

DEPARTMENT OF HEALTH - NORTHWEST



health

Department:
Health
North West Provincial Government
REPUBLIC OF SOUTH AFRICA

TENDER DOCUMENT

BID NUMBER: NWDOH/PS/70/19

ADDITIONAL SPACE IN DR KENNETH KAUNDA DISTRICT: ORKNEY EMS COLLEGE MAINTENANCE AND RENOVATION WORKS.CIDB GRADING 6GB OR HIGHER.

**NORTHWEST PROVINCE
DEPARTMENT OF HEALTH**

Cnr Sekame and First Street
New Office Park
Mafikeng
2745

Contact Person: Ms. R. P. Setane
Supply Chain Management
Telephone: (018) 391 4559
email: RPSetena@nwpg.gov.za

Contact Person: Mr. D. Mtshali
Technical Information
Telephone: (066) 315 5001
email: dmtshali@nwpg.gov.za

Tenderer _____

CIDB Registration No.: _____

Total of the Prices Inclusive of VAT: 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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**MAINTENANCE AND RENOVATION WORKS COMPRISING
OF 2 NO. RESIDENCE BLOCKS; IT LABORATORY &
LIBRARY; CLASSROOMS & ABLUTIONS; VENTILATION &
AIR CONDITIONING WORKS; SEWER & WATER WORKS;
AND FIRE COMPLIANCE WORKS AT ORKNEY EMS
COLLEGE**

PART T1

TENDERING PROCEDURES



health

Department:
Health
North West Provincial Government
REPUBLIC OF SOUTH AFRICA



Health Office Park
Private Bag X 2068
MMABATHO
2735

SUPPLY CHAIN MANAGEMENT

Tel: +27 (18) 391 4386
Email:
NSegwabanyane@nwpg.gov.za
www.health.nw.gov.za

INVITATION TO BID NWDOH/PS/70/19: ADDITIONAL SPACE IN DR KENNETH KAUNDA DISTRICT: ORKNEY EMS COLLEGE MAINTENANCE AND RENOVATION WORKS.CIDB GRADING 6GB OR HIGHER.

Open bids are hereby invited additional space in Dr Kenneth Kaunda district:
Orkney EMS College maintenance and renovation works

The conditions contained in the Preferential Procurement Policy Framework Act and 2022 PPPFA Regulations, National Treasury Implementation Guide: Preferential Procurement Regulations 2022, the General Conditions of Contract (GCC) and/ NEC 3 Engineering & Construction Contract, i.e. Annexure "A" and the attached bid forms, as well as any other conditions accompanying this invitation, are applicable.

1. The work procedure the bidder proposes to follow in order to obtain the required result must be clearly outlined and its terms may not conflict with those contained in the General Conditions of Contract.
2. All the documents accompanying this invitation to bid must be completed in detail where applicable, and together with all documentation required in considering the bid, be sealed in an envelope and be deposited in the bid box before the closing date and time.
3. The proposals in a sealed envelope and marked with the Bid Number, Company Name, Closing Date and Closing Time should be deposited in the Bid Box situated at the entrance of the **Department of Health North West, New Office Park Building, Ground floor, Corner First Street and Sekame, Mmabatho [Behind the Crossing Mall]. No correspondence will be entered into regarding non-submission/attachment of required documents after bid closure. Failure to submit all the required documents will render your bid non-responsive**
4. Duly completed and signed original bid documents issued by the Department should be sealed in an envelope marked:

Bid number : NWDOH/PS/70/19

Company Name :

Closing date : 04 September 2024

Closing time : 11H00

Technical enquiries : Mr Daluxolo Mtshali 066 315 5001

No telegraphic or facsimile bids will be considered.

5. In terms of the PFMA Treasury Regulations 2005;-

A. **Regulation 16A9. 1 [e] and [f]** the Accounting Officer of the Department may-

- i. Reject a proposal for the award of a contract if the recommended bidder has committed a corrupt or fraudulent act in competing for the particular contract, or
- ii. Cancel a contract awarded to a supplier of goods or services
 - If the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract, or
 - If any official or other role-player committed any corrupt or fraudulent act during the bidding process or the execution of that contract that benefitted that supplier.

B. **Regulation 16A9.2 [a] and [b]** the accounting officer or accounting authority-

- i. May disregard the bid of any bidder if that bidder, or any of its directors-
 - Have abused the institution's supply chain management system
 - Have committed fraud or any other improper conduct in relation to such system.

C. Bidders may NOT buy gifts for or ask for cell phone numbers from Bid Committee Members or contract managers during briefing sessions, evaluation and adjudication of bids. In terms of the **NATIONAL TREASURY MINUTE3/3/3/2/10 DATED 23 APRIL 2006-CODE OF CONDUCT FOR BID ADJUDICATION COMMITTEES** governing the Conduct of all Bid Committees, Stakeholders and SCM Practitioners involved in the SCM processes:-

- i. Bid information and documentation are confidential
- ii. No unauthorized communication should be made with a bidder/contractor by any member, stakeholder or SCM Practitioner prior to or after any meeting during the evaluation and adjudication of bids

D. **IN TERMS OF THE NATIONAL TREASURY SCM PRACTICE NOTE NUMBER: SCM 4 OF 2003; CODE OF CONDUCT FOR SUPPLY CHAIN MANAGEMENT PRACTITIONERS -**

"6.5. No person should:-

"6.5.1 Interfere with the supply chain management system of an Institution

"6.5.2 Amend or tamper with any bid after its submission

6. Bidders should ensure that all the relevant documentation required in considering bids are submitted. **Failure to submit all the required documents may render your bid non-responsive**
7. The Department will not be held responsible for missing or duplicated documents. **Bidders are required to sign, number sequentially and initial on each page of the bidding documents. Bid documents must be binded.**
8. It is the ultimate responsibility of every bidder to ensure that his/her bid is duly deposited in the Bid Box situated at the entrance of the Department of Health North West, New Office Park Building, Ground floor, Corner First Street and Sekame, Mmabatho on time before the closing date and time. **The Department of Health shall not be held responsible for any couriered bid documents that do not reach the Bid Box by the Closing date and time. – Couriered documents must be deposited in the bid box by Couriers before the closing date and time .No correspondence will be entered into regarding late bids and couriered documents that were not deposited in the bid box by the bid closing date and time.**
9. The Department of Health reserves the right to award any bid in whole or in part and the Department **does not bind itself to accept the lowest or any bid in whole and price alone is not a determining factor.**
10. National Treasury has per Circular no 3 OF 2015/2016 given instructions to all PFMA Institutions that with effect from 01 April 2016, no quotation or bid may be awarded to any supplier who is not registered as a Prospective Supplier on the National Treasury Central Service Provider Database [CSD]. If you are not registered proceed to complete the registration of your company prior to submitting your bid. Refer to <https://secure.csd.gov.za/> to register your company. Ensure that all documentation on the database are updated and valid. Bidders should further note that the Central Supplier Database (CSD) will be utilized to confirm compliance to tax and other related matters. It is therefore the bidder's responsibility to ensure compliance in all respects.
11. For more information please contact the following:

ADMINISTRATION ENQUIRES:

Ms N. Tshabalala 018 391 4043 at email NSegwabanyane@nwpg.gov.za
Ms R. Setena 018 391 4559 at email RPSetena@nwpg.gov.za

TECHNICAL ENQUIRIES:

Mr Daluxolo Mtshali 066 315 5001 at email DMtshali@nwpg.gov.za

Potential bidder(s) must reduce all telephonic enquiries to writing and send them to the above email addresses.

12. CONDITIONS TO BID

This bid is issued under the condition that the bidder should at any stage during production or execution or on completion of the bid be subject to inspection. The premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by the representative of the Department of Health or organization acting on behalf of the State. The bidder shall provide, if required, all required facilities for inspections, tests and analysis of the land available, apparatus which may be required for the purpose of such inspection, tests and analysis free of charge unless otherwise specified. The bidder also agrees that the financial standing of the bidder may be examined as part of the inspection

13. RISK ANALYSIS

A risk analysis as per applicable legislation and prescripts shall be used to establish the competency and ability of the successful bidder for the project

14. BID CONDITIONS

- a) Late bids will not be considered. Please note that bids are late if they are received at the address given in the bid document after the bid closing date and time.
- b) Bids will be valid for a period of 90 days.
- c) All bid prices must be quoted in South African currency and must be VAT inclusive.
- d) All the Relevant Forms attached to this bid document must be completed and signed in black ink where applicable by a duly authorized official. Use of tippex and pencil in the bid document are not allowed. Where cancellation has been made, bidders should endorse with a signatures

15. BID ADMINISTRATION DOCUMENTS TO BE SUBMITTED BY ALL BIDDERS:

National Treasury has per **PFMA SCM INSTRUCTION NO.9 OF 2022/2023 MANDOTRY UTILISATION OF THE E-TENDER PORTAL FOR PUBLICATION OF BID OPPORTUNITIES, BID AWARDS AND ANY BID RELATED NOTIFICATIONS DATED 13 OCT 2022** prescribed the mandatory advertisement of bids on the e-tender Publication Portal by all departments. Constitutional institutions and public entities listed In Schedules 2 and 3 to the Public Finance Management Act (PFMA). 1999 (Act No.1 of 1999), hereafter referred to as PFMA compliant institutions. This application is aimed at ensuring that all potential service providers have easy access to advertised bids and are provided with an opportunity to supply PFMA compliant institutions with goods and services, as they may require. With effect from 1 Nov 2022, all PFMA compliant institutions must submit the following information to the relevant treasury's e-Tender Publication Administrator in support its advertisement:

- a) Bid description;
- b) Bid number;

- c) Name of the PFMA compliant institution;
- d) The place where the bid is required;
- e) The closing date and time of the bid;
- f) The PFMA compliant institution's contact details (postal and physical address, Telephone number, etc.);
- g) The place where bids can be collected;
- h) The place where bids should be delivered; and
- i) The bid document, that is,
 - Invitation to Bid-which explains the bid administration requirements and the evaluation criteria, to be complied with by all bidders.
 - SBD Forms Prescribed by National Treasury- to be completed by all Bidders without exception
 - Technical Bid Specifications/Terms of Reference or Bill of Quantities requirements - depending on the technical nature of the bid.

16. BID ADMINISTRATIVE REQUIREMENTS/CRITERIA TO BE USED IN EVALUATING A BID

The National Treasury Supply Chain Management Circular Ref 3/4/3/2/10 dated 10 May 2005: Page 2 Paragraph 1 stipulates that "Bids may only be evaluated in accordance with the evaluation Criteria stipulated in the bid documentation"

All the under-mentioned documentation /criteria required to evaluate this bid must be sealed in an envelope and be deposited in the bid box before the closing date and time.

ALL BIDDERS ARE REQUIRED TO ENSURE THAT THE FOLLOWING DOCUMENTS ARE ATTACHED:-

- (a) Original, fully completed and signed applicable SBD Bid Documents and Preference Claim Forms in terms of the Preferential Procurements Regulations and National Treasury SCM prescripts. **NB. All Bidders are required to fully complete the SBD forms (SBD form 1, 3.1, 4, 6.1,) as required by the National Treasury PFMA prescripts and the PPPFA Regulations AND to fully complete all other forms as required by the specification, without fail.**
- (b) Copies of Identity Documents of the Directors / Main Shareholders of the company.
- (c) Valid Tax Clearance Certificate/ Tax Compliance Status PIN or CSD Report- The Department will also verify the tax compliance status of bidder
- (d) **Only Bidders who collect bid documentation from the Health Department must attach a General Revenue Receipt of Five Hundred Rand (R500-00). Original or Copy of stamped Bank Deposit slip or Electronic Transfer printout or Departmental Revenue Receipt reflecting the name of the Bidder and Bid Number –Bidders are encouraged to download the bid documentation from the E-Tender**

Bank Name	: ABSA
Account Name	: NW Health
Account Holder	: NWPG
Branch Code	: 632005
Account Number	: 41-1181-1655
Account Type	: Cheque Account

- (e) Copy of Company Registration Certificate from the Registrar of Companies of all Parties indicating the names of directors or main shareholders of the company. **NB The old Company Registration certificates issued in terms of the repealed 1973 Companies Act which do not show the company Directors 'names are not acceptable. All bidders are required to submit the updated Company Registration Certificates issued by the Registrar of Companies in terms of the 2008 Companies Act, that is, a complete certificates which indicate the names of all Directors or main shareholders of the Company.**
- (f) Bidders are required to submit a copy of a valid B-BBEE Status level Verification Certificate, together with their bids, to substantiate their B-BBEE rating claims. An EME is required to submit a sworn affidavit confirming their annual total revenue of R10 MILLION or less
- (g) Bidders who do not submit B-BBEE Status level Verification Certificates , a sworn affidavit or are non-compliant contributors to B-BBEE do not qualify for preference points for B-BBEE but shall not be disqualified from the bidding process , but will score points out of price only and zero [0] points out of B-BBEE.
- (h) **In the case of joint venture (JV) or Consortium the following documents must be attached to the Bid documents:-**
- Copy of Valid Tax Clearance Certificate pin of all Partners- / Tax Compliance Status PIN or CSD report- The Department will also verify the tax compliance status of bidder
 - Copies of Identity Documents of all Directors / Main Shareholders of the company.-
 - Joint venture agreement duly signed by all parties
 - A certificate or agreement regarding shareholder -ship of members
 - Copies of Company Registration Certificates from the Registrar of Companies of all Parties to a Joint Venture indicating the names of directors or main shareholders of the companies to the joint venture.-**NB The old Company Registration certificates issued in terms of the repealed 1973 Companies Act which do not show the company Directors 'names are not acceptable. All bidders are required to submit the updated Company Registration Certificates issued by the Registrar of Companies in terms of the 2008**

Companies Act, that is, a complete certificates which indicate the names of all Directors or main shareholders of the Company

- Copy of a valid Consolidated B-BBEE Status level verification Certificate.-An EME is required to submit a sworn affidavit confirming their annual total revenue of R10 MILLION or less -Bidders who do not submit B-BBEE Status level Verification Certificates , a sworn affidavit or are non-compliant contributors to B-BBEE do not qualify for preference points for B-BBEE but shall not be disqualified from the bidding process , but will score points out of price only and zero [0] points out of B-BBEE
- (i) A Trust, consortium or a joint venture are required to submit a Consolidated-BBEE Status Level Verification Certificate for every separate bid
- (j) Public entities and tertiary institutions are required to submit B-BBEE Status level verification certificates together with their bids

All the bid documents should be completed, signed and sealed in an envelope and deposited in the Bid Box, situated at the entrance of the **Department of Health North West, New Office Park Building, Ground Floor, Corner First Street and Sekame, Mmabatho.**

16. VALIDITY OF B-BBEE STATUS LEVEL VERIFICATION CERTIFICATES

- AO/AAs must ensure that the B-BBEE Status Level Verification Certificates submitted are issued by the following agencies:
 - Tenderers other than EMEs
 - I. Verification agencies accredited by SANAS; or
 - Tenderers who qualify as EMEs
 - II. Sworn affidavit signed by the EME representative and attested by a Commissioner of oaths.

16.1 Verification agencies accredited by SANAS

- 16.1.1 These certificates are identifiable by a SANAS logo and a unique BVA number.
- 16.1.2 Confirmation of the validity of a B-BBEE Status Level Verification Certification can be done by tracing the name of the issuing Verification Agency to the list of all SANAS accredited agencies. The list is accessible on http://www.sanas.co.za/directory/bbee_default.php
- 16.1.3. The relevant BVA may be contacted to confirm whether such a certificate is valid.

16.1.4 As a minimum requirement, all valid B-BBEE Status Level Verification Certificates should have the following information detailed on the face of the certificate:

- The name and physical location of the measured entity
- The registration number and, where applicable, the VAT number of the measured entity;
- The date of issue and date expiry;
- The certification number for identification and reference;
- The scorecard that was used (for example QSE, Specialized or Generic);
- The name and / or logo of the Verification Agency;
- The SANAS logo
- The certificate must be signed by the authorized person from the Verification Agency; and
- The B-BBEE Status Level of Contribution obtained by the measured entity

17. VERIFICATION OF B-BBEE LEVELS IN RESPECT OF EMEs

17.1. In terms of the Generic Codes Practice, an enterprise including a sole propriety with annual total revenue of R10 million or less qualifies as an EME

17.2 in instances where Sector Charters are developed to address the transformation challenges of specific sectors or industries, the threshold for qualification as an EME may be different from the generic threshold of R10 million. In such instances, the relevant sector Charter threshold will therefore be used as a basis for a potential bidder to qualify as an EME. (For example the approved threshold for EMEs for the Tourism and Construction Sector Charters are R2.5 million and R1.5 million respectively)

17.3 An EME is required to submit a sworn affidavit confirming their annual total revenue of R10 million or less and level of black ownership to claim points as prescribed by regulation 6 and 7 of the preferential procurement regulations 2017.

17.4 An EME that is regarded as a Specialized Enterprise is required to submit a sworn affidavit confirming their annual turnover/allocated budget/ gross receipt of R10 million or

17.5 An EME may be measured in terms of the QSE scorecard should they wish to maximize their points and move to a higher B-BBEE recognition level. It is this context that an EME may submit a B-BBEE verification certificate

18. EVALUATION CRITERIA FOR THIS BID IS AS FOLLOWS:

1. CIDB GRADING 4GB OR HIGHER
2. BIDDER REQUIREMENTS
3. TECHNICAL SPECIFICATION
4. 80/20 PREFERENTIAL POINT SYSTEM

80 = Price (NOTE: All bid price/should be VAT inclusive)

20 = Preferential points (Points will be allocated according to the below table)

Specific Goals	Procurement Transaction Preference Points allocated out of 20
B-BBEE Status level of Contributor	10
1	10
2	9
3, 4, 5, 6, 7, 8 and Non-compliant contributor	0
Enterprises located in a specific local or district municipality, township or region for work to be done or services to be rendered in that area (Mandatory)	4
Residing within the local municipality where the service is rendered	4
Residing outside the local municipality but within the District where the service is rendered	3
Residing outside the district where the service is rendered but within North West Province	2
Residing outside the North West Province	0
Designated Groups (any bid that meets 1 or more of the 5 will get the maximum points)	6
• Enterprises 51% owned by black women. • Enterprises 51% owned by people with disability • Enterprises 51% owned by black youth. • Enterprises 51% owned by black military veterans • Registered Cooperatives within the North West department of Health database	6

NB: Points will be allocated to all those who submitted their BBBEE verification certificates/Sworn Affidavit and Confirmation of preferred address on CSD will be checked and printed by the SCM Practitioner for locality points.

CHIEF DIRECTOR: SUPPLY CHAIN MANAGEMENT

DATE:

2024/07/26

COMPLIANCE CHECKLIST

NB. THE BIDDERS MUST COMPLETE THE CHECKLIST TO VERIFY/CONFIRM WHETHER A BIDDER HAS ATTACHED ALL OF THE BID ADMINISTRATIVE REQUIREMENTS

NO	REQUIREMENT	HAVE YOU ATTACHED Answer Yes or No
1	Compulsory Briefing session	N/A
2	General Revenue Receipt should be attached by all bidders who obtained hardcopy bid documentation at the Offices of the Health Department-Original Bank Deposit slip or Electronic Transfer printout receipt reflecting the name of the Bidder and Bid Number. NB-Bidders who download the bid documentation from the E-Tender Website are exempted from this requirement. Bidders are encouraged to download the bid documentation from the E-Tender Website	
3	Original, fully Completed and signed applicable Bid Documents and Preference Claim Forms in terms of the Preferential Procurement Regulations. NB. All Bidders are required to fully complete the SBD forms as required by the National Treasury PFMA prescripts and the 2022 PPPFA Regulations <u>AND</u> fully complete all other forms as required by the specification, without fail. Any bidder having not complied with these requirements shall be disqualified. [Each of the following SBD form must be fully completed and signed.]	
3.1	Availability of signed and fully completed SBD 1- Invitation to bid	
3.2	Availability of signed and fully completed SBD 3.1- Firm Price	
3.3	Availability of signed and fully completed SBD 4- Declaration of Interest	
3.4	Availability of signed and fully completed SBD 6.1 - Preference Points Claim Form in Terms of the Preferential Procurement Regulations 2022	
4	Copies of Identity Documents of all Directors / Main Shareholders of the company.-	
5	Copy of Valid Tax Clearance Certificate / Tax Compliance Status PIN or CSD Report- Indicate the expiry date[s] of all the TCC The Department will also verify the tax compliance status of bidder	

6	Copy of Company Registration Certificate from the Registrar of Companies of all Parties indicating the names of directors or main shareholders of the company. NB The old Company Registration certificates issued in terms of the repealed 1973 Companies Act which do not show the company Directors 'names are not acceptable. All bidders are required to submit the updated Company Registration Certificates issued by the Registrar of Companies in terms of the 2008 Companies Act, that is, a complete certificates which indicate the names of all Directors or main shareholders of the Company without fail	
7	TOTAL BID PRICE INCLUDING VAT AMOUNT.....	
8	Bidders are required to submit a valid copy of B-BBEE Status level Verification Certificate or, together with their bids, to substantiate their B-BBEE rating claims. An EME is required to submit a sworn affidavit confirming their annual total revenue of R10 MILLION or less -Bidders who do not submit B-BBEE Status level Verification Certificates , a sworn affidavit or are non-compliant contributors to B-BBEE do not qualify for preference points for B-BBEE but shall not be disqualified from the bidding process , but will score points out of price only and zero [0] points out of B-BBEE	
9 IN THE CASE OF JOINT VENTURE (JV) OR CONSORTIUM THE FOLLOWING DOCUMENTS MUST BE ATTACHED TO THE BID DOCUMENTS		
9.1	Copy of Valid Tax Clearance Certificate of all Partners- / Tax Compliance Status PIN or CSD report- The Department will also verify the tax compliance status of bidder Indicate the expiry date[s] of all the TCC of the JV partners.	
9.2	Copies of Identity Documents of all Directors / Main Shareholders of all Parties to the Joint Venture.	
9.3	Joint venture agreement duly signed by all parties	
9.4	General Revenue Receipt should be attached by all bidders who obtained hardcopy bid documentation at the Offices of the Health Department-Original Bank Deposit slip or Electronic Transfer printout receipt reflecting the name of the Bidder and Bid Number NB-Bidders who download the bid documentation from the E-Tender Website are exempted from this requirement	

9.5	Copies of Company Registration Certificates from the Registrar of Companies of all Parties to a Joint Venture indicating the names of directors or main shareholders of the companies to the joint venture.- NB The old Company Registration certificates issued in terms of the repealed 1973 Companies Act which do not show the company Directors 'names are not acceptable. All bidders are required to submit the updated Company Registration Certificates issued by the Registrar of Companies in terms of the 2008 Companies Act, that is, certificates which indicate the names of all Directors or main shareholders of the Company, without fail.	
9.6	Valid copy of Consolidated B-BBEE Status level verification Certificate or confirmation letter. An EME is required to submit a sworn affidavit confirming their annual total revenue of R10 MILLION or less Bidders who do not submit B-BBEE Status level Verification Certificates , a sworn affidavit or are non-compliant contributors to B-BBEE do not qualify for preference points for B-BBEE but shall not be disqualified from the bidding process , but will score points out of price only and zero [0] points out of B-BBEE	
10	A Trust, consortium or a joint venture are required to submit a consolidated B-BBEE Status Level Verification Certificate for every separate bid	
11	Public entities and tertiary institutions are required to submit B-BBEE Status level verification certificates together with their bids	
12	Duly completed and signed original bid documents issued by the Department should be sealed in an envelope marked: Bid number : NWDOH/PS/70/19 Company Name : Closing date : 04 SEPTEMBER 2024 Closing time : 11H00	
13	Address and contact details:	

SIGNATURE BY BIDDER:

DATE:



Ground Floor,
Health Office Park
Private Bag X 2068
MMABATHO

**DEPARTMENTAL BID ADJUDICATION
COMMITTEE**

Tel no: 018 391 4514
Enq: Ms N. Moeketsi
Email: nmoeketsi@nwpg.gov.za

1. PURPOSE OF BID

To advertise additional space in Dr Kenneth Kaunda District: Orkney EMS college maintenance and renovation works.

2. BACKGROUND INFORMATION

Following EMS College Management has challenges regarding infrastructure which is negatively affecting their accreditation as a college. A request for an assessment of the college in terms of infrastructure was made and the assessment resulted in a decision to upgrade essential portions of the facility to enable the college to be accredited in terms of infrastructure, which would ensure their ability to continue running as a college. This tender is a result of those assessments.

The scope includes renovation of two residence blocks, IT laboratory, library, classrooms, ablutions, ventilation and air-conditioning works, sewer and water works and fire compliance.

3. EXPECTED DELIVERABLES AND OUTCOMES

The works are to be fully completed, aligned with the Department's norms and standards and according to National Building Regulations.

4. TIME FRAME/DURATION OF TENDER

Six (6) months.

5. TECHNICAL SPECIFICATIONS

The Bills of Quantities document is attached; the technical specification was assessed and approved by Engineering and Technical Services Directorate (IDTS).

6. BIDDER REQUIREMENTS

- a) The bidder must be registered with Construction Industry Development Board (CIDB) with a grading designation of **Grade 6GB or higher**.
- b) Provide a valid COIDA letter of good standing.
- c) Construction Manager should have a Degree/National Diploma in Built Environment with at least four (4) years relevant experience and a professional registration certificate from SACPCMP as a Construction Manager.
(Attach a detailed CV outlining years of experience, job responsibilities and name of the institutions worked, copies of qualifications & professional registration certificate)
- d) Construction Supervisor and/or Foreman should have a Degree/National Diploma in Built Environment with at least four (4) years relevant experience. **(Attach a detailed CV outlining years of experience, job responsibilities and name of the institutions worked and copies of qualifications)**

- e) Safety Officer should have a Degree/National Diploma in Occupational Health and Safety/Safety Management with at least four (4) years relevant experience and a professional registration certificate from SACPCMP as a Construction Health and Safety Officer. **(Attach a detailed CV outlining years of experience, job responsibilities and name of the institutions worked, copies of qualifications & professional registration certificate)**
- f) Bidder should have completed Three (3) or more similar type projects **(General Building)** with a value of R3 million or more for each project. **(Attach letters of award and completion certificates)**

7. POST AWARD REQUIREMENTS

The successful bidder will purchase, at their cost, the JBCC Principal Building Agreement (2018 Edition 6.2, amended for Organs of State) document which will be entered into and signed by both parties.

8. EVALUATION CRITERIA

80/20 Preference point system.

- **80 =** Price
NOTE: All bid price/should be VAT inclusive.

- **20 =** Preferential Points

(Points will be allocated according to Specific goals table below)

Specific Goals	Procurement Transaction Preference Points allocated out of 20
B-BBEE Status level of Contributor	10
1	10
2	9
3, 4, 5, 6, 7, 8 and Non-compliant contributor	0
Enterprises located in a specific local or district municipality, township or region for work to be done or services to be rendered in that area (Mandatory)	4
Residing within the local municipality where the service is rendered	4
Residing outside the local municipality but within the District where the service is rendered	3
Residing outside the district where the service is rendered but within North West Province	2
Residing outside the North West Province	0
Designated Groups (any bid that meets 1 or more of the 5 will get the maximum points)	6
• Enterprises 51% owned by black women. • Enterprises 51% owned by people with disability • Enterprises 51% owned by black youth. • Enterprises 51% owned by black military veterans • Registered Cooperatives within the North West department of Health database	6

NB: Points will be allocated to all those who submitted their BBBEE verification certificates/Sworn Affidavit and Confirmation of preferred address on CSD will be checked and printed by the SCM Practitioner for locality points.

Technical Enquiries to be directed to:

Mr Daluxolo Mtshali : 066 315 5001

PART A INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE DEPARTMENT OF HEALTH

BID NUMBER: **NWDOH/PS/70/19** CLOSING DATE: **04 SEPTEMBER 2024** CLOSING TIME: **11:00**
 DESCRIPTION **ADDITIONAL SPACE IN DR KENNETH KAUNDA DISTRICT: ORKNEY EMS COLLEGE MAINTENANCE AND RENOVATION WORKS.CIDB GRADING 6GB OR HIGHER.**

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)

DEPARTMENT OF HEALTH NORTH WEST, GROUND FLOOR

NEW OFFICE PARK BUILDING,

3801 CORNER FIRST STREET AND SEKAME ROAD

MMABATHO, 2735

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO

CONTACT PERSON **Ms N. Tshabalala**
 TELEPHONE NUMBER **018 391 4386**
 FACSIMILE NUMBER **N/A**
 E-MAIL ADDRESS **NSegwabanyane@nwpg.gov.za**

TECHNICAL ENQUIRIES MAY BE DIRECTED TO:

CONTACT PERSON **Mr Mtshali**
 TELEPHONE NUMBER **066 315 5001**
 FACSIMILE NUMBER **N/A**
 E-MAIL ADDRESS **DMtshali@nwpg.gov.za**

SUPPLIER INFORMATION

NAME OF BIDDER

POSTAL ADDRESS

STREET ADDRESS

TELEPHONE NUMBER

CODE

NUMBER

CELLPHONE NUMBER

FACSIMILE NUMBER

CODE

NUMBER

E-MAIL ADDRESS

VAT REGISTRATION
NUMBER

SUPPLIER
COMPLIANCE STATUS

TAX
COMPLIANCE
SYSTEM PIN:

OR

CENTRAL
SUPPLIER
DATABASE
No:

MAAA

B-BBEE STATUS
LEVEL VERIFICATION
CERTIFICATE

TICK APPLICABLE BOX]

☐ Yes

☐ No

B-BBEE STATUS LEVEL SWORN
AFFIDAVIT

[TICK APPLICABLE BOX]

☐ Yes

☐ No

[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]

ARE YOU THE
ACCREDITED
REPRESENTATIVE IN
SOUTH AFRICA FOR
THE GOODS
/SERVICES /WORKS
OFFERED?

☐ Yes

☐ No

[IF YES ENCLOSE PROOF]

ARE YOU A FOREIGN BASED
SUPPLIER FOR THE GOODS
/SERVICES /WORKS OFFERED?

☐ Yes

☐ No

[IF YES, ANSWER THE
QUESTIONNAIRE BELOW]

QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?

☐ YES ☐ NO

DOES THE ENTITY HAVE A BRANCH IN THE RSA?

☐ YES ☐ NO

DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?

☐ YES ☐ NO

DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?

☐ YES ☐ NO

IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?

☐ YES ☐ NO

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

PART B TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:	
1.1	BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2.	ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED--(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
1.3.	THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4.	THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).
2. TAX COMPLIANCE REQUIREMENTS	
2.1	BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2	BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3	APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4	BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5	IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6	WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7	NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

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

SIGNATURE OF BIDDER:

.....

CAPACITY UNDER WHICH THIS BID IS SIGNED:

.....

(Proof of authority must be submitted e.g. company resolution)

DATE:

.....

PRICING SCHEDULE – FIRM PRICES (PURCHASES)

NOTE: ONLY FIRM PRICES WILL BE ACCEPTED. NON-FIRM PRICES (INCLUDING PRICES SUBJECT TO RATES OF EXCHANGE VARIATIONS) WILL NOT BE CONSIDERED

IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT

Name of bidder..... Bid number.....

Closing Time 11:00

OFFER TO BE VALID FOR DAYS FROM THE CLOSING DATE OF BID.

ITEM NO.	QUANTITY	DESCRIPTION	BID PRICE IN RSA CURRENCY (INCLUDING VAT)
----------	----------	-------------	---

- Required by:
- At:
.....
- Country of origin:
- Does offer comply with specification? YES/NO
- If not to specification, indicate deviation(s)
- Period required for delivery
Delivery: Firm/not firm
- Delivery basis (all delivery costs must be included in the bid price)

Note: All delivery costs must be included in the bid price, for delivery at the prescribed destination.

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

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

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

2. Bidder's declaration

- 2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state? **YES/NO**

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

Full Name	Identity Number	Name of institution	State

- 2.2 Do you, or any person connected with the bidder, have a relationship

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise

with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:

.....

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

2.3.1 If so, furnish particulars:

.....

3 **DECLARATION**

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

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring

² Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

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

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

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

1. GENERAL CONDITIONS

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

1.2 **To be completed by the organ of state**

(delete whichever is not applicable for this tender).

- a) The applicable preference point system for this tender is the **80/20** preference point system.

- 1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
(b) Specific Goals.

1.4 **To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

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

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

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

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ \mathbf{Ps} = 80 \left(1 - \frac{Pt - Pmin}{Pmin} \right) & \mathbf{or} & \mathbf{Ps} = 90 \left(1 - \frac{Pt - Pmin}{Pmin} \right) \end{array}$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

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

3.2.1. POINTS AWARDED FOR PRICE

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

80/20

or

90/10

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

Where

- Ps = Points scored for price of tender under consideration
 Pt = Price of tender under consideration
 Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

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

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

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

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

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

Specific Goals	Procurement Transactions	Number of points claimed (80/20 system)
	Preference allocated out of 20	(To be completed by the tenderer)
B-BBEE Status level of Contributor	10	
1	10	
2	9	
3, 4, 5, 6, 7, 8 and Non-compliant contributor	0	
Enterprises located in a specific local or district municipality, township or region for work to be done or services to be rendered in that area (Mandatory)	4	
Residing within the local municipality where the service is rendered	4	
Residing outside the local municipality but within the District where the service is rendered	3	
Residing outside the district where the service is rendered but within North West Province	2	
Residing outside the North West Province	0	
Designated Groups (any bid that meets 1 or more of the 5 will get the maximum points)	6	
- Enterprises 51% owned by black women. - Enterprises 51% owned by people with disability - Enterprises 51% owned by black youth. - Enterprises 51% owned by black military veterans - Registered Cooperatives within the North West department of Health database	6	

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

Partnership/Joint Venture / Consortium
One-person business/sole propriety
Close corporation
Public Company
Personal Liability Company
(Pty) Limited
Non-Profit Company
State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

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

.....
SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

.....

THE NATIONAL TREASURY

Republic of South Africa



GOVERNMENT PROCUREMENT: GENERAL CONDITIONS OF CONTRACT

July 2010

GOVERNMENT PROCUREMENT
GENERAL CONDITIONS OF CONTRACT
July 2010

NOTES

The purpose of this document is to:

- (i) Draw special attention to certain general conditions applicable to government bids, contracts and orders; and
- (ii) To ensure that clients be familiar with regard to the rights and obligations of all parties involved in doing business with government.

In this document words in the singular also mean in the plural and vice versa and words in the masculine also mean in the feminine and neuter.

- The General Conditions of Contract will form part of all bid documents and may not be amended.
- Special Conditions of Contract (SCC) relevant to a specific bid, should be compiled separately for every bid (if applicable) and will supplement the General Conditions of Contract. Whenever there is a conflict, the provisions in the SCC shall prevail.

TABLE OF CLAUSES

1. Definitions
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General Conditions of Contract

1. Definitions

1. The following terms shall be interpreted as indicated:
 - 1.1 "Closing time" means the date and hour specified in the bidding documents for the receipt of bids.
 - 1.2 "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
 - 1.3 "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
 - 1.4 "Corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
 - 1.5 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
 - 1.6 "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
 - 1.7 "Day" means calendar day.
 - 1.8 "Delivery" means delivery in compliance of the conditions of the contract or order.
 - 1.9 "Delivery ex stock" means immediate delivery directly from stock actually on hand.
 - 1.10 "Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
 - 1.11 "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the

RSA.

- 1.12 "Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 1.13 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
- 1.14 "GCC" means the General Conditions of Contract.
- 1.15 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- 1.16 "Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
- 1.17 "Local content" means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.
- 1.18 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20 "Project site," where applicable, means the place indicated in bidding documents.
- 1.21 "Purchaser" means the organization purchasing the goods.
- 1.22 "Republic" means the Republic of South Africa.
- 1.23 "SCC" means the Special Conditions of Contract.
- 1.24 "Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such

obligations of the supplier covered under the contract.

- 1.25 “Written” or “in writing” means handwritten in ink or any form of electronic or mechanical writing.

2. Application

- 2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.

- 2.2 Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.

- 2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

3. General

- 3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.

- 3.2 With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from www.treasury.gov.za

4. Standards

- 4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.

5. Use of contract documents and information; inspection.

- 5.1 The supplier shall not, without the purchaser’s prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.

- 5.2 The supplier shall not, without the purchaser’s prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.

- 5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier’s performance under the contract if so required by the purchaser.

- 5.4 The supplier shall permit the purchaser to inspect the supplier’s records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

6. Patent rights

- 6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

7. Performance security

- 7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3 The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
- (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or
 - (b) a cashier's or certified cheque
- 7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

8. Inspections, tests and analyses

- 8.1 All pre-bidding testing will be for the account of the bidder.
- 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department.
- 8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5 Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6 Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7 Any contract supplies may on or after delivery be inspected, tested or

analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract. Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.

- 8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

9. Packing

- 9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

- 10.1 Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.
- 10.2 Documents to be submitted by the supplier are specified in SCC.

11. Insurance

- 11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.

12. Transportation

- 12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

13. Incidental services

- 13.1 The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
- (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;
 - (b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
 - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;

- (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
- (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.

13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

14. Spare parts

14.1 As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:

- (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
- (b) in the event of termination of production of the spare parts:
 - (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

15.1 The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.

15.2 This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.

15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.

15.4 Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.

15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take

such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

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|---|---|
| 16. Payment | <p>16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.</p> <p>16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfillment of other obligations stipulated in the contract.</p> <p>16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.</p> <p>16.4 Payment will be made in Rand unless otherwise stipulated in SCC.</p> |
| 17. Prices | <p>17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.</p> |
| 18. Contract amendments | <p>18.1 No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.</p> |
| 19. Assignment | <p>19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.</p> |
| 20. Subcontracts | <p>20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.</p> |
| 21. Delays in the supplier's performance | <p>21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.</p> <p>21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.</p> <p>21.3 No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.</p> <p>21.4 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the</p> |

supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.

21.5 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.

21.6 Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without canceling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:

- (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
- (b) if the Supplier fails to perform any other obligation(s) under the contract; or
- (c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.

23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.

23.4 If a purchaser intends imposing a restriction on a supplier or any

person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.

23.5 Any restriction imposed on any person by the Accounting Officer / Authority will, at the discretion of the Accounting Officer / Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Officer / Authority actively associated.

23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:

- (i) the name and address of the supplier and / or person restricted by the purchaser;
- (ii) the date of commencement of the restriction
- (iii) the period of restriction; and
- (iv) the reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

24. Anti-dumping and countervailing duties and rights

24.1 When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which

may be due to him

25. Force Majeure

- 25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
- 25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for insolvency

- 26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

27. Settlement of Disputes

- 27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4 Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.
- 27.5 Notwithstanding any reference to mediation and/or court proceedings herein,
- (a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
 - (b) the purchaser shall pay the supplier any monies due the supplier.

28. Limitation of liability

- 28.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6;
- (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and

		(b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.
29. Governing language	29.1	The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.
30. Applicable law	30.1	The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.
31. Notices	31.1	Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice
	31.2	The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.
32. Taxes and duties	32.1	A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
	32.2	A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
	32.3	No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services.
33. National Industrial Participation Programme (NIP)	33.1	The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.
34 Prohibition of Restrictive practices	34.1	In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is / are or a contractor(s) was / were involved in collusive bidding (or bid rigging).
	34.2	If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.

- 34.3 If a bidder(s) or contractor(s), has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.

Js General Conditions of Contract (revised July 2010)



**MAINTENANCE AND RENOVATION WORKS COMPRISING
OF 2 NO. RESIDENCE BLOCKS; IT LABORATORY &
LIBRARY; CLASSROOMS & ABLUTIONS; VENTILATION &
AIR CONDITIONING WORKS; SEWER & WATER WORKS;
AND FIRE COMPLIANCE WORKS AT ORKNEY EMS
COLLEGE**

PART C1

AGREEMENTS AND CONTRACT DATA



BID NUMBER: NWDOH/PS/70/19

ORKNEY EMS COLLEGE MAINTENANCE & RENOVATION WORKS

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 :

Orkney Ems College Maintenance & Renovation Works

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 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

ORKNEY EMS COLLEGE MAINTENANCE & RENOVATION WORKS

C1.2.1 Contract Data:

Maintenance & Renovation Works for 2No Residence Blocks; IT LAB and Library; Ventilation & Airconditioning Works; Sewer & Water Works; & Fire Compliance Works

CONTRACT No. NWDOH/PS/70/19

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 1.2 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 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
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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.

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. 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.
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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

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 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 ; (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 ebents, 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; (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 – N/A 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 – N/A 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.
NONE

1.2 The law applicable to the agreement shall be that of the Republic of South Africa

10.1; 10.2 Contract insurance is to be effected by the **contractor**.
 And 12.1

10.1 Contract works insurance is to be effected by the **contractor** for a sum not less

Contract

Part C: Contract Data

Reference No. NWDOH/PS/70/19

- than the **contract sum** plus 20% with a deductible in an amount as the contractor's requirement.
- 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 last date for the issue of an interim payment certificate is the 25th of every Month.
- 14.5 The employer will not provide advanced payments against an advanced payment guarantee.
- 14.2 and The **construction guarantee** is to be a fixed guarantee in an amount of 7.5% or variable in an amount 10% of the contract sum and payment reduction (retention), not more than 5% of the contract sum.
- 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):

.....

.....

.....

- 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 (variable) or not exceeding 7.5% of contract sum (fixed)) 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
ORKNEY EMS COLLEGE MAINTENANCE & RENOVATION WORKS
ADJUDICATOR'S CONTRACT

C1.2.3

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 have 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

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	Orkney EMS College Maintenance and Renovation Works
Reference number	NWDOH/PS/70/19
Works description	Maintenance and Renovation Works comprising of: 2No. Residence Blocks; IT Lab & Library; Classrooms & Ablutions; Ventilation & Airconditioning works; Sewer & Water Works; and Fire Compliance Works

A 2.0 Site [1.1]

Erf / stand number	Old AngloGold Ashanti Mine
Township / Suburb	Orkney
Site address	1 Shakespear Avenue; Orkney
Local authority	Matlosana Local Municipality

A 3.0 Employer [1.1]

Official Name of Organ of State / Public Sector Body	North West Department of Health
Business registration number	N/A
VAT/GST number	N/A
Country	South Africa
Employer's representative: Name	Mr. Daluxolo Mtshali
E-mail	dmtshali@nwpg.gov.za
Mobile number	066 315 5001
Postal address	Postal code: 2735 P/Bag X 2068 Mmabatho
Physical address	Postal code: 2745

A 4.0 Principal agent [1.1]

Name	Contact person
Legal entity of above	Telephone number
Practice 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

Practice number

Country

Postal address

Physical address

Contact person

Telephone number

Mobile number

E-mail

Postal code

Postal code

A 6.0 Agent [1.1; 6.2]**Discipline**

Name

Legal entity of above

Practice number

Country

Postal address

Physical address

Contact person

Telephone number

Mobile number

E-mail

Postal code

Postal code

A 7.0 Agent [1.1; 6.2]**Discipline**

Name

Legal entity of above

Practice number

Country

Postal address

Physical address

Contact person

Telephone number

Mobile number

E-mail

Postal code

Postal code

A 8.0 Agent [1.1; 6.2]**Discipline**

Name

Legal entity of above

Practice number

Country

Postal address

Physical address

Contact person

Telephone number

Mobile number

E-mail

Postal code

Postal code

A 9.0 Agent [1.1; 6.2]

Discipline

Name

Legal entity of above

Practice number

Country

Postal address

Physical address

Contact person

Telephone number

Mobile number

E-mail

Postal code

Postal code

A 10.0 Agent [1.1; 6.2]

Discipline

Name

Legal entity of above

Practice number

Country

Postal address

Physical address

Contact person

Telephone number

Mobile number

E-mail

Postal code

Postal code

A 11.0 Agent [1.1; 6.2]

Discipline

Name

Legal entity of above

Practice number

Country

Postal address

Physical address

Contact person

Telephone number

Mobile number

E-mail

Postal code

Postal code

A 12.0 Agent [1.1; 6.2]

Discipline

Name

Legal entity of above

Practice number

Country

Postal address

Physical address

Contact person

Telephone number

Mobile number

E-mail

Postal code

Postal code

B CONTRACT INFORMATION

B 1.0 Definitions [1.1]

Bills of quantities: System/Method of measurement

B 2.0 Law, regulations and notices [2.0]

Law applicable to the **works**, state country [2.1]

B 3.0 Offer and acceptance [3.0]

Currency applicable to this **agreement** [3.2] Rands (R)

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
Number of copies of **construction information** issued to the **contractor** at no cost [5.6]

Employer

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

Contract drawings – description

Number

Revision

Date

Refer to scope of work: Construction drawings to be issued at Site Handover

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]

Principal agent's and **agents'** interest or involvement in the **works** other than a professional interest [6.3]

B 6.0 Insurances [10.0]**Insurances by employer**

Yes/No? ☐ Yes ☐ No

Amount
including **tax**

Deductible amount
including **tax**

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]

No ☐ If yes, description 1

No ☐ If yes, description 2

and/or

Insurances by contractorAmount
including taxDeductible amount
including tax

Yes

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)- Contract Sum + 20%

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]

R5 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 College will be running and occupied

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

Existing and occupied buildings

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
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 6	Penalty amount per calendar day (excl. tax) 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 (excl. tax)

Section 1

Section 2

Section 3

Section 4

Section 5

Section 6

Section 7

Section 8

Remainder of the **works**Criteria to achieve **practical completion** not covered in the definition of **practical completion****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 reticulation & Air Conditioning System 13.2 13.3 13.4	

B 14.0 Payment [25.0]

Date of month for issue of regular payment certificates [25.2]	25 th of Every Month
Contract price adjustment / Cost fluctuations [25.3.4; 26.9.5]	Yes/no? Yes
If yes, method to calculate	
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	
Applicable rules for adjudication [30.6.2]	
Arbitration [30.7.4; 30.10]	Yes/no?
If Yes, name of nominating body	
* If No, then dispute will be referred to litigation	
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]

Services - known - specific requirements [P4.6]

Water [P8.1]	By contractor	Yes/no?
	By employer	Yes/no?
	By employer – metered	Yes/no?
Electricity [P8.2]	By contractor	Yes/no?
	By employer	Yes/no?
	By employer – metered	Yes/no?
Ablution and welfare facilities [P8.3]	By contractor	Yes/no?
	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]

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 Africa

29.1.5: 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**

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

- | | |
|----------|---|
| Option A | 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

Failure to provide particulars within the period stated

Where the allocation of **preliminaries** amounts for Option A is not provided, the following allocation of **preliminaries** amounts shall apply:

- | | |
|----------|--|
| Option A | 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



health

Department:
Health
North West Provincial Government
REPUBLIC OF SOUTH AFRICA



MAINTENANCE AND RENOVATION WORKS COMPRISING OF 2 NO. RESIDENCE BLOCKS; IT LABORATORY & LIBRARY; CLASSROOMS & ABLUTIONS; VENTILATION & AIR CONDITIONING WORKS; SEWER & WATER WORKS; AND FIRE COMPLIANCE WORKS AT ORKNEY EMS COLLEGE

PART C2

PRICING DATA



DEPARTMENT OF HEALTH NORTH WEST PROVINCE

ORKNEY EMS COLLEGE MAINTENANCE & RENOVATION WORKS

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 (Sixth Edition (Revised)), 1999. 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.



**MAINTENANCE AND RENOVATION WORKS COMPRISING
OF 2 NO. RESIDENCE BLOCKS; IT LABORATORY &
LIBRARY; CLASSROOMS & ABLUTIONS; VENTILATION &
AIR CONDITIONING WORKS; SEWER & WATER WORKS;
AND FIRE COMPLIANCE WORKS AT ORKNEY EMS
COLLEGE**

PART C3

SCOPE OF WORK

BID NUMBER: NWDOH/PS/70/19

ORKNEY EMS COLLEGE MAINTENANCE AND RENOVATIONS WORKS

Part C3.1 Scope of Work

1 DESCRIPTION OF THE WORKS

1,1 Employer's objectives

Upgrade/Maintenance/Renovations of existing facilities at Orkney EMS College to achieve accreditation

1,2 Overview of the works

Upgrade, Maintenance and Renovations of existing facilities

1,3 Extent of the works

MAINTENANCE AND RENOVATION WORKS COMPRISING OF: 2 NO. RESIDENCE BLOCKS; IT LABORATORY & LIBRARY; CLASSROOMS & ABLUTIONS; VENTILATION & AIR CONDITIONING WORKS; SEWER & WATER WORKS; AND FIRE COMPLIANCE WORKS.

1,4 Location of the works

Existing Orkney EMS College

GPS co-ordinates: -26° 58' 48.83" S

Longitude: -26° 40' 21.79" E

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
- PDF 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

ARCH – A 1001
 ARCH – A 1002
 ARCH –BD-A 1002
 ARCH – BA-A1002
 ARCH – BA-A 6001
 ARCH – BA-A 6002
 ARCH – BA-A 6003
 ARCH – BA -A 6004

2,5 Design procedures

Not Applicable

3 PROCUREMENT

3,1 Preferential procurement deliverables

Where the contractor claims a preference in the Referencing 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 6GB or Higher
	The targeting strategy is A.
	The contract participation goal is as tendered in the Referencing 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.

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 of pay per task or per day to be confirmed by the contractor as is regulated 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 1 m

	Variations Compaction to filling under roads and parking's 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
--	--

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(as). 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
-------------------------------------	--	--------

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/M7

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 Agreement 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 employers agents for his approval

Workmanship samples

The employers agents may instruct the contractor to furnish samples of workmanship for his approval. Where the employers agents 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 employers agent. The employers agent'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 employers agent
- 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 employers agent

The employers agent 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

There are a number of unknown services on site and contractor needs to take extra care when doing excavations on site.

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 employers agent

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

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

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 own expense.

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

Contractor to provide their own storage 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/sectional 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, paving's, 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, paving's, 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 Annexure B.

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

**MAINTENANCE AND RENOVATION WORKS COMPRISING
OF 2 NO. RESIDENCE BLOCKS; IT LABORATORY &
LIBRARY; CLASSROOMS & ABLUTIONS; VENTILATION &
AIR CONDITIONING WORKS; SEWER & WATER WORKS;
AND FIRE COMPLIANCE WORKS AT ORKNEY EMS
COLLEGE**

PART C4

SITE INFORMATION



health

Department:
Health
North West Provincial Government
REPUBLIC OF SOUTH AFRICA



BID NUMBER: NWDOH/PS/70/19

ORKNEY EMS COLLEGE MAINTENANCE AND RENOVATIONS WORKS

Part C4.1 Site Information

See attached site plan

C4.1 THE SITE

The site is located at Orkney College, GPS co-ordinates: -26° 58' 48.83" S
Longitude: -26° 40' 21.79" E

C4.2 WORK AREA

The existing Orkney EMS College Premises

C4.3 ACCESS

Main access gate of the College - Orkney EMS

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

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

Therefore rounded off to the nearest R10.00

$$= \text{R690,00/day}$$

PENALTIES ON CONTRACTS IN PHASES

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



health

Department:
Health
North West Provincial Government
REPUBLIC OF SOUTH AFRICA



MAINTENANCE AND RENOVATION WORKS COMPRISING OF 2 NO. RESIDENCE BLOCKS; IT LABORATORY & LIBRARY; CLASSROOMS & ABLUTIONS; VENTILATION & AIR CONDITIONING WORKS; SEWER & WATER WORKS; AND FIRE COMPLIANCE WORKS AT ORKNEY EMS COLLEGE

PART C5

BOQ AND TECHNICAL SPECIFICATIONS

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SECTION A

MAIN BILL OF QUANTITIES

SECTION A1

PRELIMINARIES AND GENERAL

Item
No

Quantity

Rate

Amount

SECTION NO. 1

BILL NO 1

PRELIMINARIES AND GENERAL

**AGREEMENT AND SCHEDULE OF CONDITIONS
OF BUILDING CONTRACT**

BUILDING AGREEMENT AND PRELIMINARIES

NB: This BOQ should not be used for procuring of materials, it should be noted that the Construction drawings and the specification document as issued by the Architect take precedence over this BOQ

- i) The Agreement is to be the JBCC Series 2000 Works Agreement: Contract Data prepared by the Joint Building Contracts Committee, May 2018 Edition 6.2
- ii) If Alternative A as set out in clause 10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories by insertion of "F", "V" or "T" as the case may be against the price in the "rate" column immediately preceding the "amount" column, where "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value and "T" denotes an amount in proportion to time
- iii) Clauses stated under a clause heading, shall be read in conjunction with the existing JBCC Series 2000 Works Agreement, May 2018 Edition and the JBCC Series 2000 Preliminaries, May 2018 Edition 6.2.

User note

A provision/clause in Edition 6.2 of the JBCC Principal Building Agreement may have unintended consequences. The following is relevant:

Carried Forward

R

Section No. 1
Bill No. 1
Preliminaries and General

Brought Forward <i>Within the contract data document there is space to insert changes made to the JBCC documentation. Quantity surveyors have generally up to now merely inserted in this space "Refer to Bill No. 1"</i> "Note : The amendments contained herein or in the single referenced Annexure constitute the only amendments to the standard JBCC Agreement that will apply. No other amendments shall be of any force or effect" <i>"It is specifically agreed that the note below calling for amendments to the standard JBCC Agreement to be listed in the space provided in the contract data or recorded in 'the single referenced Annexure' <u>shall not apply</u>. 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 in Bill No 1 (Preliminaries) and such amendments, modifications, corrections or supplements shall take precedence notwithstanding the note below and notwithstanding the provisions of clause 5.6 of the JBCC Principal Building Agreement"</i> Not doing as suggested above when adhering to the system generally used by quantity surveyors up to now may result in any amendments within Bill No. 1 (Preliminaries) being considered null and void, which could then lead to major claims <u>PREAMBLES FOR TRADES</u>			R
Section No. 1 Bill No. 1 Preliminaries and General			R

Brought Forward <u>User note</u> <i>The Model Preambles for Trades 2018 published by the Association of South African Quantity Surveyors is designed to support and extend the abbreviated descriptions utilised in these bills of quantities by inter alia referring to SANS construction standards. Where such model preambles are not applicable (eg where BS or Euro construction standards are applicable or the design consultants provide other preambles/specifications for insertion), users are to ensure that the abbreviated descriptions when read in conjunction with the Standard System of Measuring Building Work (seventh edition) for works within South Africa or the Standard Method of Measuring Building Work for Africa 2018 (second edition) for works elsewhere in Africa, represent the full description by extending the abbreviated bills of quantities descriptions and/or by inserting appropriate preambles or specifications</i> <i>Note that the text of the Standard System of Measuring Building Work (eighth edition) and that of the Standard Method of Measuring Building Work for Africa 2018 (second edition) is the same</i> The Model Preambles for Trades 2018 as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claims arising from brevity of description of items fully described in the said Model Preambles will be entertained Supplementary preambles and/or specifications are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the Model Preambles The contractor's prices for all items throughout these bills of quantities shall take account of and include for all of the obligations, requirements and specifications given in the Model Preambles and in any supplementary preambles and/or specifications			R
Carried Forward Section No. 1 Bill No. 1 Preliminaries and General			R

Brought Forward

R

STRUCTURE OF THIS PRELIMINARIES BILL

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

Section B : A recital of the headings of the individual clauses of the aforementioned Preliminaries document

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 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)

SECTION A: PRINCIPAL BUILDING AGREEMENT

Interpretation (A1-A7)

1 Clause 1.0 - Definitions and interpretation

Definition of agreement

The definition of **agreement** is replaced with the following definition :

"AGREEMENT" : The JBCC Principal Building Agreement, the completed JBCC PBA contract data, the contract drawings, the priced documents and any other documents reduced to writing and signed by the parties"

Pricing of bills of quantities

Carried Forward

R

Section No. 1
Bill No. 1
Preliminaries and General

Brought Forward 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. Value Added Tax (VAT) is to be separately stated on the summary page of these bills of quantities 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 Abbreviated descriptions The items in these bills of quantities utilise abbreviated descriptions. It is the intention that the abbreviated descriptions be fully described when read with the applicable measuring system and the relevant preambles and/or specifications. However, should the full intent and meaning of any description not be clear, the contractor shall, before submission of his tender, call for a written directive from the principal agent, failing which it shall be assumed that the contractor has allowed in his pricing for materials and workmanship in terms of international best practice Legal status of contractor If the contractor constitutes a joint venture, consortium or other unincorporated grouping of two or more persons then: These persons are deemed to be jointly and severally liable to the employer for the performance of this agreement		R	
Carried Forward Section No. 1 Bill No. 1 Preliminaries and General		R	

Brought Forward

2. These persons shall notify the **employer** of their leader who has authority to bind the **contractor** and each of these persons
3. The **contractor** shall not alter its composition or legal status without the prior written consent of the **employer**

Errata by JBCC

Omit from definition of **construction period** the words :
"excluding annual holiday periods"
Omit from definition of **preliminaries** the word : "priced"

User note

Between the contractor and the employer there shall be and agreement from one person responsible for the enrolment of the following residential developments below:

NHBRC levies

The **employer** shall allow for and pay any levies required by the National Home Builders Registration Council (NHBRC). The **contractor** warrants that he is registered and will maintain registration with the NHBRC for the duration of this **agreement** [2.1]

NHBRC levies

The **contractor** shall allow for and pay any levies required by the National Home Builders Registration Council (NHBRC). The **contractor** warrants that he is registered and will maintain registration with the NHBRC for the duration of this **agreement** [2.1]

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

2 Clause 3.0 - Offer and acceptance

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

Carried Forward

Section No. 1
Bill No. 1
Preliminaries and General

R

Item

Item

R

	Brought Forward		R
3	Clause 4.0 - Assignment and cession F: V: T:	Item	
4	Clause 5.0 - Contract documents Value Added Tax Provision is made in the summary page of these bills of quantities for the inclusion of Value Added Tax (VAT) <u>User note</u> <i>The contract drawings are to be listed in the contract data. If insufficient space is available for such listing or for any other reason then reference should be made in the contract data as to where the contract drawings are listed. One of the following clauses may be used</i> <i>Insert the following where only a few contract drawings are applicable</i> Contract drawings The contract drawings are as listed on the contents page of the bills of quantities [5.1] - TBA <i>Insert the following where numerous contract drawings are applicable</i> Contract drawings Refer to Annexure TBA for a list of the contract drawings [5.1] Priced document as specification Clause 5.3 is deemed to be deleted The principal agent shall decide which portion of the priced document may be used as a specification of materials and goods or methods, if any		
	Carried Forward		R
	Section No. 1 Bill No. 1 Preliminaries and General		

	Brought Forward		R
	<u>User note</u> <i>Insert the following where applicable</i> Electronic issue of drawings All drawings for this project will be issued electronically and the contractor shall be deemed to have received such drawings on the date that such drawings have been dispatched electronically [5.5] Precedence Clause 5.6 is deemed to be deleted. The provisions of this Bill No. 1 (Preliminaries) shall take precedence over any other documents which constitute this agreement [5.6] F:..... V:..... T:.....	Item	
5	Clause 6.0 - Employer's agents Delegated authority The authority of the principal agent to issue contract instructions and perform duties for specific aspects of the works is delegated to agents as follows [6.2]: <u>User note</u> <i>Add delegated authority as may be required for other relevant consultants not listed hereinafter</i> 0. Project Manager/Principal Agent 0.1 Duties : The project manager/principal agent is responsible for the project management, coordination and for the smooth running of the project from start to completion /hand over of the project to the user client 1. <u>Architect</u>		
	Carried Forward		R
	Section No. 1 Bill No. 1 Preliminaries and General		

Brought Forward <u>User note</u> <i>Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA</i> 1.1 Duties : The architect is responsible for the architectural design, functional design and quality inspection of the works 1.2 Contract instructions [17.0] : 1.2.1 Rectification of discrepancies, errors in descriptions or omissions in contract documents other than this agreement 1.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works 1.2.3 The site [13.2.4] 1.2.4 Compliance with the law, regulations and by laws [2.1] 1.2.5 Provision and testing of samples of materials and goods, of finishes and assemblies of elements of the works 1.2.6 Opening up of work for inspection, removal or re-execution 1.2.7 Removal or re-execution of work 1.2.8 Removal or substitution of any materials and goods 1.2.9 Protection of the works 1.2.10 Making good physical loss and repairing damage to the works [8.0] 1.2.11 Rectification of defects [21.2] Carried Forward			R
Section No. 1 Bill No. 1 Preliminaries and General			R

Brought Forward 1.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion 1.2.13 Expenditure of budgetary allowances, prime cost amounts and provisional sums 1.2.14 Appointment of a subcontractor [14.0; 15.0] 1.2.15 Termination of a nominated n/s subcontract agreement [27.2.8] 1.2.16 Work by (a) direct contractor(s) [16.0] 1.2.17 Access by other or previous contractors to remedy defective work 1.2.18 Removal from the site of any person employed on the works 1.2.19 Removal from the site of any person not engaged on or connected with the works 1.2.20 On termination, protection of the works, removal of construction equipment and surplus materials and goods [29.0] 2. <u>Quantity surveyor</u> <u>User note</u> <i>Insert the following but remove where the consultant is not relevant to this agreement. Edit both the duties and the contract instructions of the consultant in keeping with the wishes of the principal agent</i> 2.1 Duties : The quantity surveyor is responsible for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions of the works 2.2 Contract instructions [17.0] :		R
Carried Forward Section No. 1 Bill No. 1 Preliminaries and General		R

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Brought Forward		R
2.2.1	Rectification of discrepancies, errors in descriptions or omissions in contract documents other than this agreement	
2.2.2	Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works	
2.2.3	The site [13.2.4]	
2.2.4	Compliance with the law , regulations and by laws [2.1]	
2.2.5	Provision and testing of samples of materials and goods , of finishes and assemblies of elements of the works	
2.2.6	Opening up of work for inspection, removal or re-execution	
2.2.7	Removal or re-execution of work	
2.2.8	Removal or substitution of any materials and goods	
2.2.9	Protection of the works	
2.2.10	Making good physical loss and repairing damage to the works [8.0]	
2.2.11	Rectification of defects [21.2]	
2.2.12	A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion	
2.2.13	Expenditure of budgetary allowances , prime cost amounts and provisional sums	
2.2.14	Appointment of a subcontractor [14.0; 15.0]	
2.2.15	Termination of a nominated n/s subcontract agreement [27.2.8]	
Carried Forward		R
Section No. 1 Bill No. 1 Preliminaries and General		

Brought Forward 2.2.16 Work by (a) direct contractor(s) [16.0] 2.2.17 Access by other or previous contractors to remedy defective work 2.2.18 Removal from the site of any person employed on the works 2.2.19 Removal from the site of any person not engaged on or connected with the works 2.2.20 On termination, protection of the works, removal of construction equipment and surplus materials and goods [29.0] 3. <u>Civil and structural engineer</u>		R	
<u>User note</u> <i>Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA</i> 3.1 Duties : The civil and structural engineer is responsible for all aspects of civil and structural engineering design and quality inspection of the works 3.2 Contract instructions [17.0] : 3.2.1 Rectification of discrepancies, errors in descriptions or omissions in contract documents other than this agreement 3.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works 3.2.3 The site [13.2.4] 3.2.4 Compliance with the law, regulations and by laws [2.1] 3.2.5 Provision and testing of samples of materials and goods, of finishes and assemblies of elements of the works			
Carried Forward Section No. 1 Bill No. 1 Preliminaries and General		R	

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Brought Forward		R
3.2.6	Opening up of work for inspection, removal or re-execution	
3.2.7	Removal or re-execution of work	
3.2.8	Removal or substitution of any materials and goods	
3.2.9	Protection of the works	
3.2.10	Making good physical loss and repairing damage to the works [8.0]	
3.2.11	Rectification of defects [21.2]	
3.2.12	A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion	
3.2.13	Expenditure of budgetary allowances, prime cost amounts and provisional sums	
3.2.14	Appointment of a subcontractor [14.0; 15.0]	
3.2.15	Termination of a nominated n/s subcontract agreement [27.2.8]	
3.2.16	Work by (a) direct contractor(s) [16.0]	
3.2.17	Access by other or previous contractors to remedy defective work	
3.2.18	Removal from the site of any person employed on the works	
3.2.19	Removal from the site of any person not engaged on or connected with the works	
3.2.20	On termination, protection of the works , removal of construction equipment and surplus materials and goods [29.0]	
4.	<u>Mechanical engineer</u>	
Carried Forward		R
Section No. 1		
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Brought Forward

R

User note

Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA

4.1 Duties :

The mechanical engineer is responsible for all aspects of mechanical engineering design and quality inspection of the **works**

4.2 Contract instructions [17.0] :

4.2.1 Rectification of discrepancies, errors in descriptions or omissions in **contract documents** other than this **agreement**

4.2.2 Alteration to design, standards or quantity of the **works** provided that such **contract instructions** shall not substantially change the scope of the **works**

4.2.3 The **site** [13.2.4]

4.2.4 Compliance with the **law**, regulations and by laws [2.1]

4.2.5 Provision and testing of samples of **materials and goods**, of finishes and assemblies of elements of the **works**

4.2.6 Opening up of work for inspection, removal or re-execution

4.2.7 Removal or re-execution of work

4.2.8 Removal or substitution of any **materials and goods**

4.2.9 Protection of the **works**

4.2.10 Making good physical loss and repairing damage to the **works** [8.0]

4.2.11 Rectification of **defects** [21.2]

Carried Forward

R

Section No. 1
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Brought Forward 4.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion 4.2.13 Expenditure of budgetary allowances, prime cost amounts and provisional sums 4.2.14 Appointment of a subcontractor [14.0; 15.0] 4.2.15 Termination of a nominated n/s subcontract agreement [27.2.8] 4.2.16 Work by (a) direct contractor(s) [16.0] 4.2.17 Access by other or previous contractors to remedy defective work 4.2.18 Removal from the site of any person employed on the works 4.2.19 Removal from the site of any person not engaged on or connected with the works 4.2.20 On termination, protection of the works, removal of construction equipment and surplus materials and goods [29.0] 5. <u>Electrical engineer</u> <u>User note</u> <i>Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA</i> 5.1 Duties : The electrical engineer is responsible for all aspects of electrical engineering design and quality inspection of the works. 5.2 Contract instructions [17.0] :			R
Carried Forward Section No. 1 Bill No. 1 Preliminaries and General			R

Brought Forward 4.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion 4.2.13 Expenditure of budgetary allowances, prime cost amounts and provisional sums 4.2.14 Appointment of a subcontractor [14.0; 15.0] 4.2.15 Termination of a nominated n/s subcontract agreement [27.2.8] 4.2.16 Work by (a) direct contractor(s) [16.0] 4.2.17 Access by other or previous contractors to remedy defective work 4.2.18 Removal from the site of any person employed on the works 4.2.19 Removal from the site of any person not engaged on or connected with the works 4.2.20 On termination, protection of the works, removal of construction equipment and surplus materials and goods [29.0] 5. <u>Electrical engineer</u> <u>User note</u> <i>Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA</i> 5.1 Duties : The electrical engineer is responsible for all aspects of electrical engineering design and quality inspection of the works. 5.2 Contract instructions [17.0] :			R
Carried Forward Section No. 1 Bill No. 1 Preliminaries and General			R

Brought Forward			R
5.2.1 Rectification of discrepancies, errors in descriptions or omissions in contract documents other than this agreement			
5.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works			
5.2.3 The site [13.2.4]			
5.2.4 Compliance with the law , regulations and by laws [2.1]			
5.2.5 Provision and testing of samples of materials and goods , of finishes and assemblies of elements of the works			
5.2.6 Opening up of work for inspection, removal or re-execution			
5.2.7 Removal or re-execution of work			
5.2.8 Removal or substitution of any materials and goods			
5.2.9 Protection of the works			
5.2.10 Making good physical loss and repairing damage to the works [8.0]			
5.2.11 Rectification of defects [21.2]			
5.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion			
5.2.13 Expenditure of budgetary allowances , prime cost amounts and provisional sums			
5.2.14 Appointment of a subcontractor [14.0; 15.0]			
5.2.15 Termination of a nominated n/s subcontract agreement [27.2.8]			
Carried Forward		R	
Section No. 1 Bill No. 1 Preliminaries and General			

Brought Forward 5.2.16 Work by (a) direct contractor(s) [16.0] 5.2.17 Access by other or previous contractors to remedy defective work 5.2.18 Removal from the site of any person employed on the works 5.2.19 Removal from the site of any person not engaged on or connected with the works 5.2.20 On termination, protection of the works, removal of construction equipment and surplus materials and goods [29.0] 6. <u>Wet services engineer</u> <u>User note</u> <i>Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA</i> 6.1 Duties : The wet services engineer is responsible for all the aspects of wet services engineering design and quality inspection of the works 6.2 Contract instructions [17.0] : 6.2.1 Rectification of discrepancies, errors in descriptions or omissions in contract documents other than this agreement 6.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works 6.2.3 The site [13.2.4] 6.2.4 Compliance with the law, regulations and by laws [2.1] 6.2.5 Provision and testing of samples of materials and goods, of finishes and assemblies of elements of the works Carried Forward Section No. 1 Bill No. 1 Preliminaries and General			R
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**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward		R
6.2.6	Opening up of work for inspection, removal or re-execution	
6.2.7	Removal or re-execution of work	
6.2.8	Removal or substitution of any materials and goods	
6.2.9	Protection of the works	
6.2.10	Making good physical loss and repairing damage to the works [8.0]	
6.2.11	Rectification of defects [21.2]	
6.2.12	A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion	
6.2.13	Expenditure of budgetary allowances, prime cost amounts and provisional sums	
6.2.14	Appointment of a subcontractor [14.0; 15.0]	
6.2.15	Termination of a nominated n/s subcontract agreement [27.2.8]	
6.2.16	Work by (a) direct contractor(s) [16.0]	
6.2.17	Access by other or previous contractors to remedy defective work	
6.2.18	Removal from the site of any person employed on the works	
6.2.19	Removal from the site of any person not engaged on or connected with the works	
6.2.20	On termination, protection of the works , removal of construction equipment and surplus materials and goods [29.0]	
7.	<u>Fire consultant</u>	
Carried Forward		R
Section No. 1 Bill No. 1 Preliminaries and General		

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward	R
<u>User note</u> <i>Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA</i> 7.1 Duties : The fire consultant is responsible for all aspects of rational fire design and quality inspection of the works 7.2 Contract instructions [17.0] : 7.2.1 Rectification of discrepancies, errors in descriptions or omissions in contract documents other than this agreement 7.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works 7.2.3 The site [13.2.4] 7.2.4 Compliance with the law, regulations and by laws [2.1] 7.2.5 Provision and testing of samples of materials and goods, of finishes and assemblies of elements of the works 7.2.6 Opening up of work for inspection, removal or re-execution 7.2.7 Removal or re-execution of work 7.2.8 Removal or substitution of any materials and goods 7.2.9 Protection of the works 7.2.10 Making good physical loss and repairing damage to the works [8.0] 7.2.11 Rectification of defects [21.2]	
Carried Forward	R
Section No. 1 Bill No. 1 Preliminaries and General	

Brought Forward 7.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion and a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion 7.2.13 Expenditure of budgetary allowances, prime cost amounts and provisional sums 7.2.14 Appointment of a subcontractor [14.0; 15.0] 7.2.15 Termination of a nominated n/s subcontract agreement [27.2.8] 7.2.16 Work by (a) direct contractor(s) [16.0] 7.2.17 Access by other or previous contractors to remedy defective work 7.2.18 Removal from the site of any person employed on the works 7.2.19 Removal from the site of any person not engaged on or connected with the works 7.2.20 On termination, protection of the works, removal of construction equipment and surplus materials and goods [29.0] 8. <u>Health and safety consultant</u> <u>User note</u> <i>Note that the contract instructions hereinafter are those listed in clause 17.0 of the JBCC PBA</i> 8.1 Duties : The health and safety consultant is responsible for all aspects of health and safety of the works. Without derogating from the generality thereof, the health and safety consultant will perform the following specific functions and duties in respect of the health and safety aspects of the works:			R
Carried Forward Section No. 1 Bill No. 1 Preliminaries and General			R

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

	Brought Forward		R
8.1.1	Act as the employer's agent in terms of Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993		
8.1.2	Prepare and update the health and safety specification for the works		
8.1.3	Agree with the contractor the health and safety plan for the works		
8.1.4	Carry out regular audits to ensure adherence to the safety plan and compliance with the Act and Regulations		
8.1.5	Stop the execution of the works where the agreed specification or plan is not adhered to		
	F: V: T:	Item	
6	Clause 7.0 - Design responsibility		
	F: V: T:	Item	
	<u>Insurance and security (A8-A11)</u>		
7	Clause 8.0 - Works risk		
	F: V: T:	Item	
8	Clause 9.0 - Indemnities		
	F: V: T:	Item	
9	Clause 10.0 - Insurances		
	F: V: T:	Item	
10	Clause 11.0 - Security		
	<u>User note</u>		
	<i>If it is deemed advisable, the <u>extent</u> of any security for payment may be stated as follows:</i>		
	Carried Forward		R
	Section No. 1 Bill No. 1 Preliminaries and General		

	Brought Forward		R
	Security for payment The employer shall provide to the contractor security for payment in the amount of N/A..... Rand (R.....N/A.....) [11.4.1,11.10] <u>User note</u> <i>Where it is expected of the contractor to waive his lien in terms of clause 11.10, the waiver of lien may be extended to subcontracts as follows:</i> Extension of waiver of lien The contractor shall ensure that a waiver of lien is included in all subcontracts and that the works executed on the site are kept free of all liens and other encumbrances at all times [11.10] Errata by JBCC Clause 11.5 Replace "ten (10)" with "five (5)" F:..... V:..... T:..... Execution (A12 - A17)		
11	Clause 12.0 - Duties of the parties Provisions of clauses 12.1.2 to 12.1.6 and 12.2.18 Office accommodation The contractor shall provide, maintain and remove on practical completion air conditioned office accommodation with suitable tables and chairs for meetings to be held on the site. Such offices shall be kept clean and fit for use at all times [12.2.18]	Item	
	Carried Forward		R
	Section No. 1 Bill No. 1 Preliminaries and General		

Brought Forward Notice board The contractor shall erect in a position approved by the principal agent, maintain and remove on practical completion a notice board recommended by the South African Institute of Architects and as approved by the principal agent listing the names and logos of the employer, the contractor, and the professional consultants. No subcontractor or supplier notice boards may be erected unless permission is granted by the principal agent for such notice boards to be erected [12.2.18] F: V: T: <u>User note</u> <i>Should access to water, sewer, stormwater and/or electricity connections not be identifiable due to such information not being available or the specific requirements of the contractor cannot be determined, then the following clause may be considered in which event a qualified tender may be expected</i> Access to water, sewer, storm water and electricity connections The employer is not in a position to identify access to water, sewer, stormwater and/or electricity connections to the site as may be suitable for the execution of the works. The contractor is to allow what he considers to be required and is to qualify his tender in detail in this regard, failing which it shall be taken that the contractor has allowed what will be required for the execution of the works. In such case no claims for additional cost or loss shall be entertained [12.1.5] ? Statutory and other notices <u>User note</u> <i>Statutory and other notices which the contractor must submit and/or comply with before possession of the site can be given are to be stated here or in the contract data. Reference [12.1.6]</i> <i>If specific information is not available then the user may consider a clause along the following lines</i>	Item	R	
Carried Forward Section No. 1 Bill No. 1 Preliminaries and General		R	

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

	Brought Forward		R
	The contractor shall submit and/or comply with all statutory and other notices that may be required by any local or other authority in order not to cause any delay to the commencement of the works by the contractor. The contractor shall pay all deposits or fees in this regard [12.1.6] It is, however, specifically recorded that the employer shall be responsible for the timeous approval of building plans by any local or other authorities and the payment of any fees or charges related thereto Errata by JBCC Clause 12.2.17 Omit the words "[CD] within ten (10) working days" F: V: T:	Item	
12	Clause 13.0 - Setting out F: V: T:	Item	
13	Clause 14.0 - Nominated subcontractors Errata by JBCC Clause 14.1.4 Reference should read "[17.1.14]" Clause 14.6 Reference should read "[17.1.15; 27.1.8]" Clause 14.7.2 Reference should read "[27.1.8]" Clause 14.7.3 Reference should read "[27.2.8]" F: V: T:	Item	
14	Clause 15.0 - Selected subcontractors Errata by JBCC Clause 15.2 Reference should read "[17.1.14]" Clause 15.7.2 Reference should read "[27.1.8]" Clause 15.7.3 Reference should read "[27.2.8]" F: V: T:	Item	
	Carried Forward		R
	Section No. 1 Bill No. 1 Preliminaries and General		

		Brought Forward		R
15	Clause 16.0 - Direct contractors Attendance on direct contractors In respect of direct contractors the contractor shall: 1. Designate an area for the direct contractor to establish a temporary office and workshop and storage of equipment and materials 2. Allow the use of personnel welfare facilities, where provided 3. Provide water, lighting and single phase electric power to a position within 50m of the place where the direct contract work is to be carried out, other than fuel or power for commissioning of any installation 4. Permit the direct contractor to use erected scaffolding, hoisting facilities, etc provided by the contractor, in common with others having the like right, while it remains erected on the site [16.1] Errata by JBCC Clause 16.1.3 Reference should read "[26.5]" F: V: T:			
16	Clause 17.0 - Contract instructions Site instructions Instructions issued on site are to be recorded in a site instruction book which is to be supplied and maintained on site by the contractor. Errata by JBCC Clause 17.1.3 Reference should read "[13.2.4]" F: V: T:		Item	
			Item	
		Carried Forward		R
	Section No. 1 Bill No. 1 Preliminaries and General			

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(Residences Blocks, Ablution Block & Classrooms)

Brought Forward		R
<u>Completion (A18 - A24)</u>		
17	Clause 18.0 - Interim completion F:..... V:..... T:.....	Item
18	Clause 19.0 - Practical completion <u>User note</u> <i>List with a suitable heading in bold any special requirements for practical completion here or in the contract data. Reference as [19.3.1]</i> F:..... V:..... T:.....	Item
19	Clause 20.0 - Sectional completion <u>User note</u> <i>If sectional completion is applicable, then a clause with a suitable heading in bold should be inserted, or drawing(s) annexed, to define the various sections. Reference as [20.1]</i> Errata by JBCC Clause 20.2.2 Reference should read "[21.6.2]" F:..... V:..... T:.....	Item
20	Clause 21.0 - Defects liability period and final completion Errata by JBCC Clause 21.1 Delete the word "final" in the second last line Reference should read "[21.6.1]" Clause 21.9 Reference should read "[21.4 ; 21.6.1]" F:..... V:..... T:.....	Item
Carried Forward		R
Section No. 1 Bill No. 1 Preliminaries and General		

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	Brought Forward		R
21	Clause 22.0 - Latent defects liability period F:..... V:..... T:.....	Item	
22	Clause 23.0 - Revision of date for practical completion Substitution of materials and goods The removal or substitution of any materials and goods which do not conform to the specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value [17.1.8, 23.1 & 2] Errata by JBCC Clause 23.2 Reference should read "[26.7]" Clause 23.2.1 Reference should read "[12.1.7]" F:..... V:..... T:.....	Item	
23	Clause 24.0 - Penalty for late or non-completion F:..... V:..... T:..... Payment (A25 - A27)	Item	
24	Clause 25.0 - Payment Materials and goods prematurely on site Materials and goods brought onto the site prematurely shall not be authorised for payment [25.3.2] <u>User note</u> Materials and goods stored off site Materials and goods stored off site shall not be authorised for payment [25.3.2] ?		
	Carried Forward		R
	Section No. 1 Bill No. 1 Preliminaries and General		

	Brought Forward		R
	Materials and goods stored off site Materials and goods stored off site shall be authorised for payment subject to a guarantee for advance payment being provided to the employer [25.3.2] Fluctuations in costs All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor [25.3.4] Prices submitted Where prices are submitted by the contractor or subcontractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of this agreement and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the certificate of final completion, it shall be in writing Errata by JBCC Clause 25.2 The word : "final" in bold in the second line Clause 25.10.3 Reference should read "[25.13 ; 26.10]" New clause 25.12.4 Add the words : "Terminate the agreement [29.14.7] where the listed options [25.12.1-3] have failed" F: V: T:		
25	Clause 26.0 - Adjustment of the contract value and final account <u>User note</u> Tenant installations/users requirements delayed There is a possibility that certain works related to tenant installations/users requirements may have to be delayed and may consequently not be executed prior to practical completion	Item	
	Carried Forward		R
	Section No. 1 Bill No. 1 Preliminaries and General		

	Brought Forward		R
		Item	
		Item	
	Carried Forward	R	

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Brought Forward

R

Errata by JBCC

New clause 28.1.5 and renumber thereafter "Or where an **agent** has failed to act in terms of this **agreement** [6.4]"

Clause 28.2 Replace the word "defect" with "default" in the first line

F: V:
T:

Item

28 Clause 29.0 - Termination

Errata by JBCC

Clause 29.1.2 Delete the words : "within the period stated [CD]"

Clause 29.14.1 Change as follows : "Provide or maintain a **guarantee for payment**.....[11.4 - 5]"

Clause 29.14.2 Reference should read "[12.1.7]"

New clause 29.14.8 "Or where an **agent** has failed to act in terms of this **agreement** [6.4]"

F: V:
T:

Item

Dispute resolution (A30)

29 Clause 30.0 - Dispute resolution

F: V:
T:

Item

30 **Agreement**

The second sentence of the introduction where the **parties** sign the **agreement**, namely "Any provision in this **agreement**..... acceptance by such **subcontractor** at any time." is deemed to be deleted

The required information of the **parties** and the amount of the **contract sum** shall be inserted in the **agreement** for signature of the **agreement** by the **parties**

F: V:
T:

Item

31 **Contract data**

Carried Forward

R

Section No. 1
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Preliminaries and General

Brought Forward			R
Payment of preliminaries			
Where Option B is applicable and the initial construction period is extended the monthly charge shall be recalculated on the same basis as was initially applied but taking into account the revised construction period and the amounts already paid to the contractor [CD26.0]			
Adjustment of preliminaries			
Where the adjustment of preliminaries is in terms of Option A, the construction period and the initial construction period shall be calculated in working days [CD 26.0]			
Where the adjustment of preliminaries is in terms of Option A and sectional completion is required, the contractor shall provide the principal agent with the division of the categorised amounts into sections . Should the contractor fail to provide such information within the period stipulated, the categorised amounts shall be prorated to the value of each section [CD 26.0]			
Where the adjustment of preliminaries is required in terms of Option B and sectional completion is required, the contractor shall provide the principal agent with details of the resources required for each section and those that are common to sections . Should the contractor fail to provide such information within the period stipulated, Option A shall apply [CD 26.0]			
<u>SECTION B: PRELIMINARIES</u>			
<u>Interpretation (B1)</u>			
32	Clause 1.1 - Definitions		
	F:..... V:..... T:.....	Item	
33	Clause 1.2 - Interpretation		
	F:..... V:..... T:.....	Item	
Carried Forward			R
Section No. 1 Bill No. 1 Preliminaries and General			

Brought Forward		R
<u>Documents (B2)</u>		
34	Clause 2.1 - Checking of documents F:..... V:..... T:.....	Item
35	Clause 2.2 - Provisional bills of quantities <u>User note</u> <i>Check "wet trades" included in the bills of quantities and edit the following clause as may be necessary</i> Multiple procurement These bills of quantities are in multiple procurement format ie the "wet trades" - earthworks, concrete, formwork and reinforcement, precast concrete, masonry, waterproofing and sub-surface drainage - are provisionally (fully?) measured and the subsequent trades are budgetary allowances and/or provisional sums ? F:..... V:..... T:.....	Item
36	Clause 2.3 - Availability of construction information Budgetary allowances and provisional sums The budgetary allowances and/or provisional sums? allocated for subsequent trades included in this agreement will be separately procured, based on multiple procurement of subcontractors during the construction period F:..... V:..... T:.....	Item
37	Clause 2.4 - Ordering of materials and goods F:..... V:..... T:.....	Item
Carried Forward		R
Section No. 1 Bill No. 1 Preliminaries and General		

Refurbishment/Upgrade of Orkney EMS College
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Brought Forward			R
<u>Previous work and adjoining properties (B3)</u>			
38	Clause 3.1 - Previous work - dimensional accuracy F:..... V:..... T:.....	Item	
39	Clause 3.2 - Previous work - defects F:..... V:..... T:.....	Item	
40	Clause 3.3 - Inspection of adjoining properties F:..... V:..... T:.....	Item	
<u>The site (B4)</u>			
41	Clause 4.1 - Defined works area F:..... V:..... T:.....	Item	
42	Clause 4.2 - Handover of site in stages F:..... V:..... T:.....	Item	
43	Clause 4.3 - Enclosure of the works F:..... V:..... T:.....	Item	
44	Clause 4.4 - Geotechnical investigation F:..... V:..... T:.....	Item	
45	Clause 4.5 - Encroachments F:..... V:..... T:.....	Item	
46	Clause 4.6 - Existing premises occupied F:..... V:..... T:.....	Item	
Carried Forward			R
Section No. 1 Bill No. 1 Preliminaries and General			

Brought Forward			R
47	Clause 4.7 - Services - known F:..... V:..... T:.....	Item	
48	Clause 4.8 - Protection of trees and/or relevant natural features F:..... V:..... T:.....	Item	
<u>Management of contract (B5)</u>			
49	Clause 5.1 - Management of the works F:..... V:..... T:.....	Item	
50	Clause 5.2 - Progress meetings F:..... V:..... T:.....	Item	
51	Clause 5.3 - Technical meetings F:..... V:..... T:.....	Item	
<u>Samples, shop drawings and manufacturer's instructions (B6)</u>			
52	Clause 6.1 - Samples of materials F:..... V:..... T:.....	Item	
53	Clause 6.2 - Workmanship samples F:..... V:..... T:.....	Item	
54	Clause 6.3 - Shop drawings F:..... V:..... T:.....	Item	
Section No. 1 Bill No. 1 Preliminaries and General			
Carried Forward			R

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward		R
55	Clause 6.4 - Compliance with manufacturer's instructions F: V: T: <u>Deposits and fees (B7)</u>	Item
56	Clause 7.1 - Deposits and fees F: V: T: <u>Temporary services (B8)</u>	Item
57	Clause 8.1 - Water F: V: T:	Item
58	Clause 8.2 - Electricity F: V: T:	Item
59	Clause 8.3 - Ablution and welfare facilities F: V: T:	Item
60	Clause 8.4 - Communication facilities F: V: T: <u>Prime cost amounts (B9)</u>	Item
61	Clause 9.1 - Responsibility for prime cost amounts	
Carried Forward		R
Section No. 1 Bill No. 1 Preliminaries and General		

Brought Forward

R

User note

Where details of materials included in prime cost amounts are not readily available and it is therefore not possible for the contractor to price for waste, the relevant prime cost amount shall be inserted in the bills of quantities as a lump sum with the contractor being given the opportunity to separately price his overheads and profit and for taking delivery, etc as called for in this clause 9.1 of the preliminaries. In such case the fixing only or installation only of the relevant materials shall be provisionally measured for the contractor to price and shall be re-measured upon completion

Where details of materials for which prime cost amounts are to be allowed are readily available, the quantity surveyor may elect to insert the relevant prime cost amounts in measured items, which measured items shall contain sufficient detail for the contractor to price for fixing and installation, waste, etc

F: V:
T:

Item

Attendance on subcontractors (B10)

62 Clause 10.1 - General attendance

User note

General attendance is defined as being the duties of the contractor in terms of clause 12.2 of the JBCC n/s subcontract agreement

F: V:
T:

Item

63 Clause 10.2 - Special attendance

User note

Insert details after the provisional sums (nominated or selected subcontract amount) for any special attendance where specifically required for each n/s subcontractor separately

Carried Forward

R

Section No. 1
Bill No. 1
Preliminaries and General

Brought Forward		R
<i>It is important to note that general attendance only requires the contractor to "permit the subcontractor to use erected scaffolding, hoisting facilities, etc provided by the contractor, in common with others having the like right while it remains erected on the site" (refer to 12.2.13 of the JBCC n/s subcontract agreement). Many n/s subcontractors qualify their tenders to exclude scaffolding and/or hoisting facilities. Especially scaffolding could be an expensive item and it may be necessary in order to avoid claims to require the contractor to provide for the extended use of scaffolding for specific subcontracts within a description of "special attendance" in the applicable bill</i> F: V: T: General (B11)		
64	Clause 11.1 - Protection of the works F: V: T:	Item
65	Clause 11.2 - Protection/isolation of existing/sectionally occupied works F: V: T:	Item
66	Clause 11.3 - Security of the works F: V: T:	Item
67	Clause 11.4 - Notice before covering work F: V: T:	Item
68	Clause 11.5 - Disturbance F: V: T: Clause 11.6 - Environmental disturbance F: V: T:	Item
Carried Forward		R
Section No. 1 Bill No. 1 Preliminaries and General		

Brought Forward		R
69	Clause 11.7 - Works cleaning and clearing F: V: T:	Item
70	Clause 11.8 - Vermin F: V: T:	Item
71	Clause 11.9 - Overhand work F: V: T:	Item
72	Clause 11.10 - Tenant installations by direct contractors F: V: T:	Item
73	Clause 11.11 - Advertising F: V: T:	Item
<u>Preliminaries schedule (B12)</u>		
74	Information for completion of the preliminaries schedule Information necessary for elections and completion of those clauses contained in the preliminaries schedule which are necessary for tender purposes is given hereunder. Where no information is given it shall mean that no specific requirements are expected or that the clause is not relevant to this specific contract 12.1 - Provisional bills of quantities [2.2] The quantities are provisional Yes/No 12.2 - Availability of construction information [2.3] Construction documentation is complete Yes/No 12.3 - Previous work - dimensional accuracy [3.1]	
Carried Forward		R
Section No. 1 Bill No. 1 Preliminaries and General		

Brought Forward 12.4 - Previous work - defects [3.2] 12.5 - Inspection of adjoining properties [3.3] 12.6 - Defined works area [4.1] <u>User note</u> 12.7 - Handover of site in stages [4.2] <u>User note</u> <i>Describe in detail where handover of the site to the contractor is done in stages</i> 12.8 - Enclosure of the works [4.3] 12.9 - Geotechnical investigation [4.4] <u>User note</u> <i>Insert the following clause should a geotechnical investigation report be available and insert the relevant annexure</i> Refer to Annexure TBA for the results of a geotechnical investigation report 12.10 - Existing premises occupied [4.6] <u>User note</u> <i>If the existing premises are occupied state it here and describe the detail and/or specific requirements. Reference as [PBA 12.1.2]</i> 12.11 - Services - known [4.7] <u>User note</u> 12.12 - Protection of trees and/or relevant natural features [4.8] <u>User note</u> <i>Expand clause 4.8 of the Preliminaries should there be specific requirements for the preservation of trees or relevant natural features. Reference as [PBA 12.1.3]</i>		R	
Carried Forward Section No. 1 Bill No. 1 Preliminaries and General		R	

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward	R
12.13 - Water [8.1]	
Option A (by contractor) Yes/No	
Option B (by employer - free of charge) Yes/No	
Option C (by employer - metered) Yes/No	
12.14 - Electricity [8.2]	
Option A (by contractor) Yes/No	
Option B (by employer - free of charge) Yes/No	
Option C (by employer - metered) Yes/No	
12.15 - Ablution and welfare facilities [8.3]	
Option A (by contractor) Yes/No	
Option B (by employer) Yes/No	
12.16 - Communication facilities [8.4]	
12.17 - Protection of the works [11.1]	
12.18 - Protection/isolation of existing/sectionally occupied works [11.2]	
Protection/isolation is required Yes/No	
12.19 - Disturbance [11.5]	
<u>User note</u>	
<i>The following clause may be used should "disturbance" [11.5] need to be extended</i>	
All work is to be carried out in such a manner as to cause no unacceptable or unreasonable dust, noise, vibrations, nuisance, inconvenience, annoyance and the like to the public, others, other properties and traffic in so far as they exceed the permissible limitations set by government legislation or by the local authority. Any delays, stoppages and the like arising from or in order to comply with the above will not constitute grounds for an adjustment to the construction period or contract value whatsoever	
Carried Forward	R
Section No. 1	
Bill No. 1	
Preliminaries and General	

Brought Forward 12.20 - Environmental disturbance [11.6] Controlling all forms of pollution The contractor shall be responsible for and take all precautions in controlling by whatever means necessary all forms of pollution emanating from the site during the construction period due <i>inter alia</i> to noise, artificial light, wind-blown sand, dust, deposits of mud, etc The contractor is to ensure that all roads which border the site and is used by the contractor during the execution of the works are kept clean and free of any dirt or debris caused by the execution of the works ? Environmental management plan The employer has prepared an environmental management plan (EMP) (refer to Annexure ? for a copy of the relevant plan). The contractor shall price opposite this item for compliance with all the requirements of such EMP F: V: T: <u>SECTION C: SPECIFIC PRELIMINARIES</u> <u>User note</u> <i>Users shall avoid inserting in Section C items which may be construed as amending, modifying, correcting or supplementing the provisions of the JBCC Principal Building Agreement. Such amendments, modifications, corrections or supplements should be kept to the absolute minimum and should be inserted in the space provided in the contract data or in a single referenced annexure as stipulated in the contract data or, when taking into account the methodology suggested in the user note on page 2 of this Bill No. 1, should be inserted in Section A under the recited clause headings of the JBCC Principal Building Agreement in this Bill No. 1</i>	Item	R	
Carried Forward Section No. 1 Bill No. 1 Preliminaries and General		R	

Brought Forward		R
<u>User note</u>		
75	Warranties for materials and workmanship Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the entity supplying the materials and/or doing the work and shall deliver same to the principal agent on the final completion of the contract The warranty shall state that workmanship, materials and installation are warranted for a specific period from the date of practical completion and that any defects that may arise during the specified period shall be made good at the expense of the entity supplying the materials and/or doing the work, upon written notice to do so The warranty will not be enforced if the work is damaged by defects in the execution of the works, in which case the responsibility for replacement shall rest entirely with the contractor F: V: T:	Item
76	Overtime Should overtime be required to be worked for any reason whatsoever, the cost of such overtime is to be borne by the contractor unless the principal agent has specifically authorised, prior to execution thereof, that costs for such overtime are to be borne by the employer F: V: T:	Item
77	Co-operation of the contractor for cost management It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the contract value does not exceed the budget F: V: T:	Item
Carried Forward		R
Section No. 1 Bill No. 1 Preliminaries and General		

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward		R
78	Overloading The contractor shall take all necessary steps to ensure that no damage occurs due to overloading of any portion of the works or temporary works eg scaffolding, etc. The contractor shall submit details of his proposed loading, storage, plant erection, etc to the principal agent for approval prior to proceeding with such loading, storing or erecting and shall comply with and pay for the principal agent's requirements in connection with the provision of temporary support work, etc. Any damage caused to the works by overloading shall be made good by the contractor at his sole expense F: V: T:	Item
79	Propping of floors below The contractor is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of materials and goods and location of plant, scaffolding, etc. The location of these areas and any necessary propping shall be approved by the principal agent and the cost thereof shall be borne by the contractor F: V: T:	Item
80	Testing of flat roof waterproofing for watertightness Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least forty (40) hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing F: V: T:	Item
Carried Forward		R
Section No. 1 Bill No. 1 Preliminaries and General		

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
81	Green star building certification <u>User note</u> <i>Insert the provisions called for by the relevant green star consultant should it be a requirement that the project be submitted for green star certification</i> F: V: T:	Item	
82	Broad based black economic empowerment (BBBEE) Tenders submitted will be evaluated taking into account their empowerment rating The employer will be monitoring the broad based black economic empowerment (BBBEE) status of the contractor throughout the execution of the works The contractor is to submit to the principal agent on an annual basis a schedule of spend, split into vendors engaged as subcontractors and suppliers indicating their BBBEE rating including proof of the said rating F: V: T:	Item	
83	Advertising rights The employer may elect to contract with advertising agencies for the erection of advertising hoardings, banners, wraps or the like for the duration of the contract. The contractor shall not prevent such an arrangement and will assist in the facilitation of same. Position and type of advertising structure to be agreed with the principal agent so as not to hinder the contractor in meeting the obligations under this agreement F: V: T:	Item	
Carried Forward			R
Section No. 1 Bill No. 1 Preliminaries and General			

Brought Forward			R
84	Confidentiality The contractor undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings from all subcontractors and suppliers. Such information shall not be used in any way except in connection with the execution of the works No information regarding this project shall be published or disclosed without the prior written consent of the employer F: V: T:	Item	
85	Media releases All rights of publication of articles in the media, together with any advertising relating thereto or in any way connected with this project, shall vest with the employer The contractor together with his subcontractors shall not, without the prior written consent of the employer, cause any statement or advertisement connected with this project to be printed, screened or aired by the media F: V: T:	Item	
<u>Provision of a CLO</u> Community Liaison Officer (CLO) The contractor to liaise with the community council to get the going rate for the CLO and include it into his/her pricing as the payment will be through the contractor. (However, proof of the going rate to be provided by the contractor from the community council) F: V: T:		Item	
86	Profit on above item	Item	
Carried Forward			R
Section No. 1 Bill No. 1 Preliminaries and General			

Brought Forward			R
87	Attendance on ditto.	Item	
88	Clause 2.0 - Law, regulations and notices		
Health and safety			
Without limiting the generality of the provisions of clause 2.0, the contractor's attention is drawn to the provisions of Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993. It is specifically stated that the employer shall prepare a documented health and safety specification for the works and that the employer shall ensure that the contractor has made provision for the cost of health and safety measures during the execution of the works. The contractor shall price opposite this item for compliance with the act and the regulations and the reasonable provisions of the aforementioned health and safety specification [2.1] The contractor shall: 1. Comply with the health and safety specification for the works 2. Prepare and agree with the health and safety consultant the health and safety plan for the works 3. Co-operate with the health and safety consultant in all respects 4. Manage the compliance of all subcontractors with the regulations and with the health and safety plan and specification 5. Conform to the conditions contained in the employer's health and safety specification			
Carried Forward			R
Section No. 1 Bill No. 1 Preliminaries and General			

Brought Forward		R
<u>Provision of the Health and Safety File</u>		
Health and Safety File Provision		
The contractor to liaise with the client/contractor for the preparation of the Health and Safety File to get the going rate for the allocated specification for the requirements for the scope of works and include it into his/her pricing as the payment will be through the contractor.		
F: V:		
T:		Item
89	Profit on above item	Item
90	Attendance on ditto.	Item
<u>SUMMARY OF CATEGORIES</u>		
91	Category : Fixed R	
	Category : Value R	
	Category : Time R	Item
Carried to Final Summary		R
Section No. 1		
Bill No. 1		
Preliminaries and General		



health

Department:
Health
North West Provincial Government
REPUBLIC OF SOUTH AFRICA



SECTION A2

BUILDING WORKS

Quantity	Rate	Amount
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Quantity

Rate

Amount

- ## DEMOLITION AND ALTERATION WORK

Carefully take out the existing floor tiles, carpeting etc., including cleaning up and preparing concrete floor to receive new porcelain tiles, including cleaning up and preparing concrete floor to receive new Vinyl Tiles.(etc) (measured elsewhere):

Carried Forward

R

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
<u>Breaking down and removing brickwork including plaster or face brick finishes, etc</u>			
5	Brick wall, etc.	m2	101
6	Labour in forming toothings to existing one brick walls in preparation for bonding to new brick walls.	m	247
<u>Breaking down and removing steel grills /brick work including plaster or face brick finishes, and making good to receive new brick work (measured elsewhere) etc</u>			
7	Remove existing steel grills and brick up openings.(measured elsewhere), etc.	m2	57
<u>Sand down entire steel windows frames, making clean for new paint (measured elsewhere), etc.</u>			
<u>Sand down steel windows:</u>			
8	Steel windows sanded down, cleaned/prepared for new paint, etc.	m2	172
<u>Cleaning existing surface steel work for new work:</u>			
9	Sand down galvanised steel balustrades, and prepare for new work, etc.	m2	105
10	Sand down galvanised steel lipped channel and prepare for new paint work, (paint work measured elsewhere) etc.	m2	115
11	Sand down galvanised steel support poles, and prepare for new paint work, (paint work measured elsewhere) etc.	m2	98
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 1			
Alterations and Demolitions			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 2</u>			
	<u>MASONRY</u>			
	<u>Note:</u>			
	The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill			
	<u>SUPER-STRUCTURE BRICKWORK</u>			
	Brickwork of Nebraska/Montana (14 MPa nominal compressive strength) in class 1 or 2 mortar. The brick to be in a 50% 50% ration as per the architectural design/Engineers Specification and strength.(to be confirmed before work commences) or similar approved			
1	220mm One brick walls	m2	209	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Joint forming material in movement joints</u>			
2	12mm Fibre board built in vertically between brick skins and concrete, etc.	m	234	
	<u>Brickwork reinforcement, every 4th course or as instructed by the Structural Engineer.</u>			
3	150mm Wide reinforcement built in horizontally	m	1 045	
	<u>FACE BRICKWORK</u>			
	<u>External facings Bergendal Light FSB in stacked bonding approved face bricks with a PC Amount of R 3,500.00 per thousand bricks delivered to site (excluding VAT) pointed with recessed horizontal and vertical joints: or similar approved / to match existing</u>			
4	Extra over brickwork for face brickwork.	m2	202	
	Carried Forward		R	
	Section No. 2			
	Bill No. 2			
	Masonry			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward				R
	<u>Brick-on-edge header course copings, sills, etc of approved face bricks Bergendal Light FSB with a PC Amount of R 5,500.00 per thousand bricks delivered to site (excluding VAT) pointed with recessed horizontal and vertical joints on all exposed faces: or similar approved / to match existing</u>			
5	190mm Wide brick-on-edge header course sills set sloping and slightly projecting and pointed on all exposed faces.	m	92	
6	Extra over ordinary brickwork for brick-on-edge header course coping.	m	92	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
Bill No. 2				
Masonry				

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 3</u>			
	<u>WATERPROOFING</u>			
	<u>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (1999 Edition) and to the Supplementary Preambles which are incorporated in these Bills of Quantities.</u>			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Waterproofing</u>			
	Waterproofing of roofs, basements, etc. shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs.			
	<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, under cills, etc.	m2	98	
	<u>JOINT SEALANTS, ETC.</u>			
	<u>"Compriband" bitumen impregnated foam plastic joint sealing strips:</u>			
2	25 x 20mm In joints between frames and walls	m	94	
	Carried Forward to Summary of Section No. 2			
	Section No. 2			
	Bill No. 3			
	Waterproofing			
			R	

Quantity	Rate	Amount
26		
	R	

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

	Brought Forward			R
	<u>Built-in-closet, Counters tops, Top counter & facade, Counter legs, Cupboards, etc.</u>			
2	Supply and Installation of: 32mm thick Formica square edge top, Pearl Grey, Formica, Storm Grey, with bull nosed edge, 16mm Supa wood with duco finish, colour Plascon Mayor, RAIEL 710 X 80 diameter satin finish table leg, 16mm Supa-wood with Duco finish, colour Plascon Deep Sea Reef, 16mm Supa-wood with 0.8 thick Pearl Grey Formica finish, etc. all complete. (all other measurements to be confirmed on site)(Allow for a PC amount of 3200, including delivery, supply and installation to site, ex. VAT)(per drawings to be issued by the architect)	Item		
	Carried Forward to Summary of Section No. 2			R
	Section No. 2			
	Bill No. 4			
	Carpentry and Joinery			

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 5</u>			
	<u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u>			
	NOTE : The locations of quantities should be read as follows:			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>CEILINGS ETC</u>			
	<u>NAILED UP CEILINGS</u>			
	<u>9.5mm Rhino Gypsum Plasterboard ceiling with 63mm wide strips of mesh scrim over joints and the whole ceiling finished with Gypsum skim plaster trowelled to a smooth polished surface</u>			
1	Ceilings including 38 x 38mm sawn softwood brander at 400mm centres	m2	650	
2	Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	13	
	<u>"Aerolite" or other equal and approved insulation</u>			
3	40mm Insulation closely fitted and laid on top of brander between roof timbers etc	m2	650	
	<u>76mm standard cove cornice where gypsum ceiling is (Ground floor units only)</u>			
4	75mm Coved cornices	m	980	
	Carried Forward		R	
	Section No. 2 Bill No. 5 Ceilings, Partitions and Access Flooring			

Brought Forward

PARTITIONS, ETC.

"Rhoni-Drywall" Partition System

6.4mm "Rhino-Drywall" System with steel studs,
partitioning with "Rhino Fire stop Board" on both sides
and fibreglass blanket between, including 100mm
Bronzed Aluminium Skirting and finished on top with an
appropriate bronzed aluminium section

5	Partitioning 3 650mm High with bottom track plugged to concrete and top track fixed to brickwork/glass, etc.	m	19
6	Extra over partitions 3650mm high for corners	No	10
7	Extra over partitioning 3650mm high for T-junction	No	10
8	Extra over partitioning 3650mm high for fair end	No	10

Carried Forward to Summary of Section No. 2

Section No. 2

Bill No. 5

Ceilings, Partitions and Access Flooring

R

R

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Item No		Quantity	Rate	Amount
<u>SECTION NO. 2</u>				
<u>BILL NO. 6</u>				
<u>IRONMONGERY</u>				
<u>Note:</u>				
The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill				
<u>LOCKS</u>				
<u>"Stainless Steel", or similar approved per the architect</u>				
1	Two lever mortice lock-set, stainless steel handle, 300mm x12mmØ, or similar approved per the Architect	No	26	
2	Four lever mortice lock-set, stainless steel handle, 300mm x12mmØ, or similar approved per the Architect	No	13	
<u>LETTER, NAMEPLATES, ETC</u>				
<u>"Solid" (or simalr approved)</u>				
3	150 x 150mm IG4/5 anodised aluminium plate	No	13	
<u>BATHROOM FITTINGS</u>				
<u>"Halcast", or similar approved</u>				
4	19mm Diameter chromium plated towel rail 600mm long including end brackets plugged	No	13	
<u>"Kimberly Clark" (or similar approved)</u>				
5	Toilet roll holder plugged	No	13	
<u>SUNDRIES</u>				
<u>"Union" (or similar approved)</u>				
6	Door stop plugged	No	39	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
Bill No. 6				
Ironmongery				

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Item No	Quantity	Rate	Amount
<u>SECTION NO. 2</u>			
<u>BILL NO. 7</u>			
<u>METALWORK</u>			
<u>Note:</u>			
The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill			
<u>PRESSED STEEL DOOR FRAMES, WINDOWS, ETC</u>			
<u>1.2mm pressed steel single rebated frames suitable for half brick walls complete with standard butt hinges. etc. painted with Plascon Velvagro - colour per the architect spe. or similar approved</u>			
1	Frame for door 813 x 2032mm high	No	39
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 7			
Metalwork			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 8</u>			
	<u>PLASTERING</u>			
	<u>Note:</u>			
	The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill			
	<u>SCREEDS</u>			
	<u>Screeds wood floated, on concrete</u>			
1	30mm Thick on floors and landings	m2	81	
	<u>INTERNAL PLASTER</u>			
	<u>Internal cement plaster, including any necessary hacking off and jointing to existing:</u>			
2	On Walls	m2	202	
3	Narrow widths, not exceeding 300mm wide	m2	20	
	<u>Two coats plaster with smooth Rhino light finish on partitioning, Ceiling, etc.</u>			
4	Soffit below ceilings to be rhinolite	m2	650	
	<u>DIVIDING STRIPS, ETC.</u>			
5	Brass edge trim dividing strip between different floor finishes	m	98	
	Carried Forward to Summary of Section No. 2			
	Section No. 2			
	Bill No. 8			
	Plastering			

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item
No

Quantity

Rate

Amount

SECTION NO. 2

BILL NO. 9

TILING

Notes:

The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill

NOTE:

Contractor to propose tiles that are within the allowed PC amount for approval by client/architect before bulk ordering.

FLOOR TILING

450 x 450mm thick Full bodies porcelain/ceramic floor tiles, colour to be determined later/by architect (PC Amount R 105/m2) fixed with adhesive to internal floor screeds elsewhere, and 3mm joints continuous in both directions jointed and flush pointed. (or similar approved)

1	To floors	m2	650
2	On narrow widths	m2	65

WALL TILING

200 x 200 x Johnson white glazed ceramic wall tiles (PC Amount R100/m2) fixed with adhesive to internal wall plaster elsewhere, and 3mm joints, grouted with white grout continuous in both directions jointed and flush pointed

3	On walls	m2	129
4	On narrow widths	m2	13

Carried Forward

R

Section No. 2
Bill No. 9
Tiling

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

	Brought Forward			R
5	On splashbacks, etc.	m2	36	
	<u>Tile Sundires</u>			
6	Allowance for joint sealant between tiles, etc.		Item	
	<u>ALUMINIUM AND PVC TRIMS, ETC.</u>			
7	Approved natural anodised aluminium straight edge dividing strip, 12mm deep at junction of differing floor finishes, plugged and screwed to floors, all to architects approval	m	650	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
Bill No. 9				
Tiling				

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item
No

Quantity

Rate

Amount

SECTION NO. 2

BILL NO. 10

PLUMBING AND DRAINAGE (PROVISIONAL)

Notse:

The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill

SANITARY FITTINGS

White vitreous china:

- | | | | |
|---|--|----|----|
| 1 | Vaal Sanitary ware Parktown 90° outlet top inlet closed rim back-to-wall pan, white, with Cobra Water tech Junior Flush master Flush valve, offset flush pipe, chrome plated compression pan connector, chrome plated wall flange, rubber seal buffer, integral vacuum breaker, non-hold-open feature, ball-o-stop chrome plated control inlet. or similar approved | No | 13 |
| 2 | One tap-hole basin with integrated overflow, white, with Lotus half pedestal, white, with 303 chrome plated basin waste, slotted with flanged back nut & washer, 62mm flange, 80mm long sank, chrome plated bottle trap with 75mm deep seal and adjustable telescopic pipe inlet X 50mm outlet for PVC, anti-theft plug & chrome plated Meter master metering pillar tap with non-hold open feature, flow controller, adjustable cycle time, back nut & washer inlet, or similar approved. | No | 13 |

SHOWER HEADS, etc.

Stop tap with arm and shower rose or similar, complete.

- | | | | |
|---|--------------------|----|----|
| 3 | Shower heads, etc. | No | 13 |
|---|--------------------|----|----|

SINKS, etc.

Carried Forward

R

Section No. 2
Bill No. 10
Plumbing and Drainage (Provisional)

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
	<u>Franke Kitchen Systems stainless steel 1200 X 536mm double bowl one piece pressed stainless steel drop-in sink with Cobra Focus sink mixer, swivel outlet, one hole single lever, chrome plated.</u>		
4	Galvanised rack Single Bowl Sink, complete.	No	1
	<u>SANITARY PLUMBING</u>		
	<u>uPVC soil and vent pipes</u>		
5	50mm Pipes	m	210
6	110mm Pipes	m	235
	<u>Extra over uPVC soil and vent pipes for fittings</u>		
7	110mm BSP adaptor	No	47
8	110mm Reducer	No	18
9	110mm Pan connector	No	20
10	50mm Bend	No	20
11	110mm Bend	No	17
12	50mm Equal tee	No	24
13	50mm Junction	No	23
14	110mm Junction	No	26
15	110 x 50 x 50mm Reducer	No	20
	<u>Sundries</u>		
16	Testing water pipe and fire water pipe systems	Item	
	<u>HOLES, ETC.</u>		
	<u>Core drilling of hole in concrete for pipe exceeding 50mm and not exceeding 100mm diameter</u>		
17	200mm Reinforced concrete slab, beam, wall, etc.	No	15
	<u>SLEEVES</u>		
	Carried Forward		
	Section No. 2		
	Bill No. 10		
	Plumbing and Drainage (Provisional)		
			R

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
<u>Plastic sleeves for pipes not exceeding 100mm diameter</u>			
18	Sleeve not exceeding 250mm long	No	12
19	Sleeve exceeding 250mm and not exceeding 500mm long	No	16
Carried Forward to Summary of Section No. 2			R
Section No. 2			
Bill No. 10			
Plumbing and Drainage (Provisional)			

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 2</u>			
	<u>BILL NO. 11</u>			
	<u>PAINT WORK</u>			
	<u>Note:</u>			
	NOTE: Colour to approved by client and architect after colour samples have been provided by the contractor			
	The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill			
	<u>PAINTWORK, ETC TO NEW WORK ON</u>			
	<u>FLOATED PLASTERED SURFACE WITH</u>			
	<u>One coat alkali resistant plaster primer finished with Two (2) coats of washable egg shell enamel paint or similar approved pr the architect. (sample to be approved before painting)</u>			
1	Internal walls	m2	201	
2	Narrow widths, not exceeding 300mm wide	m2	20	
	<u>METAL SURFACES WITH</u>			
	<u>Spot priming defects in pre-primed surfaces with metal primer, one coat universal undercoat and two coats of egg shell enamel paint, or similar approved per the architect instructions. (sample to be approved before painting)</u>			
3	Door frames	m2	219	
4	Steel windows	m2	160	
	Carried Forward		R	
	Section No. 2 Bill No. 11 Painting			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

	Brought Forward			R
5	Balustrades, etc (both sides measured over the full flat area)	m2	103	
	<u>WOOD</u>			
	<u>Prepare and apply one coat hardwood primer, one coat universal undercoat and two coats eggshell enamel on timber doors. Colour to Architects approval or similar approved per the architect instructions. (sample to be approved before painting)</u>			
6	Timber doors (Internal/Internal)	m2	177	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
Bill No. 11				
Painting				

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Bill No	SECTION SUMMARY - Renovations/Upgrade to Block O	Page No	Amount
1	Alterations and Demolitions	49	
2	Masonry	51	
3	Waterproofing	52	
4	Carpentry and Joinery	54	
5	Ceilings, Partitions and Access Flooring	56	
6	Ironmongery	57	
7	Metalwork	58	
8	Plastering	59	
9	Tiling	61	
10	Plumbing and Drainage (Provisional)	64	
11	Painting	66	
Carried to Final Summary			R
Section No. 2			

Item No	Quantity	Rate	Amount
<u>SECTION NO. 3</u>			
<u>BILL NO. 1</u>			
<u>DEMOLITIONS AND ALTERATIONS</u>			
<u>Note:</u>			
1. The Tenderer is advised to refer to the Model Preambles before pricing this Bill			
<u>DEMOLITION AND ALTERATION WORK</u>			
<u>REMOVAL OF EXISTING WORK</u>			
<u>Carefully take out the existing floor tiles, carpeting etc., including cleaning up and preparing concrete floor to receive new porcelain tiles, including cleaning up and preparing concrete floor to receive new Vinyl Tiles, (etc) (measured elsewhere):</u>			
1 Existing floor tiles	m2	650	
<u>Removal of damaged ceilings and replace with new ceiling (measured elsewhere), etc.</u>			
2 Damaged ceiling removed, etc.	m2	650	
<u>Breaking of concrete studs, cantilevered wall, brick walls, steps, steel works, etc.</u>			
<u>Demolish stud walls and make good on all affected trades.:</u>			
3 Cantilevered Concrete, etc.	m2	122	
<u>Breaking up and removing cracked plaster and make good to receive new plaster and paint (measured elsewhere)</u>			
4 Repairs to all there is cracked plaster,	m2	312	
Carried Forward			R
Section No. 3 Bill No. 1 Alterations and Demolitions			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
<u>Breaking down and removing brickwork including plaster or face brick finishes, etc</u>			
5	Brick wall, etc.	m2	101
6	Labour in forming toothings to existing one brick walls in preparation for bonding to new brick walls.	m	247
<u>Breaking down and removing steel grills /brick work including plaster or face brick finishes, and making good to receive new brick work (measured elsewhere) etc</u>			
7	Remove existing steel grills and brick up openings.(measured elsewhere), etc.	m2	57
<u>Sand down entire steel windows frames, making clean for new paint (measured elsewhere), etc.</u>			
<u>Sand down steel windows:</u>			
8	Steel windows sanded down, cleaned/prepared for new paint, etc.	m2	172
<u>Cleaning existing surface steel work for new work:</u>			
9	Sand down galvanised steel balustrades, and prepare for new work, etc.	m2	105
10	Sand down galvanised steel lipped channel and prepare for new paint work, (paint work measured elsewhere) etc.	m2	115
11	Sand down galvanised steel support poles, and prepare for new paint work, (paint work measured elsewhere) etc.	m2	98
Carried Forward to Summary of Section No. 3			
Section No. 3			
Bill No. 1			
Alterations and Demolitions			

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 2</u>			
	<u>MASONRY</u>			
	<u>Note:</u>			
	The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill			
	<u>SUPER-STRUCTURE BRICKWORK</u>			
	<u>Brickwork of Nebraska/Montana (14 MPa nominal compressive strength) in class 1 or 2 mortar. The brick to be in a 50% 50% ration as per the architectural design/Engineers Specification and strength.(to be confirmed before work commences) or similar approved</u>			
1	220mm One brick walls	m2	209	
	<u>BRICKWORK SUNDRIES</u>			
	<u>Joint forming material in movement joints</u>			
2	12mm Fibre board built in vertically between brick skins and concrete, etc.	m	234	
	<u>Brickwork reinforcement every 4th course or as instructed by the Structural Engineer.</u>			
3	150mm Wide reinforcement built in horizontally	m	1 045	
	<u>FACE BRICKWORK</u>			
	<u>External facings Bergendal Light FSB in stacked bonding approved face bricks with a PC Amount of R 3,500.00 per thousand bricks delivered to site (excluding VAT) pointed with recessed horizontal and vertical joints: or similar approved / to match existing</u>			
4	Extra over brickwork for face brickwork.	m2	202	
	Carried Forward		R	
	Section No. 3			
	Bill No. 2			
	Masonry			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward				R
	Brick-on-edge header course copings, sills, etc of approved face bricks Bergendal Light FSB with a PC Amount of R 5,500.00 per thousand bricks delivered to site (excluding VAT) pointed with recessed horizontal and vertical joints on all exposed faces: or similar approved / to match existing			
5	190mm Wide brick-on-edge header course sills set sloping and slightly projecting and pointed on all exposed faces.	m	92	
6	Extra over ordinary brickwork for brick-on-edge header course coping.	m	92	
Carried Forward to Summary of Section No. 3				R
Section No. 3				
Bill No. 2				
Masonry				

Section No. 3
Bill No. 3
Waterproofing

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward		R	
<u>Built-in-closet, Counters tops, Top counter & facade, Counter legs, Cupboards, etc.</u>			
2 Supply and Installation of: 32mm thick Formica square edge top, Pearl Grey, Formica, Storm Grey, with bull nosed edge, 16mm Supa wood with duco finish, colour Plascon Mayor, RAIEL 710 X 80 diameter satin finish table leg, 16mm Supa-wood with Duco finish, colour Plascon Deep Sea Reef, 16mm Supa-wood with 0.8 thick Pearl Grey Formica finish, etc. all complete. (all other measurements to be confirmed on site)(Allow for a PC amount of 3200, including delivery, supply and installation to site, ex. VAT)(per drawings to be issued by the architect)	Item		
Carried Forward to Summary of Section No. 3		R	
Section No. 3			
Bill No. 4			
Carpentry and Joinery			

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 5</u>			
	<u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u>			
	NOTE : The locations of quantities should be read as follows:			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<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			
	<u>CEILINGS ETC</u>			
	<u>NAILED UP CEILINGS</u>			
	<u>9.5mm Rhino Gypsum Plasterboard ceiling with 63mm wide strips of mesh scrim over joints and the whole ceiling finished with Gypsum skim plaster trowelled to a smooth polished surface</u>			
1	Ceilings including 38 x 38mm sawn softwood branderling at 400mm centres	m2	650	
2	Extra over ceiling for 650 x 650mm trap door of 38 x 50mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	13	
	<u>"Aerolite" or other equal and approved insulation</u>			
3	40mm Insulation closely fitted and laid on top of branderling between roof timbers etc	m2	650	
	<u>76mm standard cove cornice where gypsum ceiling is (Ground floor units only)</u>			
4	75mm Coved cornices	m	980	
	Carried Forward		R	
	Section No. 3 Bill No. 5 Ceilings, Partitions and Access Flooring			

Brought Forward		R
<u>PARTITIONS, ETC.</u>		
<u>"Rhoni-Drywall" Partition System</u>		
<u>6.4mm "Rhino-Drywall" System with steel studs, partitioning with "Rhino Fire stop Board" on both sides and fibreglass blanket between, including 100mm Bronzed Aluminium Skirting and finished on top with an appropriate bronzed aluminium section</u>		
Partitioning 3 650mm High with bottom track plugged to concrete and top track fixed to brickwork/glass, etc.	m	19
Extra over partitions 3650mm high for corners	No	10
Extra over partitioning 3650mm high for T-junction	No	10
Extra over partitioning 3650mm high for fair end	No	10
Carried Forward to Summary of Section No. 3		R
Section No. 3		
Bill No. 5		
Ceilings, Partitions and Access Flooring		

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item No			Quantity	Rate	Amount
	<u>SECTION NO. 3</u>				
	<u>BILL NO. 6</u>				
	<u>IRONMONGERY</u>				
	<u>Note:</u>				
	The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill				
	<u>LOCKS</u>				
	<u>"Stainless Steel", or similar approved per the architect</u>				
1	Two lever mortice lock-set, stainless steel handle, 300mm x12mmØ, or similar approved per the Architect	No	26		
2	Four lever mortice lock-set, stainless steel handle, 300mm x12mmØ, or similar approved per the Architect	No	13		
	<u>LETTER, NAMEPLATES, ETC</u>				
	<u>"Solid" (or similar approved)</u>				
3	150 x 150mm IG4/5 anodised aluminium plate	No	13		
	<u>BATHROOM FITTINGS</u>				
	<u>"Halcast", or similar approved</u>				
4	19mm Diameter chromium plated towel rail 600mm long including end brackets plugged	No	13		
	<u>"Kimberly Clark" (or similar approved)</u>				
5	Toilet roll holder plugged	No	13		
	<u>SUNDRIES</u>				
	<u>"Union" (or similar approved)</u>				
6	Door stop plugged	No	39		
	Carried Forward to Summary of Section No. 3				R
	Section No. 3				
	Bill No. 6				
	Ironmongery				

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Item No	Quantity	Rate	Amount
<u>SECTION NO. 3</u>			
<u>BILL NO. 7</u>			
<u>METALWORK</u>			
<u>Note:</u>			
The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill			
<u>PRESSED STEEL DOOR FRAMES, WINDOWS, ETC</u>			
<u>1.2mm pressed steel single rebated frames suitable for half brick walls complete with standard butt hinges, etc. painted with Plascon Velvaglo - colour per the architect spe. or similar approved</u>			
1	Frame for door 813 x 2032mm high	No	39
Carried Forward to Summary of Section No. 3			R
Section No. 3			
Bill No. 7			
Metalwork			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

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**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 3</u>			
	<u>BILL NO. 9</u>			
	<u>TILING</u>			
	<u>Notes:</u>			
	The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill			
	<u>NOTE:</u>			
	Contractor to propose tiles that are within the allowed PC amount for approval by client/architect before bulk ordering.			
	<u>FLOOR TILING</u>			
	<u>450 x 450mm thick Full bodies porcelain/ceramic floor tiles, colour to be determined later/by architect (PC Amount R 105/m2) fixed with adhesive to internal floor screeds elsewhere, and 3mm joints continuous in both directions jointed and flush pointed. (or similar approved)</u>			
1	To floors	m2	650	
2	On narrow widths	m2	65	
	<u>WALL TILING</u>			
	<u>200 x 200 x Johnson white glazed ceramic wall tiles (PC Amount R100/m2) fixed with adhesive to internal wall plaster elsewhere, and 3mm joints, grouted with white grout continuous in both directions jointed and flush pointed</u>			
3	On walls	m2	129	
4	On narrow widths	m2	13	
	Carried Forward		R	
	Section No. 3			
	Bill No. 9			
	Tiling			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

	Brought Forward			R
5	On splashbacks, etc.	m2	36	
	<u>Tile Sundires</u>			
6	Allowance for joint sealant between tiles, etc.		Item	
	<u>ALUMINIUM AND PVC TRIMS, ETC.</u>			
7	Approved natural anodised aluminium straight edge dividing strip, 12mm deep at junction of differing floor finishes, plugged and screwed to floors, all to architects approval	m	650	
Carried Forward to Summary of Section No. 3				R
Section No. 3				
Bill No. 9				
Tiling				

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item No		Quantity	Rate	Amount
<u>SECTION NO. 3</u>				
<u>BILL NO. 10</u>				
<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>				
<u>Notse:</u>				
The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill				
<u>SANITARY FITTINGS</u>				
<u>White vitreous china:</u>				
1	Vaal Sanitary ware Parktown 90° outlet top inlet closed rim back-to-wall pan, white, with Cobra Water tech Junior Flush master Flush valve, offset flush pipe, chrome plated compression pan connector, chrome plated wall flange, rubber seal buffer, integral vacuum breaker, non-hold-open feature, ball-o-stop chrome plated control inlet. or similar approved	No	13	
2	One tap-hole basin with integrated overflow, white, with Lotus half pedestal, white, with 303 chrome plated basin waste, slotted with flanged back nut & washer, 62mm flange, 80mm long sank, chrome plated bottle trap with 75mm deep seal and adjustable telescopic pipe inlet X 50mm outlet for PVC, anti-theft plug & chrome plated Meter master metering pillar tap with non-hold open feature, flow controller, adjustable cycle time, back nut & washer inlet, or similar approved.	No	13	
<u>SHOWER HEADS, etc.</u>				
<u>Stop tap with arm and shower rose or similar, complete.</u>				
3	Shower heads, etc.	No	13	
<u>SINKS, etc.</u>				
Carried Forward				R
Section No. 3 Bill No. 10 Plumbing and Drainage (Provisional)				

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
	<u>Franke Kitchen Systems stainless steel 1200 X 536mm double bowl one piece pressed stainless steel drop-in sink with Cobra Focus sink mixer, swivel outlet, one hole single lever, chrome plated.</u>		
4	Galvanised rack Single Bowl Sink, complete.	No	1
	<u>SANITARY PLUMBING</u>		
	<u>uPVC soil and vent pipes</u>		
5	50mm Pipes	m	210
6	110mm Pipes	m	235
	<u>Extra over uPVC soil and vent pipes for fittings</u>		
7	110mm BSP adaptor	No	47
8	110mm Reducer	No	18
9	110mm Pan connector	No	20
10	50mm Bend	No	20
11	110mm Bend	No	17
12	50mm Equal tee	No	24
13	50mm Junction	No	23
14	110mm Junction	No	26
15	110 x 50 x 50mm Reducer	No	20
	<u>Sundries</u>		
16	Testing water pipe and fire water pipe systems	Item	
	<u>HOLES, ETC.</u>		
	<u>Core drilling of hole in concrete for pipe exceeding 50mm and not exceeding 100mm diameter</u>		
17	200mm Reinforced concrete slab, beam, wall, etc.	No	15
	<u>SLEEVES</u>		

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward		R
<u>Plastic sleeves for pipes not exceeding 100mm diameter</u>		
Sleeve not exceeding 250mm long	No	12
Sleeve exceeding 250mm and not exceeding 500mm long	No	16
Carried Forward to Summary of Section No. 3		R
Section No. 3		
Bill No. 10		
Pumping and Drainage (Provisional)		

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item No			Quantity	Rate	Amount
	<u>SECTION NO. 3</u>				
	<u>BILL NO. 11</u>				
	<u>PAINT WORK</u>				
	<u>Note:</u>				
	<u>NOTE:</u>				
	Colour to approved by client and architect after colour samples have been provided by the contractor				
	The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill				
	<u>PAINTWORK, ETC TO NEW WORK ON</u>				
	<u>FLOATED PLASTERED SURFACE WITH</u>				
	<u>One coat alkali resistant plaster primer finished with Two (2) coats of washable egg shell enamel paint or similar approved pr the architect. (sample to be approved before painting)</u>				
1	Internal walls	m2	201		
2	Narrow widths, not exceeding 300mm wide	m2	20		
	<u>METAL SURFACES WITH</u>				
	<u>Spot priming defects in pre-primed surfaces with metal primer, one coat universal undercoat and two coats of egg shell enamel paint, or similar approved per the architect instructions. (sample to be approved before painting)</u>				
3	Door frames	m2	219		
4	Steel windows	m2	160		
	Carried Forward				R
	Section No. 3				
	Bill No. 11				
	Painting				

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

	Brought Forward			R
5	Balustrades, etc (both sides measured over the full flat area)	m2	103	
	<u>WOOD</u>			
	<u>Prepare and apply one coat hardwood primer, one coat universal undercoat and two coats eggshell enamel on timber doors. Colour to Architects approval or similar approved per the architect instructions. (sample to be approved before painting)</u>			
6	Timber doors (Internal/Internal)	m2	177	
Carried Forward to Summary of Section No. 3 Section No. 3 Bill No. 11 Painting				R

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

SECTION SUMMARY - Renovations/Upgrade to Block H

Bill No		Page No	Amount
1	Alterations and Demolitions	69	
2	Masonry	71	
3	Waterproofing	72	
4	Carpentry and Joinery	74	
5	Ceilings, Partitions and Access Flooring	76	
6	Ironmongery	77	
7	Metalwork	78	
8	Plastering	79	
9	Tiling	81	
10	Plumbing and Drainage (Provisional)	84	
11	Painting	86	
Section No. 3			
Carried to Final Summary			
			R

Item No	Quantity	Rate	Amount
<u>SECTION NO. 4</u>			
<u>BILL NO. 1</u>			
<u>DEMOLITIONS AND ALTERATIONS</u>			
<u>Note:</u>			
1.	The Tenderer is advised to refer to the Model Preambles before pricing this Bill		
<u>DEMOLITION AND ALTERATION WORK</u>			
<u>REMOVAL OF EXISTING WORK</u>			
<u>Carefully take out the existing floor tiles, carpeting etc., including cleaning up and preparing concrete floor to receive new porcelain tiles, including cleaning up and preparing concrete floor to receive new Vinyl Tiles, (etc) (measured elsewhere):</u>			
1	Removal of Carpeting making good for new tiles (measured elsewhere)	m2	324
<u>Carefully allow for the roof inspections of damaged nails, sheets, any leakage and make good roof to block any possible leakages, make allowance for scaffolding, etc.</u>			
<u>Inspection of damaged roof, making good of any leakages.:</u>			
2	Inspection of damaged roof and fixing any leakages, etc.	Item	
<u>Removal of damaged ceilings and replace with new ceiling (measured elsewhere), etc.</u>			
3	Damaged ceiling removed, etc.	m2	324
<u>Sand down entire steel windows frames, making clean for new paint (measured elsewhere), etc.</u>			
Carried Forward			
Section No. 4 Bill No. 1 Alterations and Demolitions			R

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
<u>Sand down steel windows:</u>			
4	Steel windows sanded down, cleaned/prepared for new paint, etc.	m2 164	
<u>Cleaning existing surface steel work for new work:</u>			
5	Sand down galvanised steel lipped channel and prepare for new paint work, (paint work measured elsewhere) etc.	m2 285	
6	Sand down galvanised steel support poles, and prepare for new paint work, (paint work measured elsewhere) etc.	m2 385	
Carried Forward to Summary of Section No. 4			
Section No. 4			
Bill No. 1			
Alterations and Demolitions			

Item No	Quantity	Rate	Amount
<u>SECTION NO. 4</u>			
<u>BILL NO. 2</u>			
<u>CEILINGS, PARTITIONS AND ACCESS FLOORING</u>			
NOTE : The locations of quantities should be read as follows:			
<u>SUPPLEMENTARY PREAMBLES</u>			
<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			
<u>CEILINGS ETC</u>			
<u>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)			
Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete			
<u>HORIZONTAL SUSPENDED CEILING, etc</u>			
<u>Shell white 1200 x 600 x 12mm thick square edged nutec fibre cement suspended ceiling laid to manufacturer's specifications, or similar approved</u>			
1	Plasterboard Ceiling, etc	m2	343
Carried Forward			R
Section No. 4 Bill No. 2 Ceilings, Partitions and Access Flooring			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
<u>90mm Coved Cornice fixed to wall with nails</u>			
2	19 x 50mm S.A pine Cornice: laid flat and finished with one universal undercoat and two coats enamel paint	m	154
<u>Shadow line Wall angles, etc.</u>			
3	Shadow line angles, nailed to wall/struds, etc.	m	35
<u>INSULATION</u>			
<u>40mm Thick "Isoboard" high density (36kg/m2) rigid extruded polystyrene closed cell insulation board with edge bevelled finish suspended below steel purlins at not exceeding 2m centres (purlins elsewhere) with and including approved concealed galvanised metal suspension system in strict accordance with the manufacturer's instructions:</u>			
4	75mm Thick fibreglass insulation blanket in cavity of partitioning laid according to manufactures specification.	m2	343
Carried Forward to Summary of Section No. 4			
Section No. 4			
Bill No. 2			
Ceilings, Partitions and Access Flooring			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 4</u>			
	<u>BILL NO. 3</u>			
	<u>TILING</u>			
	<u>Notes:</u>			
	The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill			
	<u>NOTE:</u>			
	Contractor to propose tiles that are within the allowed PC amount for approval by client/architect before bulk ordering.			
	<u>FLOOR TILING</u>			
	<u>450 x 450mm thick Full bodies porcelain/ceramic floor tiles, colour to be determined later/by architect (PC Amount R 105/m2) fixed with adhesive to internal floor screeds elsewhere, and 3mm joints continuous in both directions jointed and flush pointed. (or similar approved)</u>			
1	To floors	m2	324	
2	On narrow widths	m2	32	
	<u>Tile Sundries, etc.</u>			
3	Allowance for joint sealant between tiles, etc.	Item		
	<u>ALUMINIUM AND PVC TRIMS, ETC.</u>			
4	Approved natural anodised aluminium straight edge dividing strip, 12mm deep at junction of differing floor finishes, plugged and screwed to floors, all to architects approval	m	126	
	Carried Forward to Summary of Section No. 4			
	Section No. 4		R	
	Bill No. 3			
	Tiling			

Item No	Quantity	Rate	Amount
<u>SECTION NO. 4</u>			
<u>BILL NO. 4</u>			
<u>PAINT WORK</u>			
<u>Note:</u>			
NOTE: Colour to approved by client and architect after colour samples have been provided by the contractor			
The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill			
<u>PAINTWORK, ETC TO NEW WORK ON</u>			
<u>FLOATED PLASTERED SURFACE WITH</u>			
<u>One coat alkali resistant plaster primer finished with Two (2) coats of washable egg shell enamel paint or similar approved pr the architect. (sample to be approved before painting)</u>			
1	Internal walls	m2	476
2	Narrow widths, not exceeding 300mm wide	m2	48
3	External walls	m2	494
4	Narrow widths, not exceeding 300mm wide	m2	49
<u>METAL SURFACES WITH</u>			
Carried Forward			R
Section No. 4 Bill No. 4 Painting			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
<u>Spot priming defects in pre-primed surfaces with metal primer, one coat universal undercoat and two coats of egg shell enamel paint, or similar approved per the architect instructions. (sample to be approved before painting)</u>			
5	Door frames	m2	14
6	Steel windows	m2	154
7	Corrugated Roof sheeting, etc	m2	817
8	Down pipes, gutters etc	m2	52
<u>WOOD</u>			
<u>Prepare and apply one coat hardwood primer, one coat universal undercoat and two coats eggshell enamel on timber doors. Colour to Architects approval or similar approved per the architect instructions. (sample to be approved before painting)</u>			
9	Timber doors (Internal/External)	m2	30
Carried Forward to Summary of Section No. 4			R
Section No. 4			
Bill No. 4			
Painting			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
<u>Spot priming defects in pre-primed surfaces with metal primer, one coat universal undercoat and two coats of egg shell enamel paint, or similar approved per the architect instructions. (sample to be approved before painting)</u>			
5	Door frames	m2	14
6	Steel windows	m2	154
7	Corrugated Roof sheeting.etc	m2	817
8	Down pipes, gutters etc	m2	52
<u>WOOD</u>			
<u>Prepare and apply one coat hardwood primer, one coat universal undercoat and two coats eggshell enamel on timber doors. Colour to Architects approval or similar approved per the architect instructions. (sample to be approved before painting)</u>			
9	Timber doors (Internal/External)	m2	30
Carried Forward to Summary of Section No. 4 Section No. 4 Bill No. 4 Painting			R

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Bill No	SECTION SUMMARY - Renovations/Upgrade to the Classrooms Block	Page No	Amount
1	Alterations and Demolitions	89	
2	Ceilings, Partitions and Access Flooring	91	
3	Tiling	92	
4	Painting	94	
Section No. 4		Carried to Final Summary	
		R	

BILL NO. 1

Note:

1. The Tenderer is advised to refer to the Model Preambles before pricing this Bill

REMOVAL OF EXISTING WORK

Take out and remove existing steel damaged door frame, etc., from brick walls, including make good brick wall and prepare to receive new paint and new steel door frame (measured elsewhere):

1	Door average size 813 x 2 032mm High	No	5
	<u>Carefully take out the existing floor tiles, carpeting etc., including cleaning up and preparing concrete floor to receive new porcelain tiles, including cleaning up and preparing concrete floor to receive new Vinyl Tiles,(etc) (measured elsewhere):</u>		
2	Existing floor tiles	m2	139
	<u>Carefully breaking/taking out all sanitary ware, breaking walls and preparing, making area new for new sanitary ware installations (measured elsewhere)</u>		
	<u>Sanitary ware taken out.:</u>		
3	Taking out WC, to a dumping site located by contractor/client, making area new for new WC (measured elsewhere), etc.	No	9
4	Taking out Bath-tub, to a dumping site located by contractor/client, making area good for new sanitary were per architect spe. (measured elsewhere), etc.	No	3

Carried Forward

R

Section No. 5
Bill No. 1
Alterations and Demolitions

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
5	Taking out existing sinks, to a dumping site located by contractor/client, making area good for new trade per architect spec. (measured elsewhere), etc. <u>Carefully breaking/taking out all shower doors and making area good to receive new trade per the architect spec. (measured elsewhere)</u>	No 5	
6	Taking out existing shower doors, average size 600 x 1.7mm high (size to be confirmed on site, taken to a dumping site located by contractor/client, making area new for new trade per the architect spec. (measured elsewhere), etc. <u>Removal of damaged ceilings and replace with new ceiling (measured elsewhere), etc.</u>	No 6	
7	Damaged ceiling removed, etc. <u>Breaking of concrete studs, cantilevered wall, brick walls, steps, steel works, etc.</u> <u>Breaking up and removing cracked plaster and make good to receive new plaster and paint (measured elsewhere)</u>	m2 139	
8	Repairs to all there is cracked plaster,	m2 196	
9	Remove damaged existing concrete steps and make good for new stairs (measured elsewhere) per engineers specifications, <u>Breaking down and removing concrete apron, and making good to receive new concrete apron (measured elsewhere) etc</u>	m3 21	
10	Damaged concrete apron and make good to receive new .(measured elsewhere), etc. <u>Breaking down and removing concrete bench, and making good to receive new sanitary ware per the architect spec. (measured elsewhere) etc</u>	m2 38	
11	Damaged concrete bench removed and make area good to receive new sanitary ware .(measured elsewhere), etc. <u>Breaking down and removing brickwork including plaster or face brick finishes, etc</u>	m3 1	
12	Brick wall, etc.	m2 31	
Carried Forward			R
Section No. 5 Bill No. 1 Alterations and Demolitions			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
13	Labour in forming toothings to existing one brick walls in preparation for bonding to new brick walls. <u>Breaking down and removing steel grills /brick work including plaster or face brick finishes, and making good to receive new brick work (measured elsewhere) etc</u>	m 120	
14	Remove existing steel grills and brick up openings.(measured elsewhere), etc. <u>Sand down entire steel windows frames, making clean for new paint (measured elsewhere), etc.</u> <u>Sand down steel windows:</u>	m2 114	
15	Steel windows sanded down, cleaned/prepared for new paint, etc.	m2 104	
Carried Forward to Summary of Section No. 5			R
Section No. 5			
Bill No. 1			
Alterations and Demolitions			

Item
No

SECTION NO. 5

BILL NO. 2

MASONRY

Note:

The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill

SUPER-STRUCTURE BRICKWORK

Brickwork of Nebraska/Montana (14 MPa nominal compressive strength) in class 1 or 2 mortar. The brick to be in a 50% 50% ratio as per the architectural design/Engineers Specification and strength.(to be confirmed before work commences) or similar approved

1	110mm Half brick walls	m2	59
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BRICKWORK SUNDRIES

Joint forming material in movement joints

2	12mm Fibre board built in vertically between brick skins and concrete, etc.	m	80
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Brickwork reinforcement, every 4th course or as instructed by the Structural Engineer.

3	75mm Wide reinforcement built in horizontally	m	295
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Carried Forward to Summary of Section No. 5

Section No. 5
Bill No. 2
Masonry

R

BILL NO. 3

The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (1999 Edition) and to the Supplementary Preambles which are incorporated in these Bills of Quantities.

Waterproofing

Waterproofing of roofs, basements, etc. shall be laid under a ten year guarantee. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs.

One layer of 375 micron "Consol Plastics Brikrip DPC"
embossed damp-proof course:

1	In walls, under cills, etc.	m2	9
<u>JOINT SEALANTS, ETC.</u>			
<u>"Compriband" bitumen impregnated foam plastic joint sealing strips:</u>			
2	25 x 20mm In joints between frames and walls	m	18

JOINT SEALANTS, ETC.

"Compriband" bitumen impregnated foam plastic joint sealing strips:

Carried Forward to Summary of Section No. 5

Section No. 5
Bill No. 3
Waterproofing

R

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**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
	<u>External Doors to be Hardwood with vertical slatted open back doors. Size 813 x 2032mm Thick, suitable for painting.</u>		
2	Double door average size 1600 x 2032mm high Hardwood Vertical Slatted open Back Doors, etc.	No	4
	<u>EAVES, VERGES, ETC</u>		
	<u>"Everite Flexit" or other equal and approved pressed nutec-cement, or similar approved</u>		
3	12 x 225mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	48
	<u>SKIRTINGS</u>		
	<u>Wrought meranti</u>		
4	19 x 76mm Skirting including 19mm quadrant bead nailed	m	170
Carried Forward to Summary of Section No. 5			R
Section No. 5			
Bill No. 4			
Carpentry and Joinery			

R

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward		R
4	<u>40mm Thick "Isoboard" high density (36kg/m2) rigid extruded polystyrene closed cell insulation board with edge bevelled finish suspended below steel purlins at not exceeding 2m centres (purlins elsewhere) with and including approved concealed galvanised metal suspension system in strict accordance with the manufacturer's instructions:</u> 75mm Thick fibreglass insulation blanket in cavity of partitioning laid according to manufactures specification.	m2 138
Carried Forward to Summary of Section No. 5 Section No. 5 Bill No. 5 Ceilings, Partitions and Access Flooring		R

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item No			Quantity	Rate	Amount
	<u>SECTION NO. 5</u>				
	<u>BILL NO. 6</u>				
	<u>IRONMONGERY</u>				
	<u>Note:</u>				
	The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill				
	<u>LOCKS</u>				
	<u>"Stainless Steel", or similar approved per the architect</u>				
1	Two lever mortice lock-set, stainless steel handle, 300mm x12mmØ, or similar approved per the Architect	No	8		
2	Four lever mortice lock-set, stainless steel handle, 300mm x12mmØ, or similar approved per the Architect	No	2		
	<u>LETTER, NAMEPLATES, ETC</u>				
	<u>"Solid" (or simalr approved)</u>				
3	150 x 150mm IG4/5 anodised aluminium plate	No	2		
	<u>BATHROOM FITTINGS</u>				
	<u>"Halcast", or similar approved</u>				
4	19mm Diameter chromium plated towel rail 600mm long including end brackets plugged	No	2		
	<u>"Kimberly Clark" (or similar approved)</u>				
5	Toilet roll holder plugged	No	8		
	<u>SUNDRIES</u>				
	<u>"Union" (or similar approved0</u>				
6	Door stop plugged	No	14		
	Carried Forward to Summary of Section No. 5				R
	Section No. 5				
	Bill No. 6				
	Ironmongery				

METALWORK

No	4
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R

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Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 8</u>			
	<u>PLASTERING</u>			
	<u>Note:</u>			
	The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill			
	<u>SCREEDS</u>			
	<u>Screeds wood floated, on concrete</u>			
1	30mm Thick on floors and landings	m2	96	
	<u>Granolithic Finish</u>			
2	20mm Thick to top of Steps, etc.	m2	16	
	<u>INTERNAL PLASTER</u>			
	<u>Internal cement plaster, including any necessary hacking off and jointing to existing:</u>			
3	On Walls	m2	168	
4	Narrow widths, not exceeding 300mm wide	m2	12	
	<u>Two coats plaster with smooth Rhino light finish on partitioning, Ceiling, etc.</u>			
5	Soffit below ceilings to be rhinolite	m2	95	
	<u>DIVIDING STRIPS, ETC.</u>			
6	Brass edge trim dividing strip between different floor finishes	m	16	
	Carried Forward to Summary of Section No. 5			
	Section No. 5			
	Bill No. 8			
	Plastering			
			R	

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item No			Quantity	Rate	Amount
	<u>SECTION NO. 5</u>				
	<u>BILL NO. 9</u>				
	<u>TILING</u>				
	<u>Notes:</u>				
	The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill				
	<u>NOTE:</u>				
	Contractor to propose tiles that are within the allowed PC amount for approval by client/architect before bulk ordering.				
	<u>FLOOR TILING</u>				
	<u>450 x 450mm thick Full bodies porcelain/ceramic floor tiles, colour to be determined later/by architect (PC Amount R 105/m2) fixed with adhesive to internal floor screeds elsewhere, and 3mm joints continuous in both directions jointed and flush pointed. (or similar approved)</u>				
1	To floors	m2	140		
2	On narrow widths	m2	8		
	<u>WALL TILING</u>				
	<u>200 x 200 x Johnson white glazed ceramic wall tiles (PC Amount R100/m2) fixed with adhesive to internal wall plaster elsewhere, and 3mm joints, grouted with white grout continuous in both directions jointed and flush pointed</u>				
3	On walls	m2	397		
4	On narrow widths	m2	30		
	Carried Forward				R
	Section No. 5 Bill No. 9 Tiling				

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

		Brought Forward		R
5	On splashbacks, etc.	m2	26	
	<u>Tile Sundires</u>			
6	Allowance for joint sealant between tiles, etc.		Item	
	<u>ALUMINIUM AND PVC TRIMS, ETC.</u>			
7	Approved natural anodised aluminium straight edge dividing strip, 12mm deep at junction of differing floor finishes, plugged and screwed to floors, all to architects approval	m	80	
Carried Forward to Summary of Section No. 5				R
Section No. 5				
Bill No. 9				
Tiling				

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Item No		Quantity	Rate	Amount
<u>SECTION NO. 5</u>				
<u>BILL NO. 10</u>				
<u>PLUMBING AND DRAINAGE (PROVISIONAL)</u>				
<u>Notse:</u>				
The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill				
<u>RAINWATER DISPOSAL</u>				
<u>Seamless aluminium pre-painted gutters and rainwater pipes (Colour to be approved by Architect)</u>				
1	150 x 150mm Square section eaves gutters fixed to falls on splay rebated roof trusses	m	13	
2	Extra for stopped end.	No	4	
3	Extra over for angle	No	4	
4	125 x 75mm Diameter rainwater downpipe fixed to walls	No	14	
5	Extra over for bend	m	4	
6	Extra over for shoe	No	4	
7	Extra over for eaves or plinth offset	No	4	
<u>uPVC pipes</u>				
8	110mm Diameter rainwater pipes cast in concrete or built into brickwork	m	45	
9	Extra over 110mm rainwater pipe for bend	No	4	
<u>SANITARY FITTINGS</u>				
Carried Forward				R
Section No. 5 Bill No. 10 Plumbing and Drainage (Provisional)				

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
<u>White vitreous china:</u>			
10	Vaal Sanitary ware Parktown 90° outlet top inlet closed rim back-to-wall pan, white, with Cobra Water tech Junior Flush master Flush valve, offset flush pipe, chrome plated compression pan connector, chrome plated wall flange, rubber seal buffer, integral vacuum breaker, non-hold-open feature, ball-o-stop chrome plated control inlet. or similar approved	No	8
11	One tap-hole basin with integrated overflow, white, with Lotus half pedestal, white, with 303 chrome plated basin waste, slotted with flanged back nut & washer, 62mm flange, 80mm long sank, chrome plated bottle trap with 75mm deep seal and adjustable telescopic pipe inlet X 50mm outlet for PVC, anti-theft plug & chrome plated Meter master metering pillar tap with non-hold open feature, flow controller, adjustable cycle time, back nut & washer inlet, or similar approved.	No	8
<u>URINALS, ETC</u>			
<u>White vitreous china wall mounted top inlet size 600 x 385 x 380mm including 38mm chromium plated domical grating, flush valve, fixed on and including two hanger brackets and urinal division fixed with and including fixing screws and hanger bracket. (or similar approved per the architect spec.) etc.</u>			
12	Urinal, complete, etc.	No	3
<u>SANITARY PLUMBING</u>			
<u>uPVC soil and vent pipes</u>			
13	50mm Pipes	m	68
14	110mm Pipes	m	180
<u>Extra over uPVC soil and vent pipes for fittings</u>			
15	110mm BSP adaptor	No	15
16	110mm Reducer	No	6
17	110mm Pan connector	No	6
18	50mm Bend	No	5
Carried Forward			R
Section No. 5 Bill No. 10 Plumbing and Drainage (Provisional)			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

	Brought Forward			R
19	110mm Bend	No	5	
20	50mm Equal tee	No	6	
21	50mm Junction	No	8	
22	110mm Junction	No	8	
23	110 x 50 x 50mm Reducer	No	4	
	<u>Sundries</u>			
24	Testing water pipe and fire water pipe systems		Item	
	<u>SLEEVES</u>			
	<u>Plastic sleeves for pipes not exceeding 100mm diameter</u>			
25	Sleeve not exceeding 250mm long	No	4	
26	Sleeve exceeding 250mm and not exceeding 500mm long	No	4	
Carried Forward to Summary of Section No. 5				R
Section No. 5				
Bill No. 10				
Plumbing and Drainage (Provisional)				

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 5</u>			
	<u>BILL NO. 11</u>			
	<u>PAINT WORK</u>			
	<u>Note:</u>			
	NOTE: Colour to approved by client and architect after colour samples have been provided by the contractor			
	The tenderer is advised to refer to "Model Preamble For Trades" before pricing this Bill			
	<u>PAINTWORK, ETC TO NEW WORK ON</u>			
	<u>FLOATED PLASTERED SURFACE WITH</u>			
	<u>One coat alkali resistant plaster primer finished with Two (2) coats of washable egg shell enamel paint or similar approved pr the architect. (sample to be approved before painting)</u>			
1	Internal walls	m2	196	
2	Narrow widths, not exceeding 300mm wide	m2	12	
	<u>METAL SURFACES WITH</u>			
	<u>Spot priming defects in pre-primed surfaces with metal primer, one coat universal undercoat and two coats of egg shell enamel paint, or similar approved per the architect instructions. (sample to be approved before painting)</u>			
3	Door frames	m2	50	
4	Steel windows	m2	82	
	Carried Forward		R	
	Section No. 5 Bill No. 11 Painting			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

	Brought Forward			R
5	Corrugated Roof sheeting.etc	m2	76	
6	Down pipes, gutters etc	m2	13	
	<u>WOOD</u>			
	<u>Prepare and apply one coat hardwood primer, one coat universal undercoat and two coats eggshell enamel on timber doors. Colour to Architects approval.or similar approved per the architect instructions. (sample to be approved before painting)</u>			
7	Timber doors (Internal/External)	m2	56	
Carried Forward to Summary of Section No. 5				R
Section No. 5				
Bill No. 11				
Painting				

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

SECTION SUMMARY - Renovations/Upgrade to the Ablution Block

Bill No		Page No	Amount
1	Alterations and Demolitions	98	
2	Masonry	99	
3	Waterproofing	100	
4	Carpentry and Joinery	102	
5	Ceilings, Partitions and Access Flooring	104	
6	Ironmongery	105	
7	Metalwork	106	
8	Plastering	107	
9	Tiling	109	
10	Plumbing and Drainage (Provisional)	112	
11	Painting	114	
Carried to Final Summary			R
Section No. 5			



SECTION A3

CIVIL WORKS

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Item No	Unit	Quantity	Rate	Amount
<u>SECTION NO. 6</u>				
<u>BILL NO. 1</u>				
<u>CIVIL WORKS</u>				
<u>NOTES:</u>				
Tenderers are advised to study the "specification of materials and methods to be used" (EP/ASC Revision 0)				
<u>NOTE:</u>				
All unit rates must take into account and will be assumed to include all applicable taxes including new Value Added Tax Act. No additional claims relating to taxes will be entertained.				
<u>NOTE:</u>				
Tenderers are advised to study the Architect's/Civil drawings before pricing this bill. In the case of any discrepancies between the bill and the drawings tenderers must notify the Architect/QS.				
<u>SUPPLEMENTARY PREAMBLES</u>				
<u>Carting away of excavated material</u>				
Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site and dumping on areas to be indicated by the Architect/Civil, etc.				
<u>Note:</u>				
The responsibility of achieving the compaction densities specified and for obtaining suitable fill material from an appropriate source (either from site excavations or imported) rests solely with the Contractor. The rates shall be deemed to include for all costs in connection therewith.				
Carried Forward			R	
Section No. 6 Bill No. 1 Civil Works Upgrade				

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
The Tenderer is advised to refer Architect's/Civil site layout plan for site clearance, etc before pricing this bill.			
<u>SEWER NETWORK</u>			
<u>SITE CLEARANCE ETC</u>			
<u>Site clearance</u>			
1	Clearing, grubbing and digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	400
<u>EXCAVATIONS</u>			
<u>Excavation in earth not exceeding 2m deep and stockpile for further re-use</u>			
2	Trenches	m3	250
<u>Extra over excavation in earth for excavation in</u>			
3	Soft rock	m3	30
4	Hard rock	m3	60
<u>SUNDRIES</u>			
5	Extra over all excavations for carting away	m3	50
<u>Carting away of excavated material to a dumping site, etc.</u>			
6	Surplus material from excavations and/or stock piles on site and or carted away to a dumping site to be located by the contractor	m3	300
<u>Risk of collapse of excavations</u>			
7	Risk of collapse to excavations sides	m2	250
8	Sides of trench and hole excavations not exceeding 1,5m deep	m2	50
<u>Keeping excavations free of water</u>			
9	Keeping excavations free of water of all water other than subterranean water	Item	
Carried Forward			R
Section No. 6 Bill No. 1 Civil Works Upgrade			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
<u>FILLING ETC</u>			
<u>Earth filling supplied by the contractor, compacted to 93% Mod AASHTO density</u>			
10	Under trenches, floors, steps, pavings, etc	m3	400
<u>Compaction of surfaces</u>			
11	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	400
<u>PIPE WORKS</u>			
<u>Supply and Installation of associated pipe works</u>			
12	Supply and install 160mm Upvc sewer Pipe, etc.	m	500
13	Supply all the necessary apparatus, sewer etc. for and test the sewer supply systems to the satisfaction of the Representative/ Agent and the Local Authority, rectify all defective work free of charge and leave in perfect order	Item	
<u>Allowance for the construction of the concrete platform for the tank with 395 mesh complete.</u>			
14	Provide the sum of R 80 000.00 (Eighty Thousand Rand) for the erection of concrete platform for the tank with 395 mesh	Item	
15	Profit on above item	Item	
16	Attendance on ditto.	Item	
<u>Allowance for the construction and building of the tank complete</u>			
17	Provide the sum of R 180 000-00 (One Hundred And Eighty Thousand Rand) for the building of the tank and apply 3 coats of waterproofing material	Item	
18	Profit on above item	Item	
19	Attendance on ditto.	Item	
Carried Forward			R
Section No. 6 Bill No. 1 Civil Works Upgrade			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
	<u>Construction of the concrete cover with two manhole opening, steel cover</u>		
20	Provide the sum of R 80 000,00 (Eighty Thousand Rand) for concrete cover with two manhole opening, steel cover	Item	
21	Profit on above item	Item	
22	Attendance on ditto.	Item	
<u>WATER NETWORKS</u>			
<u>SITE CLEARANCE ETC</u>			
	<u>Site clearance</u>		
23	Clearing, grubbing and digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2 300	
<u>EXCAVATIONS</u>			
	<u>Excavation in earth not exceeding 2m deep and stockpile for further re-use</u>		
24	Trenches	m3 300	
	<u>Extra over excavation in earth for excavation in</u>		
25	Soft rock	m3 30	
26	Hard rock	m3 60	
<u>SUNDRIES</u>			
27	Extra over all excavations for carting away	m3 80	
	<u>Carting away of excavated material to a dumping site, etc.</u>		
28	Surplus material from excavations and/or stock piles on site and or carted away to a dumping site to be located by the contractor	m3 300	
	<u>Risk of collapse of excavations</u>		
29	Risk of collapse to excavations sides	m2 150	
Carried Forward			R
Section No. 6 Bill No. 1 Civil Works Upgrade			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

	Brought Forward			R
30	Sides of trench and hole excavations not exceeding 1.5m deep	m2	50	
	<u>Keeping excavations free of water</u>			
31	Keeping excavations free of water of all water other than subterranean water		Item	
	<u>FILLING ETC</u>			
	<u>Earth filling supplied by the contractor, compacted to 93% Mod AASHTO density</u>			
32	Under trenches, floors, steps, pavings, etc	m3	300	
	<u>Compaction of surfaces</u>			
33	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	300	
	<u>PIPE WORKS</u>			
	<u>Supply and Installation of associated pipe works</u>			
34	Supply and install 90mm HDP water Pipe, etc.	m	1 500	
35	Supply all the necessary apparatus, water etc. for and test the water supply systems to the satisfaction of the Representative/ Agent and the Local Authority, rectify all defective work free of charge and leave in perfect order		Item	
	<u>REMOVAL OF EXISTING VEGETATION</u>			
	<u>SITE CLEARANCE ETC</u>			
	<u>Site clearance</u>			
36	Clearing, grubbing and digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	1 840	
	<u>Removal of Top Soil Material</u>			
37	Removal of top soil material of average depth 200mm, per the engineer's spec. and drawings , etc	m3	110	
	Carried Forward			R
	Section No. 6			
	Bill No. 1			
	Civil Works Upgrade			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
<u>Compaction of surfaces</u>			
38	Compaction of ground surface etc including scarifying for a depth of 150mm, breaking down oversize material , adding suitable material where necessary and compacting to 93% MOD AASHTO density	m2	1 840
<u>WATER PROOFING</u>			
<u>One layer of 250 micron DPC Plastics USB Green or Black waterproof sheeting sealed at over laps, per the engineer's spec. or similar approved</u>			
39	Supply and lay of DPC under stones (measured elsewhere) for water proofing, per engineer's spec.	m2	1 840
<u>SOIL POISONING</u>			
<u>Soil insecticide/Weed Killers</u>			
40	Soil/Termindes under floors etc, including forming and poisoning shallow furrows against foundation walls, cleared site etc, in accordance with SANS 5859	m2	1 840
<u>CRUSHER STONES</u>			
<u>Supply and install 19mm Crusher stone, over the identified site, per the engineer's spec. and drawings</u>			
41	Supply and install 19mm Crusher stone	m3	110
Carried to Final Summary			R
Section No. 6			
Bill No. 1			
Civil Works Upgrade			

Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)

Item No		Quantity	Rate	Amount
	<u>SECTION NO. 7</u>			
	<u>BILL NO. 1</u>			
	<u>FIRE PROTECTION INSTALLATION SYSTEM</u>			
	<u>SANS 10400W AND 10252</u>			
	<u>Note:</u>			
	1. Supply, installation, test and commissioning of the complete mechanical fire protection system and equipment as shown the drawings to SANS 10400W.			
	<u>FIRE PROTECTION INSTALLATION</u>			
	<u>FIRE APPLIANCES ETC</u>			
	<u>"Chubb" / or similar approved</u>			
1	30 metres fire hose reels connected to 25mm steel pipe which is connected to the ground floor steel pipe ring and underground fire hydrants ring main HDPE class 16.	No	20	
	<u>Supply and Install DCP fire extinguishers complete with lockable cabinets</u>			
2	4.5kg DCP fire extinguishers	No	30	
3	5kg CO2 Dry powder extinguishers	No	20	
4	4.5kg DCP fire extinguishers pvc lockable cabinets	No	20	
5	5kg CO2 Dry powder extinguishers pvc lockable cabinets	No	20	
	Carried Forward		R	
	Section No. 7			
	Bill No. 1			
	Fire Compliance-protection			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
<u>STEEL PIPEWORK AND FITTINGS</u>			
6	Dia 75mm steel galvanised pipework	m 650	
7	Dia 50mm steel galvanised pipework	m 100	
8	Dia 32mm steel galvanised pipework	m 40	
9	Dia 25mm steel galvanised pipework	m 200	
10	Dia 50mm steel elbows	No 20	
11	Dia 42mm steel elbows	No 20	
12	Dia 32mm steel elbows	No 25	
13	Dia 25mm steel elbows	No 40	
14	Dia 50mm equal tees	No 20	
15	Dia 42mm equal tees	No 10	
16	Dia 32mm equal tees	No 10	
17	Dia 28mm equal tees	No 20	
18	Dia 42mm to 32mm reducer	No 20	
19	Dia 32mm to 25mm reducer	No 20	
20	Dia 50mm to 42mm reducer	No 20	
Carried Forward			R
Section No. 7 Bill No. 1 Fire Compliance-protection			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
<u>Fittings elbows, reducers hydrant connections</u>			
21	Dia 65mm fire hydrant connection steel pipework	m	20
22	Dia 75mm fire hydrant connection steel pipework	m	20
23	Dia 65mm fire hydrant connection points	No	8
24	Dia 75mm fire hydrant storz	No	1
25	Dia 75mm fire twin booster connection	No	1
26	Dia 65mm steel pipe elbows	m	15
27	Dia 75mm steel pipe elbows	m	12
28	Dia 65mm steel pipe equal tees	m	12
29	Dia 75mm steel pipe equal tees	m	12
30	Dia 65mm steel socket unions	m	22
31	Dia 75mm steel socket unions	m	18
32	Dia 65mm steel straight couplings	No	20
33	Dia 75mm steel straight couplings	No	16
34	Dia 75mm to 65mm steel reducers	No	12
35	Dia 100mm to 75mm steel reducers	No	2
Carried Forward			R
Section No. 7 Bill No. 1 Fire Compliance-protection			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
36	Dia 100mm steel elbows	No	8
	<u>Valves</u>		
37	Dia 25mm isolation valves	No	25
38	Dia 32mm isolation valves	No	16
39	Dia 42mm isolation valves	No	10
40	Dia 50mm isolation valves	No	10
41	Dia 65mm isolation valves	No	6
42	Dia 75mm isolation valves	No	2
43	Dia 100mm isolation valves	No	2
44	Dia 100mm non return valves	No	2
	<u>Supply, install, test and commissioning HDPE class 16 fire reticulation installed 1m deep</u>		
45	Dia 110mm HDPE class 16 fire main ring pipework	m	120
46	Dia 63mm HDPE class 16 fire pipework	No	50
47	Dia 32mm HDPE class 16 fire pipework	No	60
48	Dia 40mm HDPE class 16 pipework	No	40
49	Dia 110mm HDPE class 16 equal tees	No	4
Carried Forward			R
Section No. 7 Bill No. 1 Fire Compliance-protection			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
50	Dia 63mm HDPE class 16 equal tees	No 4	
51	Dia 40mm HDPE class 16 equal tees	No 6	
52	Dia 32mm HDPE class 16 equal tees	No 4	
53	Dia 110mm to 63mm reducers	No 6	
54	Dia 63mm to 40mm reducers	No 6	
55	Dia 40mm to 32mm reducers	No 6	
56	Dia 110mm bends	No 4	
57	Dia 63mm bends	No 8	
58	Dia 40mm bends	No 4	
59	Dia 32mm bends	No 6	
<u>FIRE STORAGE TANKS AND BOOSTER PUMPS</u>			
60	Supply, install, test and commission 87 000 litres size 7,32m x 4,88m x 2,44m [LxWxH] BI-sectional panel steel sectional storage tanks mounted on 600mm high strip foundation plinths to structural engineer's design	No 1	
61	Supply, install, test and commission 10 000 litres pvc Roto storage tanks mounted on flat concrete base to civil engineer's design.	No 1	
Carried Forward			R
Section No. 7 Bill No. 1 Fire Compliance-protection			

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Brought Forward			R
62	Supply, install, test and commission 21,5 l/s @6,5bar duty and standby electrical fire booster pumps including a duty 1,5 l/s @7 bars jockey pump. Installation to including insolation valves, non-return valves and strainers, and electrical control panel.	No	2
63	Supply and install dia 100mm and 75mm inter-connecting pipes from the bulk storage tanks to fire pumps and domestic water pumps.	No	40
64	Supply, install, test and commissioning the automation of the supply of both municipal mains water and borehole water supply systems.	No	1
65	Supply and install steel 50 x 50 x 200mm cantilever brackets complete with 10mm dia u bolts for supporting fire pipework	No	200
66	Provide 1m deep by 500mm wide trenching for laying underground class 16 HDPE fire pipework	m	100
67	Supply and equipment borehole drilled on site with a new borehole pump, interconnecting pipework to the break tank c/w electrical installation.	No	1
68	Paint all fire pipework exposed and in ceiling voids signal red.	No	40
69	Supply and install dia 75mm steel flanges for the joining the steel galvanised pipework above ground	No	240
70	Supply and install dia 75mm steel flanges for the joining the steel galvanised pipework above ground	No	80
Carried to Final Summary			R
Section No. 7			
Bill No. 1			
Fire Compliance-protection			



SECTION A4

BOQ FINAL SUMMARY PAGE

**Refurbishment/Upgrade of Orkney EMS College
(Residences Blocks, Ablution Block & Classrooms)**

Section No		Page No	Amount
1	Preliminaries and General	47	
2	Renovations/Upgrade to Block O	67	
3	Renovations/Upgrade to Block H	87	
4	Renovations/Upgrade to the Classrooms Block	95	
5	Renovations/Upgrade to the Ablution Block	115	
6	Rehabilitation to the Civil Works at College	121	
7	Fire Compliance to the College	127	
Sub-total - 1			R
ELECTRICAL INSTALLATION (Brought forward - Part B) (Value-Added Tax Excluded)		Item	
Sub-total - 2			R
MECHANICAL INSTALLATION (Brought forward - Part C) (Value-Added Tax Excluded)		Item	
Sub-total - 3			R
CONTINGENCIES			
Allow for Ten Percent (10%) on the sub-total above for Contingencies to be used at the discretion of the Principal Agent and to be deducted in whole or in part if not required			R
Sub-total - 4			R
Value Added Tax (15%)			R
TOTAL TO TENDER			R
Carried to Form of Tender			R



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Department:
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North West Provincial Government
REPUBLIC OF SOUTH AFRICA



SECTION B

ELECTRICAL

ANNEXURE – A

ELECTRICAL BOQ



SECTION B1
BLOCK O

BLOCK O

BILLS OF QUANTITIES

ORKNEY EMRS COLLEGE

Item No	Description	Quantity	Rate	Amount
	BILL NO. 1: PRELIMINARIES AND GENERALS Applicable to all sections of the works			
	Compliance with conditions Net price for compliance with conditions of contract and various specifications which cost are not specifically covered elsewhere or by unit rates (including all risks insurance)			
1	Contract Works Insurances	Item	SUM	R -
2	Supplementary Insurance	Item	SUM	R -
3	Public Liability Insurance	Item	SUM	R -
4	Construction Guarantee / Security	Item	SUM	R -
5	Compliance with Fixed Cost- Obligations	Item	SUM	R -
6	Compliance with Time - Related Obligations	Item	SUM	R -
7	Compliance with Value - Related Obligations	Item	SUM	R -
8	Compliance with Construction Regulations and Health and Safety Act	Item	SUM	R -
9	Compliance with EPWP Labour Intensive Specification	Item	SUM	R -
10	Site establishment: Establish on Site and provision of buildings and materials storage facilities including de-establishment of site, cleaning and tidying up after completion of contract	Item	SUM	R -
11	Contract Management and supervision of the Works including Contractor's Monthly Reports and attendance of site meetings (2 per month)	Item	SUM	R -
12	Commissioning and testing: Supply all test equipments and labour for testing, commissioning and adjustments of all portions of the final electrical installation, as well as being in attendance for any inspection and test that the Client/Engineer/Agent may call for, including the issuing of the Certificate of Compliance (COC) by Electrician	Item	SUM	R -
	Carried Forward			R -
	Bill No. 1 PRELIMINARIES AND GENERALS			

Brought Forward		Quantity		R	-
13	Guarantee Comprehensive free maintenance during the 12-months guarantee period (after handover) against defects in equipment and material, but wear, tear excluded, including monthly inspections and to be called as and when there are electrical related problems during this period.	Item	SUM	R	-
14	As-built drawings: Provide schematic diagrams and drawings for the electrical installation, both hard copies on appropriate paper format, and in electronic editable format (DWG or DXF) on CD-ROM	Item	SUM	R	-
15	Completion of all formalaties, issueing of all notices and paying of all fees due in respect of the installation, to the local supply authority (excluding connection costs for permanant supply and consumption deposit)	Item	SUM	R	-
16	Any additional items that the tenderer may wish to add to comply with requirements of the specificstions and/or bills of quantities (To be listed hereunder by Tenderer)				
Carried to Summary				R	-
Bill No. 1 PRELIMINARIES AND GENERALS					

ORKNEY EMRS COLLEGE

Item No	BLOCK O STUDENT RESIDENCES	Quantity	Rate	Amount
BILL NO. 2: GROUND FLOOR (REFURBISHMENT OF 13X STUDENTS ROOMS)				
1	DISTRIBUTION BOARD Make good of the distribution boards.	No	13 R	- R -
2	CABLES AND CABLE TERMINATION Supply and install 600/1000V /Cu/PVC/PVC/SWA/PVC cables. Copper conductor cable to SANS 1507. Cables laid in trenches, or pulled into sleeves. 10mm2 3-core	m		
3	Termination of 600/1000V Cu/PVC/PVC/SWA/PVC cables onto switchgear or distribution boards. The rate shall include all labour and material for making off of one cable end, complete with gland and weather tight shroud, lugs and connecting of conductors. 10mm2 3-core	No		
	SLEEVES			
4	Supply and install uPVC sleeves with all accessories: long radius pipes, inspection sockets, bends with appropriate radius, and access heels. 110mm diameter sleeve	m		
5	50mm diameter sleeve	m		
6	EARTHING 600 x 60 x 10mm copper earth bar suitable for 20 terminations fixed to brickwork, including stand-off insulators, bolts, nuts, washers etc.	No		
7	Earthing and bonding (water pipes, gas pipes, etc.) for all buildings, as required by the Code of Practice SANS 10142.	m	100 R	- R -
8	EXCAVATION Excavate in earth and set excavated material aside for re-use as filling for: Cable or sleeve trenches not exceeding 1 m deep	m ³		
9	Excavations for cable or sleeve trenches in "soft rock"	m ³		
10	Ditto, but in "rock"	m ³		
11	Selected and approved material from the excavations, in backfilling in trenches, to specified density	m ³		
12	Surplus material from the excavations spread and levelled over the site as directed	m ³		
	SUNDRIES Cable warning tape placed 150mm above cable in excavation	m		
Carried Forward				
Bill No. 2 GROUND FLOOR - WOODWORK BLOCK REFURBISHMENT				R -

Brought Forward					R	-
CONDUITS AND CONDUIT BOXES						
Supply and install SANS approved PVC conduits, complete with conduit accessories such as couplings, bushes, locknuts, saddle, etc., flush or wall mounted into brickwork, concrete, chased into concrete or in ceiling void or in service level or in dry walls with proper support of the draw boxes.						
Galvanised conduits						
13	25mm galvanised conduits	m				
14	20mm galvanised conduits	m				
Heavy gauge uPVC conduits						
15	20 mm uPVC conduits	m	800	R	-	R
16	25 mm uPVC conduits	m				
Flexible conduit						
17	Flexible conduit with steel reinforced PVC conduit, 25mm diameter	m				
18	25mm steel threaded glands	No				
Conduit boxes in ceiling void, roof space, etc. complete with covers						
19	Conduit round looping box for 20mm conduit complete with cover plate	No	26	R	-	R
20	Conduit round looping box for 25mm conduit complete with cover plate	No				
21	Expansion joint draw box with cover	No	26	R	-	R
SOCKET OUTLETS, LIGHT SWITCHES, AND WALL BOXES						
Wall-mounted and powerskirting flush socket outlets						
22	20A 250V 3-pin single socket outlet, flushwall mounted in a 100x100x50mm wall box, complete with steel cover plate, combined type - SANS 164-1, SANS 164-2	No	15	R	-	R
23	20A 250V 3-pin Double socket outlet, flush wall mounted in a 100x100x50mm wall box, complete with steel cover plate	No				
24	100x100x50mm zinc coated pressed steel box fixed in chase in brick work	No	15	R	-	R
25	75x75mm looping box complete with blank cover	No	13	R	-	R
LIGHTING						
Luminaires						
Supply and install the following luminaires, complete with fittings, lamps, and all required accessories						
26	Type F_: Surfaced mounted, diffused LED Luminaire. SABS approved 5FT surfaced mounted diffused luminaire. The luminaire shall consist of a powder coated sheet steel body with an impact resistant, UV stabilised, translucent polycarbonate diffuser and shall be designed to have a minimum efficacy of 105lm/w.	No	35	R	-	R
27	Type B: SABS approved bulkhead luminaire. The luminaire shall consist of a high-pressure die-cast (black outside and white inside) aluminium base, and trim ring with an impact resistant, UV stabized, translucent polycarbonate diffuser and shall be designed to operate a 2 x 18w E27 LED lamps or 20w LED and have a minimum efficacy of 105lm/w and IP65 rated. Wall mounted.	No	60	R	-	R
Carried Forward					R	-
Bill No. 2 GROUND FLOOR - WOODWORK BLOCK REFURBISHMENT					R	-

Brought Forward						R	-
Light Switches							
Supply and install 16A 250V light switches, complete with cover plates, to be installed in 100x50x50mm wall boxes.							
34	16A one-lever one-way light switch	No	26	R	-	R	-
35	16A two-lever one-way light switch	No					
36	16A one-lever two-way light switch	No					
37	100x50x50mm zinc-coated pressed steel boxes, fixed in chase in brick work	No	26	R	-	R	-
38	25A Photocell switch, 50Lx activating level, 90Lx de-activating level, IP 65, with bypass switch.	No	2	R	-	R	-
39	Occupancy Sensors	No					
40	250V 5 speed industrial fan controller	No					
41	65W, 220V, 1400mmdiameter industrial fan c/w a 5 speed industrial fan controller.	No					
FIXED APPLIANCES							
Motion sensor intercom							
42	200mm diameter 250V Bell	No					
43	Push button for Bell system including a timer and a contactor	No					
44	6mm ² Cu PVC insulated	m					
45	2,5mm ² Cu PVC insulated for lights	m	1200	R	-	R	-
46	4mm ² Cu PVC insulated for plugs	m	300	R	-	R	-
Bare stranded copper earth conductor drawn into wireways							
47	2,5mm ²	m	1200	R	-	R	-
48	4mm ²	m	300	R	-	R	-
Green/yellow PVC insulated stranded copper earth conductor							
49	2,5mm ² ICEW	m	1200	R	-	R	-
50	4mm ² ICEW	m	300	R	-	R	-
Galvanised draw wire pulled into conduits							
51	0,8mm ² draw wire	m	1500	R	-	R	-
52	<u>P9000 Wiring channel for plugs circuits</u> P9000 channel with galvanised steel cover and hangers Supply and install	m					
53	Horizontal elbow with cover for P9000 Channel Supply and install	No					
54	<u>P8300 Wiring channel for lights circuits</u> P8300 channel with galvanised steel cover and hangers Supply and install	m					
55	2-compartment power skirting c/w all accessories Supply and install	m					
56	Tee radiused unit with cover for P9000 Channel Supply and Install	No					
57	End Cap for P9000 Channel Supply and Install	No					
58	Radiused distribution outlet with cover for P9000 Channel Supply and Install	No					
Carried Forward							
Bill No. 2						R	-

	Brought Forward					R	-
	<u>Telephone outlets with outlets fixing (clips) cover plate as required</u>						
59	Telephone socket RJ11 complete with cover plate, mounted on power skirting Supply and install	Sum					
60	Standalone telephone outlet RJ11 Supply and Install	Sum					
	<u>PABX AND TELEPHONE WIRING</u>						
61	<u>Telephone distribution board installed in a telephone box with locable doors and hardwood backing</u>						
62	supply and install recessed telephone distribution panel, installed into wall mounted telephone box 450 x450 x100mm Supply and Install	No					
	<u>Telephone cable and wiring</u>						
63	Supply and install fibre optic fibre indoor and external telephone cable 2 pair standed insulated conductors Supply and Install	m					
64	20A 2pole Isolator, in suitable York Box, for HVAC, IP66 Material Installation	No No					
65	30A 3pole Isolator, in suitable York Box, for HVAC Material Installation	No No					
66	40A 2pole Isolator, in suitable York Box, for HVAC Material Installation	No No					
67	63A 2pole Isolator, in suitable York Box, for HVAC Material Installation	No No	1 1	R R	- -	R R	- -
68	100A 2pole Isolator, in suitable York Box, for HVAC Material Installation	No No					
69	125A 2pole Isolator, in suitable York Box, for HVAC Material Installation	No No	1 1	R R	- -	R R	- -
70	200A 3pole Isolator, in suitable York Box, for HVAC Material Installation	No No					
	Carried to Summary					R	-
	Bill No. 2 GROUND FLOOR - WOODWORK BLOCK REFURBISHMENT						

Item No	Amount
ORKNEY EMRS COLLEGE	
1 BILL NO. 1: PRELIMINARIES AND GENERALS	R -
4 BILL NO. 2: GROUND FLOOR (REFURBISHMENT OF 13X STUDENTS ROOMS)	R -
SUBTOTAL	R -
SUBTOTAL	R -
TOTAL PRICE CARRIED TO FINAL ELECTRICAL SUMMARY PAGE	R -



SECTION B2

BLOCK H

BLOCK H

BILLS OF QUANTITIES

ORKNEY EMRS COLLEGE - BLOCK H

Item No	Description	Quantity	Rate	Amount
	BILL NO. 1: PRELIMINARIES AND GENERALS Applicable to all sections of the works			
	Compliance with conditions Net price for compliance with conditions of contract and various specifications which cost are not specifically covered elsewhere or by unit rates (including all risks insurance)			
1	Contract Works Insurances	Item	SUM	R -
2	Supplementary Insurance	Item	SUM	R -
3	Public Liability Insurance	Item	SUM	R -
4	Construction Guarantee / Security	Item	SUM	R -
5	Compliance with Fixed Cost- Obligations	Item	SUM	R -
6	Compliance with Time - Related Obligations	Item	SUM	R -
7	Compliance with Value - Related Obligations	Item	SUM	R -
8	Compliance with Construction Regulations and Health and Safety Act	Item	SUM	R -
9	Compliance with EPWP Labour Intensive Specification	Item	SUM	R -
10	Site establishment: Establish on Site and provision of buildings and materials storage facilities including de-establishment of site, cleaning and tidying up after completion of contract	Item	SUM	R -
11	Contract Management and supervision of the Works including Contractor's Monthly Reports and attendance of site meetings (2 per month)	Item	SUM	R -
12	Commissioning and testing: Supply all test equipments and labour for testing, commissioning and adjustments of all portions of the final electrical installation, as well as being in attendance for any inspection and test that the Client/Engineer/Agent may call for, including the issuing of the Certificate of Compliance (COC) by Electrician	Item	SUM	R -
	Carried Forward			R -
	Bill No. 1 PRELIMINARIES AND GENERALS			

Brought Forward		Quantity			R	-
13	Guarantee Comprehensive free maintenance during the 12-months guarantee period (after handover) against defects in equipment and material, but wear, tear excluded, including monthly inspections and to be called as and when there are electrical related problems during this period.	Item		SUM	R	-
14	As-built drawings: Provide schematic diagrams and drawings for the electrical installation, both hard copies on appropriate paper format, and in electronic editable format (DWG or DXF) on CD-ROM	Item		SUM	R	-
15	Completion of all formalities, issuing of all notices and paying of all fees due in respect of the installation, to the local supply authority (excluding connection costs for permanent supply and consumption deposit)	Item		SUM	R	-
16	Any additional items that the tenderer may wish to add to comply with requirements of the specifications and/or bills of quantities (To be listed hereunder by Tenderer)					
Carried to Summary					R	-
Bill No. 1 PRELIMINARIES AND GENERALS						

ORKNEY EMRS COLLEGE - BLOCK H**BLOCK H STUDENT RESIDENCES**

Item No		Quantity	Rate	Amount
	BILL NO. 2: GROUND FLOOR (REFURBISHMENT OF 13X STUDENTS ROOMS)			
1	DISTRIBUTION BOARD Make good of the distribution boards.	No 13	-	-
2	CABLES AND CABLE TERMINATION Supply and install 600/1000V /Cu/PVC/PVC/SWA/PVC cables. Copper conductor cable to SANS 1507. Cables laid in trenches, or pulled into sleeves. 10mm2 3-core	m		
3	Termination of 600/1000V Cu/PVC/PVC/SWA/PVC cables onto switchgear or distribution boards. The rate shall include all labour and material for making off of one cable end, complete with gland and weather tight shroud, lugs and connecting of conductors. 10mm2 3-core	No		
	SLEEVES			
4	Supply and install uPVC sleeves with all accessories: long radius pipes, inspection sockets, bends with appropriate radius, and access heels. 110mm diameter sleeve	m		
5	50mm diameter sleeve	m		
6	EARTHING 600 x 60 x 10mm copper earth bar suitable for 20 terminations fixed to brickwork, including stand-off insulators, bolts, nuts, washers etc.	No		
7	Earthing and bonding (water pipes, gas pipes, etc.) for all buildings, as required by the Code of Practice SANS 10142.	m 100	-	-
	EXCAVATION Excavate in earth and set excavated material aside for re-use as filling for:			
8	Cable or sleeve trenches not exceeding 1 m deep	m ³		
9	Excavations for cable or sleeve trenches in "soft rock"	m ³		
10	Ditto, but in "rock"	m ³		
11	Selected and approved material from the excavations, in backfilling in trenches, to specified density	m ³		
12	Surplus material from the excavations spread and levelled over the site as directed	m ³		
	SUNDRIES Cable warning tape placed 150mm above cable in excavation	m		
Carried Forward				
Bill No. 3 GROUND FLOOR - 16 NEW CLASSROOMS REFURBISHMENT				-

Brought Forward					-
CONDUITS AND CONDUIT BOXES					
Supply and install SANS approved PVC conduits, complete with conduit accessories such as couplings, bushes, locknuts, saddle, etc., flush or wall mounted into brickwork, concrete, chased into concrete or in ceiling void or in service level or in dry walls with proper support of the draw boxes.					
Galvanised conduits					
13	25mm galvanised conduits	m			
14	20mm galvanised conduits	m			
Heavy gauge uPVC conduits					
15	20 mm uPVC conduits	m	800	-	-
16	25 mm uPVC conduits	m			
Flexible conduit					
17	Flexible conduit with steel reinforced PVC conduit, 25mm diameter	m			
18	25mm steel threaded glands	No			
Conduit boxes in ceiling void, roof space, etc. complete with covers					
19	Conduit round looping box for 20mm conduit complete with cover plate	No	26	-	-
20	Conduit round looping box for 25mm conduit complete with cover plate	No			
21	Expansion joint draw box with cover	No	26	-	-
SOCKET OUTLETS, LIGHT SWITCHES, AND WALL BOXES					
Wall-mounted and powerskirting flush socket outlets					
22	20A 250V 3-pin single socket outlet, flushwall mounted in a 100x100x50mm wall box, complete with steel cover plate, combined type - SANS 164-1, SANS 164-2	No	15	-	-
23	20A 250V 3-pin Double socket outlet, flush wall mounted in a 100x100x50mm wall box, complete with steel cover plate	No			
24	100x100x50mm zinc coated pressed steel box fixed in chase in brick work	No	15	-	-
25	75x75mm looping box complete with blank cover	No	13	-	-
LIGHTING					
Luminaires					
Supply and install the following luminaires, complete with fittings, lamps, and all required accessories					
26	Type F_: Surfaced mounted, diffused LED Luminaire. SABS approved 5FT surfaced mounted diffused luminaire. The luminaire shall consist of a powder coated sheet steel body with an impact resistant, UV stabilised, translucent polycarbonate diffuser and shall be designed to have a minimum efficacy of 105lm/w.	No	35	-	-
27	Type B: SABS approved bulkhead luminaire. The luminaire shall consist of a high-pressure die-cast (black outside and white inside) aluminium base, and trim ring with an impact resistant, UV stabized, translucent polycarbonate diffuser and shall be designed to operate a 2 x 18w E27 LED lamps or 20w LED and have a minimum efficacy of 105lm/w and IP65 rated. Wall mounted.	No	60	-	-
Carried Forward					
Bill No. 3					-
GROUND FLOOR - 16 NEW CLASSROOMS REFURBISHMENT					

	Brought Forward				-
	Light Switches				
	Supply and install 16A 250V light switches, complete with cover plates, to be installed in 100x50x50mm wall boxes.				
29	16A one-lever one-way light switch	No	26	-	-
30	16A two-lever one-way light switch	No			
31	16A one-lever two-way light switch	No			
32	100x50x50mm zinc-coated pressed steel boxes, fixed in chase in brick work	No	26	-	-
33	25A Photocell switch, 50Lx activating level, 90Lx de-activating level, IP 65, with bypass switch.	No	2	-	-
34	Occupancy Sensors	No			
35	250V 5 speed industrial fan controller	No			
36	65W, 220V, 1400mmdiameter industrial fan c/w a 5 speed industrial fan controller.	No			
	FIXED APPLIANCES				
	Motion sensor intercom				
37	200mm diameter 250V Bell	No			
38	Push button for Bell system including a timer and a contactor	No			
	CABLES				
	Supply and install PVC stranded insulated copper conductor, green/yellow PVC insulated stranded copper earth conductor, PVC stranded bare copper conductor, galvanised draw wire, all drawn into wireways (ducting, conduit, etc.)				
	PVC insulated stranded copper conductor drawn into wireways				
39	6mm ² Cu PVC insulated	m			
40	2,5mm ² Cu PVC insulated for lights	m	1200	-	-
41	4mm ² Cu PVC insulated for plugs	m	300	-	-
	Bare stranded copper earth conductor drawn into wireways				
42	2,5mm ²	m	1200	-	-
48	4mm ²	m	300	-	-
	Green/yellow PVC insulated stranded copper earth conductor				
44	2,5mm ² ICEW	m	1200	-	-
45	4mm ² ICEW	m	300	-	-
	Galvanised draw wire pulled into conduits				
46	0,8mm ² draw wire	m	1500	-	-
47	<u>P9000 Wiring channel for plugs circuits</u> P9000 channel with glavanised steel cover and hangers Supply and install	m			
48	Horizontal elbow with cover for P9000 Channel Supply and install	No			
49	<u>P8300 Wiring channel for lights circuits</u> P8300 channel with glavanised steel cover and hangers Supply and install	m			
50	2-compartment power skirting c/w all accessories Supply and install	m			
51	Tee radiused unit with cover for P9000 Channel Supply and Install	No			
52	End Cap for P9000 Channel Supply and Install	No			
53	Radiused distribution outlet with cover for P9000 Channel Supply and Install	No			
	Carried Forward				
	Bill No. 2				-
	Brought Forward				-

	<u>Telephone outlets with outlets fixing (clips) cover plate as required</u>					
54	Telephone socket RJ11 complete with cover plate, mounted on power skirting Supply and install	Sum				
55	Standalone telephone outlet RJ11 Supply and Install	Sum				
	<u>PABX AND TELEPHONE WIRING</u>					
56	<u>Telephone distribution board installed in a telephone box with locable doors and hardwood backing</u>					
57	supply and install recessed telephone distribution panel, installed into wall mounted telephone box 450 x450 x100mm Supply and Install	No				
	<u>Telephone cable and wiring</u>					
58	Supply and install fibre optic fibre indoor and external telephone cable 2 pair standed insulated conductors Supply and Install	m				
59	20A 2pole Isolator, in suitable York Box, for HVAC, IP66					
	Material	No	1	-	-	
	Installation	No	1	-	-	
60	30A 3pole Isolator, in suitable York Box, for HVAC					
	Material	No				
	Installation	No				
61	40A 2pole Isolator, in suitable York Box, for HVAC					
	Material	No				
	Installation	No				
62	63A 3pole Isolator, in suitable York Box, for HVAC					
	Material	No	1	-	-	
	Installation	No	1	-	-	
62	63A 2pole Isolator, in suitable York Box, for HVAC					
	Material	No	1	-	-	
	Installation	No	1	-	-	
63	100A 2pole Isolator, in suitable York Box, for HVAC					
	Material	No				
	Installation	No				
64	125A 2pole Isolator, in suitable York Box, for HVAC					
	Material	No	1	-	-	
	Installation	No	1	-	-	
65	200A 3pole Isolator, in suitable York Box, for HVAC					
	Material	No				
	Installation	No				
	Carried to Summary					-
	Bill No. 3					
	GROUND FLOOR - 16 NEW CLASSROOMS REFURBISHMENT					

Item No		Amount
	ORKNEY EMRS COLLEGE	
1	BILL NO. 1: PRELIMINARIES AND GENERALS	R -
2	BILL NO. 2: GROUND FLOOR (REFURBISHMENT OF 13X STUDENTS ROOMS)	R -
	SUBTOTAL	R -
	SUBTOTAL	R -
TOTAL PRICE CARRIED TO FINAL ELECTRICAL SUMMARY PAGE		R -



SECTION B3 **CLASSROOMS**

CLASSROOMS

BILLS OF QUANTITIES

ORKNEY EMRS COLLEGE - CLASSROOMS

Item No	Description	Quantity	Rate	Amount
	BILL NO. 1: PRELIMINARIES AND GENERALS Applicable to all sections of the works			
	Compliance with conditions Net price for compliance with conditions of contract and various specifications which cost are not specifically covered elsewhere or by unit rates (including all risks insurance)			
1	Contract Works Insurances	Item	SUM	R -
2	Supplementary Insurance	Item	SUM	R -
3	Public Liability Insurance	Item	SUM	R -
4	Construction Guarantee / Security	Item	SUM	R -
5	Compliance with Fixed Cost- Obligations	Item	SUM	R -
6	Compliance with Time - Related Obligations	Item	SUM	R -
7	Compliance with Value - Related Obligations	Item	SUM	R -
8	Compliance with Construction Regulations and Health and Safety Act	Item	SUM	R -
9	Compliance with EPWP Labour Intensive Specification	Item	SUM	R -
10	Site establishment: Establish on Site and provision of buildings and materials storage facilities including de-establishment of site, cleaning and tidying up after completion of contract	Item	SUM	R -
11	Contract Management and supervision of the Works including Contractor's Monthly Reports and attendance of site meetings (2 per month)	Item	SUM	R -
12	Commissioning and testing: Supply all test equipments and labour for testing, commissioning and adjustments of all portions of the final electrical installation, as well as being in attendance for any inspection and test that the Client/Engineer/Agent may call for, including the issuing of the Certificate of Compliance (COC) by Electrician	Item	SUM	R -
	Carried Forward			R -
Bill No. 1 PRELIMINARIES AND GENERALS				

Bidder Authorises Signatories

Item No	CLASSROOM BLOCK	Quantity		Rate	Amount
	BILL NO. 2: GROUND FLOOR (REFURBISHMENT OF 4X CLASSROOMS)				
	DISTRIBUTION BOARD				
1	Make good of the distribution boards.	No	1	-	-
	CABLES AND CABLE TERMINATION				
	Supply and install 600/1000V /Cu/PVC/PVC/SWA/PVC cables. Copper conductor cable to SANS 1507. Cables laid in trenches, or pulled into sleeves.				
2	16mm2 4-core	m	180	-	-
	Termination of 600/1000V Cu/PVC/PVC/SWA/PVC cables onto switchgear or distribution boards. The rate shall include all labour and material for making off of one cable end, complete with gland and weather tight shroud, lugs and connecting of conductors.				
3	16mm2 4-core	No	2	-	-
	Bare copper earth wire (BCEW), installed with cable (cable measured elsewhere), laid in ducts, trenches, horizontal racks, cable trays, channels, etc. The rate shall include strapping onto cable and termination.				
5	Supply and install 10mm2 BCEW	m	180	-	-
6	Supply and install 10mm2 terminations	No	2	-	-
	SLEEVES				
	Supply and install uPVC sleeves with all accessories: long radius pipes, inspection sockets, bends with appropriate radius, and access heels.				
7	110mm diameter sleeve	m			
8	50mm diameter sleeve	m			
	EARTHING				
9	600 x 60 x 10mm copper earth bar suitable for 20 terminations fixed to brickwork, including stand-off insulators, bolts, nuts, washers etc.	No			
10	Earthing and bonding (water pipes, gas pipes, etc.) for all buildings, as required by the Code of Practice SANS 10142.	m	100	-	-
	EXCAVATION				
	Excavate in earth and set excavated material aside for re-use as filling for:				
11	Cable or sleeve trenches not exceeding 1 m deep	m ³			
12	Excavations for cable or sleeve trenches in "soft rock"	m ³	180	-	-
13	Ditto, but in "rock"	m ³			
14	Selected and approved material from the excavations, in backfilling in trenches, to specified density	m ³			
15	Surplus material from the excavations spread and levelled over the site as directed	m ³			
	SUNDRIES				
	Cable warning tape placed 150mm above cable in excavation	m			
	Carried Forward				
	Bill No. 2				-
	GROUND FLOOR - CLASSROOM BLOCK				

Brought Forward					-
CONDUITS AND CONDUIT BOXES					
Supply and install SANS approved PVC conduits, complete with conduit accessories such as couplings, bushes, locknuts, saddle, etc., flush or wall mounted into brickwork, concrete, chased into concrete or in ceiling void or in service level or in dry walls with proper support of the draw boxes.					
Galvanised conduits					
16	25mm galvanised conduits	m			
17	20mm galvanised conduits	m			
Heavy gauge uPVC conduits					
18	20 mm uPVC conduits	m	50	-	-
19	25 mm uPVC conduits	m			
Flexible conduit					
20		m			
Flexible conduit with steel reinforced PVC conduit, 25mm diameter					
21	25mm steel threaded glands	No			
Conduit boxes in ceiling void, roof space, etc. complete with covers					
22	Conduit round looping box for 20mm conduit complete with cover plate	No	2	-	-
23	Conduit round looping box for 25mm conduit complete with cover plate	No			
24	Expansion joint draw box with cover	No	2	-	-
SOCKET OUTLETS, LIGHT SWITCHES, AND WALL BOXES					
Wall-mounted and powerskirting flush socket outlets					
25	20A 250V 3-pin double socket outlet, flushwall mounted in a 100x100x50mm wall box, complete with steel cover plate, combined type - SANS 164-1, SANS 164-2	No	8	-	-
26	20A 250V 3-pin single socket outlet, flush powerskirting mounted, complete with steel cover plate	No			
27	100x100x50mm zinc coated pressed steel box fixed in chase in brick work	No			
28	75x75mm looping box complete with blank cover	No	4	-	-
LIGHTING					
Luminaires					
Supply and install the following luminaires, complete with fittings, lamps, and all required accessories					
29	Type F_: Surfaced mounted, diffused LED Luminaire. SABS approved 5FT surfaced mounted diffused luminaire. The luminaire shall consist of a powder coated sheet steel body with an impact resistant, UV stabilised, translucent polycarbonate diffuser and shall be designed to have a minimum efficacy of 105lm/w.	No	44	-	-
30	Type B: SABS approved bulkhead luminaire. The luminaire shall consist of a high-pressure die-cast (black outside and white inside) aluminium base, and trim ring with an impact resistant, UV stabized, translucent polycarbonate diffuser and shall be designed to operate a 2 x 18w E27 LED lamps or 20w LED and have a minimum efficacy of 105lm/w and IP65 rated. Wall mounted.	No	6	-	-
Carried Forward					
Bill No. 2					-
GROUND FLOOR - CLASSROOM BLOCK					

	Brought Forward					-
	Light Switches					
	Supply and install 16A 250V light switches, complete with cover plates, to be installed in 100x50x50mm wall boxes.					
31	16A one-lever one-way light switch	No	2	-		-
32	16A two-lever one-way light switch	No				
33	16A one-lever two-way light switch	No				
34	100x50x50mm zinc-coated pressed steel boxes, fixed in chase in brick work	No				
35	25A Photocell switch, 50Lx activating level, 90Lx de-activating level, IP 65, with bypass switch.	No	1	-		-
36	Occupancy Sensors	No				
37	250V 5 speed industrial fan controller	No				
38	65W, 220V, 1400mmdiameter industrial fan c/w a 5 speed industrial fan controller.	No				
	FIXED APPLIANCES					
	Motion sensor intercom					
39	200mm diameter 250V Bell	No				
40	Push button for Bell system including a timer and a contactor	No				
41	6mm ² Cu PVC insulated	m				
42	2,5mm ² Cu PVC insulated for lights	m	300	-		-
43	4mm ² Cu PVC insulated for plugs	m	200	-		-
	Bare stranded copper earth conductor drawn into wireways					
44	2,5mm ²	m	300	-		-
45	4mm ²	m	200	-		-
	Green/yellow PVC insulated stranded copper earth conductor					
46	4mm ² ICEW	m	200	-		-
47	2.5mm ² ICEW	m	300	-		-
	Galvanised draw wire pulled into conduits					
48	0,8mm ² draw wire	m	400	-		-
49	<u>P9000 Wiring channel for plugs circuits</u> P9000 channel with glavanised steel cover and hangers Supply and install	m				
50	Horizontal elbow with cover for P9000 Channel Supply and install	No				
51	<u>P8300 Wiring channel for lights circuits</u> P8300 channel with glavanised steel cover and hangers Supply and install	m				
52	2-compartment power skirting c/w all accessories Supply and install	m				
53	Tee radiused unit with cover for P9000 Channel Supply and Install	No				
54	End Cap for P9000 Channel Supply and Install	No				
55	Radiused distribution outlet with cover for P9000 Channel Supply and Install	No				
	Carried Forward					
Bill No. 2						-

Brought Forward					-
	<u>Telephone outlets with outlets fixing (clips) cover plate as required</u>				
56	Telephone socket RJ11 complete with cover plate, mounted on power skirting Supply and install	Sum			
57	Standalone telephone outlet RJ11 Supply and Install	Sum			
<u>PABX AND TELEPHONE WIRING</u>					
58	<u>Telephone distribution board installed in a telephone box with locable doors and hardwood backing</u>	No			
59	supply and install recessed telephone distribution panel, installed into wall mounted telephone box 450 x450 x100mm Supply and Install	No			
<u>Telephone cable and wiring</u>					
60	Supply and install fibre optic fibre indoor and external telephone cable 2 pair standed insulated conductors Supply and Install	m			
61	20A 2pole Isolator, in suitable York Box, for HVAC, IP66				
	Material	No	4	-	-
	Installation	No	4	-	-
62	30A 3pole Isolator, in suitable York Box, for HVAC				
	Material	No			
	Installation	No			
63	40A 2pole Isolator, in suitable York Box, for HVAC				
	Material	No			
	Installation	No			
64	63A 2pole Isolator, in suitable York Box, for HVAC				
	Material	No			
	Installation	No			
65	80A 2pole Isolator, in suitable York Box, for HVAC				
	Material	No	2	-	-
	Installation	No	2	-	-
66	100A 2pole Isolator, in suitable York Box, for HVAC				
	Material	No			
	Installation	No			
67	125A 2pole Isolator, in suitable York Box, for HVAC				
	Material	No			
	Installation	No			
68	200A 3pole Isolator, in suitable York Box, for HVAC				
	Material	No			
	Installation	No			
Carried to Summary					-
Bill No. 2					
GROUND FLOOR - CLASSROOM BLOCK					

Item No		Amount
	ORKNEY EMRS COLLEGE	
1	BILL NO. 1: PRELIMINARIES AND GENERALS	R -
2	BILL NO. 2: GROUND FLOOR (REFURBISHMENT OF 4X CLASSROOMS)	R -
	SUBTOTAL	R -
	SUBTOTAL	R -
TOTAL PRICE CARRIED TO FINAL ELECTRICAL SUMMARY PAGE		R -



health

Department:
Health
North West Provincial Government
REPUBLIC OF SOUTH AFRICA



SECTION B4

ABLUTIONS

ABLUTIONS

BILLS OF QUANTITIES

ORKNEY EMRS COLLEGE - ABLUTION BLOCK

Item No	Description	Quantity	Rate	Amount
	BILL NO. 1: PRELIMINARIES AND GENERALS Applicable to all sections of the works			
	Compliance with conditions Net price for compliance with conditions of contract and various specifications which cost are not specifically covered elsewhere or by unit rates (including all risks insurance)			
1	Contract Works Insurances	Item	SUM	-
2	Supplementary Insurance	Item	SUM	-
3	Public Liability Insurance	Item	SUM	-
4	Construction Guarantee / Security	Item	SUM	-
5	Compliance with Fixed Cost- Obligations	Item	SUM	-
6	Compliance with Time - Related Obligations	Item	SUM	-
7	Compliance with Value - Related Obligations	Item	SUM	-
8	Compliance with Construction Regulations and Health and Safety Act	Item	SUM	-
9	Compliance with EPWP Labour Intensive Specification	Item	SUM	-
10	Site establishment: Establish on Site and provision of buildings and materials storage facilities including de-establishment of site, cleaning and tidying up after completion of contract	Item	SUM	-
11	Contract Management and supervision of the Works including Contractor's Monthly Reports and attendance of site meetings (2 per month)	Item	SUM	-
12	Commissioning and testing: Supply all test equipments and labour for testing, commissioning and adjustments of all portions of the final electrical installation, as well as being in attendance for any inspection and test that the Client/Engineer/Agent may call for, including the issuing of the Certificate of Compliance (COC) by Electrician	Item	SUM	-
	Carried Forward			-
	Bill No. 1 PRELIMINARIES AND GENERALS			

Brought Forward		Quantity		
13	Guarantee Comprehensive free maintenance during the 12-months guarantee period (after handover) against defects in equipment and material, but wear, tear excluded, including monthly inspections and to be called as and when there are electrical related problems during this period.	Item	SUM	-
14	As-built drawings: Provide schematic diagrams and drawings for the electrical installation, both hard copies on appropriate paper format, and in electronic editable format (DWG or DXF) on CD-ROM	Item	SUM	-
15	Completion of all formalities, issuing of all notices and paying of all fees due in respect of the installation, to the local supply authority (excluding connection costs for permanent supply and consumption deposit)	Item	SUM	-
16	Any additional items that the tenderer may wish to add to comply with requirements of the specifications and/or bills of quantities (To be listed hereunder by Tenderer)			
Carried to Summary				-
Bill No. 1 PRELIMINARIES AND GENERALS				

ORKNEY EMRS COLLEGE

STUDENT TOILETS

Item No		Quantity	Rate	Amount
	BILL NO. 2: GROUND FLOOR (REFURBISHMENT OF STUDENT TOILETS)			
1	DISTRIBUTION BOARD Make good of the distribution boards.	No		
	CABLES AND CABLE TERMINATION Supply and install 600/1000V /Cu/PVC/PVC/SWA/PVC cables. Copper conductor cable to SANS 1507. Cables laid in trenches, or pulled into sleeves.			
2	16mm ² 4-core	m		
	Termination of 600/1000V Cu/PVC/PVC/SWA/PVC cables onto switchgear or distribution boards. The rate shall include all labour and material for making off of one cable end, complete with gland and weather tight shroud, lugs and connecting of conductors.			
3	16mm ² 4-core	No		
	Bare copper earth wire (BCEW), installed with cable (cable measured elsewhere), laid in ducts, trenches, horizontal racks, cable trays, channels, etc. The rate shall include strapping onto cable and termination.			
	Supply and install 10mm ² BCEW	m 50	R -	R -
	Supply and install 10mm ² terminations	No 2	R -	R -
	SLEEVES Supply and install uPVC sleeves with all accessories: long radius pipes, inspection sockets, bends with appropriate radius, and access heels.			
4	110mm diameter sleeve	m		
5	50mm diameter sleeve	m		
	EARTHING			
6	600 x 60 x 10mm copper earth bar suitable for 20 terminations fixed to brickwork, including stand-off insulators, bolts, nuts, washers etc.	No		
7	Earthing and bonding (water pipes, gas pipes, etc.) for all buildings, as required by the Code of Practice SANS 10142.	m 50	R -	R -
	EXCAVATION Excavate in earth and set excavated material aside for re-use as filling for:			
8	Cable or sleeve trenches not exceeding 1 m deep	m ³		
9	Excavations for cable or sleeve trenches in "soft rock"	m ³ 25	R -	R -
10	Ditto, but in "rock"	m ³		
11	Selected and approved material from the excavations, in backfilling in trenches, to specified density	m ³		
12	Surplus material from the excavations spread and levelled over the site as directed	m ³		
	SUNDRIES Cable warning tape placed 150mm above cable in excavation	m		
	Carried Forward			
	Bill No. 2 GROUND FLOOR - STUDENT TOILETS			R -

Brought Forward					R	-
CONDUITS AND CONDUIT BOXES						
Supply and install SANS approved PVC conduits, complete with conduit accessories such as couplings, bushes, locknuts, saddle, etc., flush or wall mounted into brickwork, concrete, chased into concrete or in ceiling void or in service level or in dry walls with proper support of the draw boxes.						
Galvanised conduits						
13	25mm galvanised conduits	m				
14	20mm galvanised conduits	m				
Heavy gauge uPVC conduits						
15	20 mm uPVC conduits	m	400	R	-	R
16	25 mm uPVC conduits	m				
Flexible conduit						
17	Flexible conduit with steel reinforced PVC conduit, 25mm diameter	m				
18	25mm steel threaded glands	No				
Conduit boxes in ceiling void, roof space, etc. complete with covers						
19	Conduit round looping box for 20mm conduit complete with cover plate	m	5	R	-	R
20	Conduit round looping box for 25mm conduit complete with cover plate	No				
21	Expansion joint draw box with cover	No	5	R	-	R
SOCKET OUTLETS, LIGHT SWITCHES, AND WALL BOXES						
Wall-mounted and powerskirting flush socket outlets						
22	20A 250V 3-pin single socket outlet, flushwall mounted in a 100x100x50mm wall box, complete with steel cover plate, combined type - SANS 164-1, SANS 164-2	No				
23	20A 250V 3-pin single socket outlet, flush powerskirting mounted, complete with steel cover plate	No				
24	100x100x50mm zinc coated pressed steel box fixed in chase in brick work	No				
25	75x75mm looping box complete with blank cover	No				
LIGHTING						
Luminaires						
Supply and install the following luminaires, complete with fittings, lamps, and all required accessories						
26	Type F_: Surfaced mounted, fireproof LED Luminaire. SABS approved 5FT surfaced mounted diffused luminaire. The luminaire shall consist of a powder coated sheet steel body with an impact resistant, UV stabilised, translucent polycarbonate diffuser and shall be designed to have a minimum efficacy of 105lm/w.	No	4	R	-	R
27	Type B: SABS approved bulkhead luminaire. The luminaire shall consist of a high-pressure die-cast (black outside and white inside) aluminium base, and trim ring with an impact resistant, UV stabized, translucent polycarbonate diffuser and shall be designed to operate a 2 x 18w E27 LED lamps or 20w LED and have a minimum efficacy of 105lm/w and IP65 rated. Wall mounted.	No	12	R	-	R
Carried Forward						
Bill No. 2 GROUND FLOOR - STUDENT TOILETS					R	-

	Brought Forward					R	-
	Light Switches						
	Supply and install 16A 250V light switches, complete with cover plates, to be installed in 100x50x50mm wall boxes.						
28	16A one-lever one-way light switch	No	1	R	-	R	-
29	16A two-lever one-way light switch	No					
30	16A one-lever two-way light switch	No	2	R	-	R	-
31		No					
	100x50x50mm zinc-coated pressed steel boxes, fixed in chase in brick work						
32	25A Photocell switch, 50Lx activating level, 90Lx de-activating level, IP 65, with bypass switch.	No	1	R	-	R	-
33	Occupancy Sensors	No					
34	250V 5 speed industrial fan controller	No					
35	65W, 220V, 1400mmdiameter industrial fan c/w a 5 speed industrial fan controller.	No					
	FIXED APPLIANCES						
	Motion sensor intercom						
36	200mm diameter 250V Bell	No					
37	Push button for Bell system including a timer and a contactor	No					
44	6mm ² Cu PVC insulated	m					
45	2,5mm ² Cu PVC insulated for lights	m	400	R	-	R	-
46	4mm ² Cu PVC insulated for plugs	m					
	Bare stranded copper earth conductor drawn into wireways						
47	2,5mm ²	m					
48	4mm ²	m					
	Green/yellow PVC insulated stranded copper earth conductor						
49	2,5mm ² ICEW	m					
50	4mm ² ICEW	m					
	Galvanised draw wire pulled into conduits						
51	0,8mm ² draw wire	m	400	R	-	R	-
52	<u>P9000 Wiring channel for plugs circuits</u>						
	P9000 channel with galvanised steel cover and hangers						
	Supply and install	m					
53	Horizontal elbow with cover for P9000 Channel						
	Supply and install	No					
54	<u>P8300 Wiring channel for lights circuits</u>						
	P8300 channel with galvanised steel cover and hangers						
	Supply and install	m					
55	2-compartment power skirting c/w all accessories						
	Supply and install	m					
56	Tee radiused unit with cover for P9000 Channel						
	Supply and Install	No					
57	End Cap for P9000 Channel						
	Supply and Install	No					
58	Radiused distribution outlet with cover for P9000 Channel						
	Supply and Install	No					
	<u>Telephone outlets with outlets fixing (clips) cover plate as required</u>						
59	Telephone socket RJ11 complete with cover plate, mounted on power skirting						
	Supply and install	Sum					
60	Standalone telephone outlet RJ11						
	Supply and Install	Sum					
	Carried Forward					R	-
	Bill No. 2						

Bidder Authorises Signatories

Item No		Amount
	ORKNEY EMRS COLLEGE	
1	BILL NO. 1: PRELIMINARIES AND GENERALS	R -
7	BILL NO. 2: GROUND FLOOR (REFURBISHMENT OF STUDENT TOILETS)	R -
	SUBTOTAL	R -
	SUBTOTAL	R -
TOTAL PRICE CARRIED TO FINAL ELECTRICAL SUMMARY PAGE		R -



health

Department:
Health
North West Provincial Government
REPUBLIC OF SOUTH AFRICA



SECTION B5

LIBRARY & IT LAB

LIBRARY IT LAB

BILLS OF QUANTITIES

ORKNEY EMRS COLLEGE - LIBRARY IT

Item No	Description	Quantity	Rate	Amount
	BILL NO. 1: PRELIMINARIES AND GENERALS Applicable to all sections of the works			
	Compliance with conditions Net price for compliance with conditions of contract and various specifications which cost are not specifically covered elsewhere or by unit rates (including all risks insurance)			
1	Contract Works Insurances	Item	SUM	-
2	Supplementary Insurance	Item	SUM	-
3	Public Liability Insurance	Item	SUM	-
4	Construction Guarantee / Security	Item	SUM	-
5	Compliance with Fixed Cost- Obligations	Item	SUM	-
6	Compliance with Time - Related Obligations	Item	SUM	-
7	Compliance with Value - Related Obligations	Item	SUM	-
8			SUM	-
	Compliance with Construction Regulations and Health and Safety Act	Item		
9	Compliance with EPWP Labour Intensive Specification	Item	SUM	-
10	Site establishment: Establish on Site and provision of buildings and materials storage facilities including de-establishment of site, cleaning and tidying up after completion of contract	Item	SUM	-
11	Contract Management and supervision of the Works including Contractor's Monthly Reports and attendance of site meetings (2 per month)	Item	SUM	-
12	Commissioning and testing: Supply all test equipments and labour for testing, commissioning and adjustments of all portions of the final electrical installation, as well as being in attendance for any inspection and test that the Client/Engineer/Agent may call for, including the issuing of the Certificate of Compliance (COC) by Electrician	Item	SUM	-
	Carried Forward			-
	Bill No. 1 PRELIMINARIES AND GENERALS			

Brought Forward		Quantity		-
13	Guarantee			
	Comprehensive free maintenance during the 12-months guarantee period (after handover) against defects in equipment and material, but wear, tear excluded, including monthly inspections and to be called as and when there are electrical related problems during this period.	Item	SUM	-
14	As-built drawings: Provide schematic diagrams and drawings for the electrical installation, both hard copies on appropriate paper format, and in electronic editable format (DWG or DXF) on CD-ROM	Item	SUM	-
15	Completion of all formalaties, issueing of all notices and paying of all fees due in respect of the installation, to the local supply authority (excluding connection costs for permanant supply and consumption deposit)	Item	SUM	-
16	Any additional items that the tenderer may wish to add to comply with requirements of the specifictions and/or bills of quantities (To be listed hereunder by Tenderer)			
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				

ORKNEY EMRS COLLEGE

LIBRARY & I.T LAB

Item No		Quantity		Rate		Amount	
	BILL NO. 2: GROUND FLOOR (REFURBISHMENT OF LIBRARY & I.T LAB)						
	DISTRIBUTION BOARD						
1	Make good of the distribution boards.	No	1	R	-	R	-
	CABLES AND CABLE TERMINATION						
	Supply and install 600/1000V /Cu/PVC/PVC/SWA/PVC cables. Copper conductor cable to SANS 1507. Cables laid in trenches, or pulled into sleeves.						
2	16mm2 4-core	m	70	R	-	R	-
	Termination of 600/1000V Cu/PVC/PVC/SWA/PVC cables onto switchgear or distribution boards. The rate shall include all labour and material for making off of one cable end, complete with gland and weather tight shroud, lugs and connecting of conductors.						
3	16mm2 4-core	No	2	R	-	R	-
	Bare copper earth wire (BCEW), installed with cable (cable measured elsewhere), laid in ducts, trenches, horizontal racks, cable trays, channels, etc. The rate shall include strapping onto cable and termination.						
4	Supply and install 10mm2 BCEW	m	70	R	-	R	-
5	Supply and install 10mm2 terminations	No	2	R	-	R	-
	SLEEVES						
	Supply and install uPVC sleeves with all accessories: long radius pipes, inspection sockets, bends with appropriate radius, and access heels.						
6	110mm diameter sleeve	m					
7	50mm diameter sleeve	m					
	EARTHING						
8	600 x 60 x 10mm copper earth bar suitable for 20 terminations fixed to brickwork, including stand-off insulators, bolts, nuts, washers etc.	No					
9	Earthing and bonding (water pipes, gas pipes, etc.) for all buildings, as required by the Code of Practice SANS 10142.	m					
	EXCAVATION						
	Excavate in earth and set excavated material aside for re-use as filling for:						
10	Cable or sleeve trenches not exceeding 1 m deep	m ³					
11	Excavations for cable or sleeve trenches in "soft rock"	m ³	70	R	-	R	-
12	Ditto, but in "rock"	m ³					
13	Selected and approved material from the excavations, in backfilling in trenches, to specified density	m ³					
14	Surplus material from the excavations spread and levelled over the site as directed	m ³					
	SUNDRIES						
	Cable warning tape placed 150mm above cable in excavation	m					
	Carried Forward						
	Bill No. 5					R	-
	GROUND FLOOR - ADMIN BLOCK REFURBISHMENT						

Brought Forward					R	-
CONDUITS AND CONDUIT BOXES						
Supply and install SANS approved PVC conduits, complete with conduit accessories such as couplings, bushes, locknuts, saddle, etc., flush or wall mounted into brickwork, concrete, chased into concrete or in ceiling void or in service level or in dry walls with proper support of the draw boxes.						
Galvanised conduits						
15	25mm galvanised conduits	m				
16	20mm galvanised conduits	m				
Heavy gauge uPVC conduits						
17	20 mm uPVC conduits	m				
18	25 mm uPVC conduits	m				
Flexible conduit						
19		m				
Flexible conduit with steel reinforced PVC conduit, 25mm diameter						
20	25mm steel threaded glands	No				
Conduit boxes in ceiling void, roof space, etc. complete with covers						
21		No				
Conduit round looping box for 20mm conduit complete with cover plate						
22		No				
Conduit round looping box for 25mm conduit complete with cover plate						
23	Expansion joint draw box with cover	No				
SOCKET OUTLETS, LIGHT SWITCHES, AND WALL BOXES						
Wall-mounted and powerskirting flush socket outlets						
24	20A 250V 3-pin single socket outlet, flushwall mounted in a 100x100x50mm wall box, complete with steel cover plate, combined type - SANS 164-1, SANS 164-2	No				
25	20A 250V 3-pin single socket outlet, flush powerskirting mounted, complete with steel cover plate	No				
26	100x100x50mm zinc coated pressed steel box fixed in chase in brick work	No				
27	75x75mm looping box complete with blank cover	No				
LIGHTING						
Luminaires						
Supply and install the following luminaires, complete with fittings, lamps, and all required accessories						
28	Type F_: Surfaced mounted, diffused LED Luminaire. SABS approved 5FT surfaced mounted diffused luminaire. The luminaire shall consist of a powder coated sheet steel body with an impact resistant, UV stabilised, translucent polycarbonate diffuser and shall be designed to have a minimum efficacy of 105lm/w.	No				
29	Type B: SABS approved bulkhead luminaire. The luminaire shall consist of a high-pressure die-cast (black outside and white inside) aluminium base, and trim ring with an impact resistant, UV stabized, translucent polycarbonate diffuser and shall be designed to operate a 2 x 18w E27 LED lamps or 20w LED and have a minimum efficacy of 105lm/w and IP65 rated. Wall mounted.	No	4	R	-	
					R	-
Carried Forward					R	-
Bill No. 5						
GROUND FLOOR - ADMIN BLOCK REFURBISHMENT						

	Brought Forward				R	-
	Light Switches					
	Supply and install 16A 250V light switches, complete with cover plates, to be installed in 100x50x50mm wall boxes.					
30	16A one-lever one-way light switch	No				
31	16A two-lever one-way light switch	No				
32	16A one-lever two-way light switch	No				
33	100x50x50mm zinc-coated pressed steel boxes, fixed in chase in brick work	No				
34	25A Photocell switch, 50Lx activating level, 90Lx de-activating level, IP 65, with bypass switch.	No				
35	Occupancy Sensors	No				
36	250V 5 speed industrial fan controller	No				
37	65W, 220V, 1400mmdiameter industrial fan c/w a 5 speed industrial fan controller.	No				
	FIXED APPLIANCES					
	Motion sensor intercom					
38	200mm diameter 250V Bell	No				
39	Push button for Bell system including a timer and a contactor	No				
40	6mm ² Cu PVC insulated	m				
41	2,5mm ² Cu PVC insulated for lights	m				
42	4mm ² Cu PVC insulated for plugs	m				
	Bare stranded copper earth conductor drawn into wireways					
43	2,5mm ²	m				
44	4mm ²	m				
	Green/yellow PVC insulated stranded copper earth conductor					
45	4mm ² ICEW	m				
46	2.5mm ² ICEW	m				
	Galvanised draw wire pulled into conduits					
47	0,8mm ² draw wire	m				
48	<u>P9000 Wiring channel for plugs circuits</u> P9000 channel with glavanised steel cover and hangers Supply and install	m				
49	Horizontal elbow with cover for P9000 Channel Supply and install	No				
50	<u>P8300 Wiring channel for lights circuits</u> P8300 channel with glavanised steel cover and hangers Supply and install	m				
51	2-compartment power skirting c/w all accessories Supply and install	m				
52	Tee radiused unit with cover for P9000 Channel Supply and Install	No				
53	End Cap for P9000 Channel Supply and Install	No				
54	Radiused distribution outlet with cover for P9000 Channel Supply and Install	No				
	Carried Forward					
Bill No. 5					R	-

Brought Forward						R	-
	<u>Telephone outlets with outlets fixing (clips) cover plate as required</u>						
55	Telephone socket RJ11 complete with cover plate, mounted on power skirting Supply and install	Sum					
56	Standalone telephone outlet RJ11 Supply and Install	Sum					
	<u>PABX AND TELEPHONE WIRING</u>						
57	<u>Telephone distribution board installed in a telephone box with locable doors and hardwood backing</u>	No					
58	supply and install recessed telephone distribution panel, installed into wall mounted telephone box 450 x450 x100mm Supply and Install	No					
	<u>Telephone cable and wiring</u>						
59	Supply and install fibre optic fibre indoor and external telephone cable 2 pair standed insulated conductors Supply and Install	m					
60	20A 2pole Isolator, in suitable York Box, for HVAC, IP66						
	Material	No	4	R	-	R	-
	Installation	No	4	R	-	R	-
61	30A 3pole Isolator, in suitable York Box, for HVAC						
	Material	No					
	Installation	No					
62	40A 2pole Isolator, in suitable York Box, for HVAC						
	Material	No	3	R	-	R	-
	Installation	No	3	R	-	R	-
63	63A 2pole Isolator, in suitable York Box, for HVAC						
	Material	No					
	Installation	No					
64	100A 2pole Isolator, in suitable York Box, for HVAC						
	Material	No					
	Installation	No					
65	125A 2pole Isolator, in suitable York Box, for HVAC						
	Material	No					
	Installation	No					
66	200A 3pole Isolator, in suitable York Box, for HVAC						
	Material	No					
	Installation	No					
Carried to Summary						R	-
Bill No. 5							
GROUND FLOOR - ADMIN BLOCK REFURBISHMENT							

Item No	Amount
ORKNEY EMRS COLLEGE	
1 BILL NO. 1: PRELIMINARIES AND GENERALS	R -
2 BILL NO. 2: GROUND FLOOR (REFURBISHMENT OF LIBRARY & I.T LAB)	R -
SUBTOTAL	R -
SUBTOTAL	R -
TOTAL PRICE CARRIED TO FINAL ELECTRICAL SUMMARY PAGE	R -



SECTION B6

ELECTRICAL SUMMARY PAGE

FINAL SUMMARY

[illegible]

	TOTAL FINAL TENDER SUMMARY (excluding vat) - Forwarded to Part B - Summary Page of the BOQ - Page 128	-
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NAME OF TENDERER AND COMPANY STAMP / SIGNATURE



SECTION C MECHANICAL



health
Department:
Health
North West Provincial Government
REPUBLIC OF SOUTH AFRICA



SECTION C1

MECHANICAL BOQ

ANNEXURE – B

MECHANICAL BOQ

EMS College Orkney Resident Block D - Hot and Cold Water Installation - Bills of Quantities

[illegible]

EMS College Orkney Resident Block D - Hot and Cold Water Installation - Bill No 1 - Bills of Quantities

ITEM	DESCRIPTION	Unit	Qty	Rate	Amount
1	HOT & COLD WATER SYSTEM				
1.1	Electrical Geysers Supply,install,test and commission of 200 litres vertical complete with interconnecting pipework	No	6.00	-	-
1.2	Under Sink Pressure Geyser Supply,install,test and commission under sink 10 litres pressure geyser	No	1.00	-	-
1.3	Electrical Work Supply and Install electrical work Including power and control cabling and connections as specified for hot water heating system	Item	6.00	-	-
1.4	Hot Water Piping and Fittings Mepla Pipework Mepla water piping Installed complete with short lengths, cutting, plain couplings and jointing strictly in accordance with the Manufacturer's Instructions, support brackets,including pressure testing, with 15mm insulated piping to hot water system.				
1.4.1	Ø54mm	m	0	-	-
1.4.2	Ø42mm	m	0	-	-
1.4.3	Ø35mm	m	0	-	-
1.4.4	Ø28mm	m	60	-	-
1.4.5	Ø22mm	m	100	-	-
1.4.6	Ø15mm	m	200	-	-
1.5	Bends Mepla piping for fittings complete with hangers, brackets,pressure testing				
1.5.1	Ø54mm	No	0	-	-
1.5.2	Ø42mm	No	0	-	-
1.5.3	Ø35mm	No	0	-	-
1.5.4	Ø28mm	No	8	-	-
1.5.5	Ø22mm	No	24	-	-
1.5.6	Ø15mm	No	24	-	-
1.6	Tees Mepla piping for fittings in accordance with complete with hangers, brackets , etc.				
1.6.1	Ø54 x Ø42 x Ø54mm	No	0	-	-
1.6.2	Ø42 x Ø35 x Ø42mm	No	2	-	-
1.6.3	Ø35 x Ø15 x Ø35mm	No	4	-	-
1.6.4	Ø28 x Ø15 x Ø28mm	No	4	-	-
	TOTAL CARRIED FORWARD				-

EMS College Orkney Resident Block D - Hot and Cold Water Installation - Bill No 1 - Bills of Quantities

ITEM	DESCRIPTION	Unit	Qty	Rate	Amount
	TOTAL BROUGHT FORWARD				-
1.6.5	Ø22 x Ø15 x Ø22mm	No	8	-	-
1.6.6	Ø15 x Ø15 x Ø15mm	No	8	-	-
1.7	<u>Reducers</u>				
	Mepla piping for reducer fittings to be installed complete with hangers, brackets etc.				
1.7.1	Ø54 - Ø42mm	No	0	-	-
1.7.2	Ø42 - Ø35mm	No	8	-	-
1.7.3	Ø42 - Ø22mm	No	6	-	-
1.7.4	Ø35 - Ø28mm	No	10	-	-
1.7.5	Ø28 - Ø22mm	No	16	-	-
1.7.6	Ø22 - Ø15mm	No	24	-	-
1.8	<u>Isolating Valves</u>				
	Ball type Isolating Valve complete with couplings to piping, etc., all strictly in accordance with Manufacturers Instructions and complying to SANS 1056 - 3				
1.8.1	Ø54mm	No	0	-	R
1.8.2	Ø42mm	No	1	-	-
1.8.3	Ø35mm	No	0	-	-
1.8.4	Ø28mm	No	6	-	-
1.8.5	Ø22mm	No	8	-	-
1.8.6	Ø15mm	No	50	-	-
1.9	<u>Pressure Reducing Valves (PRV)</u>				
1.9.1	Ø42mm	No	1	-	-
1.10	<u>Underground uPVC Pipework Class 12</u>				
1.10.1	Ø40mm	m	20	-	-
1.10.2	Ø32mm	m	90	-	-
1.11	<u>Underground uPVC Pipe Tees</u>				
1.11.1	Ø75 x Ø42 x Ø75mm	No	1	-	-
1.11.2	Ø35 x Ø28 x Ø35mm	No	5	-	-
1.12	<u>Underground uPVC Pipe Bends</u>				
1.12.1	Ø28mm	No	5	-	-
1.12.2	Ø22mm	No	2	-	-
1.13	<u>Provisional Sum</u>				
1.13.1	Provisonal sum for unseen hot and cold water fittings and material	Sum			-
	Carry forward to bill summary				-

EMS College Orkney Resident Block H - Hot and Cold Water Installation -

Bill No 2 - Bills of Quantities

ITEM	DESCRIPTION	Unit	Qty	Rate	Amount
1	HOT & COLD WATER SYSTEM				
1.1	<u>Electrical Geysers</u> Supply,install,test and commission of 200 litres vertical complete with interconnecting pipework	No	6.00		-
1.2	<u>Under Sink Pressure Geyser</u> Supply,install,test and commission under sink 10 litres pressure geyser	No	1.00		-
1.3	<u>Electrical Work</u> Supply and Install electrical work Including power and control cabling and connections as specified for hot water heating system	Item	6.00		-
1.4	<u>Hot Water Piping and Fittings</u> <u>Mepla Pipework</u> Mepla water piping Installed complete with short lengths, cutting, plain couplings and jointing strictly in accordance with the Manufacturer's Instructions, support brackets,including pressure testing, with 15mm insulated piping to hot water system.				
1.4.1	Ø54mm	m	0		-
1.4.2	Ø42mm	m	0		-
1.4.3	Ø35mm	m	0		-
1.4.4	Ø28mm	m	60		-
1.4.5	Ø22mm	m	100		-
1.4.6	Ø15mm	m	200		-
1.5	<u>Bends</u> Mepla piping for fittings complete with hangers, brackets,presure testing				
1.5.1	Ø54mm	No	0		-
1.5.2	Ø42mm	No	0		-
1.5.3	Ø35mm	No	0		-
1.5.4	Ø28mm	No	8		-
1.5.5	Ø22mm	No	24		-
1.5.6	Ø15mm	No	24		-
1.6	<u>Tees</u> Mepla piping for fittings in accordance with complete with hangers, brackets , etc.				
1.6.1	Ø54 x Ø42 x Ø54mm	No	0		-
1.6.2	Ø42 x Ø35 x Ø42mm	No	2		-
1.6.3	Ø35 x Ø15 x Ø35mm	No	4		-
1.6.4	Ø28 x Ø15 x Ø28mm	No	4		-
	TOTAL CARRIED FORWARD				-

EMS College Orkney Resident Block H - Hot and Cold Water Installation -

Bill No 2 - Bills of Quantities

ITEM	DESCRIPTION	Unit	Qty	Rate	Amount
	TOTAL BROUGHT FORWARD				-
1.6.5	Ø22 x Ø15 x Ø22mm	No	8		-
1.6.6	Ø15 x Ø15 x Ø15mm	No	8		-
1.7	Reducers				
	Mepla piping for reducer fittings to be installed complete with hangers, brackets etc.				
1.7.1	Ø54 - Ø42mm	No	0		-
1.7.2	Ø42 - Ø35mm	No	8		-
1.7.3	Ø42 - Ø22mm	No	6		-
1.7.4	Ø35 - Ø28mm	No	10		-
1.7.5	Ø28 - Ø22mm	No	16		-
1.7.6	Ø22 - Ø15mm	No	24		-
1.8	Isolating Valves				
	Ball type Isolating Valve complete with couplings to piping, etc., all strictly in accordance with Manufacturers Instructions and complying to SANS 1056 - 3				
1.8.1	Ø54mm	No	0		-
1.8.2	Ø42mm	No	1		-
1.8.3	Ø35mm	No	0		-
1.8.4	Ø28mm	No	6		-
1.8.5	Ø22mm	No	8		-
1.8.6	Ø15mm	No	50		-
1.9	Pressure Reducing Valves (PRV)				
1.9.1	Ø42mm	No	1		-
1.10	Underground uPVC Pipework Class 12				
1.10.1	Ø40mm	m	20		-
1.10.2	Ø32mm	m	90		-
1.11	Underground uPVC Pipe Tees				
1.11.1	Ø75 x Ø42 x Ø75mm	No	1		-
1.11.2	Ø35 x Ø28 x Ø35mm	No	5		-
1.12	Underground uPVC Pipe Bends				
1.12.1	Ø28mm	No	5		-
1.12.2	Ø22mm	No	2		-
1.13	Provisional Sum				
1.13.1	Provisional sum for unseen hot and cold water fittings and material	Sum			-
	Carry forward to bill summary				-

EMS College Orkney Ablutions Block - Hot and Cold Water Installation -
Bill No. 3 - Bills of Quantities

ITEM	DESCRIPTION	Unit	Qty	Rate	Amount
1	HOT & COLD WATER SYSTEM				
1.1	Electrical Geysers Supply,install,test and commission of 100 litres vertical complete with interconnecting pipework	No	1.00		-
1.2	Electrical Work Supply and Install electrical work Including power and control cabling and connections as specified for hot water heating system	Item	1.00		-
1.3	Hot Water Piping and Fittings Mepla Pipework Mepla water piping Installed complete with short lengths, cutting, plain couplings and jointing strictly in accordance with the Manufacturer's Instructions, support brackets,including pressure testing, with 15mm insulated piping to hot water svstem.				
1.3.1	Ø28mm	m	20		-
1.3.2	Ø22mm	m	40		-
1.3.3	Ø15mm	m	60		-
1.4	Bends Mepla piping for fittings complete with hangers, brackets,presure testing				
1.4.1	Ø28mm	No	10		-
1.4.2	Ø22mm	No	20		-
1.4.3	Ø15mm	No	60		-
1.5	Tees Mepla piping for fittings in accordance with complete with hangers, brackets , etc.				
1.5.1	Ø28 x Ø28 x Ø28mm	No	12		-
1.5.2	Ø22 x Ø22 x Ø22mm	No	30		-
1.5.3	Ø15 x Ø15 x Ø15mm	No	8		-
1.6	Reducers Mepla piping for reducer fittings to be installed complete with hangers, brackets etc.				
1.6.1	Ø28 - Ø22mm	No	12		-
1.6.2	Ø28 - Ø15mm	No	18		-
1.6.3	Ø22 - Ø15mm	No	8		-
1.7	Isolating Valves Ball type Isolating Valve complete with couplings to piping, etc., all strictly in accordance with Manufacturers Instructions and complvina to SANS 1056 - 3				
1.7.1	Ø28mm	No	1		-
	TOTAL CARRIED FORWARD				-

Bill No. 3 - Bills of Quantities

[illegible]

EMS College Orkney - 4 off classrooms block Air Conditioning Installation -

Bill No. 5 - Bills of Quantities

ITEM	DESCRIPTION	Unit	Qty	Rate	Amount
1	AIR CONDITIONING AND VENTILATION SYSTEMS				
P1	<u>FIXED PRELIMINARY & GENERAL</u>				
P1.1	<u>Variables with Contract Period</u> <u>(SABS 1500 SA 8.4)</u>				
P1.2	Time related	-	Sum		
P2	<u>COMPLIANCE</u>				
P2.1	Scaffolding	Item	sum		-
P2.2	Labour	Item	sum		-
P2.3	Programming of work	Item	sum		-
P2.4	12 Months Guarantee and Maintenance	Item	sum		-
P2.5	Transport and delivery	Item	sum		-
P2.6	Testing, balancing and commissioning	Item	sum		-
P2.7	O & M manuals including as built drawings in hard copy and on CD	Sets	3.00		-
P2.8	Shop Drawings	Sum	1.00		-
P3	<u>PROVISIONAL SUM</u>	Item	sum		-
2	<u>Spilt midwall units c/w with outdoor condenser units</u> <u>SPLIT MIDWALL UNITS OR EQUAL APPROVED</u>				
2.2	Supply, install, test and commission inverter 7,8kW Cassette split units installed c/w outdoor condenser, support brackets and waterproof isolator. Refrigerant pipework to be installed in between back to back of the indoor and outdoor units.				
2.2.1	CCU-1 - 7,1kW DX Ceiling Cassette Split unit c/w controller	No	6.00		-
2.4	<u>Control wiring</u> System's control wiring	m	120		-
2.5	<u>Refrigerant copper piping - as per manufactures specification</u>				
2.5.1	Ø9.52mm insulated refrigerant copper piping in trunking	m	60		-
2.5.2	Ø15.9mm insulated refrigerant copper piping in trunking	m	60		-
2.6	<u>Condensate piping</u>				
2.6.1	Ø25mm PVC Piping	m	10		-
2.6.2	Ø32mm PVC Piping	m	30		-
2.6.3	R410 refrigerant gas	kg	30		-
	Carry forward to bill summary				-

Bills of Quantities Summary

NAME OF TENDERER AND COMPANY STAMP / SIGNATURE



SECTION C2

MECHANICAL SPECIFICATIONS



DEPARTMENT OF HEALTH

ORKNEY EMS SCHOOL

MAINTENANCE AND RENOVATIONS

DETAILED TECHNICAL SPECIFICATION

VENTILATION & AIR CONDITIONING

(HVAC)

INSTALLATION

ARCHITECT:

CITIES STUDIO AFRICA
ARCHITECT
176 EMILY HOBHOUSE AVE
PRETORIA NORTH
TEL: 012 546 0018

MECHANICAL ENGINEERS:

RISIMATI ENGINEERS (Pty) LTD
P/BAG X 158
SIBASA
0970
TEL: 012 998 1054

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SECTION 1: PROJECT SPECIFICATION

1.1 GENERAL

This specification is for the supply and installation of air conditioning and ventilation system at Orkney EMS College. The following areas to be provided with the system:

- Classroom Block,

The installation must be complete in all respects, and the contractor shall allow for the completion and successful operation of the complete system, irrespective of whether every separate item is specified or not.

In certain cases the position of units may be shown schematically on the drawings. In these instances the exact positions will be pointed out on site.

The installation is to be performed at an existing occupied hospital. No services may be disrupted without prior arrangement through the engineer and shall be arranged at least one week in advance of such disruption.

On completion of the installation, the site shall be left in a neat and tidy condition to the satisfaction of the engineer.

1.2 QUALITY OF MATERIALS

Only material of the best quality, which carries the approval by the Engineer, shall be used.

Where applicable, all material shall be in accordance with the relevant standard specifications of the South African Bureau of Standards and the British Standard Specifications. Any material of inferior quality identified by the engineer shall be removed and replaced at the expense of the contractor.

1.3 QUALITY OF WORKMANSHIP

The complete installation shall be carried out according to latest modern engineering practice.

The Engineer reserves the right to reject any work or part thereof that, according to his judgement, does not meet the highest standard of workmanship and to enforce replacement of the work at the expense of the contractor.

1.4 RATING OF EQUIPMENT

The contractor shall supply a schedule of all equipment offered by him detailing the make, model, size/capacity/rating, electrical requirements and material of construction where applicable to the Engineer for approval before his installation commences or equipment is ordered.

1.5 REGULATIONS

The plant must in all respects conform to the following regulations:

- The Occupational Health and Safety Act, Act No. 85 of 1993.
- Mine and Industrial Regulations, Government notices.
- Local Municipal Regulations and Ordinances.
- Fire Department Regulations.
- Code of Practice for the Wiring of Premises, SABS 0142 as amended.
- All special conditions, specifications or codes of practice specified hereinafter.
- The National building regulations, SABS 0400.
- Air conditioning ductwork SABS 0147-1995.
- Copper tubes for domestic plumbing, SABS 460
- SABS 0103, The measurement and rating of environmental noise with respect to annoyance and speech communications

Where trade names and references to catalogues are found in the specification, the intention is to set a particular standard of equipment. Where other approved equipment is specified, the contractor shall obtain written approval from the Engineer before he may deviate from the specified equipment.

1.6 PROGRAMS AND ORDER OF WORK

The contractor shall co-ordinate his work with that of the builder and electrician.

Within one week of site handover the contractor shall provide a detailed program for the contract. The program shall be submitted to the engineer for approval and once approved shall be adhered to.

1.7 SCOPE OF WORK

1.7.1 This sub-contract is for the supply, delivery, storage, installation, commissioning and testing of air-conditioning split units and other accessories as listed below:

- a) Cassette heat pump type split air conditioning units.
- b) Mid-wall (heat pump) type split air conditioning units.
- c) Wall mounted ventilation fans.
- d) Refrigerate & Drain piping.
- e) Electrical cables and wiring.
- f) Controller units.
- g) All accessories namely: door grilles.
- h) Minor Building Work such as holes through building elements (wall, ceiling) mounting brackets for condensing units for indoor and outdoor units.

1.7.2 A full 12 months maintenance and guarantee period shall commence from the date of the beneficial use of the above listed equipment.

1.8 DESIGN DATA

Location	Northwest province
Altitude	1297,5 m above sea level
Outside summer temperature	35°Cdb, 20°Cwb
Room conditions	23°C +- 1,5°C
Electrical supply	380/220V $\pm$ 10%, 50 Hz.

1.9 SCHEDULE OF DRAWINGS

R1630/04/AC-01: Classroom Air-Conditioning Layout.

1.10 CASSETTE TYPE AIR CONDITIONING UNIT (CU).

1.10.1 GENERAL

Supply and install a cassette type air conditioning unit in the minor theatre as shown on the drawing. The unit shall be suitable for mounting in a suspended ceiling with 600 x 600mm modules.

1.10.2 EVAPORATOR UNITS (air handling units)

General

The evaporator unit shall be placed in the suspended ceiling where shown and shall be aesthetically pleasing when mounted in a white ceiling. The evaporator unit shall be quiet running even at high fan speed. The air handling unit must be able to project air horizontally and downwards.

Condensate removal

Condensate shall be piped away by means of copper pipes of at least 22mm diameter and shall discharge as indicated on the drawings. The unit shall be supplied

complete with a condensate pump to ensure effective removal of condensate. The connection of the drainpipe to the evaporator unit shall be direct to eliminate the danger of pipe leaks above the ceiling.

Fan and fan motor

The unit shall be fitted with a totally enclosed two or three speed electrical fan motor directly coupled to a quiet running fan.

Cooling coil

The cooling coil shall be a direct expansion coil manufactured of copper tubes mechanically fixed to aluminium fins.

Electrical control equipment

The unit shall be controlled via a remote control unit placed against the wall where shown on the drawings. For this purpose a conduit terminating in a 50 x 100mm box with cover plate, will be installed in the wall by the electrical contractor. The remote control unit shall be fitted to this cover plate. No surface wiring in PVC channels will be acceptable. Units with cordless remote control units are also acceptable.

Filters

The unit must be provided with a return air grille with removable washable filter.

Operation and control

Heating shall be by means of heat pump action by the reversal of the cooling cycle. All the necessary control equipment, valves and piping required to perform this function shall be supplied as part of this work.

The temperature in the room shall be thermostatically controlled by means of a temperature sensor in the air handling section. The control system shall be such that the unit will automatically change from heating to cooling and vice-versa. A time delay relay shall prevent the unit from changing immediately from heating to cooling and vice versa.

1.10.3 CONDENSING UNIT

General

The condensing section shall be mounted on a sturdy galvanised angle iron or "Unistrut" bracket against the wall where shown. The bracket forms part of this work. Details of the bracket shall be forwarded to the Engineer for approval before the brackets are manufactured.

Compressor

The compressor shall be of the hermetically sealed type, mounted on anti-vibration pads and protected against overload in an approved manner. The compressor shall be able to deliver the specified cooling capacity.

Condensing fan

The condensing fan shall be of the propeller type, manufactured of **aluminium** and driven by a totally enclosed electric motor.

Condensing coils

The condensing coils shall be manufactured of copper tubes mechanically fastened to aluminium cooling coils.

A defrosting system shall be provided that will defrost the condensing coil during the winter months when heating is required. The defrosting system shall be a proven system that functions fully automatically without affecting the room temperature significantly.

1.10.4 PIPING INSTALLATION

The contractor shall be responsible for the supply and installation of the refrigerant piping and electrical connections between the air handling unit and the condensing unit. All pipelines in which the temperature of the refrigerant drops to below 10°C must be insulated with 15mm thick "Armourflex" or any other approved insulation material.

All refrigerant piping and electrical conductors shall be installed in suitably sized galvanised channels, flush mounted in walls and fitted with clip-on covers. Where piping runs above suspended ceilings channels need not be used and the piping and cables may be bundled and strapped and suspended from the roof or ceiling structure by means of sheet metal straps.

Any insulation material not covered by the channels shall be covered in cloth and sealed with "Decadex" or any other approved sealing agent. The final colour finish shall be aluminium. After installation the channel covers shall be painted with two layers of high quality paint. All the above work and materials form part of this work.

1.10.5 ELECTRICAL

Electrical points in the form of cables terminating in weather proof isolators shall be supplied at the condensing units by the electrical contractor. The air conditioning contractor shall provide overload protection for his equipment and do the final connection to the unit. The feed from the isolator to the unit shall run in a galvanised conduit installed by the air conditioning contractor and shall be neatly connected to the condensing unit.

1.11 EQUIPMENT CAPACITY

The following equipment capacity must be read in conjunction with the attached drawings. Schedule of drawings is outlined in Paragraph 1.9 of this Detailed Technical Specification.

CLASS ROOMS 1 - 3 Cassette Schedule
(refer to Drawing No.: E163/04/AC-01)

Indoor Cassette Unit Ref.	CCU-01
Indoor conditions	25.3°C db/17.8°C wb
Cooling Capacity (kW)	6.2
Heating Capacity (kW)	6.0
Supply air quantity (l/s)	320
No. off	6

NOTE: The unit capacities specified are adjusted to standard catalogued conditions as indicated.

1.12 ROOF MOUNTED VENTILATION FANS

Where shown on the drawings roof mounted fresh air fans shall be installed. The fans shall be silent In-line Rectangular Centrifugal Air fans which will be mounted at high level in the roof void indicated. Electric motors shall be of the 220V, single phase, shaded pole type with class II insulation and thermal protection. The fan directions are shown on the drawings.

Electrical points in the form of un-switched 3-pin sockets shall be provided at the fans by the electrical contractor and shall be controlled via the light switches. The air conditioning contractor shall connect the fan to the power point by means of a neat short chord.

Fan Schedule
(refer to Drawing No.: E163/04/AC-01)

Fan Ref.	EAF-01	EAF-02
Supply air quantity (l/s)	230	460
Static Pressure (Pa)	180	180
Rotational speed (rpm)	2280	2280
No. off	1	1

1.13 ELECTRICAL EQUIPMENT AND WIRING

The supply voltage is 380/220 volts, 3 phase, 4-wire, 50Hz.

Power points will be provided by others where shown on the drawing and as described under the relevant sections and on the drawings. All power and control wiring between these power points and equipment form part of this contract and the cost thereof shall be included for in the tender price.

1.14 PAINTING

All exposed steel surfaces, excluding galvanised and stainless steel shall be painted. All mild steel surfaces to be painted shall be prepared according to SABS 064 (Code for the preparation of steel surfaces for painting). Thereafter the surfaces shall be painted with a zinc chromate primer, followed by one coat of universal undercoat and one final coat of high gloss enamel paint, the colour of which will be determined by the Engineer.

1.15 OPERATING MANUALS, WIRING DIAGRAMS, TEST CERTIFICATES, CATALOGUES OF SPARE PARTS AND MAINTENANCE INSTRUCTIONS.

Three copies of operation manuals, wiring diagrams, test certificates; catalogues of spare parts and maintenance instructions and a list of agents and/or suppliers must be supplied and forwarded to the Engineer.

The operational manuals must consist of the following:

- (a) Paper prints of all approved shop drawings and diagrams where applicable.
- (b) Comprehensive literature of the different components of the installation.
- (c) Start-up and shutdown procedures.
- (d) Prescriptions for routine tests, which must be performed by the user together with the time when such tests must be performed.
- (e) Schedule of apparatus and equipment complete with model numbers, optional extras, modifications, electrical requirements, etc.
- (f) Detailed monthly, quarterly, bi-annual, or annual preventative maintenance procedures where applicable.
- (g) Manufacturers catalog.
- (h) List of spares for all equipment.

The operation manuals must be sturdily bound in a strong hard cover. Material in the manual must be clear, legible, and well-arranged and provided with an index.

The above manuals must be available three weeks before final hand-over of the installation and no hand-over shall be considered without these manuals.

1.16 GUARANTEE & MAINTENANCE

All equipment supplied and work done according to this specification shall be guaranteed against defective material and poor workmanship for a period of twelve (12) months, commencing on the date of first hand-over of the project. The HVAC Contractor should maintain the entire HVAC system during the guarantee period.

DEPARTMENT OF HEALTH
ORKNEY EMS COLLEGE
HEATING, VENTILATION & AIR CONDITIONING (HVAC)

SECTION 2: SCHEDULES OF PARTICULARS AND INFORMATION

2.1 GENERAL REQUIREMENTS

Schedules, which accompany this tender notice, form an integral part of it and shall be duly completed in every detail, **FAILING** which, the tender in question may be rendered ineligible for consideration.

Under no circumstances will statements such as:

See attached pamphlets
Refer to catalogue
Data to follow
As given by supplier, etc. be acceptable to the Department.

Equipment offered and listed on the schedules shall be capable of performing the Specification requirements in all respects. **SHOULD** it transpire that such equipment, even when offered by make, model and/or type, is unsuitable or incapable of meeting, or performing in any respect, the Contractor or Sub-Contractor shall nevertheless be responsible for any additional costs incurred in providing the required or suitable equipment.

Whenever a specific make, model or type of equipment has been prescribed in the specification, and the tenderer offers an alternative, or equal make or type of equipment in his tender, the Department will on acceptance of such a tender inform the prospective contractor in writing as to the make, and/or type of equipment accepted. **HOWEVER**, it should be noted that the use of words **OR EQUAL** by the tenderer is to be discouraged and could lead to the disqualification of the tender.

2.2 SCHEDULE OF PARTICULARS

The following schedule of particulars must be completed in full and submitted with the tender:

ITEM	DESCRIPTION	PARTICULARS
1	AIR CONDITIONING UNITS	
2.2.1	Ref.	CCU-01
A	Make	
B	Model	
C	Cooling capacity	
D	Heating capacity	
E	Air flow rate at system resistance	
F	No. off	
G	Electrical supply required	

ITEM	DESCRIPTION	PARTICULARS
2	SUPPLY AIR GRILLES	
2.2.2	Ref.	SD-01
A	Make	
B	Model	
C	Air Flow rate	
D	Static Pressure	
E	No. off	

ITEM	DESCRIPTION	PARTICULARS
3	INTAKE WEATHER LOUVRES c/w PANEL PLEATED FILTERS	
2.2.3	Ref.	WL-01
A	Make	
B	Model	
C	Air Flow rate	
D	Static Pressure	
E	No. off	

ITEM	DESCRIPTION	PARTICULARS
4	INTAKE WEATHER LOUVRES c/w PANEL PLEATED FILTERS	
2.2.4	Ref.	WL-02
A	Make	
B	Model	
C	Air Flow rate	
D	Static Pressure	
E	No. off	

ITEM	DESCRIPTION	PARTICULARS
5	IN-LINE CENTRIFUGAL RECTANGULAR CENTRIFUGAL AIR FANS (QUIET TYPE)	
2.2.5	Ref.	FAF-01
A	Make	
B	Model	
C	Air Flow rate	
D	Static Pressure	
E	No. off	
F	Electrical supply required	

ITEM	DESCRIPTION	PARTICULARS
6	IN-LINE CENTRIFUGAL RECTANGULAR CENTRIFUGAL AIR FANS (QUIET TYPE)	
2.2.7	Ref.	FAF-02
A	Make	
B	Model	
C	Air Flow rate	
D	Static Pressure	
E	No. off	
F	Electrical supply required	



SECTION D

HEALTH & SAFETY



SECTION D1

PROJECT HEALTH & SAFETY SPECIFICATIONS

Project Health and Safety Specification

In terms of the Construction Regulation of 2014

Project Client: North-West Department of Health

Description of Project Works: Refurbishment/Upgrade of Orkney EMS College

Project Location: Orkney EMS College

Project Health and Safety Specification developed by:

Rasejo Projects

Tel: 0748668815

Email: admin1@rasejoprojects.co.za

Preparation Date: June 2024

Revision: 01

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1. SPECIFIC PROJECT INFORMATION

1.1 Introduction and Definitions

THE REQUIREMENTS OF THE CONSTRUCTION REGULATIONS 2014 (AND GUIDANCE NOTES OF 2017) HAVE BEEN IN EFFECT SINCE 7TH AUGUST 2014. THE REGULATIONS PLACE LEGAL DUTIES UPON PRINCIPAL CONTRACTORS AND CONTRACTORS. ALTHOUGH THIS HEALTH AND SAFETY SPECIFICATION INCLUDES MUCH OF THE CONTENT OF THE REGULATIONS, THE CONTRACTOR WILL BE DEEMED TO BE FAMILIAR WITH THE REQUIREMENTS OF THESE REGULATIONS, AND OTHER ASSOCIATED HEALTH AND SAFETY REGULATIONS, AND TO HAVE FACTORED IN ALL THE DUTIES PLACED UPON CONTRACTORS AND PRINCIPAL CONTRACTORS IN THE TENDER. A COPY OF THE REGULATIONS CAN BE VIEWED ON THE DEPARTMENT OF LABOUR'S WEBSITE.

PLEASE NOTE THAT THE TERMS "CONTRACTOR" AND "PRINCIPAL CONTRACTOR" HAVE THE SAME MEANING AS THAT IN THE CONSTRUCTION REGULATIONS AND ARE USED INTERCHANGEABLY IN THIS DOCUMENT, I.E., REFERENCES TO "CONTRACTOR" REFER TO PRINCIPAL CONTRACTOR AND/OR CONTRACTOR AS THE REGULATIONS PERTAIN TO THEIR FUNCTIONS.

This Health and Safety Specification contains clauses that are generally applicable to construction activities, as well as imposing pro-active controls associated with activities that impact on Health and Safety as it relates to work on site. Compliance to the requirements of the Occupational Health and Safety Act 1993 is an additional requirement of this Health and Safety Specification and is part of the Contractor's responsibility. The Client, and/or their agents, will monitor that all Contractors comply with the requirements of such legislation.

ALL REFERENCES TO CLIENT IN THIS HEALTH AND SAFETY SPECIFICATION ALSO REFER TO SAFETY AGENT.

Definitions (as per the Construction Regulations 2014) applicable to this Health and Safety Specification:
"agent" means a competent person who acts as a representative for a Client;

"angle of repose" means the steepest angle of a surface at which a mass of loose or fragmented material will remain stationary in a pile on the surface, rather than sliding or crumbling away;

"bulk mixing plant" means machinery, appliances or other similar devices that are assembled in such a manner so as to be able to mix materials in bulk for the purposes of using the mixed product for construction work;

"client" means any person for whom construction work is being performed;

"competent person" means a person who has, in respect of the work or task to be performed, the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and is familiar with the Act and with the applicable regulations made under the Act;

"construction manager" means a competent person responsible for the management of the physical construction processes and the coordination, administration, and management of resources on a construction site;

"construction site" means a workplace where construction work is being performed;

"construction supervisor" means a competent person responsible for supervising construction activities on a construction site;

"construction vehicle" means a vehicle used as a means of conveyance for transporting persons or material, or persons and material, on and off the construction site for the purposes of performing construction work;

"construction work" means any work in connection with -

- the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
- the construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system; or the moving of earth, clearing of land, the making of excavation, piling, or any similar civil engineering structure or type of work;

"construction work permit" means a document issued in terms of regulation 3; "contractor"

means an employer who performs construction work;

"demolition work" means a method to dismantle, wreck, break, pull down or knock down of a structure or part thereof by way of manual labour, machinery, or the use of explosives;

"design" in relation to any structure, includes drawings, calculations, design details and specifications;

"designer" means a competent person who-

- prepares a design;
- checks and approves a design;
- arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or
 - designs temporary work, including its components;
 - an architect or engineer contributing to, or having overall responsibility for a design;
 - a building services engineer designing details for fixed plant;
 - a surveyor specifying articles or drawing up specifications;
 - a contractor carrying out design work as part of a design and building project; or
 - an interior designer, shopfitter, or landscape architect;

"ergonomics" means the scientific discipline concerned with the fundamental understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data, and methods to design in order to optimise human well-being and overall system performance;

"excavation work" means the making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping;

"explosive actuated fastening device" means a tool that is activated by an explosive charge and that is used for driving bolts, nails, and similar objects for the purpose of providing fixing;

"fall arrest equipment" means equipment used to arrest a person in a fall, including personal equipment, a body harness, lanyards, deceleration devices, lifelines, or similar equipment;

"falsework" means a combined system of formwork and support work;

"formwork" means temporary or permanent shutters used to form wet concrete into elements of a structure, and includes both horizontally and vertically placed shutters;

"fall prevention equipment" means equipment used to prevent persons from falling from a fall risk position, including personal equipment, a body harness, lanyards, lifelines or physical equipment such as guard-rails, screens, barricades, anchorages or similar equipment;

"fall protection plan" means a documented plan, which includes and provides for -

- all risks relating to working from a fall risk position, considering the nature of work undertaken;
- the procedures and methods to be applied in order to eliminate the risk of falling; and
- a rescue plan and procedures;

"fall risk" means any potential exposure to falling either from, off or into;

"health and safety file" means a file, or other record containing the information in writing required by these Regulations;

"health and safety plan" means a site, activity or project specific documented plan in accordance with the Client's health and safety specification;

"health and safety specification" means a site, activity or project specific document prepared by the Client pertaining to all health and safety requirements related to construction work;

"material hoist" means a hoist used to lower or raise material and equipment, excluding passengers;

"medical certificate of fitness" means a certificate contemplated in regulation 7(8);

"mobile plant" means any machinery, appliance or other similar device that is able to move independently, and is used for the purpose of performing construction work on a construction site;

"National Building Regulations" means the National Building Regulations made under the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), and promulgated by Government Notice No. R. 2378 of 30 July 1990, as amended by Government Notices No's R. 432 of 8 March 1991, R. 919 of 30 July 1999 and R. 547 of 30 May 2008;

"person day" means one normal working shift of carrying out construction work by a person on a construction site;

"principal contractor" means an employer appointed by the Client to perform construction work;

"Professional Engineer or Professional Certificated Engineer" means a person holding registration as either a Professional Engineer or Professional Certificated Engineer in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000);

"Professional Technologist" means a person holding registration as a Professional Engineering Technologist in terms of the Engineering Profession Act, 2000;

"provincial director" means the provincial director as defined in regulation 1 of the General Administrative Regulations, 2003;

"scaffold" means a temporary elevated platform and supporting structure used for providing access to and supporting workmen or materials or both;

"shoring" means a system used to support the sides of an excavation and which is intended to prevent the cave-in or the collapse of the sides of an excavation;

"structure" means-

- any building, steel or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, bulk mixing plant, pylon, surface and underground tanks, earth retaining structure, or any structure designed to preserve or alter any natural feature, and any other similar structure;
- any falsework, scaffold or other structure designed or used to provide support or means of access during construction work; or
- any fixed plant in respect of construction work which includes installation, commissioning, decommissioning, or dismantling and where any construction work involves a risk of a person falling;

"support work" means the temporary structure erected to support the formwork before the casting of a concrete element of a structure.

"suspended platform" means a working platform suspended from supports by means of one or more separate ropes from each support;

"temporary works" means any falsework, formwork, support work, scaffold, shoring or other temporary structure designed to provide support or means of access during construction work;

"the Act" means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993);

"tunnelling" means the construction of any tunnel beneath the natural surface of the earth for a purpose other than the searching for or winning of a mineral.

IMPORTANT NOTE: This Health and Safety Specification has been prepared to comply with the requirements of the Construction Regulations 2014.

1.2 BACKGROUND TO THE HEALTH & SAFETY SPECIFICATION

Historically, the Construction Industry has had a poor health and safety record. Due to the complex and potentially dangerous operations being undertaken, there is a high risk of incidents, accidents, and injuries. In many instances poor adherence to the Act and Regulations has resulted in severe consequences for Health and Safety performance. The Client is determined that the highest Health and Safety standards will prevail throughout the Contract and that there will be full commitment from all parties involved.

To achieve this goal the Client has arranged for the preparation of this Health and Safety Specification. The Health and Safety Specification sets out guidelines and minimum levels of awareness and guidance for Health and Safety requirements for the project. Contractual responsibility for adhering to these requirements rests with the Contractors. All employees are encouraged to be pro-active in compliance.

The Client is committed to ensuring the highest Health and Safety standards for all work undertaken within the Contract.

Contractors as employers are fully responsible and accountable for compliance with all Health and Safety requirements.

IMPORTANT NOTE: Compliance with the Occupational Health and Safety Act and Regulations shall not be limited to this Health and Safety Specification and definitions contained in this document.

Contractors shall be conversant with the requirements and effects of Health and Safety legislation upon their activities, in particular the Construction Regulations, 2014, and the Occupational Health and Safety Act, 1993, and to have made adequate resource in their tender submission to comply with all legislative requirements.

Failure to comply with the requirements of this Safety Specification will result in severe sanction and the severity of the sanction will depend on the severity of the noncompliance.

The Contractor's personnel will be responsible for the auditing of the implementation of the Health and Safety Specification and maintaining the document control and record systems associated with the Health and Safety Specification. The Client will arrange for Health and Safety audits to be conducted on site on their behalf to monitor health and safety compliance by contractors.

1.3 PURPOSE OF THE HEALTH & SAFETY SPECIFICATION

The purpose of this site-specific Health and Safety Specification is to comply with legal requirements and to provide health and safety information about specific project risks known by the Client, Designer and Safety Agent to be applicable to this project. This document also provides minimum health and safety requirements, standards, and expectations that the contractor must adhere to.

The Contractor must consider all information in this specification and ensure that their tenders include adequate resource and competence to deal with the matters detailed herein so that all relevant contents are dealt with in a way which follows legislation and the ethical concerns for the safeguarding of employees, contractors and other persons affected by the construction activities. **Please note that a detailed OHS bill of quantities based on the requirements of these specifications, must be provided by the contractor on all Construction Work Permit projects. The Bill of Quantities will form part of the Construction Work Permit application presented to Department of Labour for approval.**

The Health and Safety Specification will be implemented during construction of the works and any construction activity that the Client has control over.

This will also assist in ensuring that all the costs related to the compliance with Occupational Health Act 85 of 1993 and the Construction Regulations 2014, as well as this Health and Safety Specification, are taken into consideration at Tender stage.

No advice, approval of any document required by the Health and Safety Specification such as hazard identification and risk assessment action plans or any other form shall be construed as an acceptance by the Client of any obligation that absolves the Contractor from achieving the required level of performance and compliance with legal requirements.

Further, there is no acceptance of liability by the Client which may result from the Contractor failing to comply with the Health and Safety Specification unless the Client has issued an instruction to any requirement, i.e., the Contractor remains responsible for achieving the required performance levels.

1.4 IMPLEMENTATION OF THE HEALTH & SAFETY SPECIFICATION

This Health and Safety Specification forms an integral part of the Contract, and Contractors shall make it an integral part of their Contracts with other Contractors and Suppliers. Contractors employed by the Client are to ensure that the provisions of the Health and Safety Specification are applied both on the site and in respect of all off site activities relating to the project, in particular in transport activities and project dedicated off site fabrication works.

The Contractor shall enforce the provisions of the Health and Safety Specification amongst all Contractors and suppliers for the project.

The Contractor shall sign the acknowledgment on the last page of this safety specification that he/she has familiarized him/herself with the content of the Health and Safety Specification and shall comply with all obligations in respect thereof.

The successful Contractor will be required to compile a Health and Safety Plan based on the requirements of the Occupational Health Act 85 of 1993 and these Specifications, which will need to be approved by Client (or their appointed safety agent) prior to commencement with construction work.

1.4.1 CLIENT DUTIES

In terms of the Construction Regulations 2014 the Client (or their Agent) has legal duties. Where an Agent (refer to “definitions” section of this document) is appointed in terms of this project, these Health and Safety duties assigned will also apply.

All references to “Client” will apply to their appointed “Safety Agent” in this Health and Safety Specification.

The Client must:

- Prepare a baseline risk assessment for the construction work
- Prepare a suitable, sufficiently documented, and coherent site-specific Health and Safety specification for the intended construction work, based on the baseline risk assessment

- Include the health and safety specification in the tender documents
- Ensure that potential principal contractors submitting tenders have made adequate provision for the cost of health and safety measures
- Ensure that the principal contractor to be appointed has the necessary competencies and resources to carry out the construction work safely
- Take reasonable steps to ensure co-operation between all contractors appointed by the Client to enable each of those contractors to comply with the regulations
- Ensure, before work commences, that every principal contractor is registered and in good standing with the compensation fund, or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993 (Act no 130 of 1993) Appoint each principal contractor in writing for the project, or part thereof
- Discuss and negotiate with the principal contractor the contents of the principal contractor's safety plan and thereafter finally approve that plan for implementation
- Ensure that a copy of the principal contractor's health and safety plan is implemented and maintained
- Ensure that periodic health and safety audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days
- Ensure that a copy of the health and safety audit report is provided to the principal contractor within 7 days after the audit
- Stop any contractor from executing a construction activity which poses a threat to the health and safety of persons which is not in accordance with the principal contractor's health and safety plan for site
- Where changes are brought about to the design or construction work, make sufficient health and safety information and appropriate resources available to the principal contractor to execute the work safely
- Ensure that the health and safety file is kept and maintained by the principal contractor.
- Where the Client requires additional work to be performed as a result of a design change or error in construction due to the actions of the Client, the Client must ensure that sufficient safety information and appropriate additional resources are available to execute the required work safely.
- Where more than one principal contractor is appointed, the Client must take reasonable steps to ensure co-operation between all principal contractors and contractors to ensure compliance with the Regulations

1.4.2 DESIGNER DUTIES

It must be noted that the Designer also has Health and Safety duties assigned in terms of the Construction Regulations. Where the contractor fulfils a design function in terms of this project (refer to "definitions" section of this document), these duties will also apply. Please refer to Regulation 6 of the Construction Regulations 2014.

Please note that the designer of temporary works must ensure that:

- all temporary works are adequately designed so that it will be capable of supporting all anticipated vertical and lateral loads that may be applied;

- the designs of temporary works are done with close reference to the structural design drawings issued by the contractor, and in the event of any uncertainty consult the contractor;
- all drawings and calculations pertaining to the design of temporary works are kept at the office of the temporary works designer and are made available on request by an inspector; and
- the loads caused by the temporary works and any imposed loads are clearly indicated in the design.

1.6 PROJECT DETAILS

Description of Works:

Refurbishment/Upgrade of Orkney EMS College

In order to improve the services, the College renders and to comply to accreditation requirements of the college, the following refurbishments and upgrades were recommended by the Department.

- Refurbishment/upgrade of Student Residences (Blocks H & O) - (2237 m2).
- Refurbishment of the existing Library & IT Lab Building - (869 m2).
- Refurbishment of the existing Classrooms (671 m2).
- Refurbishment & upgrade of Student Toilet Block - (94 m2).
- Refurbishment of fire protection & control installations for compliance purposes.
- Refurbishment of HVAC installations.
- Refurbishment of Electrical Works.
- Refurbishment of Civil Works – Water & Sewer.

This description of the works is not necessarily complete and shall not limit the work to be carried out by the Contractor under this Contract.

1.7 EXISTING ENVIRONMENT

Hazards particular to this project by virtue of location:

- Public accessibility: Area is within walking distance from surrounding settlements and town areas.
- National & Municipal Roads: Public roads bordering the area that grants access to the working site.

1.8 PROJECT HEALTH & SAFETY REQUIREMENTS

Significant health and safety hazards identified by Client, Designer and Safety Agent:

- Excavations
- Fire

- Flammable Liquids / Gas
- Fragile Materials
- Hazardous Substances
- Hot Works
- Members of Public
- Existing Services
- Snakes
- Working at Height

Other construction hazards that the contractor can reasonably expect are as follows:

- Asbestos
- Bricklaying
- Brush cutting
- Compacting and Filling
- Compactor Operations
- Concrete Pumping
- Cutting Kerbs
- Cutting Off Disc
- Electric Tools and Electrical Installations
- Explosive Actuated Fastening Devices
- Goods / Passenger Hoist Operation
- Hand tools
- Kerb Laying
- Lifting Operations
- Manhole Rings and Pipes Storage
- Manual Handling of General Items
- Material / Passenger Hoist Operation
- Mobile Crane
- Noise and Dust
- Painting
- Paving (Laying)
- Plant/Vehicle and Equipment Operation
- Plastering
- Plumbing
- Precast Slab / Unit Laying and Fixing
- Scaffold Erection / Dismantling
- Shuttering Walls, Beams, Columns
- Site Stripping
- Steel Erection
- Steel Fixing
- Temporary Work (include False Work, Formwork, Support Work Scaffold and Shoring)

NOTE: Please refer to the baseline risk assessment for these hazards and risks.

ACTIVITIES REQUIRING APPROVED METHOD STATEMENTS (FOR HEALTH AND SAFETY)

- Excavation work
- Demolition work
- Lifting operations
- Work where explosions are involved
- Use of heavy machinery

CONTRACTOR SAFETY OFFICER PROVISION

Records of safety audits undertaken by the Contractor's Safety Officer must be kept on site in the safety file and nonconformances reported by the Safety Officer to the Contractor's management team. All nonconformances identified by the Safety Officer and client's safety agent must be investigated and corrective action taken by the Contractor to prevent re-occurrence.

Please note that as from 7th August 2018 the safety officer must be professionally registered with the SACPCMP. Proof of registration with the SACPCMP must be provided.

If registered as a Candidate proof of mentorship and weekly visits by mentor must be available on site.

The requirement for this site is that a full time Safety Officer be appointed by the Contractor.

MEDICAL CERTIFICATE OF FITNESS [ANNEXURE 3]

The contractor must ensure that their employees on site have a valid medical certificate of fitness, specific to the construction work being performed, issued by an occupational health practitioner in the form of an Annexure 3 template.

MANAGEMENT AND SUPERVISION OF CONSTRUCTION WORK

A principal contractor must, in writing, appoint one full-time competent person as the construction manager with the duty of managing all the construction work on a single site, including the duty of ensuring occupational health and safety compliance, and in the absence of the construction manager an alternate competent person must be appointed by the principal contractor. Proof of an all-inclusive assessment by the Principal Contractor of the Construction Manager's Competency in construction management and health and safety competency must be available in the Safety File.

The Construction Manager, Alternate Construction Managers, Assistant Construction Managers, and designated construction supervisor/s must, as a minimum, have training in Legal Liability, Construction Regulation 2014 and the OHS Act and Regulations.

SITE TRAFFIC MANAGEMENT

The site Traffic Management Plan must be approved by the Project Manager

ENVIRONMENTAL CONDITIONS

Contractor must consider adverse weather conditions on site activities and implement control measures to mitigate risk. This includes risk of exposure to excessive heat, cold, rain, lightning and wind. The open nature of the site works will not preclude any of the above.

ARRANGEMENTS FOR ACCESS, PARKING, DELIVERIES, ETC.

Access to site by Construction Vehicles, Access to site by Construction Workers and Visitors:

All service providers must sign a 37.2 Mandatory Agreement and must be inducted before they can be allowed on site.

ARRANGEMENTS FOR SITE CAMP, ABLUTIONS AND YARD

Site camp location and set up

- Restrictions / requirements – None
- Storage areas – As per legislation and good practice
- Security – Contractor to provide own security since the site is prone to theft activities

Note: Contractor to advise in consultation with Engineer / Professional Team

Ablutions and Welfare Arrangements

Contractor to supply ablutions and facilities in line with the Construction Regulations 2014, refer to section 2.31 of this health and safety specification regarding the below. Toilets should be provided with built in facilities for hand washing.

Toilets, Washing facilities, Drinking Water, Shelter, Showers - Contractor to provide as per Regulations

Mobile site facilities requirements

A portable toilet will be required for sites that cannot facilitate a permanent location for ablution units and must be available for each gender per location.

The use of a portable toilet must be prepared and setup correctly with additional anchors and available toiletries prior to each working day and to be first priority when changing location of works along a set working path.

Teams are to ensure that the toilets are cleaned correctly and suitable for easy and hygienic uses and recorded on a daily register.

PROTECTION OF SITE AGAINST UNAUTHORISED ACCESS BY PUBLIC

Excavation Fencing: Note that excavations accessible to public, or adjacent to public roads / thoroughfares, must have (1) barrier / fence of at least 1m in height, and (2) warning illuminates at night or when visibility is poor, or have other suitable precautionary measures if of both these are not practicable.

General Fencing of Site: Note that construction sites in built up areas adjacent to public walkway must be fenced off and have controlled access points with the correct signs to indicate the site office for any relevant enquiries.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

The Client requires the Contractor to ensure that employees (and others under his/her control) wear the following minimum PPE as identified in the applicable risk assessments and method statements:

- Overalls
- Safety Harnesses (when required)
- Hard Hats
- Reflective Vests
- Goggles / gloves / ear defenders / respiratory protection
- Safety Footwear
- Specialist Equipment (e.g., for confined Spaces)

1.9 INDUCTIONS

Contractor must note that the following Client safety rules and/or requirements are to be observed:

All workers are to receive induction prior to commencement of work on site.

The contractor shall provide induction training to all Employees prior to the commencement of work. This programme shall include, but not be limited to:

- reiteration of the risks to the health and safety of the Employee associated with work;
- issue of induction handouts and explanation of safety rules;
- issue of PPE;
- traffic rules, driving rules and light vehicle safety;
- use of fire-fighting appliances;
- emergency procedures;
- communication systems; and
- provisions for first aid (including the location of first aid stations).

1.10 PROJECT CLOSE OUT

The Health and Safety files for the Principal Contractors and all Contractors require closure and handover to the Client at the completion of the project in the form of a consolidated safety file. The following list is an example of what should be included but is not exhaustive. The Safety Agent or the Client may require further information at the time of completion and the Principal Contractor is to ensure that all instructions are responded to. Documentation would include all health and safety related records from the start of the project. All records to be in hard copy or electronic format and submitted to the Safety Agent for approval in adequately formatted lists and folders. Layout should be logical and in the same order as in the site files.

Consolidated Health and Safety close out file requirements include:

- Health and safety specification (most recent version)
- Principal Contractor's health and safety plan/s
- Site safety organograms
- Legal appointments
- Notification to Department of Labour of commencement of work / Construction Work Permit
- Workman's Compensation Letters of Good Standing for the project

- Full safety files for all contractors as well as their close out reports
- List of all contractors who worked on site
- Letters of safety plan approval of contractors by the Principal Contractor
- Mandatory agreements (section 37.2 agreements)
- Incident and accident records / Occupational Disease records
- Contractor Nonconformance records
- Safety agent's audit reports
- Safety Officer reports
- Method Statements
- Risk assessments
- Safe work procedures
- Medical surveillance certificates of fitness. Medical records are to be kept according to the Occupational Health and Safety Act, as amended.
- All temporary works drawings (suspended beams/scaffolds, etc.)
- Copies of test results, policies, and procedures for environmental monitoring (silica, noise, dusts, etc.)
- Detailed registers of all material used
- Copies of all Checklists completed

1.11 SAFETY FILE RETURN TO CLIENT

The consolidated Health and Safety Files for the Project is to be handed over by the Principal Contractor to the Client upon Project Completion in either hard copy or electronic format.

2. FURTHER REQUIREMENTS

2.1 DUTIES OF CONTRACTOR IN TERMS OF CONSTRUCTION REGULATIONS 2014

A Principal Contractor must:

Provide and demonstrate to the Client a suitable, sufficiently documented and coherent site-specific health and safety plan, based on the Client's documented health and safety specifications, which plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the principal contractor as work progresses;

Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, which must be made available on request to an inspector, the Client, the Client's Safety Agent, or a Contractor; and

On appointing any other contractor, in order to ensure compliance with the provisions of the Act –

- provide contractors who are tendering to perform construction work for the principal contractor, with the relevant sections of the health and safety specifications pertaining to the construction work which has to be performed;
- ensure that potential contractors submitting tenders have made sufficient provision for health and safety measures during the construction process;

- ensure that no contractor is appointed to perform construction work unless the principal contractor is reasonably satisfied that the contractor that he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely;
- ensure prior to work commencing on the site that every contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993;
- appoint each contractor in writing for the part of the project on the construction site
- take reasonable steps to ensure that each contractor's health and safety plan is implemented and maintained on the construction site;
- ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days;
- stop any contractor from executing construction work which is not in accordance with the Client's health and safety specifications and the principal contractor's health and safety plan for the site or which poses a threat to the health and safety of persons;

Where changes are brought about to the design and construction, make available sufficient health and safety information and appropriate resources to the contractor to execute the work safely;

Discuss and negotiate with the contractor the contents of their health and safety plan and finally approve that plan for implementation;

Ensure that a copy of both the principal contractor and contractor's health and safety plan is available on request to an employee, an inspector, a contractor, the Client, or the Client's Safety Agent;

Hand over a consolidated health and safety file to the Client upon completion of the construction work, to include a record of all drawings, designs, materials used and other similar information concerning the completed structure;

in addition to the documentation required in the health and safety file include and make available a comprehensive and updated list of all the contractors on site accountable to the principal contractor, the agreements between the parties and the type of work being done;

Ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

A contractor must prior to performing any construction work-

- provide and demonstrate to the principal contractor a suitable and sufficiently documented health and safety plan, based on the relevant sections of the Client's health and safety specification and provided by the principal contractor, which plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the contractor as work progresses;
- open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, and which must be made available on request to an inspector, the Client, the Client's Safety Agent or the principal contractor;
- before appointing another contractor to perform construction work be reasonably satisfied that the contractor that he or she intends to appoint has the necessary competencies and resources to perform the construction work safely;

- co-operate with the principal contractor as far as is necessary to enable each of them to comply with the provisions of the Act;
- as far as is reasonably practicable, promptly provide the principal contractor with any information which might affect the health and safety of any person at work carrying out construction work on the site, any person who might be affected by the work of such a person at work, or which might justify a review of the health and safety plan.

Where a contractor appoints another contractor to perform construction work, the duties that apply to the principal contractor will apply to the contractor as if he or she were the principal contractor.

A principal contractor must take reasonable steps to ensure co-operation between all contractors appointed by the principal contractor to enable each of those contractors to comply with these Regulations.

No contractor may allow or permit any employee or person to enter any site unless that employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

A contractor must ensure that all visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site and must ensure that such visitors have the necessary personal protective equipment.

A contractor must at all times keep on his or her construction site records of the health and safety induction training and such records must be made available on request to an inspector, the Client, the Client's Safety Agent or the Principal Contractor.

A contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3 (a template of which can be found in the Construction Regulations, 2014).

2.2 MANAGEMENT AND SUPERVISION OF CONSTRUCTION WORK

A principal contractor must, in writing, appoint one full-time competent person as the construction manager with the duty of managing all the construction work on a single site, including the duty of ensuring occupational health and safety compliance, and in the absence of the construction manager an alternate must be appointed by the principal contractor. Proof of all-inclusive assessment of the Construction Manager's Competency in construction management and H & S competency must be available in the Safety File. The Construction Manager must, as a minimum, have a Construction Regulation course. No contractors may be left unsupervised on site by the principal contractor.

A principal contractor must upon having considered the size of the project, in writing appoint one or more assistant construction managers for different sections thereof: Provided that the designation of any such person does not relieve the construction manager of any personal accountability for failing in his or her management duties in terms of this regulation.

Where the construction manager has not appointed assistant construction managers, or, in the opinion of an inspector, a sufficient number of such assistant construction managers have not been appointed, that inspector must direct the construction manager in writing to appoint the number of assistant construction managers indicated by the inspector, and those assistant construction managers must be regarded as having been appointed.

No construction manager appointed in terms of the Regulations may manage any construction work on or in any construction site other than the site in respect of which he or she has been appointed.

No contractor may appoint a construction health and safety officer to assist in the control of health and safety related aspects on the site unless he or she is reasonably satisfied that the construction health and safety officer that he or she intends to appoint is registered with a statutory body approved by the Chief Inspector and has necessary competencies and resources to assist the contractor

A construction manager must in writing appoint construction supervisors responsible for construction activities and ensuring occupational health and safety compliance on the construction site. Proof of all- inclusive assessment of the Construction Supervisor's competency in construction supervision and H&S competency must be available in the Safety File. The Construction Supervisor must, as a minimum, have a supervision course as per Unit Standard 262845 (Civil Engineering), 119080 (Building Construction) and 262884 (Civil Engineering).

A contractor must, upon having considered the size of the project, in writing appoint one or more competent employees for different sections thereof to assist the construction supervisor, and every such employee has, to the extent clearly defined by the contractor in the letter of appointment, the same duties as the construction supervisor: Provided that the designation of such employee does not relieve the construction supervisor of any personal accountability for failing in his or her supervisory duties.

No construction supervisor appointed may supervise any construction work on or in any construction site other than the site in respect of which he or she has been appointed: Provided that if a sufficient number of competent employees have been appropriately designated on all the relevant construction sites, the appointed construction supervisor may supervise more than one site.

2.3 NOTIFICATION OF INTENTION TO COMMENCE CONSTRUCTION WORK

The Contractor shall notify the Provincial Director of the Department of Labour of the intention to commence construction work at least 7 days prior to the works commencing if the intended construction work will:

- Include excavation work
- Include work at height where there is a risk of falling
- Include the demolition of a structure, or
- Include the use of explosives to perform construction work.

This must be done on a form similar to an Annexure 2 (template of which can be found in the Construction Regulations, 2014). A copy of the notification letter to the Provincial Director shall be forwarded to the Client for record purposes.

2.4 CONSTRUCTION WORK PERMIT

A client who intends to have construction work carried out, must at least 30 days before that work is to be carried out apply to the provincial director in writing for a construction work permit to perform construction work on projects that will –

1. exceed 365 days and will involve more than 3600 person days of construction work; or
2. the tender value limit is grade 7, 8 or 9 of the Construction Industry Development Board (CIDB) grading.

- Grade 7 = R60 000 000
- Grade 8 = R200 000 000
- Grade 9 = No limit

A client may appoint a Construction Health and Safety Agent or Construction Health and Safety Manager to apply for this permit from the Provincial Director and construction work may not commence until the permit has been issued by the Provincial Director.

A copy of this permit will be required to be kept in the principal contractor's safety file, and the site-specific number issued by the Provincial Director must be displayed at the site entrance.

The following minimum documentation will be required during the permit application process:

- Principal Contractor's Health and Safety Plan CR 5(1)(m)
- Baseline Risk Assessment CR 5(1)(a)
- Appointed Principal Contractor's Letter for Good Standing as per CR 5(1)(j)
- Issue Register signed by Designer CR 5 (1)(c)
- Issue Register signed by Principal Contractor
- Declaration signed by Designer CR 5(1)(d) and CV
- Principal Contractor made adequate provision for the cost of health and safety measures (Bill of Quantities) CR 5(1)(g)
- Proof of Principal Contractor's competency and resources to carry out the construction work safely CR 5(1)(h)
- Appointment Letter for Construction Manager, CV, Certificates and List of projects
- Appointment Letter of Safety Officer & Safety Officer's Registration for SACPCMP
- Principal Contractor's Appointment Letter CR 5(1)(k), Company Profile and CIDB grading

After approval of the Construction Work Permit any changes made to the appointed persons on the annexure 1 must be submitted to Department of Labour for approval before the appointed persons are allowed to commence with their tasks.

PLEASE NOTE THAT THE CONSTRUCTION MANAGER (8(1)) NAMED ON THE CONSTRUCTION WORK PERMIT MUST BE THE SAME PERSON THAT ACTS AS THE CONSTRUCTION MANAGER ON SITE. IF THIS WILL NOT BE THE CASE FOR SOME REASON THEN THE SAFETY AGENT MUST BE NOTIFIED OF THE CHANGE BY THE PRINCIPAL CONTRACTOR AT LEAST 7 DAYS BEFORE THE CHANGE IS MADE SO THAT THE SAFETY AGENT CAN AMEND THE CONSTRUCTION WORK PERMIT APPLICATION AND ADVISE THE DEPARTMENT OF EMPLOYMENT AND LABOUR ACCORDINGLY.

2.5 ASSIGNMENT OF CONTRACTOR'S RESPONSIBLE PERSONS TO MANAGE HEALTH AND SAFETY ON SITE

The Contractor shall submit management and supervisory appointments as well as any relevant appointments in writing (as stipulated by the Construction Regulations 2014 and the Occupational Safety and Health Act 1993), prior to commencement of work (refer to Annexure B at the end of this Health and Safety Specification).

2.6 COMPETENCY FOR CONTRACTOR'S RESPONSIBLE PERSONS

The Contractor's responsible persons shall be competent in health and safety and be familiar with the Occupational Health and Safety Act 1993, and applicable regulations. Valid proof of pertinent health and safety courses attended by such persons will be required to be presented to the Client.

2.7 COMPENSATION OF OCCUPATIONAL INJURIES AND DISEASES ACT 130 OF 1993 (COIDA)

The successful Contractor shall submit to the Client a valid letter of good standing with the Compensation Insurer prior to appointment.

2.8 OCCUPATIONAL HEALTH AND SAFETY POLICY

The Contractor shall submit their Health and Safety Policy, prior to construction commencement, signed by the Chief Executive Officer. The Policy must outline objectives and how they will be achieved and implemented within the company operations. The Policy must be communicated to all employees and proof thereof must be available in the Safety File.

2.9 HEALTH AND SAFETY ORGANOGRAM

The Contractor shall submit an organogram, prior to construction commencement, outlining the Health and Safety Site Team that will be assigned to the project, if successful with the tender. In cases where appointments have not been made, the organogram shall reflect the position. The organogram shall be updated when there is a change in the site team.

2.10 RISK ASSESSMENTS

The Client shall cause a baseline risk assessment to be conducted by a competent person before the design process and tender process commence, and the assessed risks shall form part of the health and safety specifications.

The Contractor must, before commencement of any construction work, and during construction work, have risk assessments performed by a competent person appointed in writing, which risk assessments form part of the health and safety plan to be applied on the site and must include:

- The identification of the risks and hazards to which persons may be exposed to;
- An analysis and evaluation of the risks and hazards identified; based on a documented method
- A documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- A monitoring plan; and
- A review plan

The Contractor must ensure that, as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated, and addressed in a risk assessment.

The Contractor must ensure that all employees under his control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures and/or control measures before any work commences and thereafter at the times determined in the risk assessment monitoring and review plan of the relevant site.

The Principal Contractor must ensure that all contractors are informed regarding any hazard that is stipulated in the risk assessment before any work commences and thereafter at the times determined in the risk assessment monitoring and review plan of the relevant site.

The Contractor must ensure that copies of risk assessment for this site are available on site for inspection purposes by interested parties (inspector, the Client, Client's Safety Agent, any contractor, any employee, a representative trade union, a health and safety representative or safety committee member.

A Contractor must review the relevant risk assessment where changes are effected to the design and/or construction that result in a change to the risk profile, or when an incident has occurred.

Preventative measures must first address the elimination of the hazard or risk. Should PPE be required to reduce risk, the equipment or clothing to be used must be SABS approved.

In general, the Contractor must ensure that the Risk Assessment involves identifying the hazards present in a work activity on site. This is followed by an evaluation of the extent of the risk involved considering those precautions already being taken.

The following general principle should be followed when conducting a risk assessment:

- All relevant risks and/or hazards should be systematically addressed;
- The risk assessment should address what actually happens in the workplace during the work activity;
- All employees and those who may be affected must be considered, including maintenance staff, security guards, visitors, and Contractors;
- The risk assessment process should consider the existing safety measures and controls.
- The level of detail on a risk assessment should be appropriate to the level of risk.

2.11 HEALTH AND SAFETY REPRESENTATIVE(S)

The Contractor shall ensure that Health and Safety Representative(s) is/are elected and trained to carry out his / her functions. The Safety Representative(s) must be democratically nominated, elected, and appointed in writing. The Health and Safety Representative(s) shall carry out regular inspections, keep records and report to the supervisor to take appropriate action. The Safety Representative(s) shall attend Health and Safety Committee Meetings. The Health and Safety Representative shall be part of the team that will investigate incidents, accidents, and non-conformances. The Safety Representative(s) must be (a) full time employee(s) who is/are acquainted with conditions and activities at that workplace or section thereof. The Safety Representatives must have Safety Representative training and must be capable of performing their duties.

2.12 HEALTH AND SAFETY COMMITTEE

Where two or more health and safety representatives have been appointed on site, the Contractor shall ensure that monthly health and safety meetings are held with such representatives and minutes are kept on record. Meetings must be organized and chaired by the Contractor's Health and Safety Committee Chairperson. Minutes of these meetings must be available for the employees of the contractor to refer to.

2.13 MEDICAL CERTIFICATE OF FITNESS

The contractor must ensure that their employees on site have a valid medical certificate of fitness, specific to the construction work being performed, issued by an occupational health practitioner in the form of an Annexure 3 template (refer to the Construction Regulations 2014 on the Department of Labour website for a sample of this form).

Employees required to perform work at heights or from fall risk position must be medically fit to perform such work, such employee's medicals must specify "Fall Risk" or "Working at heights" in the exposure section of the annexure 3 template.

2.14 HEALTH AND SAFETY TRAINING

The Contractor shall quarterly conduct a training needs analysis to ascertain what health and safety training is required. A plan of action should be devised and forwarded to the Client for records. Once the identified people have attended the training, the Contractor must provide the Client with copies of certificates obtained.

2.14.1 INDUCTION

No Contractor may allow or permit any employee or person to enter site unless they have undergone health and safety induction training pertaining to the hazards prevalent on site at the time of entry. This includes visitors to site. The Contractor must ensure that visitors to site have the necessary protective equipment (PPE). A copy of attendance registers of all employees who attend inductions shall be kept.

2.14.2 AWARENESS

The Contractor shall conduct periodic toolbox talks on site, weekly or before any hazardous work takes place. The talks shall cover the relevant activity and an attendance register must be signed by all attendees. This record of who attended and the content of the topic will be kept on the site health and safety file as evidence of training.

2.15 COMPETENCY

After the Contractor has identified the training to be conducted as part of the competency requirement, and based on Risk Assessment, he shall send the relevant persons on appropriate courses and keep certificates of training for reference. Familiarity with the Health and Safety Act and Regulations is an integral part of the definition of competence. All training must be conducted by an accredited training provider and the certificates must display the applicable unit standards and the expiry dates thereof.

2.16 GENERAL RECORD KEEPING

The Contractor shall keep and maintain Health and Safety records to demonstrate compliance with the Health and Safety Specification and the Occupational Health and Safety Act. The contractor shall ensure that all records of incidents, spot fines, training, etc. are kept on site. All documents shall be available for inspection by the Client, or the Department of Labour's Inspectors.

2.17 GENERAL INSPECTION, MONITORING AND REPORTING

The Contractor shall carry out inspections as required by this Health and Safety Specification, as well as by health and safety legislation.

2.18 EMERGENCY PROCEDURES

The Contractor shall submit a detailed Emergency Procedure for approval by the Client prior to commencement on site. The procedure shall detail the response plan including the following:

- List of key personnel;
- Details of emergency services;
- Actions or steps to be taken in the event of the emergency; and
- Information on hazardous materials / situations, including each material's hazardous potential impact or risk on the environment or human and measures to be taken in the event of an accident.

Emergency procedure(s) shall include, but shall not be limited to, fire, spills, accidents to employees, use of hazardous substances, dangers as a result of riot / service delivery protests / intimidation, etc. The Contractor shall advise the Client in writing of any on-site emergencies, together with a record of action taken, within 24 hours of the emergency occurring. A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc.) must be maintained and available to site personnel.

2.19 FIRST AID BOX AND FIRST AID EQUIPMENT

The Contractor shall provide first aid box/es and appoint, in writing, First Aider(s) for this project in line with the results of the Contractor's risk assessment for the project, this health and safety specification as well as the provisions of the General Safety Regulations. The appointed First Aider(s) are to be sent for accredited first aid training before starting on site. Valid certificates are to be kept on site.

- First Aid box/es must be adequately stocked at all times, accessible and be controlled by a qualified First Aider.
- Perishables to be checked and replaced when expired.
- Stock per content list as per the General Safety Regulations Annexure.
- Signage to be in place.
- To be numbered and sealed with name of first aider on or above the First aid box.
- Dressing logbook to be available in the first aid box.
- If more than 5 employees are present, there must be a first aid box available.
- Register to be checked by a Competent person.

2.20 ACCIDENT / INCIDENT REPORTING AND INVESTIGATION

The Contractor shall, in addition to the prescribed requirements of the Occupational Health and Safety Act and General Safety Regulations, investigate, record, and report all Section 24 reportable incidents to the Client within 24 hours of the incident occurring. Incident investigations shall be conducted by the Contractor's appointed Accident Investigator – this Investigator must be a competent person or persons who have sufficient knowledge to carry out an investigation.

In the event of a fatality or a permanent disabling injury the Contractor must submit proof of reporting of incident to Department of Labour as well as proof of preventative measures to the Client. The Client reserves the right to conduct investigations into any incidents that they deem fit and the Contractor is required to provide full co-operation in this regard.

The contractor must report to the client all safety and health related incidents and accidents at the Site.

The contractor must investigate any incident/accident that occurs to establish the cause of the incident/accident, as well as any remedial measures to be implemented to prevent, as far as Reasonably Practicable, a reoccurrence of such incident/accident.

2.21 HAZARDS AND POTENTIAL SITUATIONS

The Contractor shall immediately notify other Contractors of any hazardous or potentially hazardous situations, which may arise during performance of the activities.

2.22 OCCUPATIONAL HEALTH AND SAFETY SIGNAGE

The Contractor shall ascertain and provide adequate on site health and safety signage. This signage shall include, but shall not be limited to, Hard Hat / Helmet Area; Safety Shoes to be worn on site; Dust Masks to be worn in areas where there might be exposure to excessive dust; Ear Plugs / Muffs to be worn where there might be noise exposure over 85 dB; Gloves; Safety Goggles; Safety Harness, Workers in Excavation, traffic management, etc. The Contractor shall be responsible to maintain the quality and replacement of signage. Signage must comply with the requirements of SABS.

2.23 MANAGEMENT OF CONTRACTORS BY PRINCIPAL CONTRACTOR

The Principal Contractor shall ensure that all contractors under his control are complying with the respective Health and Safety Plans, as well as Health and Safety Legislation.

2.24 STACKING OF MATERIALS

In addition to the provisions for the stacking of articles in the General Safety Regulations, 2003, the contractor must ensure that –

- a competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;
- adequate storage areas are provided;
- there are demarcated storage areas; and
- storage areas are kept neat and under control.

2.25 HOUSEKEEPING AND GENERAL SAFEGUARDING ON CONSTRUCTION SITES

A contractor must, in addition to compliance with the Environmental Regulations for Workplaces, 1987, promulgated by Government Notice No. R. 2281 of 16 October 1987, ensure that suitable housekeeping is continuously implemented on each construction site, including-

- the proper storage of materials and equipment;
- the removal of scrap, waste and debris at appropriate intervals;

- ensuring that materials required for use, are not placed on the site so as to obstruct means of access to and egress from workplaces and passageways;
- ensuring that materials which are no longer required for use, do not accumulate on and are removed from the site at appropriate intervals;
- ensuring that waste and debris are not disposed of from a high place with a chute, unless the chute complies with the requirements set out in the regulations;
- ensuring that construction sites in built-up areas adjacent to a public way are suitably and sufficiently fenced off and provided with controlled access points to prevent the entry of unauthorized persons; and
- ensuring that a catch platform or net is erected above an entrance or passageway or above a place where persons work or pass under or fencing off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe in the case of danger or possibility of persons being struck by falling objects.

2.26 CONSTRUCTION VEHICLES AND MOBILE PLANT

A contractor must ensure that all construction vehicles and mobile plant-

- are of an acceptable design and construction;
- are maintained in a good working order;
- are used in accordance with their design and the intention for which they were designed, having due regard to safety and health;
- are operated by a person who-
 - has received appropriate training, is certified competent and in possession of proof of competency and is authorised in writing to operate those construction vehicles and mobile plant;
 - has a medical certificate of fitness to operate those construction vehicles and mobile plant, issued by an occupational health practitioner in the form of Annexure 3.
- have safe and suitable means of access and egress;
- are properly organized and controlled in any work situation by providing adequate signalling or other control arrangements to guard against the dangers relating to the movement of vehicles and plant, in order to ensure their continued safe operation;
- are prevented from falling into excavations, water, or any other area lower than the working surface by installing adequate edge protection, which may include guard-rails and crash barriers;
- are fitted with structures designed to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn;
- are equipped with an acoustic warning device which can be activated by the operator;
- are equipped with an automatic acoustic reversing alarm;
- are equipped with fire extinguishers (2.5 – 4.5 kg); and
- are inspected by the authorised operator or driver on a daily basis using a relevant checklist prior to use and that the findings of such inspection are recorded in a register kept in the construction vehicle or mobile plant.

A contractor must ensure that-

- no person rides or is required or permitted to ride on a construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose;

- every construction site is organized in such a way that, as far as is reasonably practicable, pedestrians and vehicles can move safely and without risks to health;
- the traffic routes are suitable for the persons, construction vehicles or mobile plant using them, are sufficient in number, in suitable positions and of sufficient size;
- every traffic route is, where necessary, indicated by suitable signs;
- all construction vehicles and mobile plant left unattended at night, adjacent to a public road in normal use or adjacent to construction areas where work is in progress, have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, in order to identify the location of the vehicles or plant;
- all construction vehicles or mobile plant when not in use, have buckets, booms, or similar appendages, fully lowered, or blocked, controls in a neutral position, motors stopped, wheels chocked, brakes set, and ignition secured;
- whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation;
- tools, material, and equipment are secured and separated by means of a physical barrier in order to prevent movement when transported in the same compartment with employees;
- vehicles used to transport employees have seats firmly secured and adequate for the number of employees to be carried; and
- all construction vehicles or mobile plant travelling, working, or operating on public roads comply with the requirements of the National Road Traffic Act, 1996.
- all plant and vehicles are to be fitted with amber rotating beacons and reverse alarms.
- ALL construction site vehicles must be inspected daily especially if it has dangerous "items" (fuel, explosives, etc.) on vehicle, completed inspection registers must also be available for inspection.
- the vehicles must resemble the original manufacturer's product. Levers, alarms, and amber lights to be fitted to construction vehicle for notification of vehicle.
- fire extinguishers, signage, and licence disc to be correctly mounted and displayed.
- when the vehicle is stationary no key to be left in or on vehicle or plant.
- Drip tray must be present when stationary.

2.27 ELECTRICAL INSTALLATIONS AND MACHINERY ON CONSTRUCTION SITES

A contractor must, in addition to compliance with the Electrical Installation Regulations and the Electrical Machinery Regulations, ensure that –

- before construction commences and during the progress thereof, adequate steps are taken to ascertain the presence of and guard against danger to workers from any electrical cable or apparatus which is under, over or on the site;
- all parts of electrical installations and machinery are of adequate strength to withstand the working conditions on construction sites;
- the control of all temporary electrical installations on the construction site is designated to a competent person who has been appointed in writing for that purpose;
- all temporary electrical installations used by the contractor are inspected at least once a week by a competent person and the inspection findings are recorded in a register kept on the construction site; and
- all electrical machinery is inspected by the authorized operator or user on a daily basis using a relevant checklist prior to use and the inspection findings are recorded in a register kept on the construction site.

2.28 USE AND TEMPORARY STORAGE OF FLAMMABLE LIQUIDS ON CONSTRUCTION SITES

A contractor must, in addition to compliance with the provisions for the use and storage of flammable liquids in the General Safety Regulations, 2003, ensure that –

- where flammable liquids are being used, applied, or stored at the workplace concerned, it is done in a manner that does not cause a fire or explosion hazard, and that the workplace is effectively ventilated;
- no person smokes in any place in which flammable liquid is used or stored, and the contractor must affix a suitable and conspicuous notice at all entrances to any such areas prohibiting such smoking;
- an adequate amount of efficient fire-fighting equipment is installed in suitable locations around the flammable liquids store with the recognized symbolic signs;
- only the quantity of flammable liquid needed for work on one day is taken out of the store for use;
- all containers holding flammable liquids are kept tightly closed when not in actual use and, after their contents have been used up, are removed from the construction site and safely disposed of;
- where flammable liquids are decanted, the metal containers are bonded and earthed; and
- no flammable material, including cotton waste, paper, cleaning rags or similar material is stored together with flammable liquids
- proper containers are to be used for fuel. Marked and labelled as per the content.
- diesel on site; more than 800 litres must have a certificate, fire safe certificate. Locked in a ventilated, secure area with a drip tray and have a designated, responsible person to use it.

2.29 WATER ENVIRONMENTS

A contractor must ensure that where construction work is done over or in close proximity to water, provision is made for –

- preventing persons from falling into water; and
- the rescuing of persons in danger of drowning.

A contractor must ensure that where a person is exposed to the risk of drowning by falling into the water, the person is provided with and wears a lifejacket.

2.30 FIRE PRECAUTIONS ON CONSTRUCTION SITES

A contractor must, in addition to compliance with the Environmental Regulations for Workplaces, 1987, ensure that –

- all appropriate measures are taken to avoid the risk of fire;
- sufficient and suitable storage is provided for flammable liquids, solids, and gases;
- smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- in confined spaces and other places in which flammable gases, vapours or dust can cause danger-
- only suitably protected electrical installations and equipment, including portable lights, are used;
- there are no flames or similar means of ignition;
- there are conspicuous notices prohibiting smoking;

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- oily rags, waste, and other substances liable to ignite are without delay removed to a safe place;
- adequate ventilation is provided;
- combustible materials do not accumulate on the construction site;
- welding, flame cutting, and other hot work are done only after appropriate precautions have been taken to reduce the risk of fire;
- suitable and sufficient fire-extinguishing equipment is placed at strategic locations or as may be recommended by the Fire Chief or local authority concerned, and that such equipment is maintained in a good working order;
- the fire equipment contemplated above is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof;
- a sufficient number of workers are trained in the use of fire-extinguishing equipment;
- where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
- the means of escape is kept clear at all times;
- there is an effective evacuation plan providing for all -
- persons to be evacuated speedily without panic;
- persons to be accounted for; and
- plant and processes to be shut down;

2.31 CONSTRUCTION EMPLOYEES' FACILITIES

A contractor must, in terms of the Construction Regulations 2014, provide:

- at least one sanitary facility for each sex and for every 30 workers;
- Toilets to be within walking distance
- Hygiene registers to be completed
- Proof of safe disposal of effluent waste disposal certificates to be obtained
- changing facilities for each sex;
- sheltered/shaded eating area.
- Sufficient clean water for all employees.

2.32 FALL PROTECTION

The Contractor must:

- designate a competent person to be responsible for the preparation of a fall protection plan
- ensure that the fall protection plan contemplated above is implemented, amended where and when necessary and maintained as required; and
- take steps to ensure continued adherence to the fall protection plan.

A fall protection plan contemplated above must include-

- a risk assessment of all work carried out from a fall risk position and the procedures and methods used to address all the risks identified per location;
- the processes for the evaluation of the employees' medical fitness necessary to work at a fall risk position and the records thereof;
- a programme for the training of employees working from a fall risk position and the records thereof;
- the procedure addressing the inspection, testing, and maintenance of all fall protection equipment; and

- a rescue plan detailing the necessary procedure, personnel and suitable equipment required to affect a rescue of a person in the event of a fall incident to ensure that the rescue procedure is implemented immediately following the incident.

A contractor must ensure that a construction manager appointed under regulation 8(1) is in possession of the most recently updated version of the fall protection plan.

A contractor must ensure that all unprotected openings in floors, edges, slabs, hatchways, and stairways are adequately guarded, fenced, or barricaded or that similar means are used to safeguard any person from falling through such openings;

Also that no person is required to work in a fall risk position, unless such work is performed safely as contemplated in above and fall prevention and fall arrest equipment are approved as suitable and of sufficient strength for the purpose for which they are being used, having regard to the work being carried out and the load, including any person, they are intended to bear; and securely attached to a structure or plant, and the structure of plant and the means of attachment thereto are suitable and of sufficient strength and stability for the purpose of safely supporting the equipment and person who could fall, and fall arrest equipment is used only where it is not reasonably practicable to use fall prevention equipment.

2.33 TEMPORARY WORKS

A contractor must appoint a temporary works designer in writing to design, inspect and approve the erected temporary works on site before use.

A contractor must ensure that all temporary works operations are carried out under the supervision of a competent person who has been appointed in writing for that purpose.

A contractor must ensure that-

- all temporary works structures are adequately erected, supported, braced and maintained by a competent person so that they are capable of supporting all anticipated vertical and lateral loads that may be applied to them, and that no loads are imposed onto the structure that the structure is not designed to withstand;
- all temporary works structures are done with close reference to the structural design drawings, and where any uncertainty exists the structural designer should be consulted;
- detailed activity specific drawings pertaining to the design of temporary works structures are kept on the site and are available on request to an inspector, other contractors, the Client, the Client's Safety Agent, or any employee;
- all persons required to erect, move, or dismantle temporary works structures are provided with adequate training and instruction to perform those operations safely;
- all equipment used in temporary works structure are carefully examined and checked for suitability by a competent person, before being used;
- all temporary works structures are inspected by a competent person immediately before, during and after the placement of concrete, after inclement weather or any other imposed load and at least on a daily basis until the temporary works structure has been removed and the results have been recorded in a register and made available on site;
- no person may cast concrete, until authorization in writing has been given by the competent person contemplated above;
- if, after erection, any temporary works structure is found to be damaged or weakened to such a degree that its integrity is affected, it is safely removed or reinforced immediately;

- adequate precautionary measures are taken in order to-
- secure any deck panels against displacement; and
- prevent any person from slipping on temporary works due to the application of release agents;
- as far as is reasonably practicable, the health of any person is not affected through the use of solvents or oils or any other similar substances;
- upon casting concrete, the temporary works structure is left in place until the concrete has acquired sufficient strength to safely support its own weight and any imposed load, and is not removed until authorization in writing has been given by the competent person
- the foundation conditions are suitable to withstand the loads caused by the temporary works structure and any imposed load in accordance with the temporary works design.
- provision is made for safe access by means of secured ladders or staircases for all work to be carried out above the foundation bearing level;
- a temporary works drawing, or any other relevant document includes construction sequences and methods statements;
- the temporary works designer has been issued with the latest revision of any relevant structural design drawing;
- a temporary works design and drawing is used only for its intended purpose and for a specific portion of a construction site; and
- the temporary works drawings are approved by the temporary works designer before the erection of any temporary works.

No contractor may use a temporary works design and drawing for any work other than its intended purpose.

2.34 EXCAVATION

A contractor must-

- ensure that all excavation work is carried out under the supervision of a competent person who has been appointed in writing for that purpose; and
- evaluate, as far as is reasonably practicable, the stability of the ground before excavation work begins.

A contractor who performs excavation work-

- must take reasonable and sufficient steps in order to prevent, as far as is reasonably practicable, any person from being buried or trapped by a fall or dislodgement of material in an excavation;
- may not require or permit any person to work in an excavation which has not been adequately shored or braced: Provided that shoring and bracing may not be necessary where-
 - the sides of the excavation are sloped to at least the maximum angle of repose measured relative to the horizontal plane; or
 - such an excavation is in stable material: Provided that-
 - permission has been given in writing by the appointed competent person contemplated above upon evaluation by him or her of the site conditions; and

- where any uncertainty pertaining to the stability of the soil still exists, the decision from a professional engineer or a professional technologist competent in excavations is decisive and such a decision must be noted in writing and signed by both the competent person and the professional engineer or technologist, as the case may be;
- must take steps to ensure that the shoring or bracing contemplated above is designed and constructed in a manner that renders it strong enough to support the sides of the excavation in question;
- must ensure that no load, material, plant or equipment is placed or moved near the edge of any excavation where it may cause its collapse and consequently endangers the safety of any person, unless precautions such as the provision of sufficient and suitable shoring or bracing are taken to prevent the sides from collapsing;
- must ensure that where the stability of an adjoining building, structure or road is likely to be affected by the making of an excavation, steps are taken to ensure the stability of such building, structure or road and the safety of persons;
- must cause convenient and safe means of access to be provided to every excavation in which persons are required to work, and such access may not be further than six metres from the point where any worker within the excavation is working;
- must ascertain, as far as is reasonably practicable, the location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed, and must before the commencement of excavation work that may affect any such service, take the steps that are necessary to render the circumstances safe for all persons involved;
- must ensure that every excavation, including all bracing and shoring, is inspected-
 - - daily, prior to the commencement of each shift;
 - - after every blasting operation;
 - - after an unexpected fall of ground;
 - - after damage to supports; and
 - - after rain,

by the competent person, in order to ensure the safety of the excavation and of persons, and those results must be recorded in a register kept on site and made available on request to an inspector, the Client, the Client's Safety Agent, any other contractor or any employee;

- must cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, to be –
 - adequately protected by a barrier or fence of at least one metre in height and as close to the excavation as is practicable; and
 - provided with warning illuminants or any other clearly visible boundary indicators at night or when visibility is poor, or have resort to any other suitable and sufficient precautionary measure where this is not practicable;
- must ensure that all precautionary measures stipulated for confined spaces as determined in the General Safety Regulations, 2003, are complied with by any person entering any excavation;

- must cause warning signs to be positioned next to an excavation within which or where persons are working or carrying out inspections or tests.

2.35 VENTILATION AND LIGHTING IN THE WORKPLACE

Every employer shall cause every workplace in his undertaking to be lighted in accordance with the illuminance values specified in the Schedule to the General Safety Regulations:

The Contractor must ensure that:

- the average illuminance at any floor level in a workplace within five meters of a task is not less than one fifth of the average illuminance on that task;
- glare in any workplace is reduced to a level that does not impair vision;
- luminaires and lamps are kept clean and, when defective, are replaced or repaired forthwith.

The contractor must ensure that every workplace in his undertaking is ventilated either by natural or mechanical means in such a way that –

- the air breathed by employees does not endanger their safety;
- the time-weighted average concentration of carbon dioxide therein, taken over an eight-hour period, does not exceed one half per cent by volume of air;
- the carbon dioxide content thereof does not at any time exceed three per cent by volume of air;
- the prescribed exposure limits for airborne substances therein are not exceeded; and
- the concentration therein of any explosive or flammable gas, vapour or dust does not exceed the lower explosive limit of that gas, vapour, or dust.

2.36 TUNNELLING

No person may enter a tunnel which has a height dimension of less than 800 mm.

2.37 SCAFFOLDING

A contractor must appoint a competent person in writing who must ensure that all scaffolding work operations are carried out under his or her supervision and that all scaffold erectors, team leaders and inspectors are competent to carry out their work as per the SANS 10085 of 2004.

A contractor using access scaffolding must ensure that such scaffolding, when in use, complies with the safety standards incorporated for this purpose into these Regulations under section 44 of the Act and SANS 10085. Scaffold must be;

- Level and balanced upon the correct footing such as base jacks, U-Jacks, and mobile wheels
- Have the correct Ledgers and bracing methods to secure the frames and Standards
- To be fully boarded with the correct edge protection on both the 0.500m and 1 metre height per working platforms.
- Working platforms to be in accordance with the Tables 4 and 5 of the SANS 10085 for weight restrictions
- Have the correct access that is fitted within the scaffold and grants access to the working platforms and must be fitted with a trap door system.

- Secured with fastening methods such as Reveal and fixed ties according to table 7 of SANS 10085. Buttresses to be used when required.
- Signage must be displayed to indicate if the scaffold is safe or unsafe to use.
- Trestles to be built in accordance with section 10.16.1 of the SANS 10085 and safety requirements to be met by the scaffolding inspector and scaffold supervisors on site.

2.38 TRAFFIC ACCOMMODATION

All traffic signs must be displayed as per the traffic management plan drawings.

Size of signs used must be as per the traffic management drawings and all signs to be visible and in good condition.

- Traffic management Plan issued per Road and Traffic act (chapter 13). Must be approved by the Traffic Chief and professional team.
- Plans for signage deployment must be in order and must be placed correctly.
- Traffic management plan must be submitted and must be suitable for the tasks being performed.
- Traffic plan must be implemented and controlled by the site's Traffic safety officer and flag persons.
- Jersey barriers, where used, to be linked.
- No signs to be obstructed.
- Displayed traffic signs must be maintained in a daily register to be checked morning and evenings after works have been finalised.

2.39 GENERAL PRACTICES WHEN WORKING AT HEIGHTS

- No Homemade structures or ladders will be permitted on the project.
- Surroundings to be clear of rubble.
- Fall protection, fall prevention, and fall rescue plans to be in place and communicated to site employees.
- Ladders to be structurally sound and not broken and in accordance to GSR 13A.
- Only competent persons may be allowed to work at heights
- Correct personal protective equipment to be used (safety harness and lanyard) and edge protection / lifelines to be used.
- GSR (6) 6. No employer shall require or permit any person to work in an elevated position and no person shall work in an elevated position, unless such work is performed safely from a ladder or scaffolding, or from a position where such person has been made as safe as if they were working from scaffolding.
- Construction regulation 10 of 2014 to be implemented when working at heights and to prevent any person from falling from heights.
- Employees required to perform work at heights or from fall risk position must be medically fit to perform such work, such employee's medicals must specify "Fall Risk" or "Working at heights" in the exposure section of the annexure 3 template.

2.40 HAZARDOUS CHEMICAL SUBSTANCES (HCS)

In addition to the requirements in the HCS Regulations, the principal contractor must provide proof in the Health and Safety Plan that:

- Material Safety Data Sheets (MSDS's) of the relevant materials / hazardous chemical substances are available prior to use by the contractor. All MSDS's shall be available for inspection by the agent at all times.
- Risk assessments are done at least once every 6 months.
- The relevant HCS's are being/going to be controlled by referring to:
 - Limiting the amount of HCS
 - Limiting the number of employees
 - Limiting the period of exposure
 - Substituting the HCS
 - Using engineering controls
 - Using appropriate written work procedures
 - The correct PPE is being used.
- HCS are stored and transported according to SABS 072 and 0228.
- Training with regards to these regulations was given.

The Health and Safety plan should refer to the disposal of hazardous waste on classified sites and the location thereof (where applicable).

The First Aider must be made aware of the MSDS and trained in how to treat HCS incidents appropriately.

2.41 NOISE INDUCED HEARING LOSS

Where noise is identified as a hazard the requirements of the NIHL regulations must be complied with and the following must be included / referred to in the Health and Safety Plan:

- Proof of training with regards to these regulations.
- Risk assessment done within 1 month of commencement of work.
- That monitoring carried out by an AIA and done according to SABS 083.
- Medical surveillance programme established and maintained for the necessary employees.
- Control of noise by referring to:
- Engineering methods considered
- Admin control (number of employees exposed) considered
- Personal protective equipment considered/decided on
- Describe how records are going to be kept for 40 years.

2.42 ALCOHOL AND DRUGS (GSR 2)

A contractor shall not permit any person who is or who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a site.

No employee shall be under the influence of or have in his or her possession or partake of or offer any other person intoxicating liquor or drugs.

An employer or a user, as the case may be, shall, in the case where a person is taking medicines, only allow such person to perform duties at the site if the side effects of such medicine do not constitute a threat to the health or safety of the person concerned or other persons at such site.

2.43 PERSONAL PROTECTIVE EQUIPMENT (PPE)

The Contractor shall carry out PPE or clothing needs analysis in accordance with his risk assessment, to determine the necessary PPE or clothing to be used during construction. The Contractor shall make provision to keep adequate quantities of appropriate, SABS approved PPE or clothing on site at all times.

The Contractor must ensure that personnel are trained in the correct use of PPE to be used.

The Contractor must ensure that lost, stolen, worn out or damaged PPE is replaced as required and receipt signed for by employees on site.

2.44 ASBESTOS

The Contractor shall ensure that all asbestos work is done only by registered "Asbestos Contractor" as prescribed by the Asbestos Abatement Regulations, 2020. The Contractor shall submit an Asbestos Certificate from Department of Labour which refer to the prescribed requirements. The Contractor shall notify The Client if there are any asbestos materials to be used on site.

Asbestos has been identified as a hazard at the workplace, the contractor must therefore, as per AAR 2020, include the following in the health and safety plan/file and must be implemented on site:

- An asbestos risk assessment must be carried out, as far as is reasonably practicable, immediately by a competent person and thereafter at intervals not exceeding 24 months.
- If asbestos-containing materials are identified a written asbestos management plan for the workplace must be prepared by a competent person.
- Train Employees, visitors and persons who may have incidental asbestos exposure to asbestos.
- The contractor may only undertake the type of asbestos work for which they are registered by the chief inspector.
- Must appoint an occupational health and safety representative as contemplated in section 17 of the Act.
- Appoint an asbestos removal supervisor for each asbestos work site.
- Adhere to the repair or removal methodology and associated control measures provided in the plan of work approved for that specific asbestos work.
- Ensure that the employee medical and training records are available on site for inspection and validation.
- For type 2 and type 3 asbestos work, ensure that air monitoring is in place.
- All asbestos contractor employees must be put under medical surveillance.
- Close off all asbestos containing or affected areas.
- The contractor must provide the required PPE, washing facilities and decontamination facilities as per the type of asbestos work.
- A document must be obtained from the asbestos disposal site for all asbestos waste removed from the workplace; all asbestos waste is disposed of only on sites specifically designated for this purpose
- When all asbestos is removed an inspection must be done by and approved inspection authority and an asbestos clearance certificate issued.
- Comply with the Prohibitions in regulation 24.

2.45 PRESSURE EQUIPMENT (INCLUDING GAS BOTTLES)

The Contractor shall comply with Pressure Equipment Regulations, including:

- Providing competency and awareness training to the operators;
- Providing PPE or clothing;
- Providing and maintain appropriate signage in areas where pressure equipment are used, as applicable;
- Inspect equipment regularly and keep records of inspections;
- Providing appropriate firefighting equipment (Fire Extinguishers).

Under pressure equipment to have the following in place;

- Service date
- Seals on valves with no leaks and not broken
- Signage to be visible
- Gauges in working condition and be visible
- Pressure equip Regs 6. (1) The user shall ensure that the pressure equipment is operated and maintained within its design and operating parameters.

2.46 FIRE EXTINGUISHERS AND FIRE FIGHTING EQUIPMENT

The Contractor shall provide adequate, regularly serviced fire extinguishers located at strategic points on site. The Contractor shall keep spare serviced portable fire extinguishers. The Contractor shall have adequate persons trained or competent to use the Fire Fighting Equipment.

Safety signage shall be posted up in all areas where fire extinguishers are located.

2.47 LIFTING MACHINERY AND TACKLE

The Contractor shall ensure that lifting machinery and tackle is inspected before use and on a monthly basis. The Contractor shall have lifting machinery and tackle inspector who will inspect the equipment at intervals required by the Driven Machinery Regulations, considering that:

- All lifting machinery and tackle have a safe working load clearly indicated
- Regular inspection and servicing is carried out
- Records are kept of inspections and of service certificates
- Thorough examinations are carried out by competent personnel at the frequencies required by legislation
- There is proper supervision in terms of guiding the loads which includes a trained banks man to direct and check lifting tackle if it is safe for use
- Forklift to be inspected every year and lift plan every 2 years
- Load test certificate to be no older than 6 months
- Sufficient props to be used and max weight to be displayed

- Slings to be checked with regard to integrity, chains, serial numbers, checked for tears, cuts links and all other materials
- Hooks to be oiled, not in a fixed position and closed to prevent materials from slipping/falling off
- Lifting equipment must be used for the scope of work carried out

2.48 LADDERS AND LADDER WORK

The Contractor shall ensure that all ladders are numbered and inspected regularly keeping record of inspections. It should be noted that Aluminium ladders are preferred to wooden ladders.

2.49 GENERAL MACHINERY

The Contractor shall comply with the Driven Machinery Regulations, which include inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE or clothing and training those that use machinery and enforce compliance.

2.50 PORTABLE ELECTRICAL TOOLS

The Contractor shall ensure that use and storage of all explosive actuating fastening devices and portable electrical tools follow relevant legislation.

The Contractor shall consider that:

- A competent person undertakes routine inspections;
- Only authorised persons use the tools;
- There are safe working procedures applied;
- Awareness training is carried out and compliance is enforced at all times; and
- PPE and clothing is provided and maintained.

2.51 HIGH VOLTAGE ELECTRICAL EQUIPMENT

The Contractor shall ensure that, where the work is under, on or near high-voltage electrical equipment the Electrical Installation Regulations, together with safety instructions (Regulations of the Owner of the Equipment) are complied with. Such equipment includes:

- Eskom and the Local Authority equipment
- The Contractor's own power supply; and
- Electrical equipment being installed but not yet taken over from a Contractor by The Client.

2.52 PUBLIC HEALTH AND SAFETY

The Contractor shall ensure that each person working on or visiting a site, and the surrounding community, shall be made aware of the dangers likely to arise from onsite activities and the precautions to be observed to avoid or minimize those dangers. Appropriate health and safety signage shall be posted at all times.

2.53 NIGHT WORK

The Contractor shall not undertake any night work without prior arrangement and a written permit from the Client. The Contractor shall ensure that adequate lighting is provided for all night work and failure to do so shall result in work being stopped.

2.54 ENVIRONMENTAL CONDITIONS AND FLORA AND FAUNA

The Contractor must be mindful of adverse weather conditions upon the health and safety of the workforce. This includes inclement weather, strong wind, heat stress, extreme cold, etc. The Contractor's risk assessment process must consider the risks associated with such weather conditions. The same is true when working in an environment where there is a risk to employees' health and safety from presence of poisonous flora, or wildlife (including bees, snakes, etc). The Contractor's risk assessment process must take these risks into account.

The contractor will be responsible for any act or omission on the part of any of its directors, officers, representatives, Employees, agents, Contractors or Sub-Contractors which amount to a breach of Environmental Legislation.

The contractor must take all reasonable measures to ensure that its directors, officers, representatives, Employees, agents, Contractors or Sub-Contractors comply with Environmental Legislation in respect of the construction, operation and maintenance of the site.

2.55 OCCUPATIONAL HEALTH

Exposure of workers to occupational health hazards and risks are quite common in any work environment, especially in construction. Occupational health hazards and risks exposure is a major problem, and all Contractors are to ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards and risks.

The occupational hazards and risks may enter the body in three ways:

- Inhalation through breathing e.g. cement dust;
- Ingestion through swallowing maybe through food intake;
- Absorption through the skin (pores) e.g. painting or use of thinners.

The contractor is required to ensure that all his personnel are medically fit prior to being allowed onto the work site.

All Contractors should ensure that Occupational Hygiene surveys are conducted as per the Occupational Health and Safety Act to ensure employees are not exposed to hazards. Risk Assessments should identify areas where surveys are to be conducted.

2.56 CONFINED SPACES

Confined space work must be closely monitored by a competent person appointed by the contractor, to include, but not restricted to, ensuring that the confined space is sufficiently ventilated prior to entry. Oxygen levels to be tested in confined space to ensure that it is safe for entry. Permit system to be in place to declare confined space safe for entry prior to entry. PPE must be worn (such as proper masks) if air supply is insufficient or not of sufficient quality.

Sufficient training must take place in use of all confined space monitoring and access equipment prior to any works commencing in such confined space. It is strongly recommended that a tripod and winch system be in place to afford easy access and egress and for emergency evacuation from the confined space (manholes and chambers). Please also refer to GSR5 on safety requirements for Work in Confined Spaces.

2.57 ERGONOMICS REGULATION OF 2019

"competent person" in relation to ergonomics, means a person who– (a) has in respect of the work or task to be performed the required knowledge, training and experience in ergonomics and, where applicable, qualifications specific to ergonomics; provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualifications Framework Act, 2008 (Act No. 67 of 2008), those qualifications and that training must be regarded as the required qualifications and training; and (b) is familiar with the Act and the applicable regulations made under the Act;

"ergonomic risk" means a characteristic or action in the workplace, workplace conditions, or a combination thereof that may impair overall system performance and human well-being;

"ergonomic risk assessment" means a programme, process, or investigation to identify, analyse, value, and prioritise any risk from exposure to ergonomic risks associated with the workplace;

"ergonomics" means the scientific discipline concerned with the fundamental understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimise human well-being and overall system performance;

The ergonomics regulations will apply to any employer or self-employed person who carries out work at the workplace who may expose any person to an ergonomic risk in the work place and any designer, manufacturer, importer or supplier of machinery, plant, or work systems for the work place.

An employer must, before the commencement of any work that may expose employees to ergonomic risks, have an ergonomic risk assessment performed by a competent person.

The ergonomic risk assessment must be done at intervals not exceeding two years and must include the following;

- a complete hazard identification and all persons who may be affected by the ergonomic risk.
- how employees may be affected by the ergonomic risks;
- the analysis and evaluation of the ergonomic risks;
- the prioritisation of ergonomic risks.

An employer must review the relevant ergonomic risk assessment if:

- such assessment is no longer valid;
- control measures are no longer effective;
- technological or scientific advances allow for more effective control methods;
- there has been a change in –
- the work methods;
- the type of work carried out; or

- the type of equipment used to control the exposure; and
- an incident occurs or medical surveillance reveals an adverse health effect, where ergonomic risks are identified as a contributing factor.

An employer must ensure that an employee is placed under medical surveillance, which is overseen by an occupational medicine practitioner, if–

- the ergonomic risk assessment referred to in regulation 6 indicates the need for the employee to be placed under medical surveillance; or
- an occupational health practitioner recommends that relevant employees must be under Medical surveillance, in which case the employer may call upon an occupational medicine practitioner to ratify the appropriateness of such recommendation.

An employer must ensure that the medical surveillance consists of:

- in the case of a new employee, an initial health examination before the employee commences employment or within 30 days of commencement of such employment;
- a periodic health examination informed by the ergonomic risk assessment, at intervals specified by an occupational medicine practitioner, but not exceeding two years; and
- an exit health examination informed by the ergonomic risk assessment.

Both the Client and the Contractor have a duty in terms of health and safety legislation to do all that is reasonably practicable to make members of the public and others being affected by the construction processes aware of possible risks and put preventative measures in place to mitigate the risks. The public and/or visitors shall go through a brief health and safety induction detailing hazards and risks they may be exposed to and what measures are in place to control these hazards and risks.

2.58 SUSPENSION OF THE OPERATIONS

The client may, on written notice, instruct the contractor to immediately suspend activities on site if, in their reasonable opinion, an Unsafe Condition has occurred or is likely to occur.

On receipt of a notice, the contractor must suspend all site activities from the time and date stipulated in such notice until the client directs the contractor, in writing, to continue.

3. OTHER HEALTH AND SAFETY SPECIFICATION REQUIREMENTS

What	When	Output
Awareness training (Toolbox Talks)	At least weekly and before hazardous work is carried out	Attendance Register
Health and Safety Committee Meetings	Monthly	Minutes signed by the employer (Contractor) covering: Health and Safety Representative Checklist Safety report from Safety Officer and Safety Agent
Health and Safety Reports	Monthly	Report covering:

		Incidents/Accidents and Investigations, Non-conformance Health and Safety Training HIRA Updates Internal and External Audits
General Inspections	As per Health and Safety Specification and OHSA	Report on Health and Safety Specification and OHSA compliance: Scaffolding, Lifting Machinery, Excavation
General Inspections	Monthly	Covering: Firefighting, Equipment, Portable Electrical Equipment, Ladders
Record keeping	Ongoing	Covering: General complaints, Fines, General incidents, MSDS, Surveillance Medicals, Inspection Register, Dept of Labour Notices
Permits	Before commencement with certain activities	As stipulated by the OHSA / Construction Regulations

Key: OHSA – Occupational Health and Safety Act, 1993

ANNEXURE A – Requirements for the Safety Plan Assessment

The Contractor must note that the information below is pertinent to the compilation of their safety plan response to this site-specific safety specification and it would be preferred if the Safety Plan is written in the order of the assessment documented below.

Item	Notes
Project Directory	Please state details of Project Client, Project Manager/Principal Agent, Safety Agent, Consulting Engineer, etc. (Name, contact details).
Contractors Directory	Please indicate if you will be using Contractors on this project, if yes, include their details, trade, and workers compensation details.
Other Parties Directory	Please indicate contact details for any services applicable (electricity, water, etc.) as well as Department of Labour and Emergency Services.
Project Safety Statement	The Project Safety Statement must be included in the Safety Plan.
Health and Safety standards for the project (OHS Act, construction regulations, basic conditions of employment, etc.)	Health and Safety standards must be included in the Safety Plan.
Project Particulars	Scope of works must be included in the Safety Plan. This is critical.
Existing environment – Structures and Surroundings, Services (Electrical, Water, Sewerage, etc.), Traffic Arrangements, Parking, Access to Site, Storage of Plant and Materials	Please include these items in the plan. The items must be Site Specific, the location of services and services that will be affected must be mentioned.
Management Structure for safety on the Project	A structured organogram with names of the responsible people must be included.
Security Procedures	Please indicate if a security company will be appointed and include the contact information in the Safety Plan.
Registers list and inspection frequency	A list of the Inspection Registers that will be on file must be included in the Safety Plan.
Design Co-ordination	Please indicate your procedure for implementation of design changes by designer on the project, and the procedures for liaison and implementation of temporary works design on the project.
Contractor Co-ordination	Mention must be made of how Contractors will be co-ordinated on site to ensure that they work together and not adversely affected health and safety.
Housekeeping, stacking and storage	Housekeeping policies and procedures must be included in the Safety Plan.
Waste Disposal Arrangements	Waste disposal arrangements procedures must be included in the Safety Plan.
Noise and dust control	Please indicate if any noisy operations (more than 85 decibels) will be carried out and what measures will be used to reduce noise exposure to workforce.
Plant and Equipment	A list of plant and equipment to be used on site must be included in the Safety Plan.
Safety Monitoring Arrangements	The name, contact details and SACPCMP registration status of the Safety Officer must be included in the Safety Plan. State how often the Safety officer will be on site (note safety specification requirement in section 1.7).
Consultation/communication arrangements with Employees	State how information will be given to employees e.g. notice board.

Selection of Contractors Procedures	Principal contractor must state what health and safety procedures they will use to assess the competence and resources of their contractors on site.
Activities with risk to Health and Safety (Risk Assessment)	A Baseline Risk Assessment must be included in the Safety Plan, it must address the Risks identified in the Safety Specification as well as the risk of any other hazards that the Principal Contractor is aware of that are relevant to the site.
Hazardous Substances	Must be listed in the Safety Plan and addressed in the Risk Assessment.
First Aid and Medical Procedures	Please indicate name of first aider, position of first aid box, location of nearest medical facility and emergency numbers.
Fire and Emergency Procedures	List of emergency telephone numbers must be drawn up and included in the Safety Plan. The position of Fire Extinguishers, Assembly Point location, fire drill frequencies, numbers of fire marshals, etc.
Accident and Incident Reporting and investigation	State the Accident and Incident Reporting and investigation procedures of your company.
Welfare and Site Facilities	Elaborate on toilets and eating areas, water provision, COVID-19 ablution provision, how will workers be protected during wet weather conditions etc.
Information for Contractors	
Training Requirements	Training requirements must be identified and recorded.
Appointed Persons, Supervision	The required appointments must be identified. A list of the appointed persons must be included in the Safety Plan.
Site Rules	The Site Rules must be included in the Safety Plan.
Personal Protective Equipment	The necessity must be identified by Risk Assessments, the required PPE for site risks and COVID-19 control measures.
Health & Safety File arrangements	Please indicate arrangements for the return of the Health and Safety File to the safety agent at the end of the project.

ANNEXURE B – LEGAL APPOINTMENTS

The contractor shall make the following appointments, as required:

- Chief Executive Officer (OSH Act 16(1))
- Contract Director/Manager (OSH Act 16(2))
- Construction Manager (CR 8(1))
- Construction Supervisor (CR 8(7))
- Assistant Construction Supervisor (CR 8(8))
- Construction Safety Officer (CR 8(5))
- Traffic Safety Officer
- Safety Representative (where > 20 employees on site)
- Temporary work Designer (CR 12(1))
- Temporary work Supervisor (CR12(2))
- Construction risk assessor (CR 9(1))
- Excavation Supervisor (CR13(1)(a))
- Scaffold Supervisor (CR16(1))
- Construction Vehicle and Mobile Plant Operator (CR23(1)(d)(i))
- Controller of Temporary Electrical Installations (CR24(c))
- Stacking Supervisor (CR28(a))
- Fire Extinguishing Equipment Inspector (CR29(h))
- Fall Protection Plan Developer (CR 10(1)(a))
- Incident Investigator (OSH Act 9(2))
- Competent Person – Confined Spaces (GAR 5(1))
- Asbestos Removal Supervisor

ANNEXURE C – SAFETY SPECIFICATION AND BASELINE RISK ASSESSMENT ISSUE REGISTER

Date of Original Safety Specification Compilation	Compiled By	Issue Date
June 2024	Victoria Ngwenya	June 2024

Developed by:



Sign.....
Construction Health & Safety Agent (PrCHSA)
Ingwenya Health Safety & Risk Consultants
Date: 06/2024

Approved by:



Sign.....
Client Patrick Phiri
Department of Health, North West Province
Date: 06/2024

Issued to:

Sign.....
Principal Contractor / Contractor (16.1/16.2)
Date:

Issued to:

Sign.....
Designer / Architect
Date:

Client / Construction Health & Safety Agent Addendums:

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Acknowledgement:

I, _____ representing

_____ (Contractor), have satisfied myself with the content of this Health and Safety Specification and shall ensure that our employees and contractors on site comply with the requirements of this document, our safety documentation and health and safety legislation.

Signature of Contractor

Date

Comments:

ANNEXURE D - BASELINE RISK ASSESSMENT

Irrespective of the risk presented on site, it must be ensured that sufficient supervision is in place, that personnel are trained in accordance with legislation, including the requirement for site specific inductions on site to inform personnel on site of the risks and hazards applicable to the site. Site supervision is responsible for ensuring that the control measures required below are implemented on site.

	Hazard	Risk	Minimum Control Measures
1	Asbestos Pipes	Release of asbestos fibres	• Ensure safe access and egress is provided • Erect physical barriers to prevent entry by unauthorised persons, as applicable • damp down exposed area to contain fibre release • Personnel involved to wear asbestos respiratory protection • Exclusion zone may be required • Only Department of Labour registered asbestos contractors may work with asbestos, and strictly in accordance with the requirements of the Asbestos Regulations.
2	Asphalting	Fire Burns to skin Skin disease	• Suitable fire extinguisher to be in place prior to commencement of works • Ensure competent personnel using materials and competent and trained machinery/equipment operators • Ensure there is a safe place of work at all times • Ensure all personnel wear suitable and sufficient personal protective equipment (PPE) including safety boots, reflective vests and gloves • Health and Safety data sheet required
3	Bricklaying	Caustic contamination with mortar Contact with sharp bladed tools	• Use only trained personnel • Safe means of access to be provided • Safe/Suitable working platform required where working at height • PPE for mortar to include gloves where practicable and goggles/masks where there is a risk of contamination
4	Compacting and Filling	Contact with tipping materials Contact with moving plant Vehicles/personnel falling into excavations Contact with underground services	• Trained banksman to control vehicles movement • Only trained personnel use plant • Personal Protective Equipment to be worn • Personnel to stand clear as materials are being tipped • Use stop blocks and signs to warn vehicles of excavations, where applicable • Stand clear of plant whilst materials are being compacted • Establish position of underground services and protect services from damage
5	Compactor Operations	Crushing of feet	• Only trained and competent personnel to use the machine Ensure operative wears steel toe cap shoes or boots at all times
6	Concrete Pumping	Sprains and strains Hit by pump Concrete burns Collapse/bursting of structure	• Personnel to be in clear vision of pump operator • Trained pump operator • Personnel working with the concrete to wear the appropriate personal protective equipment to protect against cement burns • Design of structure being loaded to be approved by competent designer and inspected before, during and after loading

			Pump to be well maintained
7	Confined Spaces	Suffocation Fumes	- Ensure that confined space is sufficiently ventilated - Wear personal protective equipment such as proper masks if air supply insufficient or not of sufficient quality - Test oxygen levels in confined space to ensure that is safe for entry - Ensure that emergency procedures in place
8	Electrical Commissioning	Electric shock	- Personnel to comply with permits to work issued by Client - Personal protective equipment to be worn by employees to prevent electric shock - First aid treatment to be readily available - Only competent and trained persons may decommission or commission electrical equipment
10	Electric Tools and Electrical Installations	Electric shock Fire	- Electric tools and installations to be in good condition - Inspect electric tools before use - Do not use electric tools in wet/damp conditions - Use personal protective equipment such as insulated gloves - Electrical installations register to be maintained, inspected by competent person
11	Excavations (Working in and around)	Toxic fumes Collapse of trench walls/trapping Falling into excavation	- Deep excavations / monitor air for toxic fumes - Prevent collapse by battering back sides to a safe angle or install temporary support - Protect vehicles and the public from falling into excavations – provide barriers, signage, etc. as necessary - Beware of undermining of other structures (e.g. buildings, scaffolds) - Record excavation inspections by competent person on daily basis - Provide suitable means of access/egress in case of emergency. - Excavations formed by explosives must be accompanied by method statement approved by Client
12	Fire	Injuries to workers, pedestrians, residents, road users, damage to property through fire	- No littering on site which could become fire hazard, maintain site in clean condition. - No fires to be lit on site. Have a working fire extinguisher at hand at all times. - No smoking or naked flame near flammable substances or in unauthorised areas - Ensure proper storage/use of Petrol/diesel/flammable substances – post warning notices
13	Flammable Liquids and Gases (Use of)	Fire Explosion	- No littering on site which could become fire hazard, maintain site in clean condition. - Have a working fire extinguisher at hand at all times. - No smoking or naked flame near flammable substances or in unauthorised areas - Ensure proper storage/use of Petrol/diesel/flammable substances – post warning notices - Equipment must be in good condition, maintained - Personnel using substances must be trained in safe use and risks
14	Hand tools	Injuries caused by use of hand tool	- Ensure: - Tool is correct for job - Tool is in good order and suitably sharp

		Impact with the tool Falls due to access problems Contamination with substance being worked	- Personnel must be competent/instructed in tool usage and tool safety - Lighting is sufficient - Access is safe, working platform is secure, leading edge is guarded - Operative is wearing all necessary PPE
15	Hazardous Substances	Injuries to workers through use of hazardous substances, e.g. injuries to eyes, skin, etc.	- Use substances in accordance with data sheet, particularly reference protective clothing required (example: gloves, goggles, etc.) - Know what First Aid measures are - Have welfare facilities available for washing of hands, etc.
17	Lifting Operations	Falling material Crushing by materials Hand injuries to the slinger Toppling crane	- Check test certificate - Check examination certificate - Check inspection have been carried out - Check certificates for lifting equipment (chains, slings, shackles, etc.) - Ensure lifting gear is rated to carry load (SWL) - Ensure materials being lifted are properly packaged and slung. - Be aware that there should be a minimum clearance of 600mm between any slewing parts of a crane and any fixed installation to prevent being trapped. - Access to the work area during lifting operations is to be restricted to those involved with and trained in the work in hand. Do not allow members of the public to gain access to the area. - Only trained banksmen to be used. - The crane driver and the banksman are to ensure that the signals given are clearly understood.
18	Manhole Rings and Pipes Storage	Rolling of rings Collapse of pipes Crushing of persons Stockpile collapse	- Manhole rings must be stored flat to prevent them being rolled. - Banks of pipe stockpiles are not to be broken until they are ready for use. - Personnel must stand to the side when breaking bands so as not to be hit by falling pipes. - Pipes must be wedged to prevent rolling
19	Manual Handling of General Items	Muscular skeletal injuries if the load is too heavy or awkward Operative falling/ tripping Contamination from the substance being carried Fall of material being carried	- Personnel should be aware of safe manual handling techniques - Personnel to wear Personal Protective Equipment when carrying items, e.g. safety footwear and gloves. - Ensure good housekeeping against tripping/fall hazards. - Operative to get assistance if load too heavy- team lift if necessary. - Utilise mechanical lifting and carrying aids where possible. - Personnel to ensure access equipment, ladders will take weight of operative and load being carried. - Personnel to ensure item being carried is properly bonded or is not be liable to break apart whilst being manually handled.
20	Material Hoist	Mechanical failure Overloading Hoist gateway being left open at landings	- Safe working limit to be indicated on hoist. - Hoist operator to be trained/ competent. - Regular maintenance and inspection of hoist by competent person - Records of maintenance and inspection to be maintained. - Hoist gate should be fitted with mechanical and electrical interlocking devices.

21	Members of Public – Protection of	Injury to member of public and road users from site works	- Barriers and signage to be in place - Workers must warn away any members of public from the works - Footpaths and bridges which are open to public must be closed off if in area of works or otherwise made safe so that no injury occurs to members of public - Traffic turning into site – traffic management and signage as required. - Signage to be on road at site entrance warning motorists that construction traffic turning into/out of site access. Keep roads free of mud where possible - Refer to plant risk assessment for details on plant safety precautions - NOTE: SIGNAGE TO BE POSTED ON SITE TO WARN OF CONSTRUCTION TRAFFIC MOVEMENTS. SAFE MEANS OF ACCESS FOR BOTH CONSTRUCTION TRAFFIC TO SITE AND PRIVATE HOMEOWNERS MUST BE AGREED.
22	Mobile Crane Erection and Dismantling and Use	Collapse of structure Overturning of structure Falling materials	- Ensure emergency procedures are in place and all operative are aware of the details - Only use trained and competent operators for the erection and dismantling and use of cranes - Ensure crane driver is trained and holds certification as proof. Must have valid medical certificate of fitness. - Ensure there is safe means of access available at all times - Ensure the mobile crane driver has 360° vision if not ensure a fully trained banksman is used - Banksman to wear reflector vest to identify himself to the crane driver - Ensure all personnel wear suitable and sufficient personal protective equipment - Consider creating exclusion areas
23	Night Work	Security Lighting	- The Contractor shall not undertake any night work without prior arrangement and a written permit from the Client. - The Contractor shall ensure that adequate lighting is provided for all night work and failure to do so shall result in work being stopped.
24	Noise and Dust	Breathing in dust can cause long term health problems, noise can damage hearing	- Wear respiratory and hearing protection - Dampen down and minimise dust where possible.
25	Overhead Services (Working near)	Contact with live services causing injury to personnel Damage caused to services	- Maintain safe clearance levels - Establish presence of any services via proper walk-through survey of site and/or means of service drawings - Wear personal protective clothing - Ensure height of plant/vehicles does not compromise or exceed clearance levels for overhead services - Obtain information on clearance levels from service provider
26	Plant or Vehicles and Equipment Operation	Workers injured by passing traffic Road users and pedestrians at risk from plant operation Noise	- Implement traffic protection measures - Trained and competent operators must be used - Check plant and vehicles on daily basis before use and record inspections. Maintain vehicles in safe condition. - Medical certificates of fitness required for construction plant. - Crossing of road by construction vehicles or machines must be limited to the practical minimum - Plant and vehicles must be fitted with amber rotating beacons and reverse alarms.

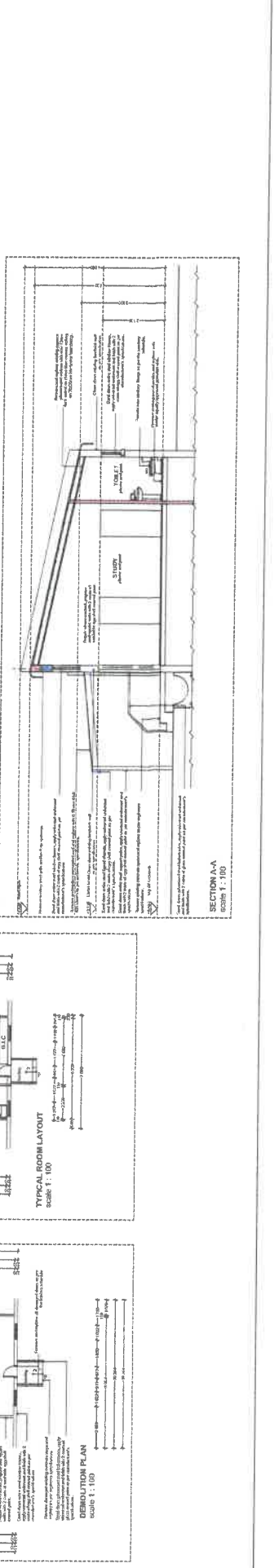
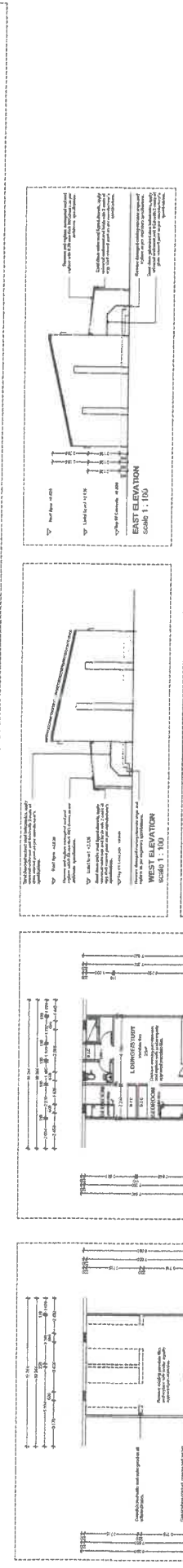
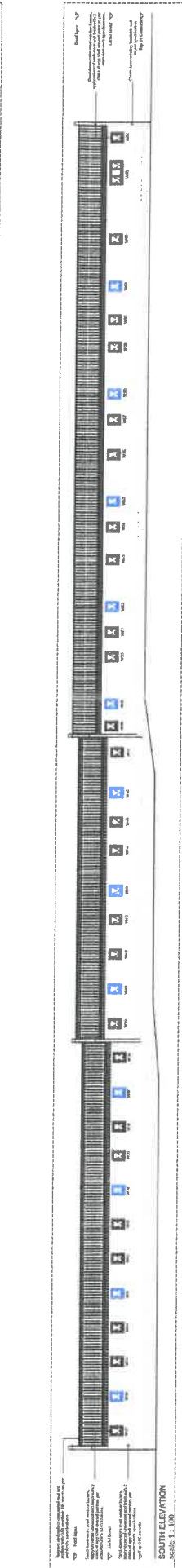
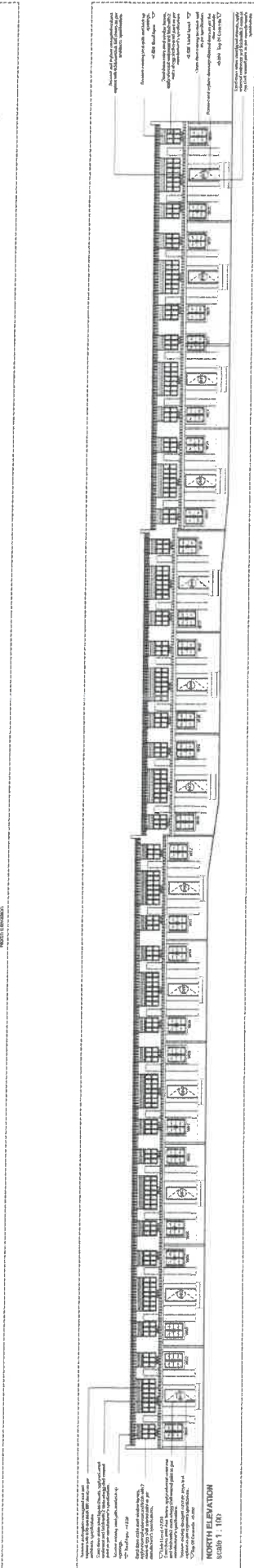
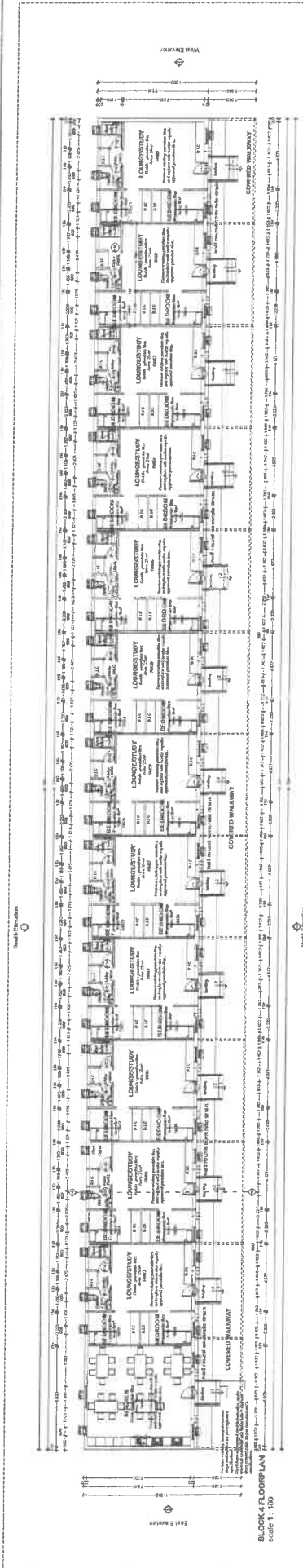
			Wear appropriate protective clothing/equipment, e.g. goggles, gloves, ear defenders, etc. as appropriate.
27	Plastering	Falling materials Fall from height Contact with materials	- Ensure standard safety procedures are followed - Ensure there is a safe working area - Ensure safe access and egress - Ensure competent personnel are used
28	Plumbing	Falling material Falling from height Fire Exposure to lead fumes	- Ensure standard safety procedures are followed at all times - Only use trained and competent personnel - Ensure there is a safe working area at all times - Ensure materials are stored neatly - Ensure there is safe access and egress at all times - Ensure all personnel wear suitable and sufficient personal protective equipment - Consider a hot works permit system prior to commencing any hot works - Make sure emergency procedures are in place and ensure all personnel are aware of where to go in case of a fire
29	Precast Slab / Unit Laying and Fixing	Falls Falling materials Manual Handling	- Emergency procedures in place and personnel explained details - Use competent personnel - Ensure suitable and sufficient access and egress is provided - Safe place of work must be provided - Ensure all personnel wear correct personal protective equipment - Exclusion zone may be required for protection against risk of falling objects
31	Scaffold Erection/ Dismantling	Personnel falling from a height Items of scaffold falling onto personnel Scaffold collapsing onto those below	- Ensure - scaffold is designed to take the imposed loads - scaffolding is constructed properly - scaffold is not overloaded - scaffolders are fully trained - scaffolding is regularly checked by competent person and record of inspection retained. Written inspections to be recorded on weekly basis - scaffolders must adhere to the safe systems of work. - all fall arrest equipment to be checked and certified in good working order - that ALL understand the safe system of work
32	Snakes	Snake bite	- Qualified first aider required for site who can treat snakebite - Snake bite kit to be on hand - Check area before working - Find out nearest hospital and get emergency telephone numbers.
33	Temporary Works – shoring, scaffold, falsework, formwork	Collapse of form work	- Wear personal protective equipment such as gloves and goggles - Formwork must be built by trained person and also be inspected by competent person and results entered into register on site
34	Underground Services	Striking of buried services	- Make all necessary enquiries to establish what services are in the area. Consult drawings and advice from service provider (e.g. Municipality or ESKOM) when planning work. - Assume all service to be live (Unless confirmation is received to confirm that services are isolated or otherwise made safe). Do

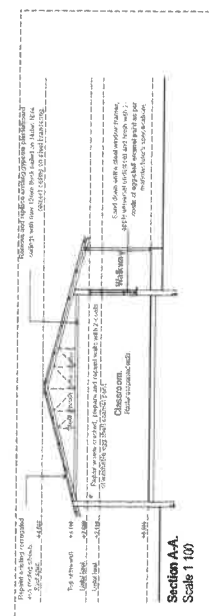
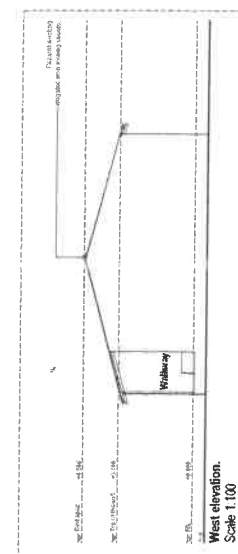
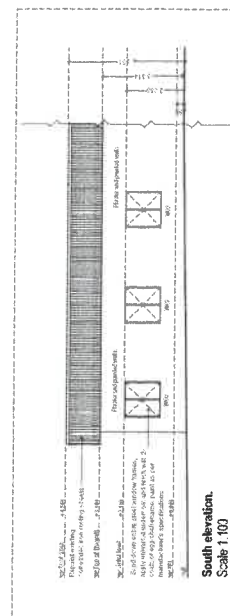
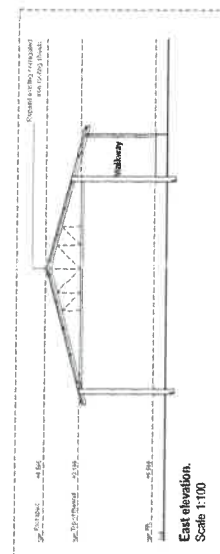
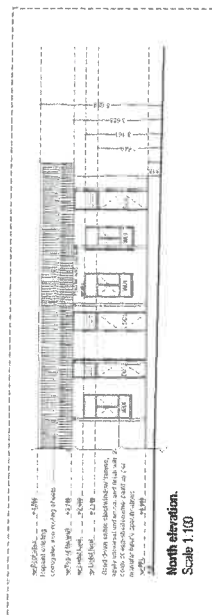
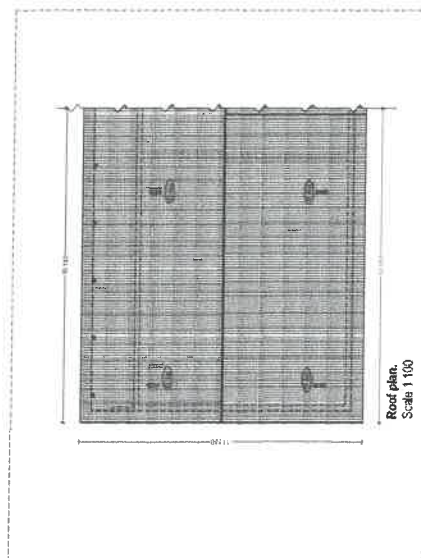
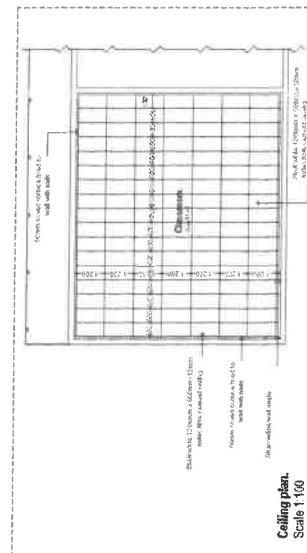
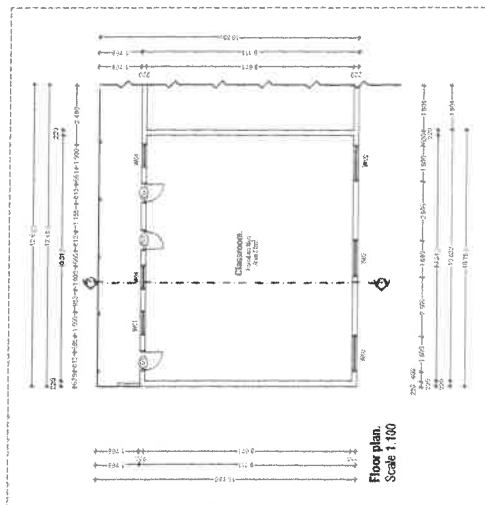
			not work near live services without authorisation from site management. • Comply with the requirements of the safe system of work for underground services. • Where available, locate services with a locator • Hand dig around services
35	Working at Height	Personnel falling from height Falling debris Those beneath being injured	• All access equipment is properly constructed (inspections record must be maintained) • Only trained personnel construct, dismantle or control the access equipment • All access equipment must have full toe boards and guardrails - comply with SANS 10085 on erection, use and dismantling of scaffolding • No access equipment may be loaded above the level of the guardrail • No access equipment to be loaded above its safe working load • Where work involves leaning out on an open leading edge, then all personnel are to be fitted with full body harness. The harness must be connected at all times • All fall arrest equipment to be correctly maintained • Ensure if ladders are being used for access, they are either footed or tied. Also, the ladder must be set at the correct level of 1 in 4 or approximately 75°
37	Steel Erection	Falls from height Falling components Contact injuries from falling lifting equipment	• Adhere to all general precautions for working at height (See risk assessment below) • Barrier off / exclude area below work • All lifting appliances to be examined and inspected • Inspection register in place and up to date • All personnel to be trained and competent and wear clipped on safety harnesses when working at height • Ensure that lifting equipment (slings, chains, shackles) test certificates are current and on site. • Competent persons only to connect loads and direct plant
38	Steel Fixing	Back injuries caused by manual handling Eye injuries from tie wire Trips / falls Falling from height	• PPE must include safety boots and goggles • Manual handling training may be required • Care to be taken when working near overhead lines • Use only trained personnel • Provide safe means of access • Maintain and regularly inspect all lifting appliances and equipment • Cap starter bars to prevent injuries where feasible • Construct scaffold walk ways to cross reinforcing mesh, as required



SECTION E DRAWINGS

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1. All drawings shall be made in accordance with the latest edition of the British Standard BS 1192:2009.
2. All dimensions shall be in millimeters unless otherwise stated.
3. All materials shall be of the highest quality and shall be suitable for the intended use.
4. All work shall be carried out in accordance with the latest edition of the British Standard BS 5268:2009.
5. All work shall be carried out in accordance with the latest edition of the British Standard BS 5269:2009.
6. All work shall be carried out in accordance with the latest edition of the British Standard BS 5270:2009.
7. All work shall be carried out in accordance with the latest edition of the British Standard BS 5271:2009.
8. All work shall be carried out in accordance with the latest edition of the British Standard BS 5272:2009.
9. All work shall be carried out in accordance with the latest edition of the British Standard BS 5273:2009.
10. All work shall be carried out in accordance with the latest edition of the British Standard BS 5274:2009.

LEGEND

1. All dimensions shall be in millimeters unless otherwise stated.
2. All materials shall be of the highest quality and shall be suitable for the intended use.
3. All work shall be carried out in accordance with the latest edition of the British Standard BS 5268:2009.
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10. All work shall be carried out in accordance with the latest edition of the British Standard BS 5275:2009.

RISIMATI ENGINEERS
17-JAC FOR REFORMATION
DATE: 2003.1.04

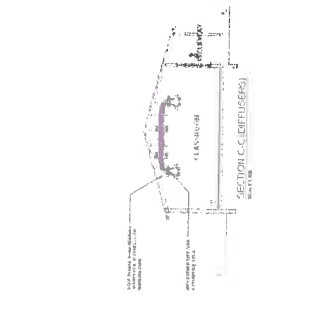
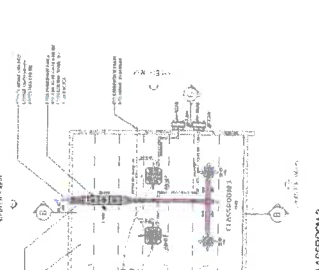
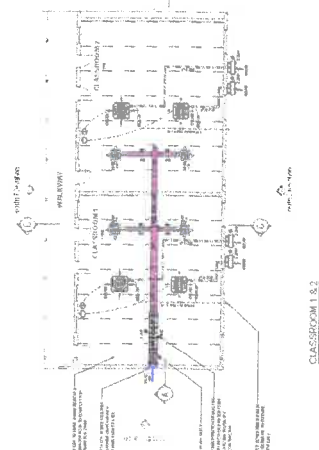
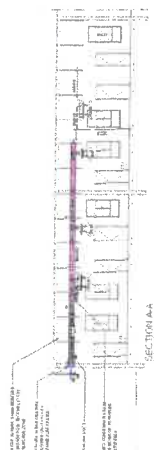
FRESH AIR FANS

FAN NO.	FAN TYPE	FAN SPEED	FAN CAPACITY	FAN EFFICIENCY	FAN WEIGHT
1	17-JAC	1700	1700	1700	1700
2	17-JAC	1700	1700	1700	1700
3	17-JAC	1700	1700	1700	1700
4	17-JAC	1700	1700	1700	1700
5	17-JAC	1700	1700	1700	1700
6	17-JAC	1700	1700	1700	1700
7	17-JAC	1700	1700	1700	1700
8	17-JAC	1700	1700	1700	1700
9	17-JAC	1700	1700	1700	1700
10	17-JAC	1700	1700	1700	1700

DX AIR CONDITIONING UNITS

UNIT NO.	UNIT TYPE	UNIT CAPACITY	UNIT EFFICIENCY	UNIT WEIGHT
1	17-JAC	1700	1700	1700
2	17-JAC	1700	1700	1700
3	17-JAC	1700	1700	1700
4	17-JAC	1700	1700	1700
5	17-JAC	1700	1700	1700
6	17-JAC	1700	1700	1700
7	17-JAC	1700	1700	1700
8	17-JAC	1700	1700	1700
9	17-JAC	1700	1700	1700
10	17-JAC	1700	1700	1700

1. All dimensions shall be in millimeters unless otherwise stated.



RISIMATI ENGINEERS
17-JAC FOR REFORMATION
DATE: 2003.1.04

ORINET BMS SCHOOL
17-JAC FOR REFORMATION
DATE: 2003.1.04

17-JAC FOR REFORMATION
DATE: 2003.1.04

17-JAC FOR REFORMATION
DATE: 2003.1.04

NOTES

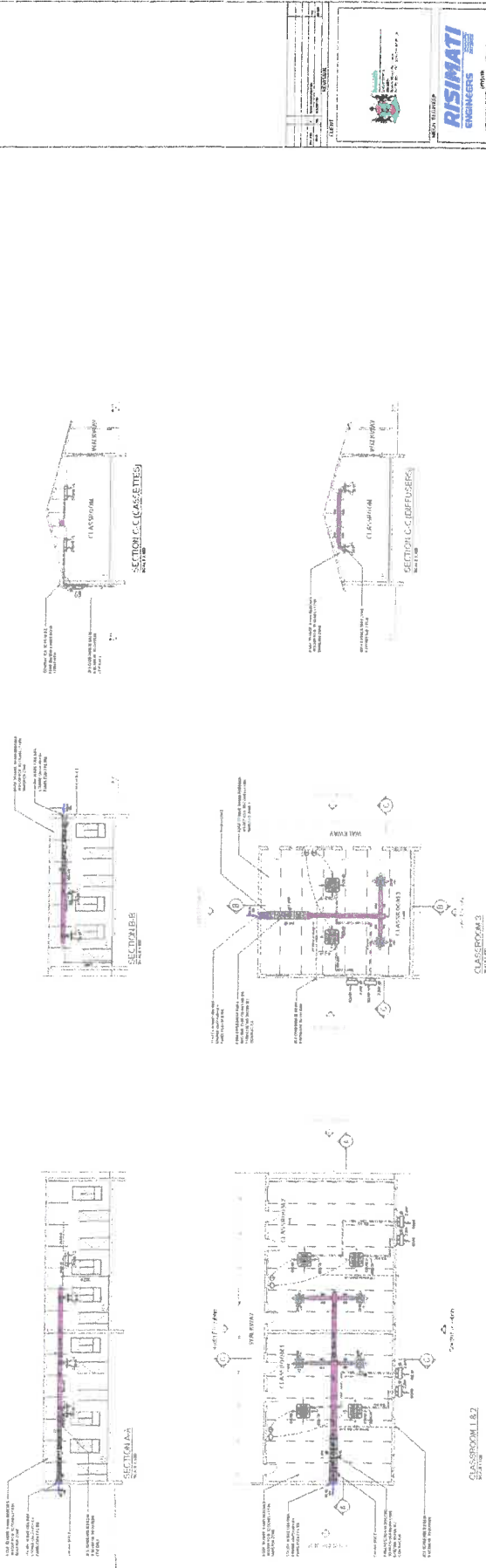
LEGEND

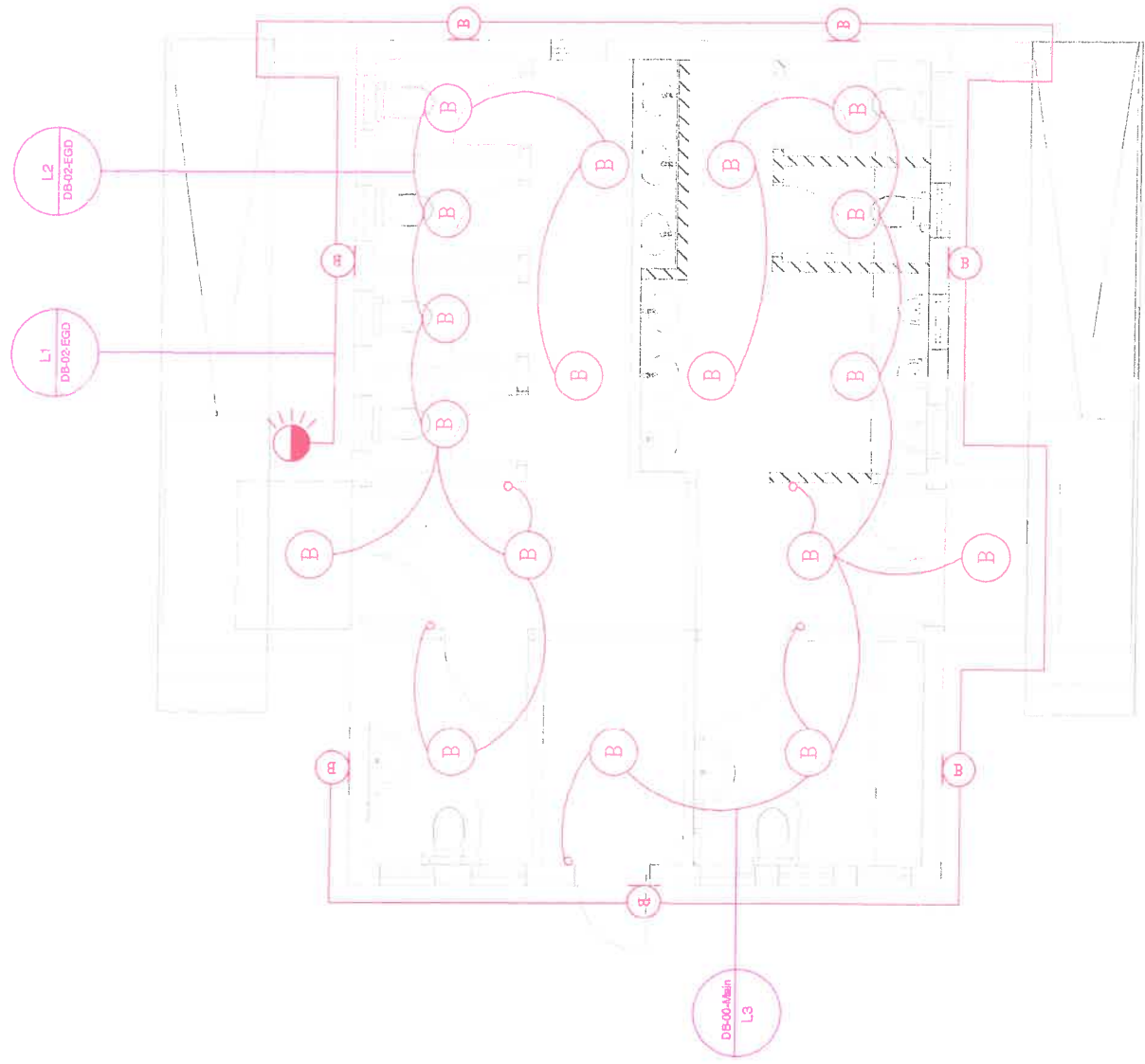
PRISMATI ENGINEERS
 10000 W. 10TH AVE., SUITE 1000, DENVER, CO 80202
 (303) 751-1000 FAX (303) 751-1001
ISSUED FOR INFORMATION
DATE: 2003-1-14

[illegible]

WEATHER COURSE		
DATE	WIND DIRECTION	WIND SPEED
1941	Ind. wind, steady from S. by E. by S.	10-15
1942	Ind. wind, steady from S. by E. by S.	10-15
1943	Ind. wind, steady from S. by E. by S.	10-15

BOX AIR CONDITIONING UNITS		TOTAL	
UNIT MODEL		UNIT MODEL	
UNIT PRICE OF UNIT		UNIT PRICE OF UNIT	
1	10000 BTU	1	10000 BTU
2	10000 BTU	2	10000 BTU
3	10000 BTU	3	10000 BTU
4	10000 BTU	4	10000 BTU
5	10000 BTU	5	10000 BTU
6	10000 BTU	6	10000 BTU
7	10000 BTU	7	10000 BTU
8	10000 BTU	8	10000 BTU
9	10000 BTU	9	10000 BTU
10	10000 BTU	10	10000 BTU
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Project Information	
Project Name	...
Project Number	...
Project Location	...
Project Start Date	...
Project End Date	...
Project Manager	...
Project Engineer	...
Project Designer	...
Project Checker	...
Project Approver	...



[illegible][illegible]

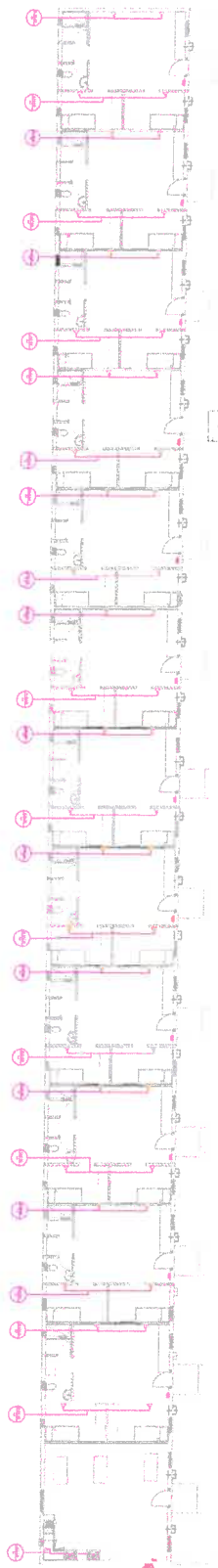
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[illegible]
$$\frac{d}{dt} \left(\frac{\partial L}{\partial \dot{x}} \right) = - \frac{\partial L}{\partial x}$$

Name		Address		City		State		Zip	
1	Mr. J. H. Smith	123 Main St.	Springfield	Ill.	62761				
2	Mr. W. R. Jones	456 Oak Ave.	Chicago	Ill.	60601				
3	Mr. T. L. Brown	789 Elm St.	Peoria	Ill.	61601				
4	Mr. S. K. Davis	101 Maple Dr.	Rockford	Ill.	61101				
5	Mr. P. M. Wilson	202 Pine St.	Decatur	Ill.	62521				
6	Mr. Q. N. Taylor	303 Cedar Ln.	Normal	Ill.	61761				
7	Mr. R. O. White	404 Birch Rd.	Urbana	Ill.	61501				
8	Mr. V. P. Green	505 Walnut St.	Macomb	Ill.	61455				
9	Mr. X. Q. Black	606 Spruce Ave.	Normal	Ill.	61761				
10	Mr. Y. R. Gray	707 Ash Dr.	Urbana	Ill.	61501				

and North and Department of Health.





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