Medical Fitness for Duty

All Principal Contractor employees shall undergo medical examinations and be certified fit for duty by an Occupational Health Practitioner before they are allowed to work on site.

The medical certificate must be in the form of Annexure 3 of the Construction Regulations and stipulate the possible exposures the employee might be exposed to during the execution of the project.

It is recommended and in the best interest of The Principal Contractor to implement pre-employment as well as exit medical surveillance, especially with regards to Section 8 of the Noise Induced Hearing Loss Regulation.

11.2 First Aid

According to GSR 3(4), where more than 10 employees are employed at a workplace / worksite, The Principal Contractor shall ensure that there is at least one trained first aider for every group of 50 employees at the workplace/site. First Aid boxes must be provided where more than 5 employees are employed and must be readily available and accessible for the treatment of injured persons at the workplace.

To ensure immediate treatment of an injured person, it is recommended that all work crews have at least one trained first aider, with a fully stocked first aid box, irrespective of the number of people in the work crew. This is especially important when Principal Contractors work at great distances from the nearest emergency facility or town. These persons shall be appointed in writing as the first aiders with their certificates attached as proof of competency.

The minimum contents of the first aid box shall be as per the supplied list in the General Safety Regulations.

All treatments done must be recorded on a register and kept with the first aid box. A trained and appointed first aider must be responsible for the first aid box and its content. Used content must be replenished as soon as possible.

In order to ensure prompt response at the emergency facility it is recommended that the W.CI 2 forms be partially completed with the employers' details.

11.3 Hygiene Facilities

The Principal Contractor and his Principal Contractors shall ensure compliance to Section 30 of the Construction Regulations with regards to facilities on the construction site as well as where accommodation is provided to employees on remote sites. The Principal Contractor shall ensure that the facilities are kept clean at all times, either through a service provider or self-employed persons. The Principal Contractor shall provide employees with at least one sanitary facility for each sex and for every 30 workers, changing facilities for each sex and sheltered eating areas.

12 Waste management

The Principal Contractor shall comply with all applicable and relevant Waste management legislation, as well as municipal bylaws applicable to waste management.

The Principal Contractor shall remove all waste generated at the construction site on a daily basis or as soon as possible after generation to ensure good housekeeping at all times. The Principal Contractor shall have a waste management plan which must be implemented on the construction site and which will have the objective to ensure that waste is managed according to the Waste Management Hierarchy:

- Reduce what you can. If you cannot reduce then,
- Re-use what you can. If you cannot re-use then,
- Recycle what you can. What you cannot recycle,
- Convert into energy sources. If it cannot be converted to an energy source,
- Dispose of in a landfill – this is only to be done as a last resort and disposed without endangering human health and without using processes or methods which could harm the environment.

13 Hazardous chemical agents management

The Principal Contractor shall ensure that hazardous agents brought onto site are easily identifiable and stored according to the requirements of the Regulations for Hazardous Chemical Agents, 2020.

Where flammable liquids are being used or stored, this must be done in a manner which would not cause a fire or explosion hazard.

The Principal Contractor shall have Safety Data Sheets (SDS) readily available for flammable, hazardous and toxic chemical substances and materials brought onto site and shall ensure that his employees are trained in these SDS's.

Flammable, hazardous or toxic chemical substances may not be stored in empty food or drink containers. Empty flammable, hazardous and toxic containers must be disposed of in a safe manner, which will prevent further use of such a container.

14 Principal contractor

14.1 Consultations, Communications and Liaison

OH&S liaison between the Employer, The Principal Contractor, The Principal Contractors, the designer and other concerned parties will be through the OH&S committee. In addition to the above, communication may be directly to the Employer or his appointed agent, verbally or in writing, as and when the need arises.

Consultation with the workforce on OH&S matters will be through their construction managers and supervisors, OH&S representatives and the OH&S committee. The Principal Contractor shall be responsible for the dissemination of all relevant OH&S information to The Principal Contractors e.g. design changes agreed with the Employer and the designer, instructions by the Employer and/or his/her agent, exchange of information between Principal Contractors, the reporting of hazardous/dangerous conditions/situations etc. The Principal Contractors' most senior manager on site shall be required to attend all OH&S meetings

14.2 Operational Procedures

Each construction activity shall be assessed by The Principal Contractor so as to identify operational procedures that will mitigate against the occurrence of an incident during the execution of each activity. This specification requires

The Principal Contractor:

- to be conversant with all relevant Regulations.
- to comply with their provisions.
- to include them in his OH&S plan where relevant

14.3 Checking, Reporting and Corrective Actions

The Employer will conduct monthly health and safety and document verification audits in compliance with Construction Regulation 5(1) (o) in order to ensure that The Principal Contractor has implemented and is maintaining the agreed and approved OH&S plan.

The Principal Contractor will ensure that periodic health and safety audits and document verification are conducted at intervals mutually agreed upon between the Principal Contractor and any Principal Contractor, but at least once every 30 days.

The Principal Contractor will be provided with a copy of the Health and Safety audit report within seven days after the audit. The employer or his representative may stop any Principal Contractor from executing a construction activity which poses a threat to the health and safety of persons which is not in accordance with the client's health and safety specification and the Principal Contractor's health and safety plan for the specific site.

14.4 Other Audits and Inspections by the Employer

The Employer reserves the right to conduct other ad hoc audits and inspections as deemed necessary. This will include site safety walks.

14.5 Principal Contractor's Audits and Inspections

The Principal Contractor must conduct his own regular internal audits to verify compliance with his own OH&S management system, as well as with this specification. The Principal Contractor shall furthermore ensure that each Principal Contractor's health & safety plan is being implemented by conducting periodic audits at intervals mutually agreed between The Principal Contractor and Principal Contractors, but at least once per month.

14.6 Inspections by OH&S Representatives and other Appointees

OH&S representatives shall conduct weekly inspections of their areas of responsibility and report thereon to their foreman or supervisor whilst other appointees shall conduct inspections and report thereon as specified in their appointments e.g. vehicle, plant and machinery drivers, operators and users must conduct daily inspections before start-up.

14.7 Recording and Review of Inspection Results

All the results of the abovementioned inspections shall be in writing, reviewed at OH&S committee meetings, endorsed by the chairman of the meeting and placed on the OH&S File.

14.8 Project Health and Safety Management Plan

As per Section 5(1) (l) and Section 7(1) (a) of the Construction Regulations of 2014, The Principal Contractor shall develop, implement and administer a Health and Safety Management Plan. The plan shall be in writing and shall be negotiated between The Principal Contractor and Client or designated OHS Agent and must be approved by Department of Health North West or the designated OHS Agent prior to the commencement of work on site. The plan shall demonstrate management's commitment to ensure employee health and safety as their primary objective during the contract.

14.9 Project Health and Safety File

The Principal Contractor shall compile a project specific Health and Safety File that consist of all the relevant project specific documentation. The Health and Safety file may consist of multiple files, which when combined should contain all the required documentation.

It is recommended that the project specific Health and Safety file contain at least the following:

- Scope and summary of the project as well as any scope changes.
- Notification of Construction Work to DoL / Copy of Work Permit
- Proof of COID registration (Letter of Good Standing)
- Principal Contractor Health and Safety Policy statement signed by management.
- Mandatory Agreement – OH&S Act 37.2 (Between Employer and Principal Contractor)
- Signed Client Health and Safety specification
- Latest copy of the OHS Act and Regulations.

- Company Organogram depicting Health and Safety Responsibilities, including sub-Principal Contractors.
- Employee list including copy of IDs and medicals.
- Project specific Health and Safety Management Plan agreed with the Employer
- Relevant OH&S Legal appointments which includes duties and responsibilities as well as competencies (training certificate)
- Copies of minutes of meetings - OH&S committee and other relevant OH&S meeting minutes
- Site specific Fall Protection Plan (if applicable)
- Risk Assessments
- Principal Contractor Induction material
- Waste management Plan
- Emergency preparedness (first aid, firefighting, emergency plan, etc.)
- Emergency Contact Telephone numbers
- HIV awareness program
- List of hazardous chemical agents used on site.
- Safety Data Sheets of hazardous chemicals on site
- List of plant & equipment to be used on site.
- Inspection Checklists/Registers of plant & equipment and emergency equipment
- List of Sub-Principal Contractors including type of work.
- Sub-Principal Contractor 37.2 Mandatory Agreements
- Sub-Principal Contractor appointments which shall include the type of work The Principal Contractor is appointed for.

14.10 Contracting Philosophy

Any site-specific hazards and safety management expectations will be made known to The Principal Contractor prior to the work commencing on site. Legal OHS requirements contained in the OHS Act and Regulations as well as SANS Codes are the minimum requirements The Principal Contractor must apply during this contract with regards to Occupational Health and Safety. The Principal Contractor shall apply, implement and enforce the minimum OHS Act & Regulations and SANS Codes requirements.

14.11 Workers Compensation Registration

The Principal Contractor shall ensure that his employees are covered for any occupational injuries and illnesses in terms of the Occupational Injuries and Diseases Act 130 of 1993, which cover shall remain in place and up to date for the duration of the project. The principal contractor must ensure that only contractors who have letter of good standing are eligible to work under this contract.

14.12 HSE Non-Compliance

It is a legal duty of the client according to the Construction Regulation 5(1) (q) that a Principal Contractor is stopped from executing any activity which poses a threat to the health and safety of persons. Depending on the seriousness of the non-compliance only the specific activity may be stopped until the non-compliance is rectified or the whole operation may be stopped.

It is also the duty of every employee to take reasonable care of his own health and safety and of other persons who may be affected by his acts as per OHS Act, Section 14(a). Keeping this in mind, it is required of The Principal Contractor to ensure his employees has the right to remove themselves from any unsafe situation or work activity, without any negative consequence to them until such time as The Principal Contractor has made the unsafe situation or activity as safe as practicable possible.

14.13 Indemnity by Principal Contractor

The Principal Contractor shall indemnify the Employer against and from all damages, losses and expenses (including legal fees and expenses) resulting from:

- the loss of output and delay caused by the slowing down or partial or total stoppage of work caused by:
- all or any of The Principal Contractor's workforce as a result of a dispute between all or any of the Principal Contractor's workforce and The Principal Contractor; or
- all or any of the Principal Contractor's suppliers' difficulty or impossibility to deliver goods or materials needed to perform the Works.
- Any unlawful, riotous or disorderly conduct by or amongst the Principal Contractor's personnel."

14.14 The Principal Contractor Conduct

Guidelines to the most important rules that shall be implemented and maintained by the Principal Contractor:

- Complete compliance to the OH&S Act 85 of 1993 and Regulations
- Hazard identification and Risk Assessments for all activities
- Daily communication of DSTI talk before work commences.
- Safe access and egress to and from work areas.
- Good housekeeping and stacking practices.
- Safe lifting, rigging and slinging practices.
- Complying to Legal standards for lifting machinery & equipment
- No lifting in wind conditions exceeding 30km/h (This is a guide and is dependent on risk assessments)
- Securing of tools, equipment and material at heights
- Wearing of appropriate personal protective equipment as identified in the risk assessment.

14.15 Principal Contractor and Contractor Management

The Principal Contractor shall establish, maintain and ensure that all his Contractors establish and maintain HSE standards and systems as necessary and to comply with the Legal requirements as well as these HSE specifications.

The Principal Contractor shall be solely responsible for carrying out work on the project, having the highest regard for the health and safety of his employees and people in the vicinity of his work area.

14.16 Public Health and Safety

The Principal Contractor shall, as far as is reasonably practicable, be responsible for ensuring that non-employees affected by the construction work are made aware of the dangers likely to arise from said construction work as well as the precautionary measures to be observed to avoid or minimise those dangers.

This includes:

- Non- employees entering the site for whatever reason.
- The surrounding community
- Passers-by to the site.

14.17 Designing for health, safety and environment

Designing for safety is a process aimed at minimizing injury, death, property damage or destruction and harm to the environment, by utilizing an approach to identify and eliminate or control hazardous areas. The project Designer and client must implement a process that ensures safety is incorporated in the design process, which includes temporary works as contemplated in the Construction Regulations, 2014 Section 6 and Occupational Health and Safety Act 85 of 1993 section 10.

The Principal Contractor must communicate the anticipated risks and hazards resulting from the design to his employees and establish safe work procedures for the temporary works.

14.18 Incident management

The Principal Contractor shall ensure that a culture exists within his company that promotes the recognition, response, reporting and investigation of incidents, including near misses (near hits). The Principal Contractor must implement a procedure for reporting and investigating accidents, incidents and near misses. The Principal Contractor should have a clear objective and target to obtain zero injuries for the duration of the project and such an objective must be communicated to all employees.

Appropriate corrective actions must be implemented, and the applicable learnings must be shared within The Principal Contractors business to prevent a recurrence of the incident or to prevent the near miss from becoming an incident in future.

14.19 Incidents and Accidents

The Principal Contractor and his Contractors shall coordinate their investigation of all accidents/incidents where employees and non-employees were injured to the extent that he had to be referred for medical treatment by a doctor, hospital or clinic. The results of the investigation shall be entered into an accident/incident register, which must be updated with each accident/incident.

The Principal Contractor shall notify the relevant Department of Health North West Project Manager and or Department of Health North West OHS Specialist of any incident / accident within

the Principal Contractors or his Principal Contractors area of responsibility in writing as soon as possible.

Although the accident / incident is reported to the client, the Principal Contractor has a responsibility and is required by law to report any Section 24 accidents and incidents to the Department of Labour. Any road traffic accident must be reported to the relevant authorities.

It is essential that The Principal Contractor demonstrate that corrective and preventative action has been taken to prevent a similar incident in future and that it is communicated to all The Principal Contractors affected staff. A copy of the investigation, corrective and preventative action taken as well as the attendance register of the employees who attended the discussion of the incident and the action implemented to prevent a similar incident, must be forwarded to the Department of Health North West Project Manager and or the Department of Health North West OHS Specialist.

Investigations must be completed for:

- Near Miss Incidents (To prevent it from becoming an incident)
- First Aid case Incidents
- Medical treatment case Incidents
- Fatalities

14.20 Incident Reporting

The Principal Contractor shall provide the Employer with copies of all statutory reports required in terms of the Act within 7 days of the incident occurring. In addition, The Principal Contractor shall update monthly the Disabling Injury Frequency Ratio (DIFR) and display this information on a signboard at the site office.

The Principal Contractor is responsible for collecting, recording, calculating and reporting his and his sub-Principal Contractors Health & Safety statistics to the Department of Health North West OHS Specialist.

The statistics should contain at least the following for all employees of all Principal Contractors working on the project:

- Total Number of workers
- Total Number of hours worked (on the Department of Health North West project)
- Total Number of Near Miss Incidents
- Total Number of First Aid case Incidents
- Total Number of Medical Treatment case Incidents (Excluding Section 24 type incidents)
- Total Number of Section 24 type Incidents
- Preventative actions taken on incidents that have occurred.
- Communication to employees and Principal Contractors of incidents and preventative actions.

14.21 Project specific construction requirements

The clause contains specific requirements for Contract, which must be adhered to in addition to minimum legislative requirements. The scope of work entails the following risks and hazards that will need to be managed throughout the project life cycle.

14.22 Daily Site Attendance Register

The Principal Contractor shall keep a daily site register so as to be able to identify the entire Principal Contractors personnel on site in case of an emergency or evacuation situation. The attendance register must include permanent as well as temporary workers working on the site.

All site visitors and any new Principal Contractors shall report to security / reception upon arrival at site. The Principal Contractor will only be granted first time access to work on the site if all required documentation has been provided and approved.

All visitors need to sign an attendance register when visiting the site. Visitors include all persons which are not permanently working on the site but excludes temporary site workers. Visitors must undergo site induction training before they are allowed on site to make them aware of the site dangers.

14.23 Emergency Numbers / Emergency Evacuation

A list with emergency numbers must be readily available to first aiders and supervisors. Emergency numbers must be site specific and must display the nearest emergency facilities.

The Principal Contractor shall identify and formulate emergency procedures in the event an incident does occur. The emergency procedures thus identified shall also be included in The Principal Contractor's OH&S plan and communicated as part of induction training.

The Principal Contractor must implement an emergency evacuation procedure on site to ensure that in case of an emergency, all staff will leave their place of work when the emergency siren is sound and proceed to the demarcated emergency assembly point. The emergency assembly point must display the sign "Emergency Assembly Point".

An evacuation route diagram must be displayed and visible at strategic points in buildings and on notice boards.

All staff working on site must be given awareness training on the emergency evacuation procedure and evacuation drills must be exercised to ensure all staff know the correct procedure to follow in case of an emergency.

14.24 Site Security

Certain areas where work must be carried out, is recognized unsafe areas and certain other areas may from time to time become unsafe, due to 3rd party actions. The Principal Contractor must as far as reasonably possibly anticipate unsafe areas and must ensure that his site staff is safe from 3rd party actions, which include but is not limited to:

- Unrests,

- Violent Demonstrations,
- Theft,
- Injury from 3rd parties at all times.

The Principal Contractor must, when work is to be carried out in the above-mentioned areas, make provision for security services to accompany site staff during the execution of their work, as The Principal Contractor is responsible for the Health, Safety and Security of his own staff. The provision for security services must form part of The Principal Contractors tender.

14.25 Personal Protective Equipment

Comply with General Safety Regulations, Section 2. Personal protective equipment (PPE) should, however, be the last resort and there should always first be an attempt to apply engineering and other solutions to mitigating hazardous situations before the issuing of PPE is considered. The hierarchy of hazard elimination must be followed before the option of personal protective equipment is considered. The following hierarchy of controls must be followed:

- Elimination
- Passive Controls
- Substitution – Using a cherry picker or man-lift instead of a ladder.
- Engineering Controls – Installing barrier railings; Installing stairs instead of using vertical ladders.
- Active Controls
- Administrative policies and procedures
- Personal protective equipment

Where it is not possible to create an absolutely safe and healthy workplace The Principal Contractor shall inform employees regarding this and issue, free of charge, suitable equipment to protect them from any hazards being present and that allows them to work safely and without risk to health in the hazardous environment.

The Principal Contractor shall include in his OH&S plan the PPE he intends issuing to his employees for use during construction and the sanctions he intends to apply in cases of non-conformance by his employees. Conformance to the wearing of PPE shall be discussed at the weekly inspection meetings.

14.26 Site Supervision

The Principal Contractor shall appoint a competent Construction Manager who shall be responsible for the construction activities and for ensuring occupational health and safety compliance on the construction site.

14.27 Structures

The Principal Contractor shall ensure that all practicable measures are taken to prevent the uncontrolled collapse of new or existing structures or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work. No structure may be loaded in a manner which would render it unsafe.

The Principal Contractor shall ensure that they assess the structural integrity of the building to ensure that it can safely undergo renovation without compromising its stability.

14.28 Renovations

Ensuring safety during renovations is a important to ensure the health and safety of employees is taken care of. The Principal Contractor shall conduct a through hazard assessment before starting the renovation. Identify potential risks such as structural weaknesses and electrical hazards.

Principal Contractor shall ensure that the renovation project complies with the OHS and its regulations. He/She shall ensure that employees are supplied with appropriate PPE suitable for the renovation activity done. This should include hard hats, overalls, safety boots, eye and and respiratory protection if needed.

14.29 Electrical Equipment

The Principal Contractor shall take adequate steps to ascertain the presence of and guard against danger to workers from electrical cables or apparatus which is under, over or on the site. The exact location of underground electric power cables must be determined before any excavators are used for excavation purposes. The location of overhead electrical cables must be assessed when working with cranes and lifting equipment.

All temporary electrical installations must be inspected at least once a week by a competent person and the records of the inspections must be recorded in a register which must be kept on site.

14.30 Temporary Storage of Flammable Liquids

The Principal Contractor must ensure storage areas of flammable liquids are well ventilated and “No Smoking” signs are placed at the entrances and ventilation ducts of the storage areas. Firefighting equipment must be available in suitable positions around the storage areas.

The Principal Contractor must ensure that good housekeeping is practiced in and around the flammable storage areas.

14.31 Housekeeping

The Principal Contractor shall ensure that suitable and acceptable housekeeping is continuously implemented and maintained on the construction site. Off-cuts and waste must be removed by the end of the shift or as soon as practicable. The Principal Contractor should CR 27 and Environmental Regulations for Workplaces, Section 6(3).

14.32 Stacking & Storage of Material & Equipment

The Principal Contractor shall appoint a competent person in writing with the duty of supervising all stacking and storage operations on site. Stacking shall only take place in areas specifically demarcated for this purpose. Circular items must be secured with wedges or chocks.

Items removed from a stack shall only take place from the topmost layer of the stack. Stacks shall not obstruct any fire extinguishing equipment, first aid equipment, electrical switchgear (DB Boxes) and ventilation or lighting installations. Unstable stacks must be broken down immediately.

14.33 Fire Precautions

The Principal Contractor must provide his own firefighting equipment that is within the service date and safe for use. Firefighting equipment must be on a register and inspected by a competent person who has been appointed in writing.

Suitable and sufficient fire extinguishing equipment must be placed at strategic locations and a sufficient number of firefighters must be available, which must be trained in the use of it.

14.34 Intoxicating Liquor and Drugs

The site limit for intoxication is set to zero to complement a vision of zero tolerance. Any person found to be intoxicated, or consuming intoxicating liquor or illegal drugs, will not be allowed onto the premises and/or will be removed from the premises.

The Principal Contractor has the right to test any person entering the premises for intoxicating liquor or illegal drugs and may refuse entrance on the basis of the outcome of the test.

The Principal Contractor shall ensure that employees taking prescription medicine informs The Principal Contractor of such and shall ensure that the side effect of such medicine does not constitute a hazard to the employee himself or people working in close vicinity to the employee.

14.35 Site Sanitary

The Principal Contractor shall provide and maintain on the Site adequate and suitable sanitary services for employees.

The toilets must be for both male and female with a ratio of 1:30.

14.36 Drinking Water

The Principal Contractor must ensure that an adequate supply of potable drinking water is available for personnel engaged on the Contract. Employees working in hot conditions must consume enough water per hour to prevent dehydration.

Where water is unsafe for human consumption, it must be indicated by means of adequate signage.

14.37 Formwork

The Principal contractor must indicate the plan to implement formwork on the construction site. All employees must be trained and provided with necessary PPE before formwork commences. Equipment used must be pre inspected by a competent person. All defaulted equipment must be

reported and not used. Pre assemble of formwork shutters should be prepared on an open area. Heavy shutters should be lifted with certified chains or slings.

14.38 Scaffolding

Every person required to erect, alter, disassemble and/or inspect scaffolding shall have undergone training and found competent to perform such work. Convenient and safe access must be provided to every scaffold platform. Where the access is a ladder, the ladder shall project at least 900 mm beyond the top of the platform.

All persons working on or from a scaffold platform shall wear safety harnesses which shall be secured to the platform. Scaffolding shall not be erected where electricity can pose a risk.

All scaffolds shall properly propped against displacement and secured vertically on firm foundations. Steel scaffold standards with “heavy”, “medium”, “light” or “very light” platform loading shall not exceed 320, 240, 160 and 80 kg/m² of load respectively, and spaced not more than 1.8 m, 2 m, 2.5m and 3 m apart, respectively.

Every scaffold platform shall comply with the following width dimensions:

- a) “Heavy” not less than 1125 mm and not more than 1380 mm.
- b) “Medium” not less than 1125 mm and not more than 1150 mm.
- c) “Light” not less than 900 mm and not more than 1150 mm.
- d) “Very light” not less than 675 mm and not more than 1150 mm.
- e) A minimum of 3 planks is required on a platform.

The base section of the scaffold must be provided with “foot plate” supports. The size of these plates must be related to the ground conditions. Scaffolding must be secured and effectively braced to ensure stability in all directions. Scaffolding must be secured at suitable vertical and horizontally distances to the structure to which work is being done.

Every plank of a wooden scaffold platform is to be at least 228 mm wide and 38mm thick.

Every plank which forms part of a scaffold platform is to be supported at distances not exceeding 1.25 m and, its ends project not less than 70 mm and not more than 200 mm beyond the last prop.

15.45 Roof work

Any work must be performed within the requirements of OHS Act legislation: Construction Regulation 10 Fall Protection and 16 for Scaffold, GSR 13 for ladders.

15.46 Public awareness

The Principal contractor must indicate in the SHE plan how the workers, visitors and the community will be protected from all the construction activities. The adjacent buildings to the project site must be notified through letters and notices of the hazards and risks associated with the project. The public should be given a platform of raising their concerns emanating from the project to avoid community unrest.