



NEC3 Engineering and Construction

Short Contract (ECSC3)

A contract between Eskom Holdings SOC Ltd (Reg No. 2002/015527/30)

and

for **Provision of Property Management Minor Works in the Eastern Cape.**

| | | |
|------------------|------------------------------------------------------------------------------------------------------------|-----------------|
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Documentation prepared by: Contracts Management

C1 Agreements & Contract Data

C1.1 Form of Offer and Acceptance

Offer

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

Provision of Property Management Minor Works in the Eastern Cape.

The tenderer, identified in the signature block below, having examined the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, 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 exclusive of VAT is | Rates based Contract |
| Value Added Tax @ 15% is | Rates based Contract |
| The offered total of the Prices inclusive of VAT is | Rates based Contract |
| (in words) [•] | |

This Offer may be accepted by the Employer by signing the form of Acceptance overleaf and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the Contractor in the conditions of contract identified in the Contract Data.

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Tenderer's CIDB registration number:

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 1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)

Part 2 Pricing Data

Part 3 Scope of Work: Works Information

Part 4 Site Information

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

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the 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 Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be signed by the duly authorised representative(s) for both parties.

The tenderer shall within one week of receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the Contract Data at, or just after, the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the tenderer receives one fully completed and signed copy of this document, including the Schedule of Deviations (if any) together with all the terms of the contract as listed above.

Signature(s)

Name(s) Nosipho Manyonga

Capacity Business Enablement

Senior Manager

for the Eskom Holdings SOC Limited

Employer Private Bag X1

Beacon Bay

5205

Name &
signature of
witness

Date

Note: If a tenderer wishes to submit alternative tender offers, further copies of this document may be used for that purpose, duly endorsed, 'Alternative Tender No. _____'

Schedule of Deviations

Note:

1. To be completed by the Employer prior to award of contract. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
2. 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.
3. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

| No. | Subject | Details |
|-----|---------|---------|
| 1 | [•] | [•] |
| 2 | [•] | [•] |
| 3 | [•] | [•] |
| 4 | [•] | [•] |
| 5 | [•] | [•] |
| 6 | [•] | [•] |
| 7 | [•] | [•] |

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto 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 Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the tenderer:

Signature _____

Name _____

Capacity _____

On behalf of *(Insert name and address of organisation)* _____

Name & signature of witness _____

Date _____

For the Employer

Nosipho Manyonga

Business Enablement
Senior Manager
Eskom Holdings SOC Limited
Private Bag X1
Beacon Bay
5205

C1.2 Contract Data

Data provided by the *Employer*

| Clause | Statement | Data |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General | | |
| 10.1 | The <i>Employer</i> is (Name): | Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa |
| | Address | Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg |
| 10.1 & 14.4 | The <i>Employer's</i> representative to whom the <i>Employer</i> in terms of clause 14.4 delegates his actions ¹ is (Name): | Ndzondelelo Simunca |
| | Address | Eskom, Private Bag X1, Beacon Bay, 5205 |
| | Tel No. | 043 703 2104 |
| | Fax No. | |
| | E-mail address | simuncn@eskom.co.za |
| 11.2(11) | The <i>works</i> are | Provision Of Property Management Minor Works In The Eastern Cape. |
| 11.2(13) | The Works Information is in | the document called 'Works Information' in Part 3 of this contract. |
| 11.2(12) | The Site Information is in | the document called 'Site Information' in Part 4 of this contract. |
| 11.2(12) | The <i>site</i> is | The Various Eskom buildings and sites in the Eastern Cape as per the Work Instruction |
| 30.1 | The <i>starting date</i> is. | 01 August 2025 |
| 11.2(2) | The <i>completion date</i> is. | 31 July 2028 |
| 13.2 | The <i>period for reply</i> is | One (1) week |
| 40 | The <i>defects date</i> is | 52 weeks after Completion of the whole of the works |
| 41.3 | The <i>defect correction period</i> is | 2 (Two) weeks after Completion |
| 50.1 | The <i>assessment day</i> is the | 25th of each month or on completion of works. |
| 50.5 | The <i>delay damages</i> are | The delay damages are R 500.00 per day – For late response to communication (period of reply) to employer. 10% of Work Allocation Instruction value – For Works accepted and not completed within the time frames. |

¹ Except those actions which can only be done by the *Employer* as a Party to the contract.

| | | |
|---------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 50.6 | The retention is | 0% |
| 51.2 | The interest rate on late payment is | 0.5% per week of delay has been agreed |
| 80.1 | The <i>Contractor</i> is not liable to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property in excess of | the amount of the deductibles relevant to the event |
| | Does the United Kingdom Housing Grants, Construction and Regeneration Act (1996) apply? | No |
| 93.1 | The <i>Adjudicator</i> is | the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA). |
| | Address | [•] |
| | Tel No. | [•] |
| | Fax No. | [•] |
| | e-mail | [•] |
| 93.2(2) | The <i>Adjudicator nominating body</i> is: | the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the London Institution of Civil Engineers. (See www.ice-sa.org.za) or its successor body |
| 93.4 | The <i>tribunal</i> is: | arbitration. |
| | The <i>arbitration procedure</i> is | the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body. |
| | The place where arbitration is to be held is | East London, Eastern Cape, South Africa |
| | The person or organisation who will choose an arbitrator | |
| | - if the Parties cannot agree a choice or | the Chairman for the time being or his nominee |
| | - if the arbitration procedure does not state who selects an arbitrator, is | of the Association of Arbitrators (Southern Africa) or its successor body. |

The conditions of contract are the NEC3 Engineering and Construction Short Contract (April 2013)²³ and the following additional conditions Z1 to Z11 which always apply:

Z1 Cession delegation and assignment

Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person

² If June 2005 Edition applies, delete April 2013 and insert June 2005

³ State whether attached as a 'PDF' file in terms of Eskom's licence, or to be obtained from Engineering Contract Strategies Tel 011 803 3008, Fax 086 539 1902 or www.ecs.co.za.

without the written consent of the *Employer*.

- Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

Z2 Change of Broad Based Black Economic Empowerment (B-BBEE) status

- Z2.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.
- Z2.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Employer* within thirty days of the notification or as otherwise instructed by the *Employer*.
- Z2.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the *starting date* the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Works.
- Z2.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are those stated in Clause 91.1 and the amount due on termination includes amounts listed in Clause 92.1 less a deduction of the forecast additional cost to the *Employer* of completing the *works*.

Z3 Confidentiality

- Z3.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to others except where required by this contract. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to others where required by this contract the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z3.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Employer*.
- Z3.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z3.4 The taking of images (whether photographs, video footage or otherwise) of the *works* or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Employer*. All rights in and to all such images vests exclusively in the *Employer*.
- Z3.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z4 Waiver and estoppel: Add to clause 12.2:

- Z4.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties or their delegates or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z5 Health, safety and the environment

- Z5.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *works*. Without limitation the *Contractor*:
- accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Site;
 - warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of *works*; and
 - undertakes, in and about the execution of the *works*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.
- Z5.2 The *Contractor*, in and about the execution of the *works*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z6 Provision of a Tax Invoice and interest. Add to clause 50

- Z6.1 The *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Works Information, showing the correctly assessed amount due for payment.
- Z6.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z6.3 The *Contractor* is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

Z7 Notifying compensation events

- Z7.1 Delete from the last sentence in clause 61.1, "unless the event arises from an instruction of the *Employer*."

Z8 *Employer's* limitation of liability; Add to clause 80.1

- Z8.1 The *Employer* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand).

Z9 Termination: Add to clause 90.2, after the words "or its equivalent":

- Z9.1 or had a business rescue order granted against it.

Z10 Addition to Clause 50.5

Z10.1 If the amount due for the *Contractor's* payment of *delay damages* reaches the limits stated in this Contract Data (if any), the *Employer* may terminate the *Contractor's* obligation to Provide the Works.

If the *Employer* terminates in terms of this clause, the procedures on termination are those stated in Clause 91.1 and the amount due on termination includes amounts listed in Clause 92.1 less a deduction of the forecast additional cost to the *Employer* of completing the *works*.

Z11 Ethics

For the purposes of this Z-clause, the following definitions apply:

| | |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Affected Party | means, as the context requires, any party, irrespective of whether it is the <i>Contractor</i> or a third party, such party's employees, agents, or Subconsultants or Subcontractor's employees, or any one or more of all of these parties' relatives or friends, |
| Coercive Action | means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally, |
| Collusive Action | means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally, |
| Committing Party | means, as the context requires, the <i>Contractor</i> , or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees, |
| Corrupt Action | means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party, |
| Fraudulent Action | means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation, |
| Obstructive Action | means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and |
| Prohibited Action | means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action. |

Z11.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

Z11.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor's* obligation to Provide the Services for this reason.

Z11.3 If the *Employer* terminates the *Contractor's* obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.

Z11.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation.

Z12 Insurance

Z _12.1 Replace core clause 82 with the following:

Insurance cover 82

- 82.1 When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.
- 82.2 The *Contractor* provides the insurances stated in the Insurance Table A, from the *starting date* until the earlier of Completion and the date of the termination certificate.

INSURANCE TABLE A

| Insurance against | Minimum amount of cover or minimum limit of indemnity | Cover provided until |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Loss of or damage to the works | <p>The replacement cost where not covered by the <i>Employer's</i> insurance</p> <p>The <i>Employer's</i> policy deductible as at contract date, where covered by the <i>Employer's</i> insurance</p> | The <i>Employer's</i> certificate of Completion has been issued |
| Loss of or damage to Equipment, Plant and Materials | <p>The replacement cost where not covered by the <i>Employer's</i> insurance</p> <p>The <i>Employer's</i> policy deductible as at contract date, where covered by the <i>Employer's</i> insurance</p> | The Defects Certificate has been issued |
| The <i>Contractor's</i> liability for loss of or damage to property (except the works, Plant and Materials and Equipment) and for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) arising from or in connection with the <i>Contractor's</i> Providing the Works | <p><u>Loss of or damage to property</u> <u>Employer's property</u></p> <p>The replacement cost where not covered by the <i>Employer's</i> insurance</p> <p>The <i>Employer's</i> policy deductible as at contract date where covered by the <i>Employer's</i> insurance</p> | |

| | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | <u>Other property</u> The replacement cost <u>Bodily injury to or death of a person</u> The amount required by the applicable law | |
| Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract | The amount required by the applicable law | |

82.3 The *Employer* provides the insurances as stated in the Insurance Table B

INSURANCE TABLE B

| Insurance against or name of policy | Minimum amount of cover or minimum of indemnity |
|---------------------------------------------------|--------------------------------------------------------|
| Assets All Risk | Per the insurance policy document |
| Contract Works insurance | Per the insurance policy document |
| Environmental Liability | Per the insurance policy document |
| General and Public Liability | Per the insurance policy document |
| Transportation (Marine) | Per the insurance policy document |
| Motor Fleet and Mobile Plant | Per the insurance policy document |
| Terrorism | Per the insurance policy document |
| Cyber Liability | Per the insurance policy document |
| Nuclear Material Damage and Business Interruption | Per the insurance policy document |
| Nuclear Material Damage Terrorism | Per the insurance policy document |

Z13 Nuclear Liability

Z13.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.

Z13.2 The *Employer* is solely responsible for and indemnifies the *Contractor* or any other person against any and all liabilities which the *Contractor* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.

Z13.3 Subject to clause Z13.4 below, the *Employer* waives all rights of recourse, arising from the

aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Contractor* or any other person, or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.

Z13.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.

Z13.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z14 Asbestos

For the purposes of this Z-clause, the following definitions apply:

| | |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AAIA | means approved asbestos inspection authority. |
| ACM | means asbestos containing materials. |
| AL | means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL. |
| Ambient Air | means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet. |
| Compliance Monitoring | means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles. |
| OEL | means occupational exposure limit. |
| Parallel Measurements | means measurements performed in parallel, yet separately, to existing measurements to verify validity of results. |
| Safe Levels | means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles. |
| Standard | means the <i>Employer's</i> Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles. |
| SANAS | means the South African National Accreditation System. |
| TWA | means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA. |

Z14.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance

with HSG248 and monitored according to HSG173 and OESSM.

- Z14.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
- Z14.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z14.5 The *Contractor's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.
- Z14.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
- Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

Data provided by the *Contractor* (the *Contractor's Offer*)

The tendering contractor is advised to read both the NEC3 Engineering and Construction Short Contract (April 2013) and the relevant parts of its Guidance Notes (ECSC3-GN)⁴ in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on page 31 of the ECSC3 April 2013 Guidance Notes.

Completion of the data in full is essential to create a complete contract.

| | | |
|----------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| 10.1 | The <i>Contractor</i> is (Name): | |
| | Address | |
| | Tel No. | |
| | Fax No. | |
| | E-mail address | |
| 63.2 | The percentage for overheads and profit added to the Defined Cost for people is |% |
| 63.2 | The percentage for overheads and profit added to other Defined Cost is |% |
| 11.2(9) | The Price List is in | The document called 'Price List' in Part 2 of this contract. |
| 11.2(10) | The offered total of the Prices is [Enter the total of the Prices from the Price List]: | Rates excluding VAT [in words]] Rates excluding VAT |

⁴ Available from Engineering Contract Strategies Tel 011 803 3008, Fax 086 539 1902 or www.ecs.co.za.

C2 Pricing Data

C2.1 Pricing assumptions

Entries in the first four columns in the Price List are made either by the *Employer* or the tendering contractor

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tenderer enters the amount in the Price column only; the Unit, Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for the item of work which is the rate for the work multiplied by the quantity completed, the tenderer enters the rate which is then multiplied by the expected quantity to produce the Price, which is also entered.

All Prices are to be shown excluding VAT unless instructed otherwise by the *Employer* in Tender Data or in an instruction the *Employer* has given before the tenderer enters his Prices.

If there is insufficient space in the Price List which follows, state in which document the Price List is contained.

Price adjustment for inflation:

The prices will be fixed and firm rates for the first 12 months of the contract. At the anniversary date of the contract the prices will be adjusted by Contracts Management team for inflation using CPA. The relevant publications to be used are published by the SIEFSA.

The base date for indices is:

1 month prior to Tender Closing Date

C2.2 Price List

NB: Prices to include labour, supply of all materials, overheads, safety, protective clothing, profits, hiring of equipment.

The *price list* is contained in **Annexure A – Bill of Quantities –Bulk Contract.**

Notes to the *price list*

1. The rates in the Price List exclude VAT.
2. The rates will remain fixed and firm for the first 12 months of the contract period; thereafter escalation may be applied for, in writing, annually based on CPI by the Contractor.
3. The escalation will only be applicable from the date of approval.
4. CPI will not apply to items relating to % Markups and P&Gs
5. There will be no P&Gs on Subcontracted work.
6. There will be no P&Gs on travelling.
7. Where quotations are required, Eskom will not pay the *Contractor* to supply quotations/Assessments.

C3: Scope of Work

Eskom Properties in the past have never had any capital refurbishment projects to keep the properties to the desired and efficient operational state. The needs have been identified over the past years to have the different elements of the properties refurbished and upgraded. The properties amongst other include commercial buildings, industrial buildings, Customer network centres (CNCs), Residential Properties, Warehouses and Walk in Centres.

The Minor Works contract seeks to address Health, Safety and Environmental, Building regulations compliance issues that are currently experienced within the facilities. These are all in four zones of the Eastern Cape (**East London, Aliwal North, Mthatha and Port Elizabeth**).

East London Zone

| Sector 1 | Sector 2 |
|----------------------------------------|--------------------------------|
| (The base site is East London) | (The base site is East London) |
| Sunilaws Office Park – Regional Office | King Williams Town Complex |
| Coastal Complex | Sunilaws Operations Centre |
| Ducats Engineering Complex | Alice CNC |
| | Butterworth Complex |
| | Toleni CNC |
| | Lamplough Stores |
| | Dutywa CNC |

Aliwal North Zone

| Sector 1 | Sector 2 |
|----------------------------|----------------------------|
| (The base site is Kokstad) | (The base site is Kokstad) |
| Kokstad EC Office | Aliwal North CNC |
| Bizana CNC & CS | Aliwal North WIC |
| Flagstaff CNC | Sterkspruit CNC |
| Lusikisiki CNC | Molteno CNC |
| Matatiele CNC | Elliot CNC |
| Mount Ayliff CNC | Elliot Houses |
| Mount Frere CNC | |

Mthatha Zone

| Sector 1 | Sector 2 |
|--------------------------------------------|--------------------------------------------------|
| (The base site is Mthatha Zimbane Complex) | (The base site is Mthatha Zimbane Complex) |
| Mthatha Zimbane Complex | Mthatha Zimbane Kilowatt Gardens housing complex |
| Mthatha Zimbane Helicopter Hanger | Tsolo CNC |
| Port St Johns in Tombo | Elliotdale CNC |
| Old PSJ CNC | Mqanduli CNC |
| Geckomoon Houses | Ngcobo CNC |
| | Cala CNC |
| | Cofimvaba CNC |
| | Queenstown CNC |
| | Queenstown Customer Services |

Port Elizabeth Zone

| Sector 1 | Sector 2 |
|--------------------------------------|--------------------------------------|
| (The base site is Uitenhage Complex) | (The base site is Uitenhage Complex) |
| Uitenhage Complex | Graaff Reinet CNC |
| Uitenhage CNC | Cradock CNC |
| Kirkwood CNC | Albany CNC |
| Humansdorp CNC | Alexandria CNC |
| Joubertina CNC | Grahamstown WIC |
| Joubertina Houses | Grahamstown Land |
| Kareedouw CNC | Adelaide CNC |
| Patensie CNC | 110 High Street Office Training |

1. Description of the works

The scope includes the provision of the following facilities management services:

- Alterations and building works
- Electrical installations and repairs
- Plumbing and Drainage installations and repairs
- Mechanical Installations and repairs
- General civil and site works.
- Fencing installations and repairs.
- Removal, transportation and disposal of Asbestos structures and installations.
- The detailed requirements for this contract are contained in Annexure A – Bill of Quantities

Notes to Service Provider

- The *Contractor* shall provide all labour, supervision, administration and management, equipment, tools, supplies and material required to perform the facilities management services specified herein.
- Eskom reserves the right to award any works detailed in the bill to any other supplier it deems necessary.
- The *Contractor* is to action as per task order issued by the *Project Manager* or his representative in timelines as per the Task order. Should an emergency arise the *Contractor* must action immediately the task order/call-out issued by the *Project Manager* or his representative.
- The response time for the *Contractor* to supply quotations is 3 working days from the date of request or unless agreed otherwise. Eskom will not pay the *Contractor* for obtaining quotations, unless there are compelling reasons which will have to be agreed prior.

Base:

Base as referred to in this contract refers to the Sector/Area Office, for all Task Orders the travelling distance will be calculated from.

Work Allocation Instruction:

A contractor will be afforded 2 (two) working days to advise the employer of acceptance or rejection of a Work Allocation Instruction.

Failure to advise the employer of acceptance/rejection will be deemed to mean rejection of the *works* and the Work Allocation Instruction will be allocated to another *Contractor*.

Where it deems fit, Eskom reserves the right to request information and to allocate work to another service provider who might be servicing another zone/sector

2. Drawings

| Drawing number | Revision | Title |
|----------------|----------|--------------------------------------------------------------------------------|
| | | As included in Work Instruction and discussed with relevant Eskom stakeholders |
| | | |
| | | |

3. Specifications

| Title | Type *Spec/PF | Date or revision | Tick if publicly available |
|--------------------------------------------------------------------------------------------|------------------|------------------|-------------------------------|
| General Specifications: | | | |
| Health and Safety requirements | | latest | |
| Environmental requirements | | latest | |
| Site regulations and access control | | latest | |
| Section 37(2) Agreement between Eskom and Contractor | | latest | |
| Generic Distribution Environmental Management Program for power Lines and Substation | | latest | |
| Public Finance Management Act | | latest | No |
| Occupational Health and Safety Act | Spec | latest | No |
| Compensation for Occupational Injuries and Disease | | latest | |
| Safety Risk Management Process Manual | Manual | latest | No |
| Co-Ordination of safety on capital projects | Procedure | latest | No |
| OHS Act requirements to be met by principal contractors employed by Eskom Distribution | Procedure | latest | Yes [Contractor Must sign] |
| Identifying, analyzing, documenting and observing dangerous/hazardous tasks. | Procedure | latest | No |
| Pre-Task Planning and Feedback process | Procedure | latest | No |
| Procedure for refusal to work on the grounds of health, safety and environmental concerns. | Procedure | latest | No |
| Reporting, recording, investigating, costing and follow-up of incident/accidents. | Procedure | latest | No |

| | | | |
|---------------------------------------------------------------------------------------------|-----------------|---------------|-----|
| Quality Requirements for the procurement of Assets, Goods and Services. | Standard | latest | No |
| Access to farms | Guide | latest | No |
| Transporting person on back of vehicles | Bulletin | latest | Yes |
| Expanded Public Works Report – Divisional Capital Programme | Spec | latest | Yes |
| Technical specifications: | | | |
| NWS 1058 - SAFETY AT CONSTRUCTION SITES: REQUIREMENTS TO BE MET BY CONTRACTORS | | latest | YES |
| NWS 1494 - FIRE PREVENTION AND PROTECTION OF CONTRACTOR'S PREMISES ON NEW WORK SITES | | latest | YES |
| ESK PVAAL7 - ENVIRONMENTAL IMPACT ASSESSMENT | | latest | YES |
| DPC 34-227/SCSPVABB2 - - RISK ANALYSIS / JOB PLANNING | | latest | YES |

4. Constraints on how the *Contractor* Provides the Works

- All work and finishes are subjected to ESKOM's quality control and acceptance to all trades.
- It is expected from the contractor to be able to have resources for site clearance, excavations, formwork, scaffolding, plant and equipment thereof as to execute the works
- It is expected for the contractor to be able to do the plumbing and drainage works
- All work is to be done as per specifications.
- The *Employer* will supply the *Contractor* with a Task Order/Instruction.
- It is expected from the *Contractor* to report to the CNC before starting work.
- It is expected from the *Contractor* to do a site visit and verify the scope of work and assess the conditions on site.
- It is expected from the *Contractor* to give feedback on the condition found on site.
- It is expected from the *Contractor* to do a level risk assessment according to the Employer's Performance.
- It is expected from the *Contractor* to do the whole of the work as per timeframe set in the Task Order.
- It is expected from the *Contractor* to be responsible for the collection and transport of all necessary material.
- It is expected from the *Contractor* to take delivery of all necessary to the relevant sites.
- It is expected from the *Contractor* to do the erection, dressing, stringing, tensioning, and making-off, and complete maintenance or repair of electrical reticulation.
- This will from time to time include dismantling and disassembling (And dispose of all waste material to the nearest APPROVED dump site) of specified materials.
- The work will be located in Eskom ECOU area of supply.
- The *Contractor* will be reimbursed for all activities undertaken as well as the actual distances travelled between base, the Eskom CNC.
- The *Contractor* should have the necessary authorization/Permits to do the work.

4.1 Meetings

Regular meetings of a general nature may be convened and chaired by the *Manager* as follows:

| Title and purpose | Approximate time & interval | Location | Attendance by: |
|---------------------------------------|--------------------------------------------------|-------------------------------------------|--------------------------------------------|
| Overall contract progress/feedback in | Monthly intervals or when deemed required by the | Sunilaws Office Park East London or where | <i>Employer / Manager / relevant Eskom</i> |

| | | | |
|-------------------------------|-----------------|------------------|-------------------------------------------------|
| terms of contract obligations | <i>Manager.</i> | deemed necessary | representatives and appointed <i>Contractor</i> |
|-------------------------------|-----------------|------------------|-------------------------------------------------|

Meetings of a specialist nature may be convened as specified elsewhere in this Service Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the service. Records of these meetings shall be submitted to the *Service Manager* by the person convening the meeting within five days of the meeting.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

4.2 Use of standard forms

Contracting parties must use NEC standard forms available in the Eskom Intranet for administration of the Contract.

4.3 Invoicing and payment

The *Contractor* provides a statement on the 15th and 25th of every month for the duration of the contract. The statement will reflect the following information of on all invoices submitted for payment, from the start of the contract:

- Date of Invoice
- Date of delivery of Service
- Invoice Number
- Invoice Amount excluding VAT
- PO Number
- Task Order Number
- GR Number
- Payment Status (either Paid or Unpaid)

The statement will also reflect the following summaries:

- Invoice payments outstanding <= 30days
- Invoice payments outstanding > 30days <=60 days
- Invoices payment outstanding > 60days <=90 days
- Invoices payment outstanding > 60days <=90 days
- Invoices payment outstanding > 90days
- Total of Invoices where the *Contractor* has received payment
- Total of Invoices where the *Contractor* is awaiting payment

Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice showing the amount due for payment equal to that stated in the *Service Manager's* payment certificate.

The *Contractor* shall address the tax invoice to
ESKOM HOLDINGS SOC LIMITED

and include on each invoice the following information:

- Name and address of the *Contractor* and the *Service Manager*;
- The contract number and title;
- *Contractor's* VAT registration number;
- The *Employer's* VAT registration number **4740101508**;
- Description of service provided for each item invoiced based on the Price List or accepted quotations;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;

The *Contractor* shall comply with the *Employer's* E-Invoicing process when submitting invoices for payment.

2.6.1 Payment Item Descriptions

The descriptions given for the payment items in the Price List, indicate the work to be allowed for in the tendered rates and prices for such payment items, and are for the guidance of the *Contractor* and do not necessarily repeat all the details of work and materials required by and described in the Service Information.

2.6.2 Prices to be Inclusive

The *Contractor* shall accept the payment provided in the Contract and represented by the rates and prices tendered by him in the Price List, as payment in full for executing and completing the work as specified.

Where the *Contractor* has priced an item as "nil" or "0-00" it will be deemed that no charges are or will be incurred against such an item. In the event of no price having been entered against any item, the tendered rate, price or sum will be taken as "nil" or "0-00".

2.6.3 Measurement Meetings

The *Contractor* shall attend monthly meetings with the *Service Manager* and Supervisor where all matters concerning payment shall be discussed. In particular the *Contractor* shall submit for the meeting a monthly statement together with all calculations and supporting data in substantiation of any payments.

4.4 Records of Defined Cost

All records as required to back up any defined costs must be kept on file by the *Contractor* and be made available when requested by the *Eskom Personnel*.

In order to substantiate the Defined Cost of compensation events, the *Employer* may require the *Contractor* to keep records of amounts paid by him for people employed by the *Contractor*, Plant and Materials, work sub-contracted by the *Contractor* and Equipment. A site diary will be required

4.5 Accelerated Shared Growth Initiative – South Africa (ASGI-SA)

If the ASGI-SA requirements are to be included in this contract specify constraints which *Contractor* must comply with after contract award in regard to any ASGI-SA requirements. The ASGI-SA Compliance Schedule completed in the returnable tender schedules is reproduced here. If ASGI-SA does not apply, delete this paragraph.

The *Contractor* complies with and fulfils the *Contractor's* obligations in respect of the Accelerated and Shared Growth Initiative - South Africa in accordance with and as provided for in the *Contractor's* ASGI-SA Compliance Schedule stated below

[Insert the agreed ASGI-SA Compliance Schedule here]

The *Contractor* shall keep accurate records and provide the *Employer* with reports on the *Contractor's* actual delivery against the above stated ASGI-SA criteria. [Elaborate on access to and format of records and frequency of submission etc.]

The *Contractor's* failure to comply with his ASGI-SA obligations constitutes substantial failure on the part of the *Contractor* to comply with his obligations under this contract.

4.6 BBBEE and preferencing scheme

Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change

4.7 Facilities to be provided by the Contractor

Resources to Execute Works

4.8 Title to material from excavation and demolition

All material including old material belongs to Eskom, and should be returned to Eskom's offices as per the instruction of the manager/representative.

4.9 Design by the *Contractor*

N/A

5. Requirements for the programme

The works are to be completed in according to specifications in all respects and ready for take – over by the Employer within the stipulated time frame.

6. Services and other things provided by the *Employer*

| Item | Date by which it will be provided |
|------------------|-----------------------------------|
| Work Instruction | |
| | |
| | |

4: Site Information

C4.1: Information about the *site* at time of tender which may affect the work in this contract

1. Access limitations

Contractor to liaise with relevant Eskom Personnel

2. Ground conditions in areas affected by work in this contract

N/A

3. Hidden and other services within the *site*

The *Contractor* shall be liable for any damages caused during construction to existing services such as, underground water pipes, electrical cables, telecommunication cables, overhead lines, storm water pipes and existing roads.

4. Details of existing buildings / facilities which *Contractor* is required to work on

The *Contractor* shall within reason try and keep noise levels, dust and wastage to a minimum
The *Contractor* is to provide the necessary equipment to complete the *Works* safely and by the *completion date*. (Refer to item 5.9)

Public services and infrastructures are limited and the *Contractor* shall arrange for the following:
Sanitation and accommodation on *site* for own use, and Supply of water with community leaders.



ANNEXURE A- : Bill of Quantities –Bulk Contract.

Provision of Property Management Minor Works in the Eastern Cape.

CONTRACT NUMBER :

CONTRACTOR :

ANNEXURE A2 - TABLE OF CONTENTS

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SECTION A - NOTES TO TENDERERS

1. BILLS OF QUANTITIES

This document comprises Notes to Tenderers, model preambles, supplementary preambles and Bills of Quantities and is hereafter referred to as "the Bills of Quantities".

2.1 CONTRACT DOCUMENTS

The contract documents will consist of:

2.1.1 The NEC3 Engineering and Construction Short Contract

2.1.2 The Model Preambles for Trades (2008 Edition) as published by the ASAQS. This document is not incorporated within the text of these Bills of Quantities, accordingly the contractor is urged to make careful reference to this Document for its full intent and meaning.

2.1.3 These Bills of Quantities, including all annexures and supplementary documentation referred to therein.

2.1.4 Documents to be provided by the Contractor in terms of the requirements of these Bills of Quantities.

2.2 DRAWINGS

There are certain as built drawings available, but should the contractor require to view these drawings, these are available at Employers office.

3 PREAMBLES TO ALL TRADES

Tenderers are referred to the Model Preambles for Trades, 2008 Edition, (recommended and published by the Association of South African Eskom Properties (EC) Officials) and the "Supplementary Preambles to All Trades" (Supplementary Preambles pages 1-10 hereof) for the full descriptions and specifications referred to in these Bills of Quantities. It should be noted that descriptions in these Bills of Quantities generally appear in brief, but whether specific reference to the Model Preambles and the "Supplementary Preambles" is made or not, they shall be deemed to apply fully to and augment the descriptions of the relevant items. No claim whatsoever will be allowed in respect of errors or omissions in pricing due to brevity of descriptions of items in the Bills of Quantities which are fully described when read in conjunction with the relevant requirements of the Model Preambles and the "Supplementary Preambles to All Trades".

The Tenderer must study the Model Preambles and the "Supplementary Preambles to All Trades" before pricing these Bills of Quantities and all prices inserted in these Bills of Quantities shall cover all costs and charges that may be considered necessary by the Tenderer for the carrying out and observance of the Provisions of the Model Preambles and the "Supplementary Preambles to All Trades". Where requirements of descriptions in the Bills of Quantities differ from the relevant requirements of the Model Preambles and the "Supplementary Preambles to All Trades", the requirements of the descriptions in the Bills of Quantities shall apply.

4 VALUE ADDED TAX

Tenderers should compute their rates from the net costs (excluding value added tax). Value Added Tax at the current rate of 15% is to be added to the net sub-total on the final summary page by means of a single sum calculation to establish the tender price.

5 SCOPE OF WORK

The scope of works is as per the Service Information stated in the Nec3 document and the Bill of Quantities.

6 POSSESSION OF SITE

This date will be agreed between the parties once the Contractor meets all its contractual and safety obligations. Since this is a maintenance contract, the site will always be occupied by the Employer at all times.

7 TENDERS

Tenderers are required to make themselves familiar with the sites before tendering, since no rates changes will be allowed after tender submission..

The Employer will not be liable for any costs incurred in the preparation of the tender nor will he be bound to accept the lowest or any portion of any tender.

8 COMMON LAW OR BY-LAW REQUIREMENTS

No liability for not specifically mentioning any normal contractual, Common Law or By-law requirements will be accepted by the Employer, The Eskom Properties (EC) Official.

9 AREA OF WORKS

The Tenderer shall ascertain by personal viewing of the site any restrictions to the area that may be occupied by the contractor including any restrictions imposed by any buildings, etc. and any limitations or restrictions that may be imposed by the Municipal Engineer or the Local Authorities.

The contractor is deemed to have allowed for all necessary temporary fencing, screening, hoardings, etc. Space for the storage of Building Materials must be arranged with the The Eskom Properties (EC) Official.

The Contractor shall make all necessary provisions in all rates to take into account these requirements as no claims for extras arising from these matters will be subsequently entertained as admitted. Tenderers will be held responsible for any misunderstanding of incorrect information, however obtained, except information which may have been given in writing over the signature of the Eskom Properties (EC) Official.

10 MANAGEMENT OF WORKS

The Contractor shall to the satisfaction of the Eskom Properties (EC) Official provide, the services of an experienced Supervisor and / Manager.

The names and CV's of the Contractor's proposed Management Team shall be submitted to the Eskom Properties (EC) Official prior to commencement on site and, after the Eskom Properties (EC) Official's agreement on the composition and competence thereof has been obtained, no changes shall be made nor shall any member of the said team be removed from the project while remaining in the employ of the Contractor without the Eskom Properties (EC) Official's prior written approval.

The Contractor shall make necessary provisions in all rates to take into account these requirements as no claims for extras arising from these matters will be subsequently entertained or admitted.

11 INSPECTION OF WORK

The Contractor shall obtain all local authority approvals if required and shall ensure that all work is also approved by the Eskom Properties (EC) Official prior to covering up. The fact that the work will be inspected periodically in no way absolves the Contractor from total responsibility for the quality of his workmanship and for compliance with the specification. He shall timeously notify the Eskom Properties (EC) Official so that foundation and other inspections can be arranged.

12 SITE CLEANLINESS

The Contractor shall clear away all dirt, rubbish and superfluous material as they accumulate and leave the whole of the site clean and tidy on completion to the satisfaction of the Eskom Properties (EC) Official. The Contractor is advised that the adjacent site is functional at all times and that the incumbents should not be unduly inconvenienced.

13 ORDERING OF MATERIALS

No claims will be entertained due to non-availability of materials or labour. The Tenderer is therefore required to investigate and ensure that the specific materials and components required for the works will be available at the relevant estimated construction times, at the time of tendering.

14 PROGRAMME

The Contractor will be required to submit a programme when required by the Employer.

15 PRICED BILLS OF QUANTITIES:

Tenderers must submit to the Eskom Properties (EC) Official a copy of the Bills of Quantities fully priced and extended, with his tender. After the Bills have been checked, and when called upon, each page of the Bills of Quantities shall be initialled and the first and last pages signed in full by the Tenderer.

16 IMPORT PERMITS:

Tenderers must apply direct for any import permit and/or currency required, however the ESKOM HOLDINGS LIMITED will furnish successful Tenderers with a supporting statement if required.

17 BILLS OF QUANTITIES:

No alteration, erasure, omission or addition is to be made to the text and conditions of these Bills of Quantities and should any such alteration, amendment, note or addition be made, the same will not be recognised, but the reading of the Bills of Quantities as prepared by the Eskom Properties (EC) Official will be adhered to.

It should be understood that the system of measurement herein adopted is the only system of measurement, which will be recognised in connection with this contract. Before the signing of the contract, the Eskom Properties (EC) Official will be entitled to call for adjustments of individual rates and rectify discrepancies, as he considers necessary without alterations to the Tender amount.

These Bills are not to be used for the purpose of ordering materials.

All Bill rates are to include for material, labour, plant, wastage, transport and profit.

18 TRAFFIC AUTHORITIES AND REGULATIONS

The Contractor shall comply with all requirements of the Authorities in connection with traffic control, gaining access to the site, prevention or disruption of the flow of traffic, transporting of materials and equipment to and from the site and he shall make all necessary arrangements, pay all deposits, fees and charges in connection therewith.

19 PROTECTION OF PERSONS AND PROPERTY

The Contractor shall adopt all safety measures in compliance with all statutes, regulations, etc., and shall take all measures to protect all property and to secure the safety and freedom from injury of all persons.

The Contractor shall in addition take all necessary steps to prevent nuisance from dust and the like and shall use every endeavour to minimise noise emanating from the Contract Works. The Contractor is referred to the various forms that require his attention prior to commencing work on site - All forms duly completed and signed must be forwarded to the Eskom Properties (EC) Official.

20 SETTING OUT OF THE CONTRACT WORKS

The Site shall not be used by the Contractor for any purpose other than that of carrying out the Contract works. The Contractor shall set out the Contract Works and shall be held solely responsible and liable for the correct centre lines, levels, and gradients.

21 KEEP EARTHWORKS FREE FROM WATER, MUD ETC.

The Contractor shall keep the earthworks free from water, mud, etc. by hand or machinery (including day and night attendance as necessary) as no water, mud, etc., shall be allowed to stand or accumulate.

The Contractor must cut all necessary trenches etc., and build embankments in order to divert stormwater and/or ground water and to protect the earthworks. The Contractor shall be solely responsible for any damage caused by storms, rains, surface or underground water or water from other causes.

On completion of the Contract, the Contractor shall fill in temporary trenches including compacting, and shall remove any temporary embankments all at his sole cost.

22 EXISTING AND ADJOINING PROPERTIES, PAVINGS ETC.

The Contractor shall execute the whole of the Contract Works with the minimum of disturbance to the existing and adjoining premises and occupants thereof. He shall keep the Site well watered where necessary, and take all other steps, to prevent dust and shall keep pavements, surrounding roads etc., clean to the entire satisfaction of the Eskom Properties (EC) Official and the Authorities.

The Contractor shall leave such buildings, structures, fences, pavings, roadways, kerbs, gardens, municipal pavements, streets, etc., in the same condition at completion as they were at the commencement of the Contract. Before commencing work, the Contractor shall arrange with the owners of the existing and adjoining buildings and/or the Authorities for an inspection to be made jointly with themselves, the Contractor and the Eskom Properties (EC) Official in order to make written notes of any cracks defects, etc. which may later be claimed to have been caused by the operations under the Contract. Should defects be disclosed, the Contractor shall submit same in writing to the Eskom Properties (EC) Official before commencing the Contract, failing which it shall be understood that no such defects existed and the Contractor shall be liable for all claims in this connection.

23 PROCEDURE OF WORKS

The Contractor shall be solely responsible for ensuring that the procedure of works is kept to and no deviations will be entertained.

Should this, however not be possible then the Contractor shall timeously notify the Eskom Properties (EC) Official.

The Contractor shall make any and all necessary allowances in his pricing for the disruption and costs that will be required to comply with any such restrictions.

SPECIAL CLAUSES

24 TRADE NAMES, ETC.

All materials, fittings, finishes, etc. specified under a "Trade Name", catalogue number or reference shall be either exactly as described or of equal quality, specification and weight to those described.

The Eskom Properties (EC) Official's written approval must be obtained for any departure from the specification before the submission of tenders, failing which specified materials, fittings, finishings, etc. shall be deemed to have been allowed for in the tenders.

Where articles other than what the manufacturer specified are used, an adjustment of the prices will be made and Variation Orders issued to cover these adjustments.

The Contractor must take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturer's instructions after consultation with the manufacturer's authorised representative.

25 CONTRACTOR'S RESPONSIBILITY

The Eskom Properties (EC) Official shall not be responsible for any act or omission on the part of the Contractor, which may result in any patent or latent defects, in materials or workmanship, breach or neglect of any local regulations. The Contractor shall at all times be responsible for any such neglect, deviation or wrong act, whether the same is discovered before or after the final certificate, or any other Certificate, has been approved.

26 SITE INSTRUCTIONS AND RECORDS

The Contractor shall supply and have available at the site of the works at all times, the following site books:-

a) Site Instruction Book

Receiving and recording instructions in a suitable A4 size triplicate book kept on site. Instructions issued shall be recorded by the Eskom Properties (EC) Official or other Employer's Agents to whom the Eskom Properties (EC) Official has delegated Authority in the book. Only site instructions issued in such a book shall be recognised.

b) Daily Record Book

The Contractor shall record in a suitable A4 size triplicate book kept at the site, a daily record of work done, all site visits by the Eskom Properties (EC) Official and other professional personnel and all events affecting the Works, such as progress, issue of plans, breakdown of machinery, etc. The labour, plant and material on site shall be recorded as well as work performed. Entries must be made by the Contractor and must be signed and forwarded to the Eskom Properties (EC) Official for his counter signature on a daily basis. Copies of these records shall be for the Eskom Properties (EC) Official, Eskom Properties (EC) Official and Contractor.

27 LOCATION OF TEMPORARY BUILDING AND TEMPORARY SERVICES

The Contractor shall provide all necessary temporary works, including temporary roads, tracks, crossings, hard standing and services, etc. required for his own and Sub-Contractor's use during the construction and maintenance period.

There is no guarantee given or implied that Site Conditions will be such that the Contractor will be able to erect such offices, stores and temporary accommodation within the site boundaries and it shall be the Contractor's responsibility to adopt whatever measures he deems necessary in this regard and to obtain permission and pay all cost in connection therewith.

28 CONTRACTORS TO VISIT SITES PRIOR TO SUBMISSION OF TENDER

The contractors are urged to visit all the sites that has been identified to get an overview of the nature of works, numbered assets and the location of the building prior to pricing this document.

29 PRICING OF THESE GENERAL NOTES

The Contractor may allow in his pricing for any additional costs arising out of these "General Notes" as no later claims for additional costs will be considered.

PLEASE NOTE , UPON CONTRACT AWARD , ALL TERMINOLOGY THAT REFERS TO "TENDERERS " IN THIS DOCUMENT , WILL HAVE THE SAME MEANING AS CONTRACTOR.

SECTION C - SUPPLEMENTARY PREAMBLES

SUPPLEMENTARY PREAMBLES TO ALL TRADES

GENERAL PREAMBLES

The Tenderer is referred to the Model Preambles for Trades as recommended and published by the Association of South African Quantity Surveyors (2008 Edition), which are to be read in conjunction with and shall apply to all items in these Bills of Quantities and supplemented by the following Supplementary Preambles as well as all supplementary documentation referred to in the Bills of Quantities and all annexures appended thereto.

Where Model Preambles for Trades and Supplementary Preambles are in conflict, the Supplementary Preamble shall take precedence.

SUPPLEMENTARY PREAMBLES

The following amplifications, additions and amendments to the Model Preambles for Trades shall constitute the Supplementary Preambles.

1 MATERIALS AND WORKMANSHIP GENERALLY

The standard of workmanship and the quality of materials to be utilised throughout this Contract shall be the best of their respective kinds and shall comply in all respects with the latest South African Bureau of Standards Specifications, Codes of Practice, co-ordinating Specifications and Standard methods or where not available, with the latest relevant British Standards.

NOTE: All references to Standards are to signify the latest amendments or issue thereof. No substitutes whatsoever shall be permitted from those materials specified and any work which is not of the highest standard shall be rejected and required to be re-done at the Contractor's expense. Furthermore, references to "SANS No" shall mean the "South African National Standard No".

2 RATES

All rates inserted in the Bills of Quantities shall cover all costs, charges and profit that may be considered necessary for the carrying out and observance for the provisions of these "Preambles to all Trades".

The Tenderer shall insert the amount required against each item which he wishes to price and not insert a lump sum covering a series of items. Only such priced items shall be considered in respect of any adjustment to the Contract Sum. Items left unpriced will be understood to be covered in the rates for other items throughout these Bills of Quantities.

3 TRADE NAMES, ETC.

All materials, fittings, finishes, etc. specified under a Trade Name, catalogue number or reference shall be either exactly as described or of equal quality, specification and weight to those described. The Eskom Properties (EC) Official's written approval must be obtained for any departure from the specification before the submission of tenders, failing which specified materials, fittings, finishings, etc. shall be deemed to have been allowed for in the tenders.

4 APPROVED

"Approved" means approved by The Eskom Properties (EC) Official in writing.

5 NET MEASUREMENTS

Unless otherwise stated herein, all work is measured net as fixed in position, in accordance with the "Standard System of Measuring Builder's Work in South Africa" - **Sixth Edition as amended 1996 and 1999**, no allowance being made for cutting and waste. The term "measured net" means the finished surface or quantity; i.e. with all wants deducted and no allowance made for passings and laps except where otherwise described.

To assist the Contractor certain items may have the words "Measured Net" after the respective descriptions, but it is to be clearly understood that this practice does not establish a precedent.

6 DITTO

"Ditto..." shall mean as the foregoing item plus the new qualification.

"Ditto, but..." or "Ditto...ditto" shall mean as the foregoing item but a substitute of the new qualification for the relevant clause in the foregoing item.

7 NOMINAL SIZES

Where a component is specified as a nominal size the onus is on the Contractor to establish from the manufacturers the exact size or the likely size variation.

ALTERATIONS

FORMING NEW OPENINGS OR ALTERING OPENINGS IN EXISTING WALLS

Prices for items of forming new or altering existing openings shall, unless otherwise stated, include the following:

- a) Formwork for concrete cills and thresholds where required.
- b) Inserting 375 micrometre embossed polyethylene sheeting as damp-proof course under external window cills, including breaking out and making good brickwork as necessary.

The supply, etc., of all windows, doors, frames, etc., to the newly formed openings and the removal of all existing windows, doors, frames, etc., from openings to be altered, have been included elsewhere in these Bills of Quantities.

EARTHWORKS

Generally:

Working space to sides of concrete wall footings, column bases, etc. will be measured and paid for only if specifically instructed by the Engineer as being required, and if the Contractor over-excavated areas will be to his account and shall be compacted to the same degree and in the same manner as the backfilling to the remainder of such excavation.

Site Clearance

"Clear Site" shall include for digging up and removing all rubbish, vegetable soil and substance from the area of the site to be built upon, removing all small trees, etc. having a circumference of less than 200mm measured at a height of 1m above ground level including grubbing up all roots and roughly levelling and carting away debris to a site to be found by the Contractor.

Classification of Materials

The Soil Investigation Report is appended to the Back of these Bills of Quantities. The contractor is encouraged to study this document and acquaint himself with the soil conditions.

Carting away of excavated material

Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site.

Computation of Quantities

Earthworks will be measured by volume once only in excavation. The volumes handled will be computed from the difference in elevation between the original ground levels and the specified earthwork levels.

Prices of excavation

Prices for all items of excavation shall include for digging out, any necessary staging required, forming to falls, slopes, curves, etc., trimming sides and stepping, levelling and ramming bottoms and for watering same to the satisfaction of the Eskom Properties (EC) Official if so directed.

Prices shall include for any extra labour required in recommencing excavation to make it deeper or wider if the Eskom Properties (EC) Official so directs.

Prices shall also include for bulking after excavation and consolidation or filling and for multiple handling of excavated materials as no allowance for bulking or consolidation will be made.

CONCRETE, FORMWORK AND REINFORCEMENT

Prices of Concrete, Formwork and Reinforcement

(i) In situ Concrete

Prices of all in situ concrete shall include for mixing, hoisting and lowering to all levels, placing, working around reinforcement, vibrating, compacting, pumping, etc.

(ii) Formwork

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

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

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

The prices of all formwork shall include for use, waste, all straight, square and raking cutting, splayed edges, intersections, struts, hangers, etc. horsing up, wedging, maintaining, easing, striking and removing as and when directed, except where described as "Permanent". The formwork is measured to the actual nett surface of the

Prices for smooth formwork shall include 25 x 25mm timber to all external angles.

(iii) Power Floating

After the concrete has been properly placed, struck off or rolled, it shall not be worked until ready for floating. The lapse of time between tamping and power floating may vary from 2 to 8 hours or more depending on weather conditions, concrete temperature and concrete mixture. It should be noted that it may be necessary to power float outside normal working hours and prices shall include for this possibility.

Floating shall begin when the water sheen has disappeared or the mix has stiffened enough so that the weight of a man standing on its leaves on a slight imprint on the surface. If two power floating operations are necessary to bring the surface to the desired state, the concrete shall be allowed to stiffen or become harder before beginning the second floating operation.

Sprinkling dry cement or a mixture of dry cement and water on the surface of the fresh concrete to absorb water or to stiffen the mix shall not be permitted during any stage of floor construction.

Power floating shall continue until the surface attains an even fine matt texture.

The maximum variation in surface tolerance for powerfloated floors shall be 3mm in 3000mm. If variations greater than this exist, the Eskom Properties (EC) Official may direct the Contractor to grind the floor, at his own cost, to bring the surface within the requirements. Patching of low spots shall not be permitted. Grinding shall be done as soon as possible, preferably within 3 days, but not until the concrete is sufficiently strong to prevent dislodging coarse aggregate particles.

(iv) Steel Reinforcement

The prices for steel reinforcement shall include for the supply, cutting to lengths, bending to the exact dimensions and shapes shown on the drawings and schedules, lowering or hoisting to the various floor levels, placing and wiring in position with and including 1.60 or 1.25mm diameter annealed wire or by the use of all necessary spacers, lifting blocks, etc. and maintaining in position while the concrete is being deposited. Prices of fabric reinforcement shall include for unrolling, cutting, bending and binding wire, and for 300mm (minimum) side and end laps, hoisting or lowering and fixing and maintaining in position complete.

COST OF TEST

The costs of making, storing and testing of concrete test cubes shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports of the tests to the Eskom Properties (EC) Official. The testing shall be undertaken by an independent firm or institution nominated by the Contractor to the approval of the Eskom Properties (EC) Official. (Test cubes are measured separately.)

BRICKWORK

Clay Bricks

Stock bricks generally shall be good, hard, sound, well burnt clay stock, even in size and shape and equal to samples to be submitted to and approved by the Eskom Properties (EC) Official. No chipped or damaged face

Wire Ties

Where brickwork is required to be in two skins prices shall include for 3.5mm (minimum) modified P.W.D. type galvanised steel wire ties, at a rate of not less than five per square metre.

Where brickwork is described as being in hollow walls prices shall include for 3.5mm (minimum) Butterfly type galvanised steel wire ties at a rate of not less than five per square metre.

Where brickwork is described as being in lining to concrete, prices shall include for 3.5mm (minimum) Butterfly type galvanised steel wire ties at a rate of not less than five per square meter, and for fixing inside formwork, embedding in concrete and for building into brickwork. Additional ties shall be provided within 230mm of any opening at every fourth course.

Builder's Work To Services

No separate items shall be measured for building in electrical boards, switchboards, pipes, etc. but the contractor shall allow in his price of brickwork for building in distribution boards, switchboxes, etc. or leaving recesses for same, cutting and fitting around pipes and flushing solid all chasses in cement mortar.

Prices

The prices for brickwork, etc. shall include for all cutting, plumbing angles, forming reveals weep holes in cavity walls, waste, and for wedging and pinning to underside of steel or concrete beams, concrete slabs, etc.

Prices shall also include for soaking bricks in water immediately before laying, hoisting bricks and mortar, etc. to various floor levels and for raking out joints of brickwork to be plastered or tiled.

CLEARING OFF

Great care shall be taken to keep face brickwork, brickwork, quarry tiles, etc., free from surplus mortar as the work proceeds and at completion they shall be cleaned off with spirits or salts and water or other approved cleaning materials. Rates shall include for this.

Bagged Finish

Bagged finish to brickwork is to be done whilst the mortar in joints is still soft and shall be formed by rubbing over the walls with wet rough sacking, until all joints and cervices are filled up and an even surface is obtained. Mortar, as used for building the brickwork, shall be added as may be necessary.

If bagged to walls is done after the mortar in joints is set. The wall surfaces shall be rubbed over with wet rough sacking as above, but cement grout shall be added as necessary to fill up the joints and crevices and to obtain an even surface. The final rub is to be done only vertically or horizontally and not circular.

ROOF COVERINGS, ETC

COLOURED METAL ROOF SHEETING

The sheeting and fittings shall be Global Roofing Solutions BR7 profiled steel sheets and fittings with standard colour finish. The roofing sheets shall be fixed to timber or steel purlins with the appropriate fixing clips,

All fittings, fixing clips, etc., shall be those supplied by the manufacturer of the sheeting.

Fittings, unless otherwise stated, shall be lapped a minimum of 150mm.

Descriptions of all roofing and fittings shall be deemed to include for: -

(a) Fixing as described and in accordance with the manufacturer's instructions with and including all necessary

(b) Fastening of fittings to the tops of the vertical ribs with approved pop rivets soldered over or with

20mm x No. 14 (sherardised or stainless) steel self-tapping screws each fitted with one bonded galvanised and bituminous felt washer

(c) Notching fittings over ribs of roofing or cladding sheets where described in the items

(d) Coating the heads of all fasteners and the cut edges of all sheets with matching touch-up compound supplied by the manufacturer of the sheeting and in accordance with their instructions.

Taking special care and precautions at all times to prevent the scratching of or other damage to the finished

CARPENTRY AND JOINERY

CONSTRUCTION IN GENERAL

All timbers shall be in as long lengths as possible and except where lapping is possible, timbers up to 76mm in depth shall be halved at junctions and angles and above 76mm shall be splay-scarved at junctions; in all cases the joints shall be arranged over the points of support and well spiked.

PLASTERING

PREPARATION OF SURFACES

Prior to the application of floor finishes, screeds, plaster finishes, etc., the surfaces of the new concrete, brickwork, etc. shall be thoroughly cleaned, chipped, hacked, sloshed, etc. as necessary to ensure a satisfactory bond. The Contractor will be held entirely responsible for the proper and adequate preparation of the surfaces and any work which results in failure in this regard shall be made good at the Contractor's expense to the satisfaction of the

PLUMBING AND DRAINAGE

FIXING OF PIPES

Where pipes or gutters are fixed to walls, soffits, roof timbers, etc., descriptions shall be deemed to include for all necessary brackets, holder bats, pipe clips, etc. and for plugging and screwing or cutting and pinning or building tails of holder bats, hangers, etc., to brickwork or concrete in (1:3) cement mortar and for making good. No distinction is made between pipes fixed to different elements, cut in, chased in ceiling, built in etc.

PAINTWORK

Materials

For any particular work the priming coat and subsequent coats of paint shall be executed with paints from the same manufacturer.

The Contractor will be held entirely responsible for the proper and adequate preparation of the surfaces and any work which fails to meet the manufacturer's recommendations must be made good at the Contractor's expense to the satisfaction of the Eskom Properties (EC) Official.

Descriptions

Descriptions shall be deemed to include for cutting in of contrasting colours or paints and masking as required.

| ITEM NO | DESCRIPTION | UNIT | Rates |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------|
| PG1 | <p><u>SECTION NO. 1 PRELIMINARIES</u></p> <p>P&G's, will be applied as the percentage priced by the Contractor on all works executed which will be deemed to consider all items which are not included in the Contractor rates or priced elsewhere in the Bill of Quantities .</p> <p><u>NOTES</u></p> <p>1.The Section of The Service information headed Part 1 : Preliminaries shall be taken to be incorporated herein.</p> <p>The Agreement shall be the NEC3 Engineering and Construction Short Contract Agreement .</p> <p>Tenderers are referred to the abovementioned documents for the full intent and meaning of each clause thereof. These clauses are hereinafter referred to by clause number and heading only (for which such allowance must be made as may be considered necessary). Where standard clauses or options are not applicable to the contract such modification/ corrections or supplements as are necessary are given under each relevant clause heading.</p> <p><u>PART 1 : CORE CLAUSES</u></p> <p><u>General</u></p> <p>Actions Clause 10</p> <p>Identified and defined terms. Clause 11</p> <p>Law Clause 12</p> <p>Communications Clause 13</p> <p>The Service Manager Clause 14</p> <p>Employer provides right of access and things Clause 15</p> <p>Early warning Clause 16</p> | Percent - mark up | |
| | | | |

The Contractor's main responsibilities

Providing the Works
Clause 20

Contractor's Plan
Clause 21

Revising the Contractor's plan
Clause 22

Design of Equipment
Clause 23

People
Clause 24

Working with Others
Clause 25

Subcontracting
Clause 26

Other responsibilities
Clause 27

Time

Starting and Completion - Refer to the the NEC3 document
Clause 30

Instructions to stop or not to start work
Clause 32

Defects

Testing and inspections
Clause 40

Testing and inspection before delivery
Clause 41

Correcting Defects
Clause 42

Accepting Defects
Clause 43

Payment

Assessing the amount due
Clause 50

Payment
Clause 51

Defined Cost
Clause 52

Compensation events

Compensation events
Clause 60

Notifying compensation events
Clause 61

Quotations for compensation events
Clause 62

Assessing compensation events
Clause 63

The Service Manager's assessments
Clause 64

Implementing compensation events
Clause 65

Use of equipment, Plant and Materials

The parties use of equipment Plant and Materials
Clause 70

Limitation of Liability, Indemnities and Insurance

Employer's risks
Clause 80

Contractor's risks
Clause 81

Indemnity
Clause 82

Insurance Cover
Clause 83

Insurance Policies
Clause 84

Termination and Disputes

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| Terminations | Clause 90 | | |
| Reasons for Termination | Clause 91 | | |
| Procedures on termination | Clause 92 | | |
| Payment on termination | Clause 93 | | |
| | | | |
| <p><u>Bills of Quantities</u></p> <p>The pages of the Bills of Quantities are numbered consecutively.</p> <p>The Tenderer shall check the numbers of the pages and should any be missing or duplicated, or the reproduction be indistinct, or if any doubt exists as to the full intent and meaning of any description, or these Bills of Quantities contain any obvious errors, the Tenderer shall notify the Eskom Properties (EC) Official at once who shall promptly give a written directive. No liability whatsoever will be admitted in respect of errors in any tender due to the abovementioned causes.</p> <p>Items in these Bills of Quantities are to be read and priced in conjunction with and the descriptions regarded as amplified by the Service Information and no claim arising from brevity of description of items fully described in the Trade Preambles will be entertained.</p> <p>Where appropriate, rates for similar items in the various sections of the Bills of Quantities must be the same. The Quantity Surveyor shall be at liberty to make adjustments to any individual rates or not, as will eliminate errors, discrepancies or what he considers to be unreasonable or unbalanced rates, without altering the Contract Sum, prior to signing.</p> <p>Prime Cost and Provisional Amounts, etc., contained herein may be omitted or reduced at the Eskom Properties(EC) Official's sole discretion and the Contractor shall not be entitled to claim for any loss by way of reduction or omission of any discount, or percentage relating to Prime Cost</p> | | | |

and Provisional Amounts, etc., or loss of profit related thereto.

Inspection of documents

There are certain as built drawings available , but should the contractor require to view these drawings , these are available at Employers office.

THE SITE

Defined Works Area

Any restriction to the area, including servitudes and the like, the Contractor may occupy are defined. The Contractor shall not extend his operations beyond such a defined area.

Inspection of the Site

The Tenderer is to inspect the site and any existing structures thereon and thoroughly acquaint himself with the conditions under which the Works are to be executed including the means of access to the Works, the condition of the roads and generally of all matters which may influence the execution of the Works.

Existing adjacent premises occupied

Although the area of the Works shall not be occupied, Contractors are to note that the site forms part of an existing working area. The adjacent existing premises will be in use and occupied during the execution of the Works. The Contractor shall execute the Works as will least interfere with the general routine of the occupants of the premises and minimise any nuisance from dust, noise or other causes. Specific requirements of the Employer are described in clauses.

Services known

All known existing services are described indicating whether such services are to be terminated, diverted or continue in use either temporarily or permanently. Contractors are to familiarise themselves with any such identified services.

Services - unknown

Upon encountering any unknown services such

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| <p>as underground cables, pipes or sewers during the execution of the Works the Contractor shall immediately suspend all affected work in the vicinity and notify the Eskom Properties (EC) Official forthwith and request a contract instruction in regard thereto.</p> <p><u>Protection of trees on adjacent site</u></p> <p>Trees and shrubs shall not be removed, cut back or disturbed in any way without the consent of the Eskom Properties (EC) Official.</p> | | |
| <p>Trees and shrubs shall not be removed, cut back or disturbed in any way without the consent of the Eskom Properties (EC) Official. Specific requirements of the Employer are described in detail in the Works Information.</p> <p><u>Inspection of adjoining properties, etc.</u></p> <p>Before commencing the Works the Contractor shall arrange with the owners of adjacent buildings and properties and representatives of local authorities to inspect, among others, the buildings, structures, pavings, kerbs, channels and fences. The Contractor shall note in writing all conditions that the Works could affect and copy the Eskom Properties (EC) Official accordingly. The Contractor should pay particular attention to cracks, defects and existing levels related to structures, pavings, kerbs, channels and fences, which later could be claimed to have been caused or disturbed by the construction operations.</p> <p>Where instructed by the Eskom Properties (EC) Official, 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 Eskom Properties (EC) Official.</p> | | |

MANAGEMENT OF CONTRACT

Programme for the Works

The Contractor shall provide with his bid full construction methodology and approved programme, per the programme dates listed in the Contract Data, outlining in detail how the Works will be handled:-

- a) Personnel
- b) Equipment
- c) Plant and materials
- d) Vertical and horizontal transportation
- e) Site facilities
- f) Hoists, access, scaffolding
- g) Rubble removal

- h) Inspection and handover procedures
- i) Security
- j) Safety
- k) Quality control and reporting plan
- l) Targeted procurement plan - 40% minimum level
- m) Environmental

The Contractor shall prepare and be responsible for a programme for the Works in sufficient detail as to represent the units of work to enable the Eskom Properties (EC) Official to assess the progress of the Works. The Contractor, who shall co-ordinate Sub-Contractor's programmes with his own, shall programme the Works. Where required by the Contractor, the Sub-Contractor shall prepare and update his programme for the Works in sufficient detail to meet the needs of the programme. The Contractor shall implement and modify the programme should any significant deviations take place. The Contractor shall provide copies of the programme and its supporting documents with all updates for the Eskom Properties (EC) Official and/ or the Sub-Contractor where relevant.

Progress Meetings

The Eskom Properties(EC) Official, Contractor's representative and other Agents as required shall hold meetings related to the progress of the Works at regular intervals and at such other times as may be necessary.

Sub-Contractors shall not be present at progress meetings unless specifically requested by the Contractor or Eskom Properties (EC) Official. The Service Manager shall record and distribute the Minutes of the Meetings.

The Contractor shall report on his own and all Sub-Contractors' progress and on all matters affecting progress and execution of the Works.

The Contractor shall convene additional regular meetings with his Sub-Contractors and Suppliers in order to monitor their progress and to discuss and co-ordinate all aspects of the Contract.

Technical Meetings

The Contractor shall arrange regular separate meetings to review technical matters with Sub-Contractors prior to the Progress Meetings for consideration as necessary at such Progress Meetings. Minutes of these meetings are to be distributed to the Professional Team prior to Progress Meetings.

Monthly reports

The Contractor will be required to submit a monthly report to the Service Manager. Example of Items that need to be included in the report will be labour manhours, status of task orders, status of quotations, status of Early Warnings,airconditioning inventory, list of employee names, list of sub contractors etc. The content and format of report to be agreed by Service Manager.

MATERIALS AND WORKMANSHIP

Samples of materials

The Contractor shall furnish samples of materials and specimens of finishes as may be called for by the Eskom Properties (EC) Official for his approval.

Workmanship samples

The Eskom Properties(EC) Official may instruct the Contractor to furnish samples of workmanship for his

approval. Where the Eskom Properties (EC) Official 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.

The Eskom Properties(EC) Official may reject any workmanship not corresponding with approved samples. Approved samples are to be kept on site until the completion of the Works and thereafter removed if not required in the finished work. Adequate access and viewing facilities shall be provided.

Ordering of materials

Should the Bill of Quantities be used for ordering materials, this shall be entirely at the Contractor's risk.

TEMPORARY WORKS AND PLANT**Deposits and fees**

The Contractor shall pay all deposits, fees and charges according to any Act of Parliament, Regulation or By-Law of any Local Authority which relate to hoardings, the use of pavements, street encroachment or crossings, permission for the suspension of parking facilities and the like.

Enclosure of Works

The Contractor must erect, maintain and remove at completion, hoardings with gantries, fences, safety screens, barriers, access gates, covered gangways and the like as necessary for the enclosure of the Works and elements thereof all for the protection of the public and others.

Any existing streets, pavements and kerbs are to be kept and left in good condition on completion of the Works, to the satisfaction of the Service Manager.

The Tenderer is deemed to have priced against this item for all costs in respect of these requirements.

Advertising

All advertising rights on the site and the hoardings are reserved exclusively for the Employer.

Plant, equipment, sheds and offices

The Contractor shall provide, maintain and remove on completion:

- a) All plant, equipment, scaffolding, tools and the like required by the Contractor for the due and proper fulfilment of the Works, excluding scaffolding exceeding 2m platform height.
- b) No space is available for temporary sheds for storage of materials and the use of the Contractor's workers on site. Contractor to make his own arrangements
- c) No space is available for Office accommodation on site, Contractor to make his own arrangements
- d) If space is available , Contractor to obtain permission from Service Manager before installing on site.

Temporary Services**Location**

The Contractor shall agree the location of all temporary services with the Eskom Properties (EC) Official before installation and on completion remove the same and make good.

Water

The Contractor shall provide all water (if not available) for Works at his own expense and shall pay all charges levied by the owners of or the controllers of any water supply and from which he may reach his requirements. If this Contract embodies work at a Building or Institution where water is already laid on, the Contractor may by arrangement, and only by arrangement by the Eskom Properties(EC) Official and with his written approval, use water from such supply. Permission must be obtained from the Eskom Properties (EC) Official before any water is thus obtained and any connection and metering of water usage including payment therefore, or extension of the supply required must be carried out at the Contractor's expense. Such permission shall not relieve the Contractor of his responsibility of providing all water for the Works.

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| <p><u>Electricity and Lighting</u></p> <p>The Contractor shall provide any artificial lighting which may be necessary or required for the proper execution of any portion of the Works, and provide electric power(if not available on site) for any purpose required in connection with the Works, including for all electric light and power required by all Sub-Contractors.</p> <p>The Contractor shall give all notices and pay all fees in connection with temporary electrical connections and pay for all current consumed.</p> <p><u>Telecommunication equipment</u></p> <p>The Contractor's office must be contactable by telephone and email. The Contractor's responsible persons for works on all sites must be contactable via cellphone. Relevant contractors staff for all sites must be equipped with handheld devices capable of transmitting signed task orders and pictures via email from site to the Employers representative at the Contractor's cost.</p> <p><u>Toilets</u></p> <p>The Contractor shall provide separate ablution facilities including toilet paper and hand wash soap for the workers, and visitors and shall maintain the same in a thoroughly clean and tidy condition.</p> | | |
| <p><u>FINANCIAL ASPECTS</u></p> <p><u>Taxes, etc.</u></p> <p>Value added Tax (VAT) shall not be included in the prices and/ or rates of all measured items.</p> <p>Notwithstanding anything to the contrary contained herein, should the rate of VAT be changed between the tender closing date and the date of issue of the final payment certificate, any additional tax payable by the Contractor resulting from such change in VAT shall be for the account of the Employer and any reduction in tax likewise resulting shall be for the benefit of the Employer.</p> | | |
| | | |

GENERAL

Protection of the Works

Specific protection measures required by the Employer are described in detail in the Works Information

Protection of existing and/or partially occupied Works

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

Site Security - Works Information

In order to maintain the integrity of the site during construction, it shall be necessary to implement security measures applicable to Contractor's employees. It is expected of the Contractor's Site Supervisors to exercise control over their staff and maintain order.

The Contractor shall take all appropriate measures for general site security and shall ensure that the following requirements are adhered to at all times:

- a) All workers to be in new company overalls, safety helmets, boots, etc.
- b) Eskom shall not accept any responsibility for theft or damage to the Contractor's equipment while on site. It is expected that the Contractor shall provide own site security service.
- c) The following items will not be allowed on site:
 - i) Fire arms or other dangerous weapons
 - ii) Explosives
 - iii) Liquor
 - iv) Narcotic drugs

Disturbance

The Contractor shall execute the Works with a minimum of disturbance to adjoining premises, any parts of the Works already handed over and the occupants of those premises and/ or parts. Any specific requirements are stated in the Works Information.

Works cleaning and clearing

The Contractor shall regularly clean and clear away all rubbish and excess materials as the Works proceed and leave the Works in a clean and satisfactory state for use and occupation in terms of the agreement.

Vermin

The Contractor shall take all necessary precautions to keep the Works and site free from vermin and shall leave the Works vermin-free on completion.

Overhand work

No provision has been made for overhand work. Where necessary, the Contractor shall make his own arrangements with the owners of adjoining properties to execute such work.

Boundary beacons, setting out pegs, etc.

The Contractor shall maintain the beacons, setting out pegs and master datum during building operations and shall arrange for and bear any costs for resurveying should they be disturbed or lost.

Eskom Properties (EC) Official and Supervisor

Where the works information in a drawing, specification or other document referred to therein, refers to the words Architect or Engineer, these shall be interpreted as:

a) Supervisor, where the context clearly refers to a testing or inspection activity in terms of the Supervisor's role as deemed in the NEC.

b) Eskom Properties(EC) Official, in all other cases.

Occupational Health and Safety Act

The contractor shall for the duration of this contract be deemed to be the mandatory Eskom for the purposes of the Occupational Health and Safety Act No. 85 of 1993, and he shall prior to taking occupation of the site satisfy Eskom by means of written representations that he has fully complied with the relevant requirements of the said act.

Acceptance by Eskom of the Contractor's written representations in terms of the above shall constitute an agreement in writing to the arrangements and procedures between the parties to ensure compliance by the Contractor with the provision of the act referred to therein, for the purpose of section 37(2) of the said act.

Eskom shall at all times have the right to summarily suspend the performance of the Contractor hereunder pending compliance by the Contractor with any requirement, regulation and direction referred to.

Eskom shall be entitled to set off against any amount owed by Eskom to the contractor hereunder any loss or damage suffered by it as a result of the suspension of the contractors performance in the circumstances envisaged above.

The tenderer shall price for all necessary items to comply with the OSH act.

National Building regulations

The Contractor is to ensure he complies with all requirements in terms of National Building regulations when executing work on site.

Retention

Retention of 10% of the total value of works per task order will be applied on selected task orders as per the Employers discretion. Should task orders not be completed to the Employer's satisfaction after the defects liability period has ended, the retention amount will not be paid to the Contractor

SECTION C : SPECIFIC PRELIMINARIES

SUPPLEMENTARY DOCUMENTATION

Shop Drawings

Definition

The term "shop drawings" shall mean drawings, diagrams, illustrations, schedules, performance charts, brochures, operating manuals and other data which are prepared by the Contractor or any Sub-Contractor, manufacturer, supplier or distributor and which illustrate some portion of the Works.

General Responsibilities

The Contractor shall provide a person or persons who shall be available immediately upon commencement of the Contract, whose responsibility will be:

(a) To familiarise himself with all available drawings
This will involve a clear understanding of services and element co-ordination performed by the Project Manager, in order that Sub-Contractors can be properly briefed.

(b) To provide the Professional Team with comprehensive lists of shop drawings to be prepared by relevant Sub-Contractors.

c) To check all shop drawings for sufficiency prior to submission to the relevant Consultant in the Professional Team. It is expected that such checking will include all co-ordination and pro-active resolution of any conflicting services and elements.

It is also noted that resolution of co-ordination problems will require attendance at Services and Element Co-Ordination Meetings, called by the Eskom Properties (EC) Official as and when necessary.

Procedures

The Contractor shall, at his own expense, prepare and submit one reproducible print of shop drawings of all fabricated work, working or setting out drawings, shop details and schedules to the Eskom Properties(EC) Official for approval by the

Eskom Properties (EC) Official, the relative Consulting Engineer, and/ or the Employer as is appropriate and such work shall not be performed by the Contractor until such approval has been given. The Contractor shall take cognisance of and adhere to the Project Document Numbering System, if any, in use on this Contract

The Contractor shall present a complete schedule showing the sequence of submission of shop drawings, including submission dates, for all trades and the scheduled dates for approval of all drawings. This schedule shall take into account that the Eskom Properties (EC) Official and the relative Consulting Engineer and the Employer reserve a two weeks check period from the date of the receipt of all shop drawings and/or catalogue data.

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| <p>All submissions shall be on dates as indicated in the above schedule and sufficiently in advance to permit the Contractor to meet fabrication deadlines; no claim for extensions to the contract time will be granted to the Contractor by reason of his failure in this respect.</p> <p>The Contractor shall submit four copies of catalogues and data for approval. The Contractor shall check all submissions for conformity with the contract drawings and specifications and correct any errors, omissions or deviations before their transmission to the Eskom Properties (EC) Official. All submissions shall bear the Contractor's dated stamp of approval as evidence that they have been so checked and corrected by the Contractor. Any drawings, schedule or catalogue submitted without this stamp will not be considered by the Eskom Properties (EC) Official and will be returned.</p> | | |
| <p>When the Eskom Properties (EC) Official advises the Contractor that shop drawings have been approved, he shall immediately submit to the Eskom Properties (EC) Official the original transparencies of such drawings so that the Eskom Properties (EC) Official's stamp of approval may be appended thereto. Thereafter the Contractor shall furnish to the</p> <p>Eskom Properties (EC) Official four prints of the approved shop drawings, setting out drawings and schedules. The Contractor shall also furnish to the Works as many prints of the approved shop drawings and schedules as may be required. No work shall be performed from any shop drawings and/ or catalogues not stamped with the Project Manager's approval.</p> <p>The Contractor shall be responsible for ensuring that all dimensions conform to the dimensions of built work.</p> <p>The Eskom Properties (EC) Official's approval of any document or drawing shall not in any way vary his contractual or delictual obligations and liabilities to the Employer or any other party, nor does it vary the contractual or delictual obligations and liabilities of the party submitting such document or drawing for approval.</p> <p>If the submissions differ from the requirements of the contract, the Contractor shall make specific mention of each difference in his letter of transmission with a request for substitution, together with his reasons for same, in order that,</p> | | |

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| <p>if acceptable, suitable action may be taken by the Eskom Properties (EC) Official. Otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the requirements of the contract.</p> <p>Corrections of shop drawings by the Project Manager shall not change the scope of work. Should any such correction be considered to constitute a change of scope of work, the Contractor shall notify the Eskom Properties (EC) Official in writing within not more than seven calendar days of such change and shall not proceed with the fabrication until so authorised by the Project Manager. Claims for change of scope made after performance of the work constituting the claimed change of scope will not be considered.</p> | | |
| <p>Unless otherwise agreed with the Project Manager, shop drawings shall be prepared to show all details of installation, including reticulation, fixing, etc., of all components and assemblies, or if the Contractor desires to deviate from the design then these drawings shall be all in accordance with the above procedures and at the Contractor's expense.</p> <p><u>As built drawings</u></p> <p>The position of construction breaks and the extent of individual concrete pours are to be recorded by the Contractor on the Structural Engineer's drawings and are to be submitted to the Architect and the Structural Engineer for their records.</p> <p><u>Labour Record</u></p> <p>At the end of each month the Contractor shall provide the Eskom Properties(EC) Official with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all Sub-Contractors on the Works each day.</p> <p><u>Plant Record</u></p> <p>At the end of each month the Contractor shall provide the Eskom Properties(EC) Official with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the Works.</p> | | |

Unauthorised Persons/ Workmen on Premises

The Contractor shall at all times strictly exclude all unauthorised persons from the Works and the site and shall set up notice boards to that effect.

Safety Helmets and Protective Clothing

The Contractor shall take all necessary steps to ensure that all workmen employed on the Works comply with regulations regarding the wearing of safety helmets.

The Contractor shall provide and keep on site an adequate supply of clean safety helmets and protective clothing for the use of all Employer's agents and all authorised visitors.

Notice boards shall be erected warning all workmen and visitors to wear safety helmets on or about the Works.

MANAGEMENT OF CONTRACT**Co-Ordination**

The Contractor is to submit a schedule of information required to all parties concerned, giving dates upon which such information and details are required on site

Timeous advance notice is to be given by the Contractor of information or drawings which are required on site.

Site Supervision

The contractor shall in his employ, have a dedicated supervisor to supervise work performed by the Contractor, who must be based at Area Office at all times. Supervisor to be have at least 5 years experience in managing building/maintenance contracts, with a minimum of a Diploma qualification or similiar. CV to be approved by Service Manager before appointment , to qualify for payment. The Service Manager will decide the number of Supervisors required after contract award.

Working out of dedicated zone

The Service Manager is entitled to, at any time, request the Contractor to perform work out of the contract dedicated zone.

Building inspections

The Contractor is required to do building inspections on a regular basis and report back to the Service Manager. Frequency to be determined by the Service Manager.

GENERAL

Media Releases, Advertising, etc.

All rights of publication of articles in the media, together with any advertising relating to, or in any way connected with this project shall invest in the Employer

The Contractor together with his Sub-Contractors shall not, without the written consent of the Employer, cause any statement or advertisement to be printed, screened or aired by the media.

Scale and Dimensions

All dimensions will be figured on the drawings or may be calculated from figured dimensions and are always to be followed. No dimensions shall be obtained by scaling.

Manufacturer's Recommendations

All commodities are to be handled, stored, used, applied and/or fixed in strict accordance with the manufacturer's instructions and recommendations and after consultation with the manufacturer's authorised representative. Should these instructions and/ or recommendations conflict with other specified requirements the Project Manager must be notified timeously.

Commodities to be New

All commodities, goods, articles or materials throughout the building are to be new so as to ensure that they are likewise in perfect condition when handed over at completion of the Work.

Standard of Workmanship and Materials

In the absence of detailed specifications for any item or items, National Building Regulations, the latest applicable South African Bureau of Standards Specification, or where such does not exist, then the latest applicable British Standard Specification shall apply.

Removal and Making Good of Temporary Works, etc., on Completion

The Contractor shall remove all temporary Works, roads, services and the like used for this Contract and shall make good to the entire satisfaction of the Eskom Properties (EC) Official any damage resulting therefrom.

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| <p><u>Cost of Claims</u></p> <p>All costs incurred by the Contractor in the preparation of quotations supplied to the Eskom Properties(EC) Official and/ or Quantity Surveyor shall be borne by the Contractor.</p> <p><u>Signage</u></p> <p>All warning signage must be in English</p> <p><u>Environmental requirements</u></p> <p>All costs related to the compliance of the Environmental Requirements must be allowed for by the Contractor under this item</p> | | |
| <p><u>Proprietary branded products</u></p> <p>The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturer's instructions after consultation with the manufacturer's authorized representative.</p> <p><u>Contractors Responsibility</u></p> <p>The Employer, the Eskom Properties (EC) Official and the other professional consultants shall not be responsible for any act or omission on the part of the Contractor which may result in any patent or latent defects, in materials or workmanship, breach or neglect of any local regulations. The Contractor shall at times be responsible for any such neglect, deviation or wrong act, whether the same discovered before or after the final certificate, or any other Certificate, has been is approved.</p> <p><u>Travelling</u></p> <p>The cost of travelling time , is for the Contractor and must be allowed for in his P&G % priced under this section.</p> <p><u>Sub Contract</u></p> <p>The Contractor is allowed to claim the P&G' % priced in this section for work that is sub-contracted for non bill rates.</p> <p><u>Overtime</u></p> <p>Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the Contractor unless the Eskom Properties(EC) Official has specifically authorized in writing, prior to the execution thereof, that costs for such overtime are to be borne by the Employer.</p> | | |
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Guarantees and Maintenance Manuals

The Contractor shall obtain and hand over to the Eskom Properties(EC) , all relevant guarantees, warranties, any operating and maintenance instruction manuals, data or instructions required by the Eskom Properties (EC) Official or provided by manufacturer's, suppliers or Sub-Contractors.

The Contractor shall ensure that all warranties and guarantees received are fully ceded to the Employer on Final Completion, failing which the release of the last payment due to the Contractor will be withheld until this is received.

Cost of Claims

All costs incurred by the Contractor in the preparation of claims to the satisfaction of the Eskom Properties(EC) Official and/or Quantity Surveyor shall be borne by the Contractor.

The supply of all materials

Labour of every description including additional costs incurred in working overtime, weekends, public holidays, etc., to meet the stipulated programme dates.

All making, transport, conveying, cartage, carriage and delivery, etc.

Taking delivery, unloading, storing, unpacking, hoisting or lowering, settings fixing and building into positions, cutting and waste, templates. patterns and models.

Provision and maintenance of all plant equipment, machines trucks and other vehicles, tackle, tools, staging, sheds, stores and temporary works necessary for the due and proper performance of the Contract Works, establishment charges and all fuel, operating costs and depreciation pertaining to plant, equipment, etc.

All applicable import taxes and duties.

Overheads and profit.

All obligations arising out of the Provisional Bills of Quantities, and all costs and charges deemed necessary for complying with the terms and conditions herein.

All charges required by the Contractor in connection with Preliminary and General, site established and the like.

Overloading

The Contractor shall take all necessary steps to ensure that no damage occurs due to overloading of any portion of the Works. The Contractor shall submit details of his proposed loading, storage, plant, erection, etc., to the Eskom Properties (EC) Official for their approval prior to proceeding with such loading, storing, erecting or executing work and shall comply with and pay for the Engineers requirements in connection with the provision of temporary support work, etc. Any damage caused by the Works by overloading shall be made good by the Contractor at his sole expense.

Notwithstanding any approval given by the Eskom Properties (EC) Official, the Contractor shall be entirely responsible for damage caused to the Works by overloading which damage shall be made good by the Contractor at his sole expense

Removal and Making Good of Temporary Works, etc., on Completion

The Contractor shall remove all (except where specifically stated otherwise) temporary Works, roads, services and the like used for this Contract and shall make good to the entire satisfaction of the Eskom Properties (EC) Official any damage resulting therefrom.

Location of Temporary Buildings and Temporary Services

The Contractor shall provide all necessary temporary works, including temporary roads, tracks, crossings, hardstanding and services, hoardings, dust screens, tunnelling, etc., required for his own and Sub-Contractors use during the construction and maintenance period.

There is no guarantee given or implied that Site conditions will be such that the Contractor will be able to erect such temporary works, roads, hardhats, offices stores and temporary accommodation within the site boundaries and it shall be the Contractor's responsibility to adopt whatever measures he deems necessary in this regard and to obtain all necessary permission and pay all costs in connection therewith.

Making Good

All materials and workmanship in building up, making good, etc., are to match existing and where new materials abut existing, they are to be neatly jointed to same.

'Making good' existing work where disturbed or damaged shall mean the provision of the necessary new material to match existing and the necessary workmanship so that a complete restoration is achieved to the satisfaction of the Eskom Properties (EC) Official.

'Making good' where abutting walls, etc., are removed, shall mean the provision of the necessary material and workmanship in filling the gaps to match surrounding finishes so that a complete and perfect surface, continuous with surrounding surfaces and matching of same, is obtained to the Eskom Properties (EC) Official's satisfaction.

Mode of Procedure

Notwithstanding anything to the contrary contained herein the Eskom Properties (EC) Official at all times reserves the right to direct the order in which the various parts of the Contract are to be executed. The Contractor shall give priority to any individual section or portion of the Works that, in the opinion of the Eskom Properties (EC) Official, requires to be expedited.

Should it appear, in the Eskom Properties (EC) Official's opinion, that work in any area is not being executed in accordance with the requirements of the Contract Programme, the Contractor shall provide additional manpower and resources and shall work additional overtime and do everything else required to bring the work back to programme to the satisfaction of the Eskom Properties (EC) Official and to the Contractor's cost.

Method Statement

The Tenderer shall produce, when required to do so by the Eskom Properties (EC) Official, a Method Statement outlining the methods of construction and labour and plant resources that he proposes to use in the execution of the Works. Any approval given or observation made by the Eskom Properties (EC) Official shall not relieve the Contractor of his sole responsibility to adopt the methods of construction and to provide the labour and plant resources necessary for the due and proper timeous execution of the Works.

Encroachment

During the course of the building operations, the Contractor shall be held entirely responsible for any encroachment onto any adjoining properties, buildings, etc., or servitudes and the cost of any remedial measures as required by the Eskom Properties (EC) Official shall be borne by the Contractor.

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| <p><u>SHEQ requirements</u></p> <p>The Contractor is to ensure all items included in the annexures attached to this tender relating to Environmental ,Quality, Health and Safety policies and procedures, must be allowed for in his P&G percentage priced.</p> <p>The Contractor shall take the necessary steps to ensure that all workmen employed on the Works comply with regulations regarding the wearing of Personal Protective Equipment as per Eskom's PPE Matrix.</p> <p>The Contractor will provide mandatory OHS Training to all workmen before the commencement of the works. All Workers employed during the construction period shall also receive training before gaining access to the site. e.g. SHE Representative, First Aid, Fire Fighting, risk assessments, medicals and inductions.</p> <p>The Contractor shall provide task specific training to his employees where a specific task is to be undertaken during the construction period e.g. Working at heights, Supervisory (OHS legal liability).</p> <p>The Contractor is to ensure that adequate water is provided to his labour force on site for drinking purposes.</p> <p>The Contractor shall provide Safety Signs in English and Barricading material to any potentially dangerous areas on the site, The safety signs must be entirely visible to persons in the area and the potential hazard must be completely barricaded with approved barricading material.</p> <p>The Contractor must provide the necessary communication tools in the case of emergency, these tools must be kept on site.</p> <p>The Contactor shall take the necessary provisions for an emergency. This includes First aid boxes, fire extinguisher and emergency alarm in the case of an emergency on site. These essentials must be stored in places that are easily accessible.</p> <p>The Contractor must take the necessary steps to manage Incidents that occur on site. (meetings, training)</p> <p>The Contractor is to provide temporary accommodation for his work force, These facilities must be a reasonable distance from the site and must include ablution facilities. eg. camp sites</p> <p>The Contractor is to appoint a competent person as a SHE Officer for the duration of the project. The SHE Officer must carry out all of the services and duties as required.</p> | | |
| <p>Carried To Final Summary</p> | | |

| Item | | Unit | Rates |
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| B | <u>SECTION NO. 2 : BUILDING WORKS</u> | | |
| | <u>PRICING OF RATES</u> | | |
| | <u>SITE CLEARANCE, ETC</u> | | |
| B1 | Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scoffling up as required and cart away all vegetation and debris to a dumping site. All charges to be borne by the Contractor. | m² | |
| | <u>REMOVAL OF TREES, ETC.</u> | | |
| | <u>Cut down and remove, grub up roots and fill in holes:</u> | | |
| B2 | Tree exceeding 200mm and not exceeding 500mm girth. | No | |
| B3 | Tree exceeding 500mm and not exceeding 1000mm girth. | No | |
| | <u>EXCAVATIONS OTHER THAN BULK</u> | | |
| | <u>Excavation in earth not exceeding 2m deep and stock pile on site, including keeping excavations free of water, risk of collapse</u> | | |
| B4 | Reduced levels under floors | m³ | |
| B5 | Trenches, bases, holes | m³ | |
| | <u>Extra over trench and hole excavations in earth for excavation in:</u> | | |
| B6 | Intermediate material. | m³ | |
| B7 | Hard rock material. | m³ | |
| | <u>Extra over all excavations for carting away:</u> | | |
| B8 | Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor | m³ | |
| | <u>COMPACTION</u> | | |
| | <u>Compaction of surfaces:</u> | | |
| B9 | Rip and scarify to a depth of 200mm, level and compact earth surface under floor to density of at least 85% Mod. AASHTO density. | m² | |
| | <u>FILLING ETC.</u> | | |
| | <u>Filling in accordance with SANS 1200 DM, to be supplied by Contractor:</u> | | |
| | <u>Garden soil filling supplied by the Contractor (not compacted):</u> | | |
| B10 | In general areas | m³ | |
| | <u>Selected earth filling obtained from the excavations and/or prescribed stock piles on site compacted in 150mm layers to 98% Mod. AASHTO density:</u> | | |
| B11 | Under floors, pavings, etc. | m³ | |
| B12 | Backfilling to trenches, bases, holes, etc | m³ | |
| B13 | G7 material compacted to 95% Mod AASHTO density (overall thickness 150mm). | m³ | |
| B14 | G5 material compacted to 95% Mod AASHTO density (overall thickness 150mm) | m³ | |
| B15 | G4 material compacted to 95% Mod AASHTO density (overall thickness 150mm). | m³ | |
| B16 | G2 material compacted to 95% Mod AASHTO density (overall thickness 150mm) | m³ | |
| B17 | 19mm Washed concrete stone (overall thickness 50mm). | m³ | |
| | <u>Filling in accordance with SANS 1200 ME, to be supplied by Contractor:</u> | | |
| B18 | G4 sub base, stabilized with 3% cement to attain UCS 0.75 - 1.5 MPa after seven days and compacted to 97% Mod AASHTO density. (overall thickness 150mm). | m³ | |
| B19 | C4 sub base, stabilized with 3,5% cement to attain UCS 0.75 - 1.5 MPa after seven days and compacted to 96% Mod AASHTO density (Roadways) | m³ | |

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| | <u>Surface Preparation:</u> | | |
| B20 | Trim and level off surface of ground (excavated under this Contract) to receive stone beds, including excavating or filling, ripping and scarifying as necessary and compacting the whole area for a depth of 150mm to a density of at least 93% Mod. AASHTO maximum density, to falls to maximum final slope of 1%. | m² | |
| | <u>Compaction of surfaces</u> | | |
| B21 | Compaction of ground surface under roadway paving including scarifying for a depth of 300mm in two 150mm layers, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density | m² | |
| | <u>Bituminous premix road surfacing, by approved asphaltting specialist, at municipal entrance:</u> | | |
| B22 | Sealer coat of cutback bitumen spread over base course at the rate of 0,7 litre per m2. | m² | |
| B23 | 60mm Medium mix asphalt to roads | m² | |
| B24 | 40mm Medium mix asphalt to roads | m² | |
| | <u>BOND AND INTERLOCKING CONCRETE BLOCK PAVERS</u> | | |
| | <u>Precast concrete block road surfacing:</u> | | |
| | Block paving to be manufactured in accordance with SANS 1058 | | |
| | Paving is to be laid in accordance with SANS 1200 MJ, SANS 1058 and the Concrete Manufacturer's Association Specifications. | | |
| | Paving to be installed with a minimum longitudinal fall of 1% and a transverse fall of at least 2% | | |
| | Paving is to be laid to herringbone pattern on 25mm (thickness after final compaction) clean river sand (preparation of ground or filling elsewhere) | | |
| | Clean sand is to be swept into joints between roadstones | | |
| | Paving must be resanded three months after laying. | | |
| | <u>80mm thick SANS 1058 type S-A (heavy duty G-block) as 'Infrasat G-Blok' or other approved 35MPa Grey concrete interlocking paving blocks laid with butt joints on and including 25mm thick river sand bed with dry sand swept and vibrated into joints all laid on subgrade (elsewhere measured) conforming to SANS 1200D degree of accuracy I:</u> | | |
| B25 | Paving in herringbone bond to roads, yards, parking areas to falls, side walks and pathways. | m² | |
| | <u>60mm thick SANS 1058 type S-A (heavy duty G-block) as 'Infrasat G-Blok' 30MPa Grey concrete interlocking paving blocks laid with butt joints on and including 20mm thick river sand bed with dry sand swept and vibrated into joints all laid on subgrade (elsewhere measured) conforming to SANS 1200D degree of accuracy I.</u> | | |
| B26 | Paving to roads, yards, side walks and pathways | m² | |
| | <u>SOIL POISONING:</u> | | |
| | <u>Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:</u> | | |
| B27 | Under concrete interlocking paving blocks including forming and poisoning shallow furrows against edges, etc., filling in furrows and ramming. | m² | |
| | <u>Weedkiller:</u> | | |
| B28 | 'Weedmaster Turfmaster' or equal approved weed killer mixed in the proportion of 1 litre weed killer to 50 litres of water and applied at a rate of 0,5 litres/m2 to surface below paving | m² | |
| | <u>Risk of collapse of excavations</u> | | |
| B29 | Sides of trench and hole excavations not exceeding 1,5m deep | m² | |
| | <u>Filling of river sand:</u> | | |
| B30 | Clean coarse river sand, backfilled and compacted into layers of 150mm against back of retaining wall as backfilling proceeds. | m³ | |

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| | <u>SUBFLOOR DRAINAGE</u> | | |
| | <u>Subfloor drainage:</u> | | |
| B31 | 110mm Slotted uPVC agriculture pipes laid in trench in fill under floors (fill elsewhere) including 19mm crushed stone encasing size 200 x 200mm and 'Bidim U14' geofabric filter blanket wrapped around encasing with 150mm side and 300mm end laps including stitching. | m | |
| | <u>SOIL POISONING</u> | | |
| | <u>Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years</u> | | |
| B32 | Under floors, bases, holes, etc | m² | |
| | <u>BILL NO.2 : CONCRETE, FORMWORK AND REINFORCEMENT (PROVISIONAL)</u> | | |
| | Holding down bolts are to be handed over from steel fabricator to the contractor to be bedded into concrete. | | |
| | <u>Unreinforced concrete cast against excavated services</u> | | |
| B33 | 15Mpa/19mm under bases, holes, floors etc | m³ | |
| B34 | 25mpa/19mm under bases , holes, floors etc. | m³ | |
| | <u>VIBRATED REINFORCED CONCRETE INCLUDING NECESSARY FORMWORK</u> | | |
| | <u>Class 25MPa/19mm concrete:</u> | | |
| B35 | Surface beds, ramps, strip footings, bases, holes etc | m³ | |
| B36 | Walls | m³ | |
| B36 | Columns. | m³ | |
| B37 | Stairs and landings | m³ | |

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| | <u>Class 30MPa/19mm concrete:</u> | |
| B38 | Surface beds, ramps, strip footings, bases, holes etc | m³ |
| B39 | Walls | m³ |
| B40 | Columns. | m³ |
| B41 | Stairs and landings | m³ |
| | <u>Test blocks</u> | |
| B42 | Allow for all necessary concrete test cubes size 150 x 150 x 150mm cast from batches of concrete required for this contract as specified, made, stored, cured and tested in accordance with SANS Methods 861 and 863, including use of approved cube moulds, transporting to an approved testing laboratory for testing, paying all charges and submitting reports to the Eskom Properties (EC) Official. | Item |
| | <u>FINISHING TOP SURFACE OF CONCRETE</u> | |
| | <u>Finishing top surfaces of concrete smooth with a broom finish / wood float / steel float finish</u> | |
| B43 | Surface beds, ramps, aprons etc | m² |
| | <u>MOVEMENT JOINTS ETC</u> | |
| | <u>Expansion joints with Bitumen impregnated softboard between vertical concrete and brick surfaces</u> | |
| B44 | 10mm Joints not exceeding 300mm high | m |
| | <u>Saw cut joints:</u> | |
| B45 | 3.2 x 35mm Saw cut joints in top of concrete. | m |
| B46 | 6 x 38mm Saw cut joints in top of concrete | m |
| | <u>REINFORCEMENT</u> | |
| | <u>High tensile steel reinforcement to structural concrete work:</u> | |
| B47 | Various diameter bars. | Tonnes |
| | <u>Mild steel reinforcement to structural concrete work:</u> | |
| B48 | Various diameter bars. | Tonnes |

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| | <u>Fabric reinforcement</u> | | |
| B49 | Type 193 fabric reinforcement in various areas | m² | |
| B50 | Type 245 fabric reinforcement in various areas | m² | |
| B51 | Type 395 fabric reinforcement in various | m² | |
| | <u>BILL NO.3 : MASONRY</u> | | |
| | <u>BRICKWORK</u> | | |
| | <u>BRICKWORK IN FOUNDATIONS</u> | | |
| | <u>Load bearing brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar, including brick reinforcement and hoop iron</u> | | |
| B52 | Half brick walls including brickforce | m² | |
| B53 | One brick walls including brickforce | m² | |
| B54 | 280mm Cavity walls including wire ties, brickforce and filling cavity of hollow wall with 20MPa/19mm stone unreinforced concrete (e/m) as the work proceeds. | m² | |
| | <u>BRICKWORK IN SUPERSTRUCTURE</u> | | |
| | <u>Brickwork of NFP bricks (14 MPa nominal compressive strength) in Class II mortar, including reinforcement and hoop iron</u> | | |
| B55 | Half brick walls including brickforce | m² | |
| B56 | One brick walls including brickforce | m² | |
| B57 | 280mm Cavity walls including wire ties, brickforce and filling cavity of hollow wall with 20MPa/19mm stone unreinforced concrete (e/m) as the work proceeds. | m² | |
| | <u>Bagging of 1:3 cement and sand mixture :</u> | | |
| B58 | On brick surfaces. | m² | |
| | <u>Prestressed fabricated lintels</u> | | |
| B59 | 110 x 75mm Lintels in lengths not exceeding 1.5m | No | |
| B60 | 110 x 75mm Lintels in lengths not exceeding 3m | No | |
| B61 | 110 x 75mm Lintels in lengths exceeding 3m and not exceeding 4.5m | No | |

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| | <u>MOVEMENT JOINTS</u> | | |
| | <u>Joint forming material in movement joints:</u> | | |
| B62 | 12mm Bitumen impregnated fibre board built in vertically between brick skins. | m² | |
| B63 | 10mm Bitumen impregnated softboard built in vertically between brick skins not exceeding 300mm wide | m | |
| | <u>Air bricks, etc:</u> | | |
| B64 | 229 X 152mm Terracotta vermin proofed air bricks built into beamfilling at 500mm centres. | No | |
| | <u>NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS</u> | | |
| | <u>Everite Nutec' or other approved Natural grey window sills in single lengths not exceeding 3.6m, bedded in class I mortar including metal fixing lugs screwed to underside with self tapping screws:</u> | | |
| B65 | 15 x 150mm Wide internal sills set flat and slightly projecting. | m | |
| | <u>BILL NO.4 : WATERPROOFING</u> | | |
| | <u>DAMP-PROOFING OF WALLS ,FLOORS AND SLABS</u> | | |
| | <u>Gundle® or other approved 'Brikgrip® DPC 375' damp proof course to SABS mark 952- 1985 Type B:</u> | | |
| B66 | In walls. | m² | |
| | <u>Gundle® or other approved USB Green /Black' 250 µm membrane to SANS mark 952-1985 Type C laid with minimum 150mm overlaps and sealed with 'Gunplas®' or other approved pressure sensitive tape:</u> | | |
| B67 | Under concrete surface beds, aprons etc | m² | |
| | <u>Derbigum LCEM 17" waterproofing with fibre mesh carrier or similar approved:</u> | | |
| B68 | various areas | m² | |
| | <u>Cemflex' Universal waterproofing and bonding agent with membrane waterproofing system by Sika or similar approved applied under a ten-year guarantee:</u> | | |
| B69 | various areas | m² | |
| | <u>JOINT SEALANTS, ETC</u> | | |
| B70 | Approved joint sealants are: Sikaflex 35SL; Durakol 25; Prostruct 642 or 644. | | |
| | <u>Two-part grey Sikaflex polysulphide sealing compound including backing cord, bond breaker, Bitumen primer, etc:</u> | | |
| B71 | 12 x 10mm In expansion joints between floors and walls including tearing off hinged edge of 'Jointex' preformed joint filler. | m | |
| B72 | 6 x 20mm In saw cut joints. | m | |
| | <u>One layer 'Derbigum SP4' waterproofing membrane sealed by means of torchfusion or Coldbond 90 adhesive with 75mm side laps and 100mm end laps, laid under a ten year guarantee by approved specialist sub-contractor . to receive paint or other approved protection (Elsewhere measured):</u> | | |
| B73 | On flat / sloping roofs | m² | |

BILL NO.5 : ROOF COVERINGS**ROOF TILES**

420 x 332mm Double Roman M22 coated (terracotta colour) interlocking concrete roof tiles nailed with non-corrosive nails, and/or fixed with suitable non- corrosive clips as required to and including 38 x 50 mm sawn softwood battens at 345mm centres over and including an underlay of 250 micron polyethylene sheeting in accordance with SANS 952 Type E fixed to rafters under battens with minimum laps of 150mm all in strict accordance with manufacturer's instructions:

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| B74 | Roof covering with pitch exceeding 25 degrees, at 30 degrees | m² |
| B75 | Ridges of tiles to match roofing tiles, bedded and pointed in 1:3 tinted cement mortar, including 300mm wide strip of 375 micron embossed damp-proof course in accordance with SANS 952 Type B underlay | m |
| B76 | Hips of tiles to match roofing tiles, bedded and pointed in 1:3 tinted cement mortar, including 300mm wide strip of 375 micron embossed damp-proof course in accordance with SANS 952 Type B underlay and raking cutting to tiles on both sides | m |
| B77 | Purpose made tile to end of ridge, bedded and pointed in 1:3 tinted cement mortar | No |

RIBBED METAL SHEETING AND ACCESSORIES

IBR steel sheeting and accessories in "Chromadeck" or other approved "Buffalo Brown" standard colour finish fixed to 75x50x20x2.5mm thick lipped channel purlins and girts at approximately 1400mm and 1325mm centres in strict accordance to manufacturer's instructions:

| | | |
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| B78 | Roof covering with pitch not exceeding 25 degrees | m² |
| B79 | Vertical side cladding | m² |

PROFILED FIBRE-CEMENT SHEETING AND ACCESSORIES

15mm "Everite Nutec" sheeting and accessories, fixed to timber purlins or rails:

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| B80 | Roof covering with pitches not exceeding 25 degrees | m² |
| B81 | Side cladding | m² |
| B82 | Soffit cladding | m² |

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| | <u>TRANSLUCENT SHEETING AND ACCESSORIES</u> | |
| | <u>Extra over GRS BR7 fluted steel roofing for "Modék Industrial 7" 1,25mm thick semi- opaque translucent roof sheeting:</u> | |
| B83 | Roof covering with pitch not exceeding 25° | m² |
| B84 | Vertical side cladding | m² |
| | <u>ROOF INSULATION</u> | |
| | <u>Super Sisalation or other approved Heavy Industrial Grade 420 - Double sided reflective foil laminate incorporating layers of Kraft paper and reinforcing scrim, laminated together with low density polyethylene (293gsm):</u> | |
| B85 | Insulation laid taut over purlins at up to 1160mm centres and fixed concurrent with roof covering including galvanised straining wire or training tape. | m² |
| | <u>"Factorylite" or other approved insulation laid between purlins.</u> | |
| B86 | 100mm Thick Factorylite insulation laid but jointed between purlins under Sisalation foil laminate | m² |
| | <u>"Pink Aerolite" flexible, non-combustible lightweight industrial fibreglass insulation material:</u> | |
| B87 | 50mm Thick insulation laid loose over ceilings with 50mm laps. | m² |
| | <u>BILL NO.6 : CARPENTRY AND JOINERY</u> | |
| | <u>ROOFS, ETC</u> | |
| | <u>Sawn softwood</u> | |
| B88 | 38 x 114mm Wall plates | m |
| B89 | 76 x 114mm Wall plates bolted to brick wall. | m |
| | <u>Sundries</u> | |
| B90 | Two coats creosote on sawn timbers | m² |
| | <u>EAVES , VERGES , ETC</u> | |
| | <u>"SouthPro" uPVC fascia and bargeboards in 6m lengths with uPVC connectors fixed to 38 x 38mm tilting batten and 38 x 38mm support battens between rafters twice screwed with 12 x 40mm countersunk brass screws capped with uPVC covers at maximum 800mm centres to support battens . with PVC H- profile fascia corner joiners at board ends:</u> | |
| B91 | 225 x 9mm Fascias and barge boards including uPVC connectors. | m |
| | <u>DOORS ETC</u> | |
| | <u>Hollow flush panel doors with sapele veneer suitable for painting on both sides and including hardwood edge strips all round hung to timber frames.</u> | |
| B92 | 40 x 813 x 2032mm Door. | No. |
| B93 | 40 x 1612 x 2032mm Door. | No. |
| | <u>Semi-solid flush panel doors with sapele veneer suitable for painting on both sides and including hardwood edge strips all round hung to timber frames.</u> | |
| B94 | 40 x 813 x 2032mm Door. | No. |
| B95 | 40 x 1612 x 2032mm Door. | No. |

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| | <u>Meranti stable doors</u> | |
| B96 | 40 x 813 x 2032mm Door. | No. |
| B97 | 40 x 813 x 2032mm Stable door | No. |
| B98 | 40 x 1612 x 2032mm Door. | No. |
| | <u>Extra Over Doors</u> | |
| B99 | 250 x 250mm Viewing panel in cut opening in flush panel door, framed around in a double sided stainless steel frame and glazed with and including 6.38mm clear laminated safety glass. | No. |
| | <u>FIRE DOORS AND FRAMES</u> | |
| | <u>Bitcon Industries fire doors and frames:</u> | |
| | <u>Door frame hinges, handles, locks, etc to be specified by manufacturer and fire doors all to Eskom Properties (EC). Official's approval.</u> | |
| B100 | Class 'B' fire door 813 x 2032mm high with approved steel cladding to both sides, including pressed steel frame for one brick wall and preparing frame for door closer and 8066 emergency exit fire bolt. | No. |
| B101 | Manufacturer specified electronically controlled door, class 'B' fire double door 1740 x 2032mm high with approved marionette finish to both sides, including pressed steel frame for one brick wall and preparing frame for door closer and lock. | No. |
| | <u>SKIRTINGS, ETC</u> | |
| | <u>Wrought Meranti:</u> | |
| B102 | 19 x 76mm Skirting including 19mm quadrant bead planted on. | m |
| | <u>WINDOW SILLS</u> | |
| | <u>Oak hardwood:</u> | |
| B103 | 150 x 45mm Sills to match existing. | m |
| | <u>CEILINGS, ETC</u> | |
| | <u>NAILED UP CEILINGS</u> | |
| B104 | 9.4mm "Gyproc RhinoCeil Value" gypsum flush plastered ceiling with square edged Rhinoboard fixed print side up with 32mm galvanised clout or semi-clout nails at 150mm centres to 38 x 50mm (with 50mm dimension vertical) SA Pine brandering at 300mm centres in one direction. All joints to be covered with Rhinotape fixed over joints (double over butt joints) and then plastered with 3mm to 6mm thick Rhinolite gypsum skim plaster, all fixed to trusses at centres exceeding 1000mm, not exceeding 1200mm in accordance with the manufacturer's recommendation. | m² |
| B105 | 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 |
| | <u>9.5mm 'Rhinoboard' gypsum plastered ceiling fixed print side up with 32mm galvanized clout nails at 150mm centres with 48mm wide strips of 'Fibatape' fixed over joints and the whole finished with minimum 3mm and maximum 6mm thick coat of 'Rhinolite' or 'Cretestone' gypsum skim plaster trowelled to a smooth polished surface, all in strict accordance with the manufacturer's instructions:</u> | |
| B106 | Ceilings including 38 x 50mm sawn softwood brandering at maximum 600mm centres with cross brandering at joints, ends of sheets and at light fittings, etc. | m² |
| B107 | Extra over ceiling for 600 x 600mm trap door of 70 x 44mm wrought softwood rebated framing with one 38 x 50mm sawn softwood cross brander covered with ceiling board, skim plastered and fitted flush in opening. | No. |
| | <u>6mm 'Everite Nutec' plain boards with galvanised steel or white PVC H-profile jointing strips over joints:</u> | |
| B108 | Ceilings including 38 x 50mm sawn softwood brandering at 600mm centres with cross brandering at joints, ends of sheets and at light fittings, etc. | m² |

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| | <u>SCREW UP CEILINGS</u> | | |
| | <u>6.4mm 'RhinoBoard' square edged gypsum plaster board screwed to 'Donn T37K' galvanised steel capped tee flush plastered ceiling suspension system with drywall screws spaced at 250mm centres, including galvanised 1200mm centres and cross tees at 300mm centres, all suspended with galvanised ?(19mm straps / 20 x 20mm angles) at not exceeding 1200mm centres, with 48mm wide strips of 'Fibatape' fixed over joints and the whole finished with minimum 3mm and maximum 6mm thick coat of 'Rhinolite or 'Cretestone' gypsum skim plaster trowelled to smooth polished surface in strict accordance with the manufacturer's instructions;</u> | | |
| B109 | Ceilings suspended not exceeding 1m below horizontal steel trusses | m² | |
| | <u>SUSPENDED CEILINGS</u> | | |
| | <u>Masonite Armstrong' square/revealed edged edge 'Dune Supreme' ceiling tiles size 1200 x 600mm, in colour Global White, laid in 'Masonite Armstrong' 1 hour fire rated, stitched 'Trulock 24' exposed grid system with 24mm wide T-section flanges including galvanised main tees, cross tees, hold-down clips, wedges, reinforcement splines, etc., all suspended with galvanised hangers strictly in accordance with the manufacturer's instructions and SABISA's guidelines;</u> | | |
| B110 | Ceilings suspended not exceeding 1m below timber purlins at 1200mm centres with trusses at 1200mm centres. | m² | |
| B111 | Ceilings suspended not exceeding 1m below concrete slab. | m² | |
| | <u>"Owacoustic RH 90" pre-painted Constellation mineral fibre ceiling tiles size 600 x 600 x 15mm with revealed edges on 25mm 'Gridlock' pre-painted 38mm exposed galvanised steel tee suspension system to suit including all necessary hangers, sub-grid, fixings, etc;</u> | | |
| B112 | Ceilings suspended not exceeding 1m below concrete soffits. | m² | |
| | <u>CORNICE</u> | | |
| B113 | Lafarge Gypsum Gaudi Nu-cornice polystyrene cornice. overall size 55 x 55mm high, fixed to wall and ceiling using an approved water-based adhesive and appropriate nail fixing where necessary, filling all fixing holes with an approved acrylic sealant, all in accordance with the manufacturers recommendations. | m | |
| B114 | 20 x 20mm pre-painted shadowline cornices for suspended ceilings. | m | |
| | <u>QBPB RhinoArt' Moulded Gypsum Adhesive Cornices:</u> | | |
| B115 | 75mm Coved cornice. | m | |
| | <u>Nu-cornice' Fibre Cement Cornices:</u> | | |
| B116 | 75mm Coved cornice fixed with adhesive | m | |
| | <u>Masonite Armstrong':</u> | | |
| B117 | Shadowline perimeter trim to suspended ceiling, plugged to brickwork. | m | |
| B118 | Sigma Cel-05 recessed transition angle cornice against skimmed ceiling. | m | |
| | <u>INSULATION</u> | | |
| | <u>Isotherm' or other approved flexible, non- combustible lightweight industrial fibreglass insulation material.</u> | | |
| B119 | 100mm Thick thermal insulation (density 10kg/m) laid over ceiling branding closely fitted between rafters. | m² | |
| | <u>PARTITIONING. ETC</u> | | |
| B120 | Rhino GypRoc Drywall Classic GW-ST partitioning with cavity bat to give 48dB sound rating | m² | |
| B121 | Erect drywall partition not exceeding 3m high Close up door opening with drywall partition not exceeding 2.5m | m² | |

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| | <p><u>BILL NO.8 : FLOOR COVERINGS</u></p> <p><u>PREAMBLES:</u></p> <p>The Tenderer is referred to the relevant clauses in the latest edition of the Model Preambles for Trades and to the Supplementary Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Floor and Wall Coverings:</u></p> <p>All floor coverings and wall linings are to be installed strictly in accordance with the manufacturer's detailed instructions by an approved installation company.</p> <p><u>Samples:</u></p> <p>The tenderer must allow in his prices to provide a 10m2 sample panel to the Eskom Properties (EC) Official's approval for all different finishes. The sample is to remain until the end of the contract.</p> <p><u>TUFTED CARPET SHEETING AND TILES</u></p> <p><u>"Berber Point 920" Bitumen backed carpet tiles (colour: Boron) including adhesive and preparation of screeded surfaces</u></p> | | |
| B122 | <p>On floors, stairs, ramps,landings etc</p> <p><u>"Belgotex Floorcoverings" Heather Twist Kasbah with foam or Hessian underlay including adhesive and preparation of screeded surfaces:</u></p> | m² | |
| B123 | <p>On floors.</p> <p><u>BILL NO.9 : IRONMONGERY</u></p> <p><u>PREAMBLES</u></p> <p>The Tenderer is referred to the relevant clauses in the latest edition of the Model Preambles for Trades and to the Supplementary Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES:</u></p> <p>The tenderer is referred to the separate document C2.1 Supplementary Preambles which shall be read in conjunction with and shall apply to all items in these Bills of Quantities.</p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Eskom Properties (EC) Official.</p> <p><u>Fixing of ironmongery:</u></p> <p>Screws, bolts, etc for fixing of ironmongery shall be of matching metal and finish, except for aluminium ironmongery or ironmongery fixed to aluminium in which cases stainless steel screws must be used.</p> | m² | |
| B124 | Union door lock 2 mortice | No | |
| B125 | Union door lock 3 mortice | No | |
| | <p><u>BILL 10 : VERTICAL BLINDS</u></p> <p><u>Aluvert/BlindQuip or other equal and approved vertical fabric blinds (colour Denim Blue) with 127mm wide non-fade fabric vanes with light fast factor of 6 - 7, stable in all directions to eliminate warp and twist, set up and fixed in position complete with track, runners, brackets, end caps, bottom weights, clutch and all controls, etc</u></p> | | |
| B126 | Vertical fabric blinds to windows | m² | |

BILL NO.11 : METALWORK

PREAMBLES

The Tenderer is referred to the relevant clauses in the latest edition of the Model Preambles for Trades and to the Supplementary Preambles

SUPPLEMENTARY PREAMBLES:

Shop Drawings:

As a general rule all work related to this trade must have shop drawings prepared and approved by the Eskom Properties (EC) Official prior to fabrication. Where there is reference to design and supply, it must be designed by a professionally registered engineer.

Descriptions

Descriptions of bolts shall be deemed to include nuts and washers

Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete

Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described.

Steelwork, where galvanised, is to be hot dipped galvanised to ISO 1461-1999

Contractor to supply product guarantee and slips to architect. All goods to comply with SANS.

Hot dipped galvanised and epoxy powder coated to approved colour by specialists mild steel gates.

ALUMINIUM WINDOWS, DOORS, ETC.

The following Preambles shall apply to aluminium windows, doors, etc in all respects in so far as they are applicable.

Aluminium windows and doors shall be manufactured from extruded L28 aluminium members of 6063-T6, 6261-T6 or 6082-T6 alloy and temper. All corners are to be mechanically cleated.

Windows, doors, etc shall be of an approved standard system, manufactured by an approved firm experienced in this type of work and registered with the Association of Architectural Aluminium Manufacturers of South Africa (AAAMSA), and shall meet with or exceed the minimum recommended performance requirements as set out by the AAAMSA in the latest edition of the Selection Guide. Doors shall comply with the AAAMSA PTHA1 performance standard.

The fittings for all opening sashes shall be substantial and, unless otherwise described, shall be of high quality aluminium alloy finished to match the windows, doors, etc on which they occur. Samples of all fittings shall be supplied to the Eskom Properties (EC) Official for approval.

An (AAAMSA) performance certificate from the manufacturer of the windows and doors shall be provided prior to commencement of any work on site.

Top hung opening sashes shall be hung on two concealed heavy duty FS12-1543 grade 304 stainless steel friction stays and fitted with epoxy powder coated window fasteners.

All opening sashes are to be fitted with approved woodpile weatherseals.

Glazing beads:

Where so described, openings and sashes of windows and doors shall be fitted with approved clip on aluminium glazing beads sufficient in size and profile to suit the method of glazing employed, finished to match the windows, doors, etc and neatly mitred. Screws where necessary shall be of aluminium or 300 Series stainless steel and have pan or raised heads finished to match the beads.

Finishes:

Windows, doors, etc., described as natural 'anodised' shall be treated with Grade 25 coating thickness.

The contractor shall provide a certificate of conformance with these standards.

Glazing:

Glazing is to be carried out in strict accordance with the SANS 0137/2000 code of Practice: "The Installation of Glazing in Buildings" and where required, safety glazing materials must conform to SANS 1263.

The contractor shall provide a certificate of conformance with these standards.

Laminated safety glazing shall be warranted, by the manufacturer, against delamination and colour degradation for not less than 5 years.

The contractor shall provide a certificate to this effect.

Gasket seals for glazing are to be approved Santoprene seals as recommended by the manufacturer and to suit the glazing thickness.

General:

Aluminium windows, doors, etc shall include glass as described, fixing in position, sealing around edges externally and internally with approved silicone sealant and protection against damage, deterioration or discolouration by taping the whole door/ window with removable PVC tape or covering with temporary casings and removing same on completion. The protection is to be removed only when authorised by the Eskom Properties (EC) Official

Rivets:

All rivets to be stainless steel.

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| | <p><u>BILL NO.12 : PLASTERING</u></p> <p>The Tenderer is referred to the relevant clauses in the latest edition of the Model Preambles for Trades and to the Supplementary Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>TESTING</u></p> <p>Carry out impact tests to establish the soundness of all screeded substrates</p> <p><u>SCREEDS</u></p> <p><u>Screeds on concrete:</u></p> <p>Allow for a trial mix for all screeded surfaces to be sent to an approved laboratory for testing and subject to the approval of the Eskom Properties (EC) Official and Structural Engineer. Allow for a sample panel size 2m x 2m for each thickness and for approval prior to laying.</p> <p><u>1:4 Cement plaster screeds wood floated on concrete:</u></p> <p>25mm Thick on floors and landings.</p> <p>Average 35mm thick receded screed to falls.</p> <p><u>Slush finish of 1:3 cement and sand mixture</u></p> <p>Brushed on concrete / masonry surfaces etc.</p> <p><u>INTERNAL PLASTER</u></p> <p><u>1:5 Cement plaster on masonry / concrete:</u></p> <p>Allow for a trial mix for all plastered surfaces to be sent to an approved laboratory for testing and subject to the approval of the Eskom Properties (EC) Official and Structural Engineer. Allow for a sample panel size 2m x 2m for each thickness and for approval prior to laying.</p> <p>On walls</p> <p>On columns / beams</p> <p>On ceilings.</p> <p><u>EXTERNAL PLASTER</u></p> <p>Allow for a trial mix for all plastered surfaces to be sent to an approved laboratory for testing and subject to the approval of the Eskom Properties (EC) Official and Structural Engineer. Allow for a sample panel size 2m x 2m for each thickness and for approval prior to laying.</p> <p><u>1:4 Cement plaster on masonry/concrete:</u></p> <p>On columns / beams</p> <p>On walls</p> <p>On ceilings.</p> <p><u>BILL NO.13 : TILING</u></p> <p><u>PREAMBLES</u></p> <p>The Tenderer is referred to the relevant clauses in the latest edition of the Model Preambles for Trades and to the Supplementary Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Tiles should comply with the minimum requirements of SANS 1449.</p> <p>Wall tiling to comply with Part 7.2 of SANS 0107:1996.</p> <p>Finished wall tile surfaces to comply with Part 7.2.6.1. of SANS 0107:1996.</p> <p>Protection cleaning and maintenance of wall tiles to comply with part 9 of SANS 0107:1996.</p> <p>Tiling rates to include appropriate plastic edge trims where required, to all external corners, jambs, sills, etc.</p> <p><u>CERAMIC WALL TILING</u></p> <p><u>Johnson Optima (OT4)' 200 x 250mm Gloss White glazed ceramic tiles fixed with Ceresit Tylon CM 11 cement based adhesive to wood floated plastered walls and flush pointed with Ceresit Tylon CE 33 grout.:</u></p> <p>On walls.</p> | <p>No</p> <p>Item</p> <p>m²</p> <p>m²</p> <p>m²</p> <p>m²</p> <p>m²</p> <p>m²</p> <p>m²</p> <p>m²</p> <p>m²</p> <p>m²</p> <p>m²</p> <p>m²</p> | |
| B127 | | | |
| B128 | | | |
| B129 | | | |
| B130 | | | |
| B131 | | | |
| B132 | | | |
| B133 | | | |
| B134 | | | |
| B135 | | | |
| B136 | | | |
| B137 | | | |
| B138 | | | |

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| | <u>Johnson Optima (OT4)' 200 x 250mm Gloss White glazed ceramic tiles fixed with Ceresit Tylon CM 11 cement based adhesive to wood floated plastered walls and flush pointed with Ceresit Tylon CE 33 grout.;</u> | |
| B139 | On narrow widths top of half brick wall. | m |
| | CERAMIC FLOOR TILING | |
| | <u>330 x 330mm 'Johnson Aquilhas Stone AG706'. PEI4 rating glazed ceramic tiles fixed with Ceresit Tylon CM 11 cement based adhesive to wood floated screeded floors and flush pointed with Ceresit Tylon CE 33 grout. (Pricing shall include plastic edging and corner trims).;</u> | |
| B140 | On floors and landings | m² |
| B141 | 110mm High cut tile skirting with aluminium edge trim on top. | m |
| B142 | 110mm High circular cut tile skirting with aluminium edge trim on top. | m |
| | MOSAIC FLOOR TILING | |
| | <u>25 x 25mm 'Tile Africa' 271 Matt charcoal grey, mosaic tiles fixed with 'Tal' or equally approved anti-bacterial and anti-fungal mosaic waterproof tile adhesive and tile grout;</u> | |
| B143 | On shower floors to falls and outlet. | m² |

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| | <p><u>SLATE AND SANDSTONE FLOOR TILING</u></p> <p><u>300 x 300mm African Blue Natural Slate Tiles to exterior wood floated concrete or screed. Allow all new concrete work and screeds to cure for at least 28 days before proceeding. All new concrete work and screeds must have a moisture content of 5% or less before tiling can be commenced. When tiling directly onto concrete, ensure that the surfaces are clean and free of all traces of shutter release and curing agents, laitance and any other surface contaminants, preferably by scarifying or sandblasting. Any screeding must be firmly attached to the underlying concrete, must be integrally sound (no crumbling, cracking etc.) and must be of a quality and consistency suitable for tiling. All defective areas must be removed and the floor made good before proceeding. Apply Tal Gold Star 6 rapid setting adhesive using a notched Tal floor trowel. Grout with light grey Tal Stain free grout mixed 20kg with 6 litres of clean water:</u></p> | | |
| B144 | <p>On floors in patterns.</p> <p><u>EDGE TRIMS</u></p> <p><u>M-Trim':</u></p> | m² | |
| B145 | AFE080' 15 Micron, bronze, anodised aluminium formable straight edge trim to threshold. | m | |
| B146 | ARE080' 15 Micron, matt silver, anodised aluminium formable straight edge trim to threshold. | m | |
| B147 | <p><u>PVC round edge trim:</u></p> <p>PVC round edge white tile edge trim 9mm high to suit tiling 7 to 8mm thick, fixed with adhesive to external wall corners.</p> <p><u>NOSINGS, JOINT COVERS, PROTECTORS, ETC.</u></p> <p><u>Genesis' floor movement joints:</u></p> | m | |
| B148 | <p>Genesis 'Type MMA' aluminium urethane medium duty movement joint 10mm high with type 20 finish.</p> <p><u>BILL NO.14 : GLAZING</u></p> <p><u>PREAMBLES</u></p> <p>The Tenderer is referred to the relevant clauses in the latest edition of the Model Preambles for Trades and to the Supplementary Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>BILL NO.15 : PAINTWORK</u></p> <p><u>PREAMBLES</u></p> <p>The Tenderer is referred to the relevant clauses in the latest edition of the Model Preambles for Trades and to the Supplementary Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES:</u></p> <p><u>Manufacturer's Details:</u></p> <p>The following paints are to be manufactured/supplied by PLASCON PAINTS (PTY) LTD and applied in strict accordance with the manufacturer/supplier's specification.</p> <p><u>Supplementary Preambles:</u></p> <p>All work to be executed in strict accordance with the specifications of Plascon Paints (Pty) Ltd. The coating systems are as per Plascon's 'List of Decorative Paint Products' unless otherwise specified. Full specifications are available on request from Sophie Fourie Tel. (011) 301-4600 or from the various branch offices as listed above.</p> <p>Primers and first coats may be thinned in accordance with the paint specifications of Plascon Paints (Pty) Ltd to aid the absorption of the paint.</p> <p>All surfaces must be sound, clean and have a moisture content of less than 8% for walls generally and 3% for slabs/screeds etc.</p> <p>Where surfaces of plaster etc are sandy / friable, the first coat must be replaced with 'Plascon Merit' plaster primer thinned 10% with turpentine.</p> | m | |

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| | <u>Paint Colours:</u> Old references The Tenderer is to note the following colour specifications and their application: 1. Internal doors are to be Plascon E14-5 Sombrero 2. Internal and External door frames to be PlasconE14-5 Sombrero 3. Internal and External door frames to be Plascon E14-4 Mayan Stone 4. Windows (steel) to be Plascon enamel/gloss (white) 5. All walls and ceilings to kitchen and ablutions to be Plascon Double Velvet (white) 6. Internal walls to office areas to be Plascon E14-2 Hudson 7. External walls to be Plascon A11-5 Gruyere New References Y1-C2-3 (Pale Linen) or Y2-D2-3 (Veldrift) or Y2-D2-2 (Stone Wash) Y2-D2-1 (Waxen Tint) Eskom's blue – Pantone 287). (Plascon has also matched a blue colour: S3560-R80B). <u>ON FLOATED PLASTER</u> <u>Prepare surfaces and remove all loose material, apply one coat 'Plascon Merit Plaster Primer' and two coats 'Plascon Polvin Super Acrylic' paint:</u> B149 On interior/Exterior walls. m ² B150 On interior ceilings. m ² <u>Prepare surfaces and remove all loose material, apply one coat 'Plascon Merit Plaster Primer' and two coats 'Plascon Double Velvet Super Acrylic' paint:</u> B151 On interior/Exterior walls. m ² B152 On ceilings. m ² <u>Prepare surfaces and remove all loose material, apply one coat 'Plascon Merit Plaster Primer' and two coats 'Wall and All' paint:</u> B153 On interior/Exterior walls. m ² B154 On ceilings. m ² <u>Prepare surfaces and remove all loose material, apply one coat 'Plascon Merit Plaster Primer' and two coats 'Plascon Enamel Super Acrylic' paint:</u> B155 On interior/Exterior walls. m ² B156 On ceilings. m ² | | |
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| | <u>ON SKIM PLASTER</u> | | |
| | <u>Prepare surfaces and remove all loose material, apply one coat 'Plascon Merit Plaster Primer' and three coats 'Plascon Double Velvet Pure Acrylic' paint:</u> | | |
| B157 | On interior/Exterior walls. | m² | |
| B158 | On ceilings and cornices. | m² | |
| | <u>ON WOOD</u> | | |
| | <u>Prepare and apply three coats 'Plascon Woodcare Woodcoat Polyurethane' X33/X44 suede clear varnish:</u> | | |
| B159 | On doors. | m² | |
| B160 | On door frames. | m² | |
| B161 | On skirtings, rails, etc not exceeding 300 mm girth | m | |
| B162 | On timber floors | m² | |
| | <u>Stop, fill, sand down and prepare wood surfaces and apply one coat 'Plascon Oil Wood Primer', one coat 'Plascon Merit Universal Undercoat' and two coats 'Plascon Velvagio Polyurethane Enamel' paint:</u> | | |
| B163 | On doors. | m² | |
| B164 | On door frames. | m² | |
| | <u>Plascon Professional Evolution Acrylic to interior new gypsum plaster board. Surface to be dry, sound and free of dirt and loose particles. Wipe down with a damp cloth and allow to dry completely. Prime with one coat Professional Plaster Primer (PP 700) with an over coating time of 16 hours and finish with three coats Professional Evolution Acrylic (PEV 900) with 2 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.</u> | | |
| B165 | Gypsum ceiling boards and cornices | m² | |
| | <u>ON METAL</u> | | |
| | <u>Prepare surfaces and remove all loose material, dust, grease, salts and contamination with 'Plascon Aquasolve Degreaser GR1', rinse and apply one coat 'Plascon Galvogrip Metal Primer', apply one coat 'Plascon Merit Universal Undercoat' and two coats 'Plascon Super Universal Enamel' paint:</u> | | |
| B166 | On galvanised steel door frames. | m² | |
| B167 | On galvanised steel windows (Both sides measured). | m² | |
| B168 | On Walls | | |
| | <u>Painting specification (Hot Dipped Galvanised):</u> | | |
| | Wash down all steelwork thoroughly with Plascon liquid galvanised iron cleaner, scotchbright and water to manufacturers specification and allow to dry. | | |
| | All coats to be applied according to manufacturer's specifications. | | |

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| | <p><u>Spot priming defects in pre primed surfaces with "Plascon Namelcoat Synthetic Metal" apply one coat "Plascon Merit Universal Undercoat" and three coats "Plascon Super Universal Enamel" paint on primed steel surfaces:</u></p> | |
| B169 | <p>On strong room door and frame.</p> <p><u>PROTECTIVE ROOFING PAINT</u></p> <p><u>Two coats approved silver reflective roof paint (dulux / plascon):</u></p> | m² |
| B179 | <p>On waterproofing to roofs and box gutters.</p> <p><u>BILL 16: ALTERATIONS</u></p> <p><u>SUPPLEMENTARY PREAMBLES:</u></p> <p>The breaking down and demolition of existing block walls, hacking off existing plaster, etc. is to be executed with care so as to prevent damage to remaining floor and wall surface and finishes. The contractor must allow for any necessary protection of the existing surfaces as may be necessary.</p> <p>w</p> <p>Particular care is required to protect the existing timber doors, door frames, and windows. Repairing any existing work will be for the contractor's account.</p> <p>The rates for breaking down and removal of brick walls is deemed to include for plaster finishes on walls.</p> <p>All existing items taken out from the works unless otherwise stated are to be handed over to the Eskom Properties (EC) Officials. Representative who shall direct where on the site such items are to be stored for the removal by others. Refer to the schedule at the end of these Bills of Quantities.</p> <p>Rubble resulting from breaking down, demolishing, etc. is to be removed from the site by the Contractor on an on going basis to avoid accumulation of mounds of such rubble or earth.</p> <p><u>Proprietary items or materials:</u></p> <p>Proprietary items or materials are to be of the brand specific- or other approved- by the Eskom Properties (EC) Officials prior to tender closing.</p> <p><u>General</u></p> <p>Unless otherwise described the Preambles and full descriptions of the other sections shall apply equally to this section.</p> <p>All voids in ground consequent upon the pulling or cutting are to be filled in with clean earth well consolidated and rammed up to ground level and made good with the required finish to the satisfaction of the Eskom Properties (EC) Officials.</p> <p>Allow for watering the works by spraying to prevent any nuisance from dust etc., and supply, erect, maintain and remove on completion all temporary dust screens, etc required.</p> <p>Allow for protecting all existing work liable to suffer damage (i.e. walls, finishes, floors, windows, etc.) from damage during the building operations, alterations, etc., and from make good all work damaged with new material to match existing to the approval of Eskom Properties (EC) Officials</p> <p>Provide, erect where directed, maintain for the duration of the contract and remove and make good at completion a hoarding formed of corrugated iron or timber boarding supported as necessary on framing with posts let into ground, complete with lockable pedestrian and vehicular gates.</p> <p><u>Measurement:</u></p> <p>The measurement that are referred to in this section is brief and the contractor is requested to take his own measurements prior to pricing these documents.</p> <p><u>Contractor to visit the site</u></p> <p>The contractor is advised that alterations work is to be done with utmost of care. The contractor is encouraged to visit the site and view all buildings to determine the extent of demolition and alteration works.</p> <p>All items marked as (L.I) must be executed in labour intensive manner, no deviations will be accepted.</p> <p>The contractor must take this method of construction into consideration when programming the work.</p> | m² |

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| | <u>ASBESTOS CEMENT</u> | | |
| | <p><u>Note:</u></p> <p>All preparatory work, alterations, demolitions, etc. to existing asbestos cement roof sheeting, gutters, rainwater pipes, etc. is to be carried out strictly in accordance with statutory requirements (Occupational Health and Safety Act, 1993- Asbestos Regulations, 2001) and all necessary precautions must be taken when work with and disposing of asbestos cement products and the disposing of waste water resulting from cleaning operations, etc</p> <p><u>Overtime work and normal work:</u></p> <p>The tenderers are advised that the following works may be done during normal working hours as well as after normal working hours. Tenderers must make due allowance for these working hours in the pricing as no claims will be entertained in this regard.</p> | | |
| | <u>TEMPORARY BARRIES & SCREENS</u> | | |
| | <u>Temporary barriers, screens, etc including removal:</u> | | |
| B171 | Dust screen 2.7m high between concrete floor and ceiling formed of suitable timber framing with 250 micron polyethylene sheeting stapled or nailed on, including corners, ends, etc. | m | |
| B172 | Drywall barrier, 2.7m high formed of timber studs and rails covered on one side with 12.7mm gypsum board panels and finishes with two coats interior quality PVA paint on one side, including corners, ends, etc. | m | |
| | <u>REMOVAL OF EXISTING CONCRETE WORK</u> | | |
| | <u>Break up and removing mass concrete</u> | | |
| B173 | Surface beds, slabs, etc. | m³ | |
| B174 | Strip footings, bases, etc. | m³ | |
| | <u>Break up and removing reinforced concrete including cutting off and removing reinforcement:</u> | | |
| B175 | Surface beds, slabs, beams, stairs and landings, columns, ramps, etc | m3 | |
| | <u>CUTTING THROUGH FLOORS AND CEILING</u> | | |
| B176 | Cutting through 100mm thick mesh reinforced concrete apron slab as necessary for installation of new 110mm diameter sewer drain pipe including making good concrete | m | |
| B177 | Cutting through 100mm thick mesh reinforcement concrete surface bed for 500mm wide concrete wall footing including making good concrete on both sides of new half brick wall | m | |
| | <u>Repair to cracks in concrete floors:</u> | | |
| B178 | Cut out crack in concrete floor 10mm wide x 25mm deep, where instructed with square edges, clean out and fill with Pro-Struct 524" epoxy mortar or similar approved. | m | |
| | <u>PREPARATORY WORK TO EXISTING CONCRETE SURFACES</u> | | |
| | <u>Preparation to existing vertical surfaces:</u> | | |
| B179 | Hack face of existing concrete columns, beams, etc. to receive plaster (elsewhere measured). | m² | |
| | <u>REMOVAL OF EXISTING BRICKWORK</u> | | |
| | <u>Breaking down and removing brickwork etc:</u> | | |
| B180 | Half brick walls. | m² | |
| B181 | One brick walls. | m² | |
| | <u>Hacking up/off and removing granolithic screed, plaster, etc., from concrete or brickwork and prepare surfaces for new screed, plaster etc.</u> | | |
| B182 | Hack up/off and remove existing screed from floors (new screed e.m) | m² | |
| B183 | Hack up/off and remove existing plaster from walls (new plaster elsewhere measured) | m² | |

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| | <u>REMOVAL OF EXISTING CEILINGS, PARTITIONING AND FLOORING</u> | |
| | <u>Taking down and removing ceiling, partitioning, and flooring etc.</u> | |
| B184 | Gypsum plasterboard or fibre cement ceilings including cornices, cover strips, timber brandering, etc. | m² |
| B185 | Acoustic tile suspended ceiling including suspension grid, hangers, etc. | m² |
| B186 | Drywall boarding and studwork, including doors, ironmongery, windows, etc. | m² |
| B187 | 19 x 44mm Timber cornice and prepare surface to receive new (elsewhere measured). | m |
| | <u>PLASTER CRACK REPAIRS</u> | |
| | <u>Repairs to cracks in existing plaster</u> | |
| B188 | Cut out plaster at crack on vertical wall or beam face for full depth and minimum 5mm to maximum 10mm wide, prepare and fill with "Sikacryl" or other approved acrylic sealant to finish flush. | m |
| B189 | Chase out cracks in top of surface bed to form groove 100mm wide and 50mm deep and fill with 1:4 cement mortar, including finishing smooth with a steel trowel to match existing level. | m |
| | <u>REMOVAL OF EXISTING FLOOR COVERINGS</u> | |
| | <u>Taking up and removing vinyl floor coverings, carpeting, suspended floor etc:</u> | |
| B190 | Carpet tile floor covering including preparing screed for new floor finish | m² |
| | <u>REMOVAL OF EXISTING TILING</u> | |
| | <u>Hacking up/off and removing tiled floor and wall finishes including removing mortar bed or backing and preparing concrete or brick surfaces for new finishes (elsewhere measured)</u> | |
| B191 | 30mm thick Ceramic tiles and plaster to walls . | m² |
| B192 | 30mm thick Ceramic wall tiles from timber or drywall cladding | m² |
| B193 | 30mm thick Ceramic tiles and screed to floors | m² |
| B194 | 30mm thick Ceramic tiles and screed to treads and risers of stairs | m² |
| B195 | 20mm thick Quarry tiles to floors. | m² |
| B196 | 25mm thick Slate paving to floors. | m² |
| B197 | Mosaic tiles and screed to floors | m² |
| B198 | Ceramic tile skirtings from wall | m |
| | <u>REMOVAL OF EXISTING GLAZING</u> | |
| | <u>Taking out and removing glass and mirrors</u> | |
| B199 | Glass from steel windows including cleaning out rebates and preparing for new glass (elsewhere measured) | m² |
| B200 | Glass from timber windows with beads including cleaning out rebates and preparing for new glass (elsewhere measure) | m² |
| B201 | Glass from aluminium windows with beads including cleaning out rebates and preparing for new glass (elsewhere measure) | m² |
| | <u>Break out for and form opening through brick wall for door frame including precast or concrete lintels, making good plaster or facings on one or both sides, into reveals and 30mm grano thresholds with three readings, 100mm wide.</u> | |
| B202 | Opening for door not exceeding 2.50 m2 in half brick wall. | No. |
| B203 | Opening for door exceeding 2.5m2 and exceeding 5m2 in half brick wall. | No. |
| B204 | Opening for door exceeding 2.5m2 in one brick wall. | No. |
| B205 | Opening for door exceeding 2.5m2 and not exceeding 5m2 in one brick wall. | No. |

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| | <u>REMOVAL OF EXISTING DOORS, WINDOWS, ETC. FROM BRICKWORK</u> <u>Taking out and removing doors, windows, etc. from brickwork to be demolished:</u> | | | |
| B206 | Timber single door and frame not exceeding 2.5m2. | No | | |
| B207 | Aluminium single door and frame not exceeding 2.5m2. | No | | |
| B208 | Timber double door and frame exceeding 2.5m2 and not exceeding 5m2. | No | | |
| B209 | Aluminium double door and frame exceeding 2.5m2 and not exceeding 5m2. | No | | |
| | <u>BUILDING UP OPENINGS</u> <u>Brickwork in NFP bricks in cement mortar in building up openings including plaster both sides:</u> | | | |
| B210 | Half brick walls. | m ² | | |
| B211 | One brick walls. | m ² | | |
| | <u>RIPPING UP AND REMOVE OF EXISTING</u> | | | |
| B212 | Ripping up and remove G2-G9 material compacted to 95% Mod AASHTO density | m ³ | | |
| B213 | 30mm Premix paving and prepare surface for new | m ² | | |
| | <u>REMOVAL OF EXISTING BOND AND INTERLOCKING CONCRETE BLOCK PAVERS</u> <u>Carefully remove precast concrete block road surfacing and set aside for re-use</u> | | | |
| B214 | Carefully remove 80mm G-block paving to all areas | m ² | | |
| B215 | Carefully remove 80mm G-block paving to all areas | m ² | | |
| Carried To Final Summary | | | | |

| Item | | Unit | Rate |
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| | <p><u>SECTION NO 3: PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u> <u>PREAMBLES</u></p> <p>The Tenderer is referred to the relevant clauses in the latest edition of the Model Preambles for Trades and to the Supplementary Preambles which are available on request.</p> <p><u>ALTERATIONS TO PLUMBING AND DRAINAGE</u></p> <p><u>REMOVING OF EXISTING SANITARY FITTINGS</u></p> <p><u>Taking out and removing sanitary fittings including making good wall and floor finishes and stop off services</u></p> | | |
| P1 | Pressed steel bath tub including removal of riser wall | No. | |
| P2 | Pressed steel bath tub. | No. | |
| P3 | Plastic cistern and flush pipe. | No. | |
| P4 | Stainless steel baby bath with draining board | No. | |
| P5 | Stainless steel catering double bowl potwashing sink unit. | No. | |
| P6 | Stainless steel cistern | No. | |
| P7 | Stainless steel curved back urinal not exceeding 900mm wide | No. | |
| P8 | Stainless steel curved back urinal exceeding 900mm and not exceeding 2135mm wide. | No. | |
| P9 | Stainless steel curved back urinal exceeding 2200mm and not exceeding 3500mm wide. | No. | |
| P10 | Stainless steel curved back urinal exceeding 3600mm and not exceeding 4600mm wide. | No. | |
| P11 | Stainless steel single bowl sink 1500mm on brackets or sink unit. | No. | |
| P12 | Stainless steel double bowl sink 1500mm long on brackets or sink unit. | No. | |
| P13 | Stainless steel double bowl sink 1800mm long on brackets or sink unit. | No. | |
| P14 | Stainless steel hospital drip sink and hinged stainless steel grid. | No. | |
| P15 | 900mm wide Stainless steel single wash hand basin. | No. | |
| P16 | Stainless steel slophopper unit with grid (cistern elsewhere measured removed) | No. | |
| P17 | Stainless steel surgeons scrub-up unit not exceeding 2m long. | No. | |
| P18 | Stainless steel triple wash hand basin range. | No. | |
| P19 | Stainless steel wall hung bowl urinal | No. | |
| P20 | Stainless steel WC pan and cistern. | No. | |
| P21 | Stainless steel WC pan and flush valve. | No. | |

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| P22 | Stainless steel combination bed pan and wash-up sink unit. | No. | |
| P23 | Stainless steel single bowl wash trough | No. | |
| P24 | Stainless steel double bowl wash trough | No. | |
| P25 | Stainless steel triple bowl wash trough | No. | |
| P26 | Stainless steel bed pan and bottle rack | No. | |
| P27 | Stainless steel post mortem table not exceeding 2.5m long | No. | |
| P28 | Stainless steel table, not exceeding 1m length | No. | |
| P29 | Stainless steel table, exceeding 1m and not exceeding 3m length. | No. | |
| P30 | Vitreous china low level cistern and flush pipe. | No. | |
| P31 | Vitreous china high level cistern and flush pipe. | No. | |
| P32 | Vitreous china wall hung urinal and flush valve | No. | |
| P33 | Vitrious china wash hand basin | No. | |
| P34 | Vitrious china WC suite | No. | |
| P35 | Precast concrete or fibre cement single wash trough | No. | |
| P36 | Precast concrete or fibre cement double or triple wash trough | No. | |
| | <u>Carefully taking out and setting aside for re-use sanitary fittings including making good wall and floor finishes and temporarily stop off services:</u> | | |
| P37 | Stainless steel baby bath with draining board | No. | |
| P38 | Stainless steel catering double bowl potwashing sink unit. | No. | |
| P39 | Stainless steel curved back urinal not exceeding 900mm wide | No. | |
| P40 | Stainless steel curved back urinal exceeding 900mm and not exceeding 2135mm wide. | No. | |
| P41 | Stainless steel curved back urinal exceeding 2200mm and not exceeding 3500mm wide. | No. | |
| P42 | Stainless steel curved back urinal exceeding 3600mm and not exceeding 4600mm wide. | No. | |
| P43 | Stainless steel single bowl sink 1500mm on brackets or sink unit. | No. | |
| P44 | Stainless steel double bowl sink 1500mm long on brackets or sink unit. | No. | |
| P45 | Stainless steel double bowl sink 1800mm long on brackets or sink unit. | No. | |
| P46 | Stainless steel hospital drip sink. | No. | |
| P47 | Stainless steel single wash hand basin. | No. | |
| P48 | Stainless steel slophopper unit with grid (cistern elsewhere measured removed) | No. | |

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| P49 | Stainless steel surgeons scrub-up unit not exceeding 2m long. | No. | |
| P50 | Stainless steel triple wash hand basin range. | No. | |
| P51 | Stainless steel wall hung bowl urinal | No. | |
| P52 | Stainless steel combination bed pan and wash-up sink unit. | No. | |
| P53 | Stainless steel single bowl wash trough | No. | |
| P54 | Stainless steel double bowl wash trough | No. | |
| P55 | Stainless steel triple bowl wash trough | No. | |
| P56 | Stainless steel bed pan and bottle rack | No. | |
| P57 | Stainless steel post mortem table not exceeding 2.5m long | No. | |
| P58 | Stainless steel table, exceeding 1m and not exceeding 3m length. | No. | |
| P59 | Stainless steel table, not exceeding 1m length | No. | |
| P60 | Vitrious china single wash hand basin | No. | |
| P61 | Vitrious china slophopper (cistern removal elsewhere measured). | No. | |
| P62 | Vitrious china wall hung urinal and flush valve | No. | |
| P63 | Vitrious china WC suite | No. | |
| P64 | High galvanised medicine chest, size approximately 720x230x460mm high | No. | |
| P65 | Geyser tray | No. | |

**REFIXING OF SANITARY FITTINGS PREVIOUSLY SET
ASIDE FOR RE-USE**

**Refixing of sanitary fittings complete in position and
connected to services:**

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| P66 | Stainless steel baby bath with draining board | No. |
| P67 | Stainless steel catering double bowl potwashing sink unit. | No. |
| P68 | Stainless steel curved back urinal not exceeding 900mm wide | No. |
| P69 | Stainless steel curved back urinal exceeding 900mm and not exceeding 2135mm wide. | No. |
| P70 | Stainless steel curved back urinal exceeding 2200mm and not exceeding 3500mm wide | No. |
| P71 | Stainless steel curved back urinal exceeding 3600mm and not exceeding 4600mm wide. | No. |
| P72 | Stainless steel single bowl sink 1500mm on brackets or sink unit. | No. |
| P73 | Stainless steel double bowl sink 1500mm long on brackets or sink unit. | No. |
| P74 | Stainless steel double bowl sink 1800mm long on brackets or sink unit. | No. |
| P75 | Stainless steel hospital drip sink | No. |
| P76 | Stainless steel single wash hand basin. | No. |
| P77 | Stainless steel slophopper unit with grid (cistern elsewhere measured removed) | No. |
| P78 | Stainless steel surgeons scrub-up unit not exceeding 2m long. | No. |
| P79 | Stainless steel triple wash hand basin range. | No. |
| P80 | Stainless steel wall hung bowl urinal | No. |
| P81 | Stainless steel combination bed pan and wash-up sink unit. | No. |
| P82 | Stainless steel single bowl wash trough | No. |
| P83 | Stainless steel double bowl wash trough | No. |
| P84 | Stainless steel triple bowl wash trough | No. |
| P85 | Stainless steel bed pan and bottle rack | No. |
| P86 | Stainless steel post mortem table not exceeding 2.5m long | No. |
| P87 | Stainless steel table, not exceeding 1m length | No. |
| P88 | Stainless steel table, exceeding 1m and not exceeding 3m length. | No. |
| P89 | Vitrious china single wash hand basin | No. |
| P90 | Vitrious china slophopper (cistern removal elsewhere measured). | No. |
| P91 | Vitrious china wall hung urinal and flush valve | No. |

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| P92 | Vitrious china WC suite | No. |
| P93 | High galvanised medicine chest, size approximately 720x230x460mm high | No. |
| P94 | 110mm Gulley trap complete with hopper head and grid | No. |
| <u>REMOVAL OF EXISTING WATER SUPPLY AND FITTINGS</u> | | |
| <u>Taking off and removing defective water supply pipe and fittings:</u> | | |
| P95 | Fitting to copper pipe not exceeding 30mm. | No. |
| P96 | Fitting to copper pipe not exceeding 50mm. | No. |
| <u>Hacking off plaster and locating defective pipe fittings in walls and replacing with Conex brass compression fittings:</u> | | |
| P97 | Fitting to Copper or polyethylene pipe not exceeding 30mm | No. |
| P98 | Fitting to Copper or polyethylene pipe not exceeding 50mm | No. |
| <u>Taking off and removing piping including holderbats, fittings, etc. including disconnecting piping from fittings and making good wall and floor finishes (making good tiling and paintwork elsewhere measured)</u> | | |
| P99 | Surface mounted Piping not exceeding 50mm | m |
| P100 | Surface mounted Piping exceeding 50mm but not exceeding 100mm diameter | m |
| P101 | Surface mounted Piping exceeding 100mm but not exceeding 150mm diameter | m |
| P102 | 15mm Pillar tap, including temporary stopping off of service | No. |
| P103 | 20mm Pillar tap, including temporary stopping off of service | No. |
| P104 | 15mm Underwall stopcock, including temporary stopping off of services | No. |
| P105 | 20mm Underwall stopcock, including temporary stopping off of services | No. |
| P106 | Shower rose, extension pipe and swivel head | No. |
| P107 | Shower rose, extension pipe and swivel head, riser pipe and underwall stopcocks | No. |
| P108 | Shower mixer set | No. |
| P109 | Gas water heater including making good plaster to walls and sealing off gas supply | No. |
| P110 | High pressure water heater, including temporarily stopping off service (new geyser elsewhere measured) | No. |
| <u>REMOVAL OF EXISTING RAINWATER GOODS</u> | | |

Taking off and removing piping, gutters, etc. and making good wall finishes (making good paintwork elsewhere measured)

| | | |
|------|--------------------------------------------|---|
| P111 | UPVC rainwater pipes and holderbats. | m |
| P112 | UPVC eaves gutter and brackets | m |
| P113 | Fibre cement rainwater pipe and holderbats | m |
| P114 | Fibre cement eaves gutter and brackets | m |
| P115 | Sheet metal rainwater pipe and holderbats | m |
| P116 | Sheet metal eaves gutter and brackets | m |

NEW WORK TO PLUMBING AND DRAINAGE SUPPLEMENTARY PREAMBLES

Rate Approvals:

The tenderer is advised that any rate that is required for new work must include the following breakdown:

Material, labour, plant, wastage, transport and profit.

Rate approvals must be authorised by the Principal Agent prior to work being carried out.

Please refer to the Appendix - Rate Approval for more details.

Compensation events:

Tenderers are advised that there is a three month delay in the approval of compensation events. In respect of this delay, no pending compensation events will be paid for until such time as we receive approval for the compensation events. Tenderers must make due allowance for this possible delay in their tenders.

Drawings:

The contractors are referred to a full set of A3 drawings enclosed in Book 2 Drawings. The contractors are urged to study these drawings prior to pricing.

Watertite Guttering commercial and industrial Square profile aluminium H3003h 1 seamless gutter coated internally and externally with ColourTech G4 in colour Marble White with matching splash--plate including cut and mitred angles covered with a mitred strip externally, stop ends riveted and all sealed on the inside with Dow Corning 813 silicone sealer, secured to metal roof sheets with 25 x 2.5mm L-Shaped and 20 x 3mm dual--purpose brackets at 600mm centres using aluminium pop rivets, including a 50 x 20mm high overflow spigot, including expanded aluminium mesh leaf guard set over gutter with 78 x 78 x 2mm thick aluminium downpipe in colour Marble White fixed to wall with straps at 1500mm centres using nail plugs, with downpipe riveted and silicone sealed to gutter outlets, including all necessary bends, elbows,

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| P117 | 140 x 150 x 0.9mm thick Watertite Guttering commercial and industrial Square profile aluminium H3003h 1 seamless gutter coated internally and externally with ColourTech G4 in colour Marble White with matching splash--plate including cut and mitred angles. | m | |
| P118 | 75 x 100mm fluted aluminium rain water down pipe. | m | |
| P119 | Extra over rainwater pipe for shoe | No | |
| P119 | Extra over rainwater pipe for bend to fit 70 x 100mm fluted aluminium rain water down pipe. | No | |
| P120 | Extra over rainwater pipe for eaves or plinth offset 600mm projection | No | |
| | <u>Purpose made pressed metal box-gutter:</u> | | |
| P121 | 350 x 100mm Pressed metal box-gutter bent to suit top of stanchion with fall to rain water down pipe outlets. | m | |
| P122 | Extra over 350 x 100mm box-gutter for outlet | No | |
| P123 | 75 x 100mm fluted aluminium rain water down pipe. | m | |
| P124 | Extra over rainwater pipe for shoe | No | |
| | <u>SANITARY FITTINGS</u> | | |
| | <u>"Franke stainless steel washtrough"</u> | | |
| P125 | 'Franke Grade 304 18/10" Stainless steel SIRX washtrough 500 x 450 x 240mm deep with slanted ribbed front site for scrubbing, PVC waste and plug with handle, fitted to wall on a pair of stainless steel brackets (code: 300367) pop-riveted to flange. | No | |
| | <u>"Geberit Kombifix"</u> | | |
| P126 | Geberit Kombifix concealed cistern for wall hung WC (code: 110.350.00.5), front actuated with Bolero dual- flush actuator (code: 115.777.11.1) in white alpin finish, including flush pipe and pan connector, water supply connection with stop valve, protection cover for service opening and protection cover for flush pipe, fixed with included fastening materials inside solid wall from 120mm up to 200mm. All with Geberit conditional guarantee. | No | |

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| | <u>Vaal Sanitaryware' or other approved vitreous china wash hand basins:</u> | | |
| P127 | 'Vaal Sanitaryware Flamingo" vitreous china wall mounted basin (Colour: White - code: 7007), size 560 x 405mm with one tap-hole including overflow and chain- stay hole bolted to wall with two 10mm bolts (code: 8448Z0) and sealed with silicone sealant where basin meets wall with Cobra Watertech Metsi 15mm chrome plated basin mixer with cast fixed outlet, pop-up waste, mounting kit and angle valves (code: MI-294), manufactured in accordance with SANS 226: 2004 Type 2 (BS 5412). | No | |
| | <u>"Franke stainless steel sink"</u> | | |
| P128 | Franke Trendline Model 900 x 460 SEB grade 304 18/10 polished stainless steel Double End Bowl drop on sink (code: 312081), overall size 1200 x 535mm wide with two 343 x 410 140mm deep bowls, fitted onto cupboard including 38mm waste fitting and PVC trap | No | |
| P129 | Franke Trendline Model 900 x 460 SEB grade 304 18/10 polished stainless steel Double End Bowl drop on sink (code: 312081), overall size 1200 x 535mm wide with two 343 x 410 140mm deep bowls, fitted onto cupboard including 38mm waste fitting and PVC trap | No | |
| | <u>TRAPS ETC</u> | | |
| | <u>"Marley"</u> | | |
| P130 | 32 x 50mm Deep seal "P" or "S" trap | No | |
| | <u>TAPS, VALVES ETC</u> | | |
| | <u>"Brass"</u> | | |
| P131 | 22mm Stopcock | No | |
| P132 | 50mm Isolating valve | No | |
| | <u>"Cobra Watertech"</u> | | |
| P133 | 15mm Chrome plated basin mixer | No | |
| | <u>SANITARY PLUMBING</u> | | |
| | <u>uPVC pipes</u> | | |
| P134 | 50mm Pipes | m | |
| P135 | 110mm Pipes | m | |
| | <u>Extra over uPVC pipes for fittings</u> | | |
| P136 | 110mm Reducer | No | |
| P137 | 50mm Bend | No | |
| P138 | 50mm Junction | No | |
| P139 | 110mm Pan connector | No | |
| P140 | 50mm Access bend | No | |
| P141 | 110mm Access bend | No | |
| P142 | 50mm Access junction | No | |
| P143 | 110mm Access bend with anti-syphon horn | No | |
| P144 | 50mm "GI Two-way" vent valve | No | |

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| | <u>WATER SUPPLIES</u> | | |
| | <u>Class 0 copper pipes</u> | | |
| P145 | 15mm Pipes | m | |
| P146 | 15mm Pipes chased into brick walls | m | |
| P147 | 22mm Pipes | m | |
| P148 | 22mm Pipes chased into brick walls | m | |
| | <u>Extra over class 0 copper pipes for capillary fittings</u> | | |
| P149 | 15mm Fittings | No | |
| P150 | 22mm Fittings | No | |
| P151 | 28mm Fittings | No | |
| | <u>Copper overflow and service pipes</u> | | |
| P152 | 15mm Service pipe 500mm girth | No | |
| | <u>Sundries</u> | | |
| P153 | 225 x 225mm x 10kg Type 11B cast iron stopcock box including brick chamber below not exceeding 500mm deep internally | No | |
| | <u>TESTING</u> | | |
| P154 | Testing water pipe system | Item | |
| | <u>HOT DIPPED GALVANISED MILD STEEL PIPES</u> | | |
| P155 | 65mm diameter Galvanized Mild Steel Delivery Line. | m | |
| P156 | 65mm diameter Galvanized Mild Steel Delivery Line fully bedded in wet to dry epoxy wheres chased through walls. | m | |
| P157 | 50mm diameter uPVC syphon pipe. | m | |
| P158 | Extra Over 65mm diameter Galvanized Delivery Line for bends. | No | |
| P159 | 65mm diameter outlet valve. | No | |
| P160 | 65mm diameter 'Cobra' Gate Valve including joints to steel pipe. | No | |
| P161 | Puddle flange for 65mm diameter steel pipe. | No | |
| P162 | Extra Over for Pipe Holding Down clamps as per Engineers Drawing DSOCF 10 | No | |
| P163 | Extra Over 50mm diameter uPVC syphon pipe for bends. | No | |
| P164 | 110mm Diameter galvanised steel pipes | m | |
| P165 | Extra over 110mm diameter galvanised steel pipes for bends | No | |
| | <u>TANKS ETC:</u> | | |
| P166 | 5000 litre Heavy Duty Vertical 'JO-JO' or other approved water Tank | No | |
| P167 | 10000 litre Heavy Duty Vertical 'JO-JO' or other approved water Tank | No | |

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| | <u>HOLES ETC</u> | | |
| | <u>Core drilling of hole for pipe exceeding 50mm and not exceeding 100mm diameter</u> | | |
| P168 | 200mm Reinforced concrete slab, beam, wall, etc | No | |
| | <u>STEEL PIPES, ETC</u> | | |
| | <u>Galvanised steel pipes</u> | | |
| P169 | 110mm Pipes | m | |
| | <u>Extra over galvanised steel pipes for steel fittings</u> | | |
| P170 | 110mm Fittings | No | |
| | <u>HOLES ETC</u> | | |
| | <u>Core drilling of hole for pipe exceeding 50mm and not exceeding 100mm diameter</u> | | |
| P171 | On one brickwall | No | |
| | <u>TANKS ETC</u> | | |
| | <u>"Dorbyl Prestank" or similar approved</u> | | |
| P172 | 600mm diameter oil separator tank including all accesories | No | |
| Carried To Final Summary | | | |

| Item | | Unit | Rate |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|
| E1 | <p><u>SECTION NO: 4 ELECTRICAL</u></p> <p>The Tenderer is referred to the relevant clauses in the Model Preambles for Trades and to the Supplementary Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Refer to conditions of Eskom Engineering and Construction Short Contract, attached.</p> <p>NOTE. The complete electrical installation to comply with the relevant clauses of the SABS Code of Practice for the Wiring of Premises SANS10142 - 1:2003 (previously SABS 0142)</p> <p>All equipment, electrical materials or methods of installation shall comply fully with SABS 0142-1 as published December 2001</p> <p><u>Overtime work and normal work:</u></p> <p>The tenderers are advised that the following works may be done during normal working hours as well as after normal working hours. Tenderers must make due allowance for these working hours in the pricing as no claims will be entertained in this regard.</p> <p><u>COC Certificate:</u></p> <p>Tenderers are advised that any work completed by the electrical sub-contractor must be supported by a COC Certificate to the approval of the Eskom Properties (EC) Official</p> <p><u>Rate Approvals:</u></p> <p>The tenderer is advised that any rate that is required for new work must include the following breakdown:</p> <p>Material, labour, plant, wastage, transport and profit.</p> <p>Rate approvals must be authorised by the Eskom Properties (EC) Official prior to work being carried out.</p> <p><u>Proprietary items or materials:</u></p> <p>Proprietary items or materials where specified are to be of the brand specified - or other approved - by the Eskom Properties (EC) Official</p> <p><u>DISTRIBUTION BOARDS</u></p> <p><u>Distribution boards complete with sheetmetal trays, frames, subframes, busbars, provision for future circuit breakers, including all equipment, labelling and legend cards, all in accordance with the Detail Specification</u></p> | No | |
| | Distribution board DB-CCE | | |

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| | <u>ANCILLARY DISTRIBUTION BOARDS AND OUTLETS</u> | | |
| | <u>Metal distribution boards, cover plates, etc</u> | | |
| E2 | 600 x 600mm Telephone distribution board | No | |
| E3 | Blank cover plate | No | |
| | <u>CABLES (PROVISIONAL)</u> | | |
| | <u>PVC/SWA/PVC ECC stranded copper conductor drawn into sleeves and/or laid in trenches (excavation measured elsewhere)</u> | | |
| E3 | 4mm ² x 2-Core | m | |
| E4 | 6mm ² x 3-Core | m | |
| E5 | 6mm ² x 4-Core | m | |
| E6 | 10mm ² x 4-Core | m | |
| E7 | 16mm ² x 4-Core | m | |
| E8 | 25mm ² x 4-Core | m | |
| E9 | 35mm ² x 4-Core | m | |
| E10 | 50mm ² x 4-Core | m | |
| E11 | 70mm ² x 4-Core | m | |
| E12 | 95mm ² x 4-Core | m | |
| E13 | 120mm ² x 4-Core | m | |
| E14 | 150mm ² x 4-Core | m | |
| E15 | 185mm ² x 4-Core | m | |
| E16 | 185mm H07 flex cable | m | |
| E17 | 240mm ² x 4-Core | m | |
| E18 | 300mm ² x 4-Core | m | |

| | <u>Cable terminations complete, including gland shrouds, lugs, number tags, tape, etc and connecting</u> | | |
|-----|----------------------------------------------------------------------------------------------------------|----|--|
| E19 | 4mm2 x 2-Core | No | |
| E20 | 6mm2 x 3-Core | No | |
| E21 | 6mm2 x 4-Core | No | |
| E22 | 10mm2 x 4-Core | No | |
| E23 | 16mm2 x 4-Core | No | |
| E24 | 25mm2 x 4-Core | No | |
| E25 | 35mm2 x 4-Core | No | |
| E26 | 50mm2 x 4-Core | No | |
| E27 | 70mm2 x 4-Core | No | |
| E28 | 70mm2 x 1-Core termination | No | |
| E29 | 95mm2 x 4-Core | No | |
| E30 | 120mm2 x 4-Core | No | |
| E31 | 150mm2 x 4-Core | No | |
| E32 | 150 mm single core H07 cable | No | |
| E33 | 185mm2 x 4-Core | No | |
| E34 | 185mm H07 flex cable termination | No | |
| E35 | 240mm2 x 4-Core | No | |
| E36 | 300mm2 x 4-Core | No | |

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|-----|---------------------------------------------------------------------------------------------|----|--|
| | <u>Cable joints including terminations, single core tails, etc</u> | | |
| E37 | 10mm2 x 4-Core | No | |
| E38 | 16mm2 x 4-Core | No | |
| E39 | 25mm2 x 4-Core | No | |
| E40 | 35mm2 x 4-Core | No | |
| E41 | 50mm2 x 4-Core | No | |
| E42 | 70mm2 x 4-Core | No | |
| E43 | 95mm2 x 4-Core | No | |
| E44 | 120mm2 x 4-Core | No | |
| E45 | 150mm2 x 4-Core | No | |
| E46 | 185mm2 x 4-Core | No | |
| E47 | 240mm2 x 4-Core | No | |
| E48 | 300mm2 x 4-Core | No | |
| E49 | 150mm Single core H07 cable termination | No | |
| E50 | 185mm x4 core cable joint | No | |
| | <u>CABLE TRAYS</u> | | |
| | <u>Galvanised heavy duty cable trays, including short lengths and fixed to walls</u> | | |
| E51 | 100mm Wide cable trays | m | |
| E52 | 150mm Wide cable trays | m | |
| E53 | 400mm Wide cable trays | m | |
| | <u>Extra over cable tray for:</u> | | |
| E54 | 150mm Bend | No | |
| E55 | 150mm T-piece | No | |
| E56 | 400mm Bend | No | |
| E57 | 400mm T-piece | No | |

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| | <u>SLEEVES</u> | | |
| | <u>Unplasticised polyvinyl chloride (uPVC) sleeve piping including short lengths and jointing, laid in trench (trench and backfilling measured elsewhere)</u> | | |
| E58 | 50mm Diameter rigid pipes | m | |
| E59 | 75mm Diameter rigid pipes | m | |
| E60 | 110mm Diameter rigid pipes | m | |
| E61 | 150mm Diameter rigid pipes | m | |
| E62 | 50mm Diameter flexible pipes | m | |
| E63 | 75mm Diameter flexible pipes | m | |
| E64 | 110mm Diameter flexible pipes | m | |
| | <u>Extra on UPVC piping for:</u> | | |
| E65 | 110mm Diameter long radius bend | No | |
| E66 | 150mm Diameter long radius bend | No | |
| | <u>CABLE TRENCHES</u> | | |
| E70 | Soft excavation not exceeding 2m deep for cable trenches including risk of collapse of excavations, keeping excavations free from water, setting aside excavated material and later refilling of trenches | m ³ | |
| | <u>Extra over excavation for cable or sleeve trenches for excavation in:</u> | | |
| E71 | Intermediate material | m ³ | |
| E72 | Hard rock material | m ³ | |
| | <u>SUNDRIES</u> | | |
| E73 | Cable warning tape placed 150mm above cables in excavations | m | |
| E74 | Concrete block cable marker with inscribed aluminium or brass indicator plate | No | |
| | <u>CUTTING THROUGH FLOORS, PAVINGS, ETC</u> | | |
| E75 | Saw cutting through 100mm thick unreinforced concrete paving for 600mm wide cable trench and making good concrete on completion | m | |
| E76 | Lifting up interlocking concrete block paving as necessary for 600mm wide cable trench and relaying and making good paving on completion | m | |
| E77 | C3 Material required to stabilise road crossing | m ³ | |
| | <u>CABLE MANHOLES</u> | | |
| E78 | 600 x 600mm Brick inspection chamber not exceeding 1000mm deep internally, including precast concrete cover slab (cover elsewhere) | No | |
| E78 | 1000 x 1000mm Brick inspection chamber not exceeding 1000mm deep internally, including precast concrete cover slab (cover elsewhere) | No | |
| E80 | 450 x 450mm x 27,4kg cast iron grating and frame | No | |
| | <u>GENERAL LIGHTING POWER</u> | | |
| | <u>CONDUITS ETC</u> | | |
| | <u>Galvanised steel conduits</u> | | |
| E81 | 50mm Diameter | m | |
| | <u>Rigid PVC conduits</u> | | |
| E82 | 20mm Diameter | m | |
| E83 | 25mm Diameter | m | |
| E84 | 32mm Diameter | m | |

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| | <u>PVC conduit accessories</u> | | |
| E85 | Round conduit box for 20mm diameter conduits | No | |
| E86 | Round conduit box for 25mm diameter conduits | No | |
| E87 | Round conduit box for 32mm diameter conduits | No | |
| E88 | 100 x 50 x 50mm Deep box | No | |
| E89 | 100 x 100 x 50mm Deep box | No | |
| E90 | Blank cover plate for 100mm x 100mm box | No | |
| | <u>"Normaflex" PVC conduits and accessories</u> | | |
| E91 | 50mm Flexible PVC conduit with conduit box adaptor | No | |
| | <u>WIRING CHANNELS</u> | | |
| E92 | Type P2000 galvanised wiring channels fitted with full length cover plates and suspended from timber trusses/purlins | m | |
| E93 | Type P8000 galvanised wiring channels fitted with full length cover plates and suspended from timber trusses/purlins | m | |

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| | <u>POWER SKIRTINGS</u> | | |
| E94 | 150 x 50mm "Legrand" PVC two compartment power skirtings, fixed to walls | m | |
| | <u>Extra over for:</u> | | |
| E95 | Body joint | No | |
| E96 | Cover joint | No | |
| E97 | Internal/external corner piece | No | |
| E98 | End cap | No | |
| E99 | 16A Single three-pin flush mounted switched socket outlet complete with cover plate, fixed to skirting | No | |
| E100 | 16A Dedicated single three-pin flush mounted switched socket outlet complete with cover plate, fixed to skirting | No | |
| E101 | 16A Red coloured single three-pin flush mounted switched socket outlet complete with cover plate, fixed to skirting | No | |
| E102 | RJ11 connector with cradle/cover and mod blank | No | |
| | <u>CONDUCTORS</u> | | |
| | <u>PVC insulated stranded copper earth conductors drawn into wireways:</u> | | |
| E103 | 2,5mm2 | m | |
| E104 | 6mm2 | m | |
| | <u>PVC insulated stranded copper conductors drawn into wireways:</u> | | |
| E105 | 2,5mm2 | m | |
| E106 | 4mm2 | m | |
| E107 | 10mm2 | m | |
| | <u>LIGHT SWITCHES, SWITCHED SOCKET OUTLETS, ETC.</u> | | |
| | <u>NOTE : Rates must include for engraving cover plates indicating DB and circuit number labelling</u> | | |
| | <u>Switches, etc complete with engraved metal cover plates</u> | | |
| E108 | Royce Thomson P5 type photo electric cell complete with "Hubbel" type plug set suitable for mounting on and including galvanised pressed steel conduit box and neoprene gasket | No | |

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| | <u>Switches, etc complete with engraved metal cover plates fixed in flush boxes:</u> | | |
| E109 | 16A One-lever one-way switch | No | |
| E110 | 16A Two-lever one-way switch | No | |
| E111 | 16A Three-lever one-way switch | No | |
| E112 | 16A One-lever two-way switch | No | |
| E113 | 16A One-lever one-way watertight switch | No | |
| E114 | 5A Single three-pin unswitched socket outlet for round box | No | |
| E115 | 16A Single three-pin switched socket outlet | No | |
| E116 | 16A Dedicated single three-pin switched socket outlet | No | |
| E117 | 16A Red coloured single three-pin switched socket outlet | No | |
| E118 | 16A Double three-pin switched socket outlet | No | |
| E119 | 16A Red coloured double three-pin switched socket outlet | No | |
| E120 | 16A Single three-pin waterproof switched socket outlet | No | |
| E121 | 20A Double pole isolator | No | |
| E122 | 20A Double pole weatherproof isolator | No | |
| E123 | 20A Triple pole isolator | No | |
| E124 | 30A Double pole isolator | No | |
| E125 | 40A Triple pole isolator | No | |
| E126 | 150A Triple pole isolator | No | |
| E127 | 200A Triple pole isolator | No | |
| | <u>York Boxes</u> | | |
| E128 | 200 x 200mm Weatherproof york box | No | |

| <u>LUMINAIRES AND EQUIPMENT</u> | | |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| <u>Luminaires or equipment complete with lamps, connections, etc mounted in position</u> | | |
| E129 | Type a1: 36W "Lihle LIH136 RC ECG" 1200mm long one tube prismatic diffuser fluorescent fitting | No |
| E130 | Type a2: 36W "Lihle LIH236 RC ECG" 1200mm long two tube prismatic diffuser fluorescent fitting | No |
| E131 | Type a3: 58W "Lihle LIH158 RC Prismatic/ECG" 1500mm long one tube prismatic diffuser fluorescent fitting | No |
| E132 | Type a4: 58W "Lihle LIH258 RC Prismatic/ECG" 1500mm long two tube prismatic diffuser fluorescent fitting | No |
| E133 | Type a5: "Lihle LIH258 ECG/Vapour" 1500mm long two tube vapour proof fluorescent fitting | No |
| E134 | Type a6: 36W "Lihle LIH236 RC ECG/EM 50%" 1200mm long two tube prismatic diffuser fluorescent fitting complete with 1 hour battery back-up, etc | No |
| E135 | Type b1: 18W "Lihle LIH318 CI/Prismatic/ECG" 600 x 600mm recessed three tube prismatic diffuser fluorescent fitting complete with 1,5m cabtyre, 3-pin plug top, etc | No |
| E136 | Type b2: 36W "Lihle LIH336 CI/Prismatic/ECG" 1200 x 600mm recessed three tube prismatic diffuser fluorescent fitting complete with 1,5m cabtyre, 3-pin plug top, etc | No |
| E137 | Type b3: 36W "Lihle LIH336 CI/Prismatic/EM 50% for 1 hour/ECG" 1200 x 600mm recessed three tube prismatic diffuser fluorescent fitting complete with 1 hour battery back-up, 1,5m cabtyre, 3-pin plug top, etc | No |
| E138 | Type c1: 13W "Lihle LIH 1 P13" 175mm diameter one lamp fluorescent downlighter with white trim complete with glass lens, 1,5m cabtyre, 3-pin plug top, etc | No |
| E139 | Type c2: 18W "Lihle LIH 1 P18" 215mm diameter one lamp fluorescent downlighter with white trim complete with glass lens, 1,5m cabtyre, 3-pin plug top, etc | No |
| E140 | Type c3: 26W "Beka Rondo H" 212mm diameter two lamp fluorescent downlighter with white trim complete with 1,5m cabtyre, 3-pin plug top, etc | No |
| E141 | Type j1: 26W "Beka 31226" round one lamp fluorescent bulkhead fitting with black trim | No |
| E142 | Type j4: "Beka Argos" single ceiling mounted emergency exit sign light complete with exit signage | No |
| E143 | Type j5: "LIH/BH/IND/LU/POLY/CL-2PL9" round surface mounted bulkhead fitting | No |
| E144 | Type j6: 150W "LIH150W/OTELLA" wall mounted up/down fitting | No |
| E145 | Type j7: "Beka Argos" double ceiling mounted emergency exit sign light complete with exit signage | No |
| E146 | Type j8: "Beka Argos" double ceiling mounted emergency exit sign light complete with RTO204 exit signage | No |
| E147 | Type p: 2 x 26W "Beka Dazzle" decorative pendant fitting complete with hook, 3m steel wire suspension, spiral flex, etc | No |
| E148 | Type m: Tube light with four 36W one lamp low brightness diffusers and three adjustable downlighters complete with all accessories and all in accordance with the drawings | No |

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| | <u>Fans, air conditioning units, etc including required isolator, etc and complete with cabtyre cable between isolator and unit, connections, etc fixed in position</u> | | |
| E149 | 2,5 Litre "Franke Zip Hydroboil" | No | |
| E150 | 5.0 Litre Franke Zip Hydroboil' | No | |
| E151 | 7,5 Litre "Franke Zip Hydroboil" | No | |
| | 15 Litre "Franke Zip Hydroboil" | No | |
| | <u>CONNECTIONS OF APPLIANCES ETC</u> | | |
| E152 | Hydroboil unit supplied by others | No | |
| | <u>HEAT DETECTION/INFRA RED TEST</u> | | |
| | <u>Allow for heat detection/Infra red test:</u> | | |
| E153 | An Inspection report supported by photos to be submitted to the Eskom Properties (EC) Official | No | |
| | <u>TELEPHONE INSTALLATION</u> | | |
| E154 | 25mm PVC conduit | m | |
| E155 | 25mm PVC conduit end | No | |
| E156 | 25mm PVC conduit box and end | No | |
| E157 | Blank covers | No | |
| E158 | 20 Pair indoor cable | m | |
| E159 | 40 Pair indoor cable | m | |
| | <u>PUBLIC ADDRESS INSTALLATION</u> | | |
| E160 | 25mm PVC conduit | m | |
| E161 | 25mm PVC conduit end | No | |
| E162 | 25mm PVC conduit box and end | No | |

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| <u>LIGHTNING PROTECTION INSTALLATION</u> | | |
| <u>Excavation</u> | | |
| E163 | Soft excavation not exceeding 2m deep for earth conductors including risk of collapse of excavations, keeping excavations free from water, setting aside excavated material and later refilling of trenches | m³ |
| <u>Down conductors</u> | | |
| E164 | 50mm² Aluminium conductors surface mounted on walls, etc including all necessary fixing accessories, insulating sleeves, stand off brackets, jointing, etc | m |
| <u>Air terminal conductors</u> | | |
| E165 | 50mm² Aluminium conductors surface mounted on metal roofing, etc including all necessary fixing accessories, insulating sleeves, stand off brackets, jointing, etc | m |
| <u>Terminations of down conductors to air terminals</u> | | |
| E166 | Complete termination arrangement of the 50mm² aluminium conductor to the metal sheeting including all necessary lugs, ferrules, making off of ends, clamps, etc | No |
| <u>Earthing conductors</u> | | |
| E167 | 70mm² Green PVC insulated copper conductor laid in trenches (trenches elsewhere) including jointing, etc | m |
| <u>Terminations of earthing conductors to down conductors</u> | | |
| E168 | Complete termination arrangement of the 70mm² PVC insulated earth conductor to the 50mm² aluminium down conductor including all necessary lugs, ferrules, making off of ends, clamps, etc | No |
| <u>Earth electrodes</u> | | |
| E169 | 3,6m Long "Copperweld" copper clad steel electrodes driven into the ground with top end of electrode 500mm below finished ground level | No |
| <u>Terminations of earthing conductors to earth electrodes</u> | | |
| E170 | Complete termination arrangement of the 70mm² PVC insulated copper conductor to the installed earth electrodes including all necessary lugs, ferrules, making off of ends, clamps, etc | No |
| <u>PUBLIC ADDRESS INSTALLATION</u> | | |
| <u>Supply, installation, connection, commissioning and testing of the public address installation complete as specified</u> | | |
| E171 | Ceiling mounted loud speakers | No |
| E172 | 2 Core white cabtyre PVC wiring | m |
| Carried To Final Summary | | |

| Item | | Unit | Rate |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|
| | <u>SECTION 5: AIR-CONDITIONING</u> | | |
| | The Tenderer is referred to the relevant clauses in the Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities. | | |
| | <u>INSTALLATION</u> | | |
| | <u>Back to Back installation cost</u> | | |
| | Materials, Galvanized 650mm brackets, Grey trunking & materials. (copper pipes, sleeving, drain pipes) | | |
| | Maximum of 5mtr pipe & cable runs from outdoor to indoor unit. | | |
| A1 | 9000 Btu | No. | |
| A2 | 12000 Btu | No. | |
| A3 | 18000 Btu | No. | |
| A4 | 24000 Btu | No. | |
| A5 | 30000 Btu | No. | |
| A6 | 36000 Btu | No. | |
| A7 | 36000 Btu – 56000 Btu | No. | |
| | <u>Cassete Unit installation cost</u> | | |
| | Materials, Galvanized 650mm brackets, Grey trunking & materials. (copper pipes, sleeving, drain pipes) | | |
| | Maximum of 5mtr pipe & cable runs from outdoor to indoor unit. | | |
| A8 | 9000 Btu | No. | |
| A9 | 12000 Btu | No. | |
| A10 | 18000 Btu | No. | |
| A11 | 24000 Btu | No. | |
| A12 | 30000 Btu | No. | |
| A13 | 36000 Btu | No. | |
| A14 | 36000 Btu – 56000 Btu | No. | |

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| | <u>Additional material and labour</u> | | |
| A15 | Outside trunking Grey (75mm x 75mm (per length) | m | |
| A16 | Outside trunking White (100mm x 40mm (per length) | m | |
| A17 | ¼ " copper pipe c/w insulation (p/m) | m | |
| A18 | 3/8 " copper pipe c/w insulation (p/m) | m | |
| A19 | ½ " copper pipe c/w insulation (p/m) | m | |
| A20 | 5/8 " copper pipe c/w insulation (p/m) | m | |
| A21 | ¾ " copper pipe c/w insulation (p/m) | m | |
| A22 | Cable 2.5mm (p/m) | m | |
| A23 | Drain Pipe (p/m) | m | |
| | <u>Electrical Installation</u> | | |
| | <u>Single Phase Installation:</u> | | |
| A24 | IP 65 Box ABB | No. | |
| A25 | Curve 1 C/B in DB | No. | |
| A26 | 25A isolator in IP box | No. | |
| A27 | 2.5mm cable | m | |
| | <u>Three Phase Installation:</u> | | |
| A28 | IP 65 Box ABB | No. | |
| A29 | Curve 1 C/B in DB | No. | |
| A30 | 25A isolator in IP box | No. | |
| A40 | 2.5mm cable | m | |
| Carried To Final Summary | | | |

| Item | Unit | Rate |
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| <p><u>SECTION NO. 6: General Works</u></p> <p><u>BILL NO.1 : ROADWORKS (PROVISIONAL)</u></p> <p><u>PREAMBLES</u></p> <p>The Tenderer is referred to the relevant clauses in the latest edition of the Model Preambles for Trades and to the Supplementary Preambles which are available on request.</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Items, materials or methods to be used to be specified by trade names or catalogue numbers are only an indication of the quality required.Items, materials or methods of similar quality may be used with prior aproval from the project manager.</p> <p>Work described as 'remove' or 'removed' shall be expeditiously, permanently removed from the site.</p> <p>The Tenderer must acquaint himself with the nature of material to be excavated.</p> <p>A soils investigation has been carried out by the site engineer and the report is annexed to these bills of quantities. Descriptions for excavations shall be deemed to include all ground conditions classifiable as 'earth' described in the above report and where conditions of a more difficult character are indicated these will be seperately measured.</p> <p>The Contractor is to submit a detailed method statement to the engineer for approval prior to undertaking this work.</p> | | |

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| | <p><u>Compensation event:</u></p> <p>Tenderers are advised that there is a three month delay in the approval of compensation events. In respect of this delay, no pending compensation events will be paid for until such time as we receive approval for the compensation events. Tenderers must make due allowance for this possible delay in their tenders.</p> <p><u>Rate Approvals:</u></p> <p>The tenderer is advised that any rate that is required for new work must include the following breakdown: Material, labour, plant, wastage, transport and profit. Rate approvals must be authorised by the Principal Agent prior to work being carried out. Please refer to the Appendix - Rate Approval for more details.</p> <p><u>Drawings:</u></p> <p>The Contractor is referred to the full set of A3 drawings enclosed in Book 2 Drawings. The Contractor is urged to study these drawings before pricing.</p> <p><u>Placement:</u></p> <p>Signs to be placed vertically 1700mm from floor level to the centre of the sign. Refer to Drawing E48-10-04</p> <p><u>Specifications:</u></p> <p>Sign face to be Fabricated Aluminium Sheet Metal to top panel of the sign face to be spray painted 2K gloss enamel to match Eskom blue Pantone 287 C and to receive three coats UV clear coat over graphics decals.</p> <p>Sign face cut from 1.5mm aluminium and fitted with concealed fittings to sign makers specifications.</p> <p>The Graphics are to be gloss opaque decals</p> <p>All Fire and Escape Route Pictograms are to be applied as per SABBS Specifications</p> <p><u>Freestanding Information and Directional Signs:</u></p> <p>Free Standing External sign consisting of fabricated aluminium sheet to top panel of the sign face, spray painted 2K gloss to match Eskom gold Pantone 8004 C, the bottom part of the sign face to be spray painted 2K gloss enamel to match Eskom blue Pantone 287 C. The entire sign to receive three coats UV clear coat. The sign to have Eskom corporate signature in 3M premium film exterior vinyl decal in white and blue, the decal manufactured to match Eskom Pantone blue 287 C as indicated on architects drawings. (Refer to Drawing E48-10-03)</p> | | |
| GW1 | Type B Free Standing External sign. The sign face is to be 500mm high and curved along its length of 775mm (arc length), projecting 80mm at its centre and riveted to the internal mild steel support structure using galvanised countersunk rivets on the sides. | No | |
| GW2 | Type G Free Standing External sign. The sign face is to be 839mm high and curved along its length of 1270mm (arc length), projecting 115mm at its centre and riveted to the internal mild steel support structure using galvanised countersunk rivets on the sides. | No | |

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| GW3 | Type A Free Standing External sign. The sign face is to be 1440mm high and curved along its length of 1885mm (arc length), projecting 310mm at its centre and riveted to the internal mild steel support structure using galvanised countersunk rivets on the sides. | No | |
| GW4 | Fire Equipment Locating Pictograms: | | |
| GW5 | Type N Fire Equipment Locating Sign with 2 Pictograms of a Fire extinguisher and Locational Arrow Sign. | No | |
| GW6 | Type R Fire Equipment Locating Sign with 3 Pictograms of a Fire Hydrant, Fire Hose Reel and Downward Locational Arrow Sign. | No | |
| | <u>Surface Preparation:</u> | | |
| GW7 | Trim and level off surface of ground (excavated under this Contract) to receive stone beds, including excavating or filling, ripping and scarifying as necessary and compacting the whole area for a depth of 150mm to a density of at least 93% Mod. AASHTO maximum density, to falls to maximum final slope of 1%. | m² | |
| | <u>Prescribed density tests on filling</u> | | |
| GW8 | In-situ dry density (sand replacement) test in accordance with method A10 (a) of TMH 1 | No | |
| GW9 | Maximum dry density and optimum moisture content test in accordance with method A7 of TMH 1 | No | |
| GW10 | Atterberg limits test in accordance with methods A2 to A4 of TMH1 | No | |
| GW11 | UCS test in accordance with method A14 of TMH1 | No | |
| | <u>Descriptions:</u> | | |
| | Precast concrete kerbs finished smooth on exposed surfaces including 20mm cement mortar 1:3 bedding, cutting and pointing, with 25MPa/ 19mm unreinforced concrete foundation, haunching and channel: | | |
| | <u>230 x 125mm high Fig 6 Mountable Kerb with Class 20/19 continous concrete base and channel size 600 x 155mm and Class 15/13 continous concrete haunching 150 x 100mm haunching at back, including excavation, backfilling, formwork, etc.: (Refer to drawing: 12 KN07 - 100, Detail A)</u> | | |
| GW12 | Mountable Kerb fig 6. | m | |
| GW13 | Mountable Kerb fig 6 circular to radius exceeding 4m. | m | |
| GW14 | Mountable Kerb fig 6 circular to radius not exceeding 4m. | m | |
| | <u>230 x 125mm high Fig 6 Mountable Kerb with Class 20/19 continous concrete base size 400 x 155mm and Class 15/13 continous concrete haunching 150 x 100mm haunching at back, including excavation, backfilling, formwork, etc.: (Refer to drawing: 12 KN07 - 100, Detail B)</u> | | |
| GW15 | Mountable Kerb Fig 6. | m | |
| GW16 | Mountable Kerb Fig 6 circular to a radius exceeding 4m. | m | |
| GW17 | Mountable Kerb fig 6 circular to radius not exceeding 4m. | m | |

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| | <u>Cast In-situ Concrete Cut-Off Beams in block paving:</u> | | |
| GW18 | Excavate in compacted G2 grade to form trench 250mm wide and 300mm deep, sides at angle of repose, for and cast 250 x 300mm deep cut-off beam in 25MPa/19mm stone unreinforced concrete against excavated surfaces, with 25mm diameter HDPE drain pipes 410mm long cast through at 500mm centres, the ends wrapped in 'Bidim' U14 or other approved filter fabric and protruding 80mm both sides into sandbed under paving. | m | |
| | <u>Expansion Joints:</u> | | |
| GW19 | 10mm Softboard expansion joint in Fig. 6 kerb (size 125 x 230mm) (Fig 6 Kerb E/m) | m | |
| | <u>Joint Sealants:</u> | | |
| GW20 | 10 x 20mm Polysulphide sealant to softboard expansion joint in kerb, size 240mm girth, including raking out the top 20mm | m | |
| GW21 | <u>Road Marking Paint:</u> <u>Prepare surfaces, wash thoroughly, remove loose material, leave to dry and apply three coats 'Promac Aqualine Road Marking' waterborne acrylic road marking paint:</u> | | |
| GW22 | 100mm Line on asphalt surfaces. | m | |
| GW23 | 100mm Line on concrete block surfaces. | m | |
| GW24 | 100mm Interrupted line on concrete block surfaces. | m | |
| GW25 | Directional arrow size 750 x 1500mm on concrete block surfaces. | No. | |
| GW26 | Paraplegic symbol size 1500 x 1500mm on concrete block surfaces. | No. | |
| GW27 | Stop sign size 3000 x 1500mm on concrete block surfaces. | No. | |
| GW28 | Exit sign size 3000 x 1500mm on concrete block surfaces. | No. | |
| GW29 | Enter sign size 3600 x 1500mm on concrete block surfaces. | No. | |
| | <u>SIGNAGE, LETTERS, NAMEPLATES, ETC.</u> | | |
| GW30 | Directional arrow size 750 x 1500mm on G-Block paving surfaces. | No | |
| GW31 | Paraplegic symbol size 1500 x 1500mm on G-Block paving surfaces. | No | |
| GW32 | Stop sign size 3000 x 1500mm on G-Block paving surfaces. | No | |
| GW33 | Exit sign size 3000 x 1500mm on G-Block paving surfaces. | No | |
| GW34 | Enter sign size 3600 x 1500mm on G-Block paving surfaces. | No | |

BILL NO.2 : STORMWATER DRAINAGE (PROVISIONAL)

PREAMBLES

The Tenderer is referred to the relevant clauses in the latest edition of the Model Preambles for Trades and to the Supplementary Preambles which are available on request.

SUPPLEMENTARY PREAMBLES

Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Project Manager.

All pipe diameters are nominal external.

Concrete pipes:

Pipes shall be jointed with socket and spigot joints with rubber rings.

Exposed concrete surfaces:

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

Excavations:

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

Intermediate material' and 'hard rock material' shall be as defined in 'Earthworks'.

Laying, backfilling, bedding, etc of pipes:

Pipes shall be laid and bedded in Class C bedding and trenches shall be carefully backfilled in accordance with engineers instructions. Alternatively:

Pipes shall be laid and bedded in accordance with clauses 5.1 and 5.2 of each of the following: SANS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SANS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SANS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class C bedding

Compensation Event:

Tenderers are advised that there is a three month delay in the approval of compensation events. In respect of this delay, no pending compensation events will be paid for until such time as we receive approval for the compensation events. Tenderers must make due allowance for this possible delay in their tenders.

Rate Approvals:

The tenderer is advised that any rate that is required for new work must include the following breakdown: Material, labour, plant, wastage, transport and profit. Rate approvals must be authorised by the Principal Agent prior to work being carried out. Please refer to the Appendix - Rate Approval for more details.

Drawings:

The Contractor is referred to the full set of A3 drawings enclosed in Book 2 Drawings. The Contractor is urged to study these drawings before pricing.

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| <u>STORMWATER DRAINAGE</u> | | |
| <u>Class 100D spigot and socket concrete pipes laid and jointed including excavation, Class C bedding, selected backfilling, risk of collapse, strutting and shoring, etc. :</u> | | |
| GW35 | 300mm Pipes laid in and including trenches not exceeding 1m deep. | m |
| GW36 | 300mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep. | m |
| GW37 | 300mm Pipes laid in and including trenches exceeding 2m and not exceeding 3m deep. | m |
| GW38 | 450mm Pipes laid in and including trenches not exceeding 1m deep. | m |
| GW39 | 450mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep. | m |
| GW40 | 450mm Pipes laid in and including trenches exceeding 2m and not exceeding 3m deep. | m |
| GW41 | 600mm Pipes laid in and including trenches exceeding 2m and not exceeding 3m deep under roads and terminating in headwalls | m |
| <u>uPVC Pipes, Class 34, laid and jointed including excavation, Class C bedding, selected backfilling, risk of collapse, strutting and shoring, etc. :</u> | | |
| GW42 | 160mm Diameter Class 34 uPVC Pipes laid in and including trenches exceeding 1m deep not exceeding 2m deep. | m |
| <u>Sumps, catchpits, manholes, inspection chambers, stormwater inlets etc.:</u> | | |
| GW43 | Single Splay Stormwater inlet, chamber exceeding 1m deep and not exceeding 1.5m deep. | No |
| GW44 | Double Splay Stormwater inlet, chamber exceeding 1m deep and not exceeding 1.5m deep. | No |
| <u>Gratings, Covers, etc:</u> | | |
| GW45 | 600mm Diameter precast concrete medium duty stormwater lid. (Splayed inlets) | No |
| GW46 | 600 x 600mm 'Saint Gobain No. 2130' or other approved cast iron medium duty manhole lid and frame. (Manholes) | No |
| GW47 | 550x 550mm 'Saint Gobain No. 2916' or other approved cast iron medium duty flat grate and frame. (Grid Inlet) | No |
| <u>Sundries:</u> | | |
| GW48 | Extra over excavation in earth for pipe trenches, chambers, etc for excavation in intermediate material. | m³ |
| GW49 | Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock material. | m³ |
| GW50 | Unreinforced Concrete encasing 100mm thick around 160mm uPVC pipe in trench. | m |
| <u>BILL NO.3 : SEWER DRAINAGE (PROVISIONAL)</u> | | |
| <u>PREAMBLES</u> | | |
| The Tenderer is referred to the relevant clauses in the latest edition of the Model Preambles for Trades and to the Supplementary Preambles which are available on request. | | |
| <u>SUPPLEMENTARY PREAMBLES</u> | | |
| Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Project Manager. | | |
| <u>uPVC pipes and fittings:</u> | | |
| Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings. | | |
| Soil, waste and vent pipes and fittings shall be solvent weld jointed. | | |
| <u>Laying, backfilling, bedding, etc of pipes:</u> | | |
| Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions. Alternatively: | | |
| Pipes shall be laid and bedded in accordance with clauses 5.1 and 5.2 of each of the following: SANS 1200 L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SANS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SANS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class C bedding | | |
| <u>Septic tanks:</u> | | |
| Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions. | | |

Compensation event:

Tenderers are advised that there is a three month delay in the approval of compensation events. In respect of this delay, no pending compensation events will be paid for until such time as we receive approval for the compensation events. Tenderers must make due allowance for this possible delay in their tenders.

Rate Approvals:

The tenderer is advised that any rate that is required for new work must include the following breakdown: Material, labour, plant, wastage, transport and profit. Rate approvals must be authorised by the Principal Agent prior to work being carried out. Please refer to the Appendix - Rate Approval for more details.

SOIL DRAINAGE**HD uPVC pipes laid and jointed including excavation, selected backfilling, risk of collapse, strutting and shoring, etc:**

| | | |
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| GW51 | 110mm Pipes laid in and including trenches not exceeding 1m deep. | m |
| GW52 | 110mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep. | m |
| GW53 | 110mm Pipes laid in and including trenches exceeding 2m and not exceeding 3m deep. | m |
| GW54 | 160mm Pipes laid in and including trenches not exceeding 1m deep. | m |
| GW55 | 160mm Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep. | m |
| GW56 | 160mm Pipes laid in and including trenches exceeding 2m and not exceeding 3m deep. | m |
| GW57 | Extra over 160mm pipes for 200mm diameter uPVC sleeve. | m |

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| | <p><u>Inspection chambers (covers elsewhere):</u></p> <p>Inspection chambers are to have brick reinforcement to every third course of brick walls.</p> <p>Inspection chambers are given in number, classified in depths not exceeding 1000mm deep to invert levels and thereafter in stages of 500mm. Tenderers are referred to drawings 12KN07 - 101/102/103 for details of the inspection chambers prior to their pricing this section.</p> <p><u>Gratings, covers, etc:</u></p> | | |
| GW58 | 600mm Diameter heavy duty cast iron single seal manhole cover and frame. | No | |
| | <u>BILL NO. 4 SUBSOIL DRAINAGE</u> | | |
| GW59 | <p><u>Subsoil Drainage:</u></p> <p>100mm Slotted uPVC agricultural pipes laid to falls to outlets in trench including 19mm crushed stone encasing overall size 400 x 400mm and U14 'Bidim' filter fabric wrapped around encasing with 200mm side and 200mm endlaps including stitching, backfilling not exceeding 1000mm deep with river sand 400mm wide.</p> | m | |
| GW60 | 170 x 170 x 15mm stone weepholes | No | |
| | <u>BILL NO.5 : LANDSCAPING (PROVISIONAL)</u> | | |
| | <u>PREAMBLES</u> | | |
| | The Tenderer is referred to the relevant clauses in the latest edition of the Model Preambles for Trades and to the Supplementary Preambles which are available on request. | | |
| | <u>SUPPLEMENTARY PREAMBLES</u> | | |
| | <u>Grass Planting to Level Areas:</u> | | |
| | <p>The areas to receive grass are to be weeded and raked free of stones and other superfluous matter and all depressions left by the earthworks plant are to be filled with approved topsoil. The planting of grass is to be carried out in a continuous root planting in rows 200mm apart. The method of planting known as sprigging may be used as a alternative.</p> <p>Immediately after completion of each strip or square the area thus grassed is to be thoroughly watered and lightly rolled. Any drifting or piling up of the top soil due to wind or any other cause must be prevented as far as possible and should any such piling of topsoil against newly planted grass occur the soil must be immediately be raked level and lightly rolled.</p> | | |
| | <u>Turfing:</u> | | |
| | Banks are to be carefully trimmed to an even surface and weeded and raked free of stones etc., and all depressions filled in with topsoil as described before. Turfing of the banks is to be carried out with 25mm thick maximum 500 x 1000mm weed-free grass sods of grass as before described, and as approved by the Director. The Grass sods are to be set in broken bond and closely fitted together and tamped flat with a timber pummel, a maximum of two sods in every square meter of area covered to be staked to the bank to maintain position, with and including one sharpened wood or bamboo skewer 250mm long and with all cavities between sods filled in with approved topsoil and the whole area lightly top soil dressed on completion. | | |
| | <u>Established Lawn:</u> | | |
| | The use of established lawn in pieces size approximately 500 x 1000 x 25mm thick in lieu of grass sods on banks will be permitted provided that the established lawn is supplied and laid by a firm experienced in this type of work and to the approval of the Director. The fitting, tamping, staking and top dressing must all be described as for turfing, except that one piece per square meter is required to be staked as described. | | |
| | <u>Fertilizer:</u> | | |
| | An approved fertilizer of the following types - Type 2:3:2 for grass planted level area's and Type 3:2:1 for turfed or established lawn covered banks is to be supplied and applied by the contractor at the rate of 400kg per hectare. In the case of grass being planted levelled the areas the fertilizer is to be applied either before or after grass planting and in the case of turfed or established lawn covered banks the fertilizer is to be applied after the sods or pieces have been laid. The fertilizer described above is an addition to any fertilizer which may have been specified to be applied during either the operation of scarifying and grading the area to be grassed or the re-spreading of the topsoil. | | |
| | <u>Watering and Rolling:</u> | | |
| | The entire turfed area is to be kept clear of weeds , lightly rolled and thoroughly watered throughout the period of the contract and for at least three months from the time of acceptance of the grounds or until the grassing or turfing is well established if that is sooner, all to the satisfaction of the director. In the absence of rain the initial watering of grassed or turfed area's is to be carried out as follows : Grass planted to level areas - At least twice a week Established lawn areas - At least once a week. Turfed Areas - At least once a day for the next ten to fourteen days, thereafter at least once a week. The Contractor must allow in his rates for providing and removing at completion all necessary temporary water piping complete with fittings, sprinklers, hoses, etc., as required for the proper watering of the grassed or turfed areas of the plateaux and banks. | | |

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| | <p><u>Weed Killer:</u></p> <p>Weedmaster Turfmaster' or other approved weedkiller is to be applied to the entire area to be grassed or turfed at a rate of 4 litres mixed with 200 litres of water per hectare, which is equivalent of 40 -45 ml mixed with 5 litres of water per 50 square meters .The solution is to be sprayed on using a suitable spraying apparatus to achieve an even distribution. Six to Eight weeks later the operation is to be repeated. The application of weedkiller is not to be done during wet weather. Weather conditions should be as such as to allow for a minimum of two hours for absorbtion before the likelihood of rain.</p> <p><u>Cutting of Grass:</u></p> <p>The Contractor must commence mowing as soon as the grassed or turfed area's have become established and undertake regular mowing at approximately one week intervals up to the date of final delivery, except that during the maintenance period, the mowing of the plateaux will be undertaken by the provincial works branch.</p> <p>Note: All stages of grass planting and turfing are to be supervised on a full time basis by a competent person with the necessary knowledge and experience. It shall be the responsibility of the contractor to advise the director when the following operations are to be carried out in order that his representative may be present: (a) the application of fertilizer (b) the application of weed killer Should the contractor fail to do so, the Director shall have the right to instruct the contractor to repeat the operation at his own expense.</p> <p><u>Soil Preparation:</u></p> <p>Before applying mulch for the first time, especially if the soil is in a 'concrete' condition, dig the bed over lightly. Apply a thin (2-3cm) mulch layer and a sprinkling of slow release 3:2:1 superphosphate fertilizer. Using a garden fork, dig the top layer over well, to incorporate as much of the organic material as possible. Now add a second mulch layer to cover and protect and protect the first one. From now on it will be necessary to top up the mulch layer regularly. When preparing a new flowerbed, dig as much compost and other organic material as possible into the top 20-30cm of soil. Before digging over, sprinkle bonemeal (and/or superphosphate) and slow release 3:2:1 fertilizer at a rate of 250ml per m2. Water the bed well, allow it to settle for a week or so, and then plant your trees and shrubs directly into it. After planting, apply a thick mulch layer to protect the well prepared soil, and irrigate young plants very thoroughly with a gentle spray</p> <p><u>TOPSOIL, COMPOST, LIME AND FERTILIZER</u></p> <p><u>Imported Topsoil:</u></p> | | |
| GW61 | Selected imported topsoil to be spread and leveled to grassed areas and banks. | m ³ | |
| | <p><u>Fertilizer:</u></p> | | |
| GW62 | Fertilize garden soil with 3:2:1 super phosphate spread at a rate of 1kg/10m2 including working evenly into top 20mm depth of soil. | m ² | |
| | <p><u>GRASSING, GROUND COVER ETC.</u></p> <p><u>Grassing of roots in rows:</u></p> | | |
| GW63 | Instinct Buffalo grass over site.(Type A) | m ² | |
| | <p><u>Ground Cover:</u></p> | | |
| GW64 | Tulbaghia Violacea (15 plugs per m2, Type G) | m ² | |
| | <p><u>TREES, SHRUBS, ETC.</u></p> <p><u>Trees:</u></p> | | |
| GW65 | Allow for the temporary uplifting of cycads, their treatment and re-planting on site | No | |
| GW66 | Cycade Revolution. (Type B) | No | |
| GW67 | Acacia sieberiana Var. Woody (Type C) | No | |
| | <p><u>Shrubs, bulbs and plants:</u></p> | | |
| GW68 | Duranta Sheena's Gold ® (As Hedge, Type D) | No | |
| GW69 | Dietes Grandiflora (12 splites per m2, Type E) | No | |
| GW70 | Aloe Arborescens (30 - 40 litre bag, Type F) | No | |
| | <p><u>BILL NO.6 : BOUNDARY WALLS AND FENCING</u></p> <p><u>PREAMBLES</u></p> <p>The Tenderer is referred to the relevant clauses in the latest edition of the Model Preambles for Trades and to the Supplementary Preambles</p> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Items, materials or methods to be used specified by trade names or catalogue numbers are only an indication of the quality required. Items, materials or methods of similar quality may be used with prior approval from the Eskom Properties (EC) Official.</p> | | |

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| <u>Overtime work and normal work:</u> The tenderers are advised that the following works may be done during normal working hours as well as after normal working hours. Tenderers must make due allowance for these working hours in the pricing as no claims will be entertained in this regard. | | | |
| <u>Rate Approvals:</u> The tenderer is advised that any rate that is required for new work must include the following breakdown: Material, labour, plant, wastage, transport and profit. Rate approvals must be authorised by the Eskom Properties (EC) Official prior to work being carried out. | | | |
| <u>PRECAST CONCRETE</u> Design mix of the fence to be approved by the Eskom Properties (EC) Official prior to manufacture. | | | |
| <u>Heavy Duty Industrial Type Precast concrete panel walls including razor wire fixed to top all in accordance with manufacturer's instructions:</u> Precast concrete wall 2.4m high above ground level over flat or sloping terrain with 110 x 110mm standard H-section posts at 1.525m centres, filled in with standard 1440 x 305mm high panels with Small Brick design on one side, including concrete bases and grouting panels in cement mortar. | | | |
| GW71 | m | 1 | |
| <u>Palisade fencing:</u> Precast concrete palisade fencing 2m high above ground level with exposed faces of all components finished smooth, comprising 150 x 150mm posts 2,5m long reinforced with 12mm diameter mild steel continuous bars, founded in and including 450 x 450 x 450mm unreinforced concrete bases at 1,5m centres, excavation, backfilling and disposal of excavated material off site, keeping excavations free of water, and with precast concrete top and bottom rails and vertical pales at close centres bolted thereto. | | | |
| GW72 | m | 1 | |
| <u>FENCING</u> <u>STEEL PALISADE FENCING</u> <u>Galvanising:</u> Galvanising shall comply with SANS 763 and all items of posts, stays, gate framing, etc., described as galvanised shall be hot dipped galvanised after fabrication with Class A galvanising with all internal | | | |
| <u>Gate Posts and Gates:</u> Where required, gate posts shall be supplied in steel tubing complying with CKS 82, 150mm diameter x 3,2mm wall thickness, in lengths as specified, with upper end capped with 1,6mm thick pressed mild steel domed cap welded on and 3mm thick x 300mm x 300mm diameter footplate welded to base. Gateposts are to be drilled and fitted with mild steel ferrules welded into position to receive 20mm diameter mild steel hinoes. Threaded 12mm diameter studs or approved stay collars are to be fixed on to the posts to locate and secure the top ends of stays. The whole shall be hot dipped galvanised. Holes for the threading and fixing of tying wires shall be drilled on site and holes cold galvanised on completion. Stays shall have the top end flattened, bent as required, holed 12 mm diameter for bolting to post and the whole hot dip galvanised. Mild steel tubing for gate components shall comply with SANS 657 Part1. The diameters specified are the nominal external diameters of the tube. | | | |
| <u>Hot dipped galvanised (SABS 763) welded steel palisade fencing 1885mm high including site clearance and preparation of ground:</u> 40 x 40mm Palisades spaced 170mm apart fixed to two 60 x 25 x 2mm pre-slotted horizontal channels in nominal panel size 6200mm wide, the horizontal channels bolted to face brick piers (elsewhere measured) | | | |
| GW73 | m | 1 | |
| Galvanised 40 x 40mm palisades spaced 110mm apart fixed to two 60 x 25 x 2mm pre-slotted horizontal channels in nominal panel size 3060mm wide | | | |
| GW74 | m | 1 | |
| <u>Hot dipped galvanised (SABS 763) welded steel palisade fencing 2400mm high including site clearance and preparation of ground:</u> 40 x 40mm palisades spaced 170mm apart fixed to two 60 x 25 x 2mm pre-slotted horizontal channels in nominal panel size 6200mm wide, the horizontal channels bolted to face brick piers (elsewhere measured) | | | |
| GW75 | m | 1 | |
| Galvanised 40 x 40mm palisades spaced 110mm apart fixed to two 60 x 25 x 2mm pre-slotted horizontal channels in nominal panel size 3060mm wide | | | |
| GW76 | m | 1 | |

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| | DIAMOND MESH FENCING | | |
| | <u>Allens Meshco Fully Galvanised PVC Coated Diamond Mesh security fencing:</u> | | |
| GW77 | Security fencing 2.4m high formed of 55 x 2.5mm core PVC Coated diamond mesh 2m high fixed at 400mm centres to each of 6No x 3.15mm core PVC Coated straining wires with 1.8mm wire ties, passed through 75 x 75 x 3100mm prestressed pre-cast concrete intermediate posts at 3m centres, and tied to 100 x 100 x 3100mm prestressed pre-cast concrete corner and straining posts, straining posts braced with 75 x 75 x 3000mm bracing stays epoxy jointed to straining posts with and including 20MPa Concrete bases size 300 x 300 x 775mm to intermediate posts, size 450 x 450 x 975mm to corner and straining | m | 1 |
| GW78 | Extra over for 3No Aluminium Razor Wire or similar approved passes through precast concrete posts at 100mm centres | m | 1 |
| | <u>Clearvu If fencing system:</u> | | |
| GW79 | 2100mm High ClearVu type high density mesh panels with 4mm thick mesh diameter and aperture sizes of 76.2 x 12.7mm centres. Panels to be finished with line galvanized deep etch primer and epoxy enamel finish coat, all fixed between posts with clamping plate to secure mesh panel against post using anti-vandal bolt heads as tamper proof fixing. Posts to be taper posts of maximum 85 x 85mm at maximum centres of 3382mm posts to be capped with UV stabilised polymer end caps. 100mm High galvanised 'shark tooth' type spike rails, bolted to 50mm wide ClearVu mesh flange bent along fence top, all supplied and installed strictly in manufacture's specification and recommendation | m | 1 |
| GW80 | Anti-Burrow 600 x 150mm underdig including all necessary excavation, cartaways, etc | m | 1 |
| GW81 | Taper locking post size 85 x 45 x 2700mm high including locking recess mechanism sealed with a UV stabilized polymer cap and bedded in 500 x 500 x 600mm mass concrete (15MPa) bases and related earthworks. | No. | 1 |
| GW82 | Corner post size 76 x 152 x 2700mm high including locking recess mechanism sealed with a UV stabilized polymer cap and bedded in 500 x 500 x 600mm mass concrete (15MPa) bases and related earthworks. | No | 1 |
| GW83 | Shark tooth spike fixed on top of fence and gates | m | |
| GW84 | Extra over for corner angle less than 90°. | No. | 1 |
| GW85 | Extra over for corner angle greater than 90°. | No. | 1 |
| TOTAL CARRIED TO FINAL SUMMARY | | | |

| Item | Unit | Rates |
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| <p><u>SECTION 6: SCHEDULE OF RATES</u></p> <p>These rates will be applicable to the relevant type of works, and will be used to compensate the Contractor, where there are no other Bill rates in the Bill of Quantities.</p> <p>The following are the required skills per trade that the Contractor will be required to possess to carry out the relevant type works on this contract.</p> <p style="text-align: center;">SKILLED - ELECTRICAL</p> <p>Qualification -Trade test by accredited trade facility</p> <p>Work Experience -Electrician's experience (min 5 years) -electrical maintenance on Commercial, Industrial and or Residential buildings, after been qualified as Electrician.</p> <p style="text-align: center;">SKILLED - AIRCON TECHNICIAN</p> <p>Qualifications - Trade test certificate for Air Conditioning and certificate of training from Manufacturers eg.from Daiken/Mitsubishi/Carrier/Samsung/LG</p> <p>Work Experience - experience (min 5 years) in maintenance of Building HVAC systems on Commercial, Industrial and or Residential Buildings</p> | | |
| <p style="text-align: center;">SKILLED - PLUMBER</p> <p>Qualification - Plumbing Apprentice Qualification by accredited facility</p> <p>Work Experience - experience (min 3 years) in plumbing Construction/Maintenance on Commercial, Industrial and or Residential buildings</p> | | |
| <p style="text-align: center;">SKILLED ARTISAN - (Building/civil/general maintenance)</p> <p>Qualification- Building Apprentice Qualification</p> <p>Work Experience - Minimum 3 years post apprentice experience</p> <p style="text-align: center;">ELECTRICAL ASSISTANT</p> <p>Electrical experience (2-3 years) on Commercial, Industrial and or Residential buildings.</p> <p style="text-align: center;">AIRCON TECHNICIAN ASSISTANT</p> <p>Experience (2-3 years) in Building HVAC and domestic airconditioning in Commercial, Industrial and Residential Buildings</p> <p style="text-align: center;">PLUMBER ASSISTANT</p> <p>Experience (2-3 years) in Industrial and Residential plumbing</p> | | |

ARTISAN ASSISTANT(Building/civil/general maintenance)

Experience (2-3 years) on Commercial, Industrial and or Residential building works/maintenance.

LABOUR RATES

Labour rates to be all inclusive of labour,overheads,profit,employee benefits,employer benefits etc.No additional claims per hourly rate will be paid to Contractor after contract award.

Tenderers are advised that all labour charges and transport charges must be procured from the closest to the effected site.

Any call out work commenced during working hours and completed after normal working hours will be compensated by using normal working hour rates only.

Any call out work commenced after normal working hours will be compensated by using after normal working hour rates only.

Prior written approval must be received from the Eskom Properties (EC) Official prior to commencement of any works.

Designs, drawings,building reports/inspections will be required to be done by specialists on a "as and when required basis". The Tenderer will be required to quote for this specialist works when required.

Work to be done from Monday to Friday between 7:30am and 4pm:

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| SOR1 | Skilled - Electrical | Hr |
| SOR2 | Skilled Artisan- Building/ Civil / Alterations works | Hr |
| SOR3 | Skilled - Plumbing | Hr |
| SOR4 | Skilled - Aircon Technician | Hr |
| SOR5 | Electrical Assistant | Hr |
| SOR6 | Artisan Assistant- Building /Civil /Alterations works | Hr |
| SOR7 | Plumber Assistant | Hr |
| SOR8 | Aircon Technician Assistant | Hr |
| SOR9 | General worker - unskilled | Hr |

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| | <u>Work to be done from after hours and Saturdays</u> | | |
| SOR10 | Skilled - Electrical | Hr | |
| SOR11 | Skilled Artisan- Building/ Civil / Alterations works | Hr | |
| SOR12 | Skilled - Plumbing | Hr | |
| SOR13 | Skilled - Aircon Technician | Hr | |
| SOR14 | Electrical Assistant | Hr | |
| SOR15 | Artisan Assistant- Building /Civil /Alterations works | Hr | |
| SOR16 | Plumber Assistant | Hr | |
| SOR17 | Aircon Technician Assistant | Hr | |
| SOR18 | General worker - unskilled | Hr | |
| | <u>Work to be done on Sundays and Public Holidays</u> | | |
| SOR19 | Skilled - Electrical | Hr | |
| SOR20 | Skilled Artisan- Building/ Civil / Alterations works | Hr | |
| SOR21 | Skilled - Plumbing | Hr | |
| SOR22 | Skilled - Aircon Technician | Hr | |
| SOR23 | Electrical Assistant | Hr | |
| SOR24 | Artisan Assistant- Building /Civil /Alterations works | Hr | |
| SOR25 | Plumber Assistant | Hr | |
| SOR26 | Aircon Technician Assistant | Hr | |
| SOR27 | General worker - unskilled | Hr | |
| | <u>Materials</u> | | |
| | Note : The Contractor must be able to produce material back-up (ie. invoices,receipts, quotes, etc) when requested by the Project Manager. | | |
| SOR28 | Percentage Mark Up =% | Percentage Mark up | |

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| | <p><u>Transport</u></p> <p>Payment for transport/traveling (minimum LDV type vehicle) will be paid in excess of a 30Km round trip from home centre , calculated using google maps.</p> <p>* Travelling rates to include toll fees and parking fees ** Travelling will be paid in excess of a 10km round trip from the base station. Travelling costs will only be for business purposes and not paid from home to the base station and back</p> | | |
| SOR29 | Travelling from Base Station for LDV - to be available at all times. | km | |
| SOR30 | 1 ton single axle trailer with mechanical brakes - as and when required | Day Rate | |
| SOR31 | Travelling from Base Station for 8 ton truck - as and when required | km | |
| SOR32 | Travelling from Base Station for 10 ton truck - as and when required | km | |
| | <p><u>Subcontract</u></p> <p>The Contractor will be required to provide quotations when the need arises, for the approval of Eskom. Eskom has the right to reject quotations and do its own market research,should Contractors quotations not be acceptable to Eskom. The Contractor will then be required to appoint the selected Supplier /sub contractor based on Eskom's recommendations.</p> | | |
| SOR33 | Percent mark up (profit and attendance) on sub-contracted works. | Percentage markup | |
| Carried To Final Summary | | | |