



NEC3 Engineering & Construction Contract

Between **ESKOM HOLDINGS SOC Ltd**
(Reg No. 2002/015527/30)

and **[Insert at award stage]**
(Reg No. _____)

for **The installation and commissioning of various types
of fibre optic cables for Gauteng Cluster for period of
5 years.**

| Contents: | No of pages |
|---|------------------------|
| Part C1 Agreements & Contract Data | [•] |
| Part C2 Pricing Data | [•] |
| Part C3 Scope of Work | [•] |
| Part C4 Site Information | [•] |

CONTRACT No. [Insert at award stage]

Part C1: Agreements & Contract Data

| Contents: | No of pages |
|--|--------------------|
| C1.1 Form of Offer and Acceptance | [•] |
| [to be inserted from Returnable Documents at award stage] | |
| C1.2a Contract Data provided by the <i>Employer</i> | [•] |
| C1.2b Contract Data provided by the <i>Contractor</i> | [•] |
| [to be inserted from Returnable Documents at award stage] | |
| C1.3 Proforma Guarantees | [•] |

C1.1 Form of Offer & Acceptance

Offer

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

The installation and commissioning of various types of fibre optic cables for Gauteng Cluster for period of 5 years.

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto 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.

| | | |
|-----------|--|-------|
| Options A | The offered total of the Prices exclusive of VAT is | R [●] |
| | Sub total | R [●] |
| | Value Added Tax @ 15% is | R [●] |
| | The offered total of the amount due inclusive of VAT is ¹ | R [●] |
| | (in words) [●] | |

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document 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 (if applicable)

¹ This total is required by the *Employer* for budgeting purposes only. Actual amounts due will be assessed in terms of the *conditions of contract*.

Acceptance

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

The terms of the contract, are contained in:

- Part C1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
- Part C2 Pricing Data
- Part C3 Scope of Work: Works Information
- Part C4 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 Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

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

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy signed between them of this document, including the Schedule of Deviations (if any).

Unless the tenderer (now *Contractor*) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

Signature(s)

Name(s) _____

Capacity _____

for the Employer Eskom Holdings SOC Ltd
Megawatt Park, Maxwell Drive,
Sandton, Johannesburg, 2199

(Insert name and address of organisation)

Name & signature of witness _____

Date _____

Note: If a tenderer wishes to submit alternative tenders, use another copy of this Form of Offer and Acceptance.

Schedule of Deviations to be completed by the Employer prior to contract award

Note:

1. 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:

For the Employer

Signature _____

Name _____

Capacity _____

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

(Insert name and address of organisation)
 Eskom Holdings SOC Ltd
 Megawatt Park, Maxwell Drive,
 Sandton, Johannesburg, 2199

Name & signature of witness _____

Date _____

C1.2 ECC3 Contract Data

Part one - Data provided by the *Employer*

[Instructions to the contract compiler: (delete these two notes in the final draft of a contract)]

1. Please read the relevant clauses in the conditions of contract before you enter data. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
1. Some ECC3 options are always selected by Eskom Holdings SOC Ltd. The remaining ECC3 options are identified by shading in the left hand column. In the event that the option is not required select and delete the whole row. Where the following symbol is used “[•]” - data is required to be inserted relevant to the specific option selected.]

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

| Clause | Statement | Data |
|--------|--|---|
| 1 | General | |
| | The <i>conditions of contract</i> are the core clauses and the clauses for main Option | |
| | dispute resolution Option and secondary Options | A: Priced contract with activity schedule W1: Dispute resolution procedure X1: Price adjustment for inflation X2 Changes in the law X7: Delay damages X16: Retention X18: Limitation of liability Z: Additional conditions of contract |
| | of the NEC3 Engineering and Construction Contract, April 2013 (ECC3) | |
| 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 | The <i>Project Manager</i> is: (Name) | [•]TBC |
| | Address | [•]TBC |
| | Tel | [•] |
| | Fax | [•] |

| | | | |
|----------|---|---|---------------------------|
| | e-mail | [•] | |
| 10.1 | The <i>Supervisor</i> is: (Name) | [•] | |
| | Address | [•] | |
| | Tel No. | [•] | |
| | Fax No. | [•] | |
| | e-mail | [•] | |
| 11.2(13) | The <i>works</i> are | The installation and commissioning of various types of fibre optic cables for Gauteng Cluster for period of 5 years | |
| 11.2(14) | The following matters will be included in the Risk Register | 1.Outage Unavailability, 2.Late supply of material 3.Unavailability of raw material 4.Incompatible Hardware between the OEM and Hardware manufacture. | |
| 11.2(15) | The <i>boundaries of the site</i> are | The boundaries of the various servitudes on which the Transmission and Distribution lines will be erected, per the terms of the agreed servitudes and the boundaries of the substations. (All areas will be specified as per works to be executed) | |
| 11.2(16) | The Site Information is in | Part 4: Site Information | |
| 11.2(19) | The Works Information is in | Part 3: Scope of Work and all documents and drawings to which it makes reference. | |
| 12.2 | The <i>law of the contract</i> is the law of | the Republic of South Africa | |
| 13.1 | The <i>language of this contract</i> is | English | |
| 13.3 | The <i>period for reply</i> is | 1week | |
| 2 | The <i>Contractor's</i> main responsibilities | Data required by this section of the core clauses is provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data. | |
| 3 | Time | | |
| 11.2(3) | The <i>completion date</i> for the whole of the <i>works</i> is | As per Task Order issued in terms of the framework agreement | |
| 11.2(9) | The <i>key dates</i> and the <i>conditions</i> to be met are: | <i>Condition</i> to be met | <i>key date</i> |
| | | 1 Stringing and regulation complete | Per the task order |
| 30.1 | The <i>access dates</i> are: | Part of the Site | Date |
| | | 1 Per the task order issued | Per the task |

| | | in terms of the Framework agreement | order |
|----------|---|--|-------|
| 31.1 | The <i>Contractor</i> is to submit a first programme for acceptance within | 1 weeks of task order creation | |
| 31.2 | The <i>starting date</i> is | TBC | |
| 32.2 | The <i>Contractor</i> submits revised programmes at intervals no longer than | 4 weeks (Note this can further be changed as task order) | |
| 35.1 | The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date. | | |
| 4 | Testing and Defects | | |
| 42.2 | The <i>defects date</i> is | 52 weeks after Completion of the whole of the works. | |
| 43.2 | The <i>defect correction period</i> is | 4 weeks | |
| 5 | Payment | | |
| 50.1 | The <i>assessment interval</i> is | between the 15th and 20th day of each successive month. | |
| 51.1 | The <i>currency of this contract</i> is the | South African Rand. | |
| 51.2 | The period within which payments are made is | 30 days. | |
| 51.4 | The <i>interest rate</i> is | the publicly quoted prime rate of interest (calculated on a 365 day year) charged from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and | |
| 6 | Compensation events | | |
| 60.1(13) | <p>The place where weather is to be recorded is:</p> <p>The <i>weather measurements</i> to be recorded for each calendar month are,</p> <p>The <i>weather measurements</i> are supplied by</p> <p>The <i>weather data</i> are the records of past</p> | <p>The established site</p> <p>the cumulative rainfall (mm)</p> <p>the number of days with rainfall more than 10 mm</p> <p>the number of days with minimum air temperature less than 0 degrees Celsius</p> <p>the number of days with snow lying at 09:00 hours South African Time</p> <p>and these measurements:</p> <p>The contractor using actual weather readings from the established site</p> | |

weather measurements for each calendar month which were recorded at:

The nearest weather station of the South African Weather Service to the site

and which are available from:

the South African Weather Bureau and included in Annexure A to this Contract Data provided by the *Employer*

| | | |
|-----------|--|--|
| 7 | Title | There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data. |
| 8 | Risks and insurance | |
| 80.1 | These are additional <i>Employer's</i> risks | None |
| 9 | Termination | There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data. |
| 10 | Data for main Option clause | |
| A | Priced contract with activity schedule | There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data. |
| 11 | Data for Option W1 | |
| W1.1 | 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 | [•] |
| W1.2(3) | 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. |
| W1.4(2) | The <i>tribunal</i> is: | arbitration. |
| W1.4(5) | 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 | Midrand, 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. |
| 12 | Data for secondary Option clauses | |
| X1 | Price adjustment for inflation | |
| X1.1(a) | The <i>base date</i> for indices is | One month prior to tender closing |
| X1.1(c) | The proportions used to calculate the Price Adjustment Factor are: | |
| | | proportion |
| | | linked to index for |
| | | Index prepared by |
| | | 60% |
| | | Labour-Table C3 |
| | | 15% |
| | | CPI-Table D3 |
| | | 10% |
| | | Transport-Table L2 |
| | | 15% |
| | | non-adjustable |
| | Total | 1.00 |
| X2 | Changes in the law | There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data. |
| X7 | Delay damages (but not if Option X5 is also used) | |
| X7.1 | Delay damages for Completion of the whole of the <i>works</i> are | 0.5% of the value of the affected Task Order per week of delay, provided that the total delay damages shall not exceed 5% of the outstanding amount of such Task Order |
| X16 | Retention (not used with Option F) | |
| X16.1 | The <i>retention free amount</i> is | 5% of each task order valid for the defects |
| | The <i>retention percentage</i> is | 5% |
| X18 | Limitation of liability | |
| X18.1 | The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to: | Total value of Task Orders issued |
| X18.2 | For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to: | the amount of the deductibles relevant to the event |
| X18.3 | The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to | The greater of <ul style="list-style-type: none"> the total of the Prices at the Contract Date and |

| | | |
|-------|--|---|
| | | <ul style="list-style-type: none"> the amounts excluded and unrecoverable from the <i>Employer's</i> assets policy for correcting the Defect (other than the resulting physical damage which is not excluded) plus the applicable deductible as at contract date. |
| X18.4 | <p>The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to:</p> | <p>the total of the Prices other than for the additional excluded matters.</p> <p>The <i>Contractor's</i> total liability for the additional excluded matters is not limited.</p> <p>The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for</p> <ul style="list-style-type: none"> Defects due to his design which arise before the Defects Certificate is issued, Defects due to manufacture and fabrication outside the Site, loss of or damage to property (other than the <i>works</i>, Plant and Materials), death of or injury to a person and infringement of an intellectual property right. |
| X18.5 | <p>The <i>end of liability date</i> is</p> | <p>(i) 2(two) years after the <i>defects date</i> for latent Defects and</p> <p>(ii) the date on which the liability in question prescribes in accordance with the Prescription Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other matter.</p> <p>A latent Defect is a Defect which would not have been discovered on reasonable inspection by the <i>Employer</i> or the <i>Supervisor</i> before the <i>defects date</i>, without requiring any inspection not ordinarily carried out by the <i>Employer</i> or the <i>Supervisor</i> during that period. If the <i>Employer</i> or the <i>Supervisor</i> do undertake any inspection over and above the reasonable inspection, this does not place a greater responsibility on the <i>Employer</i> or the <i>Supervisor</i> to have discovered the Defect.</p> |
| Z | <p>The <i>Additional conditions of contract</i> are</p> | <p>Z1 to Z15 always apply.</p> |
| Z1 | <p>Cession delegation and assignment</p> <p>Z1.1 The <i>Contractor</i> does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i>.</p> <p>Z1.2 Notwithstanding the above, the <i>Employer</i> may on written notice to the <i>Contractor</i> 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</p> | |

of the restructuring of the Electricity Supply Industry.

Z2 Joint ventures

- Z2.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the *Employer* for the performance of this contract.
- Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Project Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* on their behalf.
- Z2.3 The *Contractor* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

Z3 Change of Broad Based Black Economic Empowerment (B-BBEE) status

- Z3.1 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.
- Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Project Manager* within thirty days of the notification or as otherwise instructed by the *Project Manager*.
- Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Works.
- Z3.4 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 P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Confidentiality

- Z4.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. 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 in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Project Manager*.
- Z4.3 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.
- Z4.4 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 *Project Manager*. All rights in and to all such images vests exclusively in the *Employer*.

Z4.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z5 Waiver and estoppel: Add to core clause 12.3:

Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Project Manager*, the *Supervisor*, 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.

Z6 Health, safety and the environment: Add to core clause 27.4

Z6.1 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.

Z6.2 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.

Z7 Provision of a Tax Invoice and interest. Add to core clause 51

Z7.1 Within one week of receiving a payment certificate from the *Project Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer’s* procedures stated in the Works Information, showing the amount due for payment equal to that stated in the payment certificate.

Z7.2 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 core clause 51.2 is then calculated from the delayed date by when payment is to be made.

Z7.3 The *Contractor* (if registered in South Africa in terms of the companies Act) 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.

Z8 Notifying compensation events

Z8.1 Delete from the last sentence in core clause 61.3, “unless the *Project Manager* should have notified the event to the *Contractor* but did not”.

Z9 Employer's limitation of liability

- Z9.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)
- Z9.2 The *Contractor's* entitlement under the indemnity in 83.1 is provided for in 60.1(14) and the *Employer's* liability under the indemnity is limited.

Z10 Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":

- Z10.1 or had a business rescue order granted against it.

Z11 Addition to secondary Option X7 Delay damages (if applicable in this contract)

- Z11.1 If the amount due for the *Contractor's* payment of delay damages reaches the limits stated in this Contract Data for Option X7 or Options X5 and X7 used together, the *Employer* may terminate the *Contractor's* obligation to Provide the Works using the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table.

Z12 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 *Contractor* or a third party, such party's employees, agents, or Subcontractors 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 *Contractor*, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractor 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.

- Z12.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

- Z12.2 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.
- Z12.3 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.
- Z12.4 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.

Z13 Insurance

Z 13.1 Replace core clause 84 with the following:

Insurance cover 84

- 84.1** 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.
- 84.2** The *Contractor* provides the insurances stated in the Insurance Table A.
- 84.3** The insurances provide cover for events which are at the *Contractor's* risk 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 |
|---|--|
| Loss of or damage to the works, Plant and Materials | The replacement cost where not covered by the <i>Employer's</i> insurance The <i>Employer's</i> policy deductible, as Contract Date, where covered by the <i>Employer's</i> insurance |
| Loss of or damage to Equipment | The replacement cost |
| Liability for loss of or damage to property (except the works, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) caused by activity in connection with this contract | <u>Loss of or damage to property</u> <u>Employer's property</u> The replacement cost where not covered by the <i>Employer's</i> insurance The <i>Employer's</i> policy deductible, as Contract Date, where covered by the <i>Employer's</i> insurance <u>Other property</u> The replacement cost |

| | |
|---|--|
| | <u>Bodily injury to or death of a person</u> The amount required by 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 |

Z 13.2

Replace core clause 87 with the following:

The *Employer* provides the insurances 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 |

Z14 Nuclear Liability

Z14.1 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.

Z14.2 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*.

Z14.3 Subject to clause Z14.4 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*.

Z14.4 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.

Z14.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z15 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 Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.</i> |
| 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. |

Z15.1 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.

Z15.2 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 Z15.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.

- Z15.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z15.4 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.
- Z15.5 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.
- Z15.6 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.
- Z15.7 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.

Annexure A: One-in-ten-year-return weather data obtained from SA Weather Bureau for [weather station]

If any one of these *weather measurements* recorded within a calendar month, before the Completion Date for the whole of the *works* and at the place stated in this Contract Data is shown to be more adverse than the amount stated below then the *Contractor* may notify a compensation event.

| Month | Weather measurement | | | | |
|-----------|--------------------------|---|--|---|------------------------------------|
| | Cumulative rainfall (mm) | Number of days with rain more than 10mm | Number of days with min air temp < 0 deg.C | Number of days with snow lying at 08:00 CAT | [Other measurements if applicable] |
| January | [•] | [•] | [•] | [•] | |
| February | [•] | [•] | [•] | [•] | |
| March | [•] | [•] | [•] | [•] | |
| April | [•] | [•] | [•] | [•] | |
| May | [•] | [•] | [•] | [•] | |
| June | [•] | [•] | [•] | [•] | |
| July | [•] | [•] | [•] | [•] | |
| August | [•] | [•] | [•] | [•] | |
| September | [•] | [•] | [•] | [•] | |
| October | [•] | [•] | [•] | [•] | |
| November | [•] | [•] | [•] | [•] | |
| December | [•] | [•] | [•] | [•] | |

Only the difference between the more adverse recorded weather and the equivalent measurement given above is taken into account in assessing a compensation event.

C1.2 Contract Data

Part two - Data provided by the *Contractor*

[Instructions to the contract compiler: (delete this notes before issue to tenderers with an enquiry)

Whenever a cell is shaded in the left hand column it denotes this data is optional. If not required select and delete the whole row, otherwise insert the required Data.]

Notes to a tendering contractor:

1. Please read both the NEC3 Engineering and Construction Contract (April 2013) and the relevant parts of its Guidance Notes (ECC3-GN)² 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 pages 156 to 158 of the ECC3 (April 2013) Guidance Notes.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data
3. Where a form field like this [] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

| Clause | Statement | Data |
|--------|-----------|------|
|--------|-----------|------|

² Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009 or see www.ecs.co.za

| | | |
|----------|--|---|
| 10.1 | The <i>Contractor</i> is (Name): Address Tel No. Fax No. | |
| 11.2(8) | The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is | |
| 11.2(18) | The <i>working areas</i> are the Site and | |
| 24.1 | The <i>Contractor's</i> key persons are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job: Responsibilities: Qualifications: Experience: | CV's (and further key persons data including CVs) are appended to Tender Schedule entitled . |
| 11.2(3) | The <i>completion date</i> for the whole of the <i>works</i> is | |
| 11.2(14) | The following matters will be included in the Risk Register | |
| 11.2(19) | The Works Information for the <i>Contractor's</i> design is in: | |
| 31.1 | The programme identified in the Contract Data is | |
| A | Priced contract with activity schedule | |
| 11.2(20) | The <i>activity schedule</i> is in | |
| 11.2(30) | The tendered total of the Prices is | (in figures) (in words), excluding VAT |
| | Data for Schedules of Cost Components | <i>Note "SCC" means Schedule of Cost Components starting on page 60, and "SSCC" means Shorter Schedule of Cost Components starting on page 63 of ECC3 (April 2013).</i> |

The installation and commissioning of various types of fibre optic cables for Gauteng Cluster for period of 5 years

CONTRACT NO. _____

| A | Priced contract with activity schedule | Data for the Shorter Schedule of Cost Components | | |
|----------|---|---|--|--|
| | | | | |

PART 2: PRICING DATA

ECC3 Option A

| Document reference | Title | No of pages |
|---------------------------|-------------------------------|--------------------|
| C2.1 | Pricing assumptions: Option A | |
| C2.2 | The <i>activity schedule</i> | |

C2.1 Pricing assumptions: Option A

How work is priced and assessed for payment

Clause 11 in NEC3 Engineering and Construction Contract, (ECC3) Option A states:

Identified and defined terms 11
11.2 (20) The Activity Schedule is the *activity schedule* unless later changed in accordance with this contract.

(27) The Price for Work Done to Date is the total of the Prices for

- each group of completed activities and
- each completed activity which is not in a group.

A completed activity is one which is without Defects which would either delay or be covered by immediately following work.

(30) The Prices are the lump sum prices for each of the activities on the Activity Schedule unless later changed in accordance with this contract.

This confirms that Option A is a lump sum form of contract where the work is broken down into activities, each of which is priced by the tendering contractor as a lump sum. Only completed activities are assessed for payment at each assessment date; no part payment is made if the activity is not completed by the assessment date.

Function of the Activity Schedule

Clause 54.1 in Option A states: "Information in the Activity Schedule is not Works Information or Site Information". This confirms that specifications and descriptions of the work or any constraints on how it is to be done are not included in the Activity Schedule but in the Works Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Works Information". Hence the *Contractor* does **not** Provide the Works in accordance with the Activity Schedule. The Activity Schedule is only a pricing document.

Link to the programme

Clause 31.4 states that "The *Contractor* provides information which shows how each activity on the Activity Schedule relates to the operations on each programme which he submits for acceptance". Ideally the tendering contractor will develop a high level programme first then resource each activity and thus arrive at the lump sum price for that activity both of which can be entered into the *activity schedule*.

Preparing the *activity schedule*

Generally it is the tendering contractor who prepares the *activity schedule* by breaking down the work described within the Works Information into suitable activities which can be well defined, shown on a programme and priced as a lump sum.

The *Employer*, in his Instructions to Tenderers or in a Tender Schedule, may have listed some items that he requires the *Contractor* to include in his *activity schedule* and be priced accordingly.

It is assumed that in preparing his *activity schedule* the *Contractor*:

- Has taken account of the guidance given in the ECC3 Guidance Notes pages 19 and 20;
- Understands the function of the Activity Schedule and how work is priced and paid for;
- Is aware of the need to link the Activity Schedule to activities shown on his programme;
- Has listed and priced activities in the *activity schedule* which are inclusive of everything necessary and incidental to Providing the Works in accordance with the Works Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk;
- Has priced work he decides not to show as a separate activity within the Prices of other listed activities in order to fulfil the obligation to complete the *works* for the tendered total of the Prices.
- Understands there is no adjustment to the lump sum Activity Schedule price if the amount, or quantity, of work within that activity later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event.

An activity schedule could have the following format:

C2.2 the *activity schedule*

Use this page as a cover page to the *Contractor's activity schedule*.

| Item | Activity Schedule Description | Unit | Quantity | Total Estimated Quantities |
|------|---|-------------|----------|----------------------------|
| | SCHEDULE 1 | | | |
| | | | | |
| | <u>Preliminary & Generals</u> | | | |
| | Note : All the cost for the Preliminary and Generals will be indentified and agreed with the Eskom Project Manager per task order. | | | |
| | | | | |
| | Site Establishment: | | | |
| 1 | Facilities for Engineer | monthly | 1 | |
| 2 | Name boards. (In No. 2) | SUM | 1 | |
| 3 | Facilities for Contractor | monthly | 1 | |
| 4 | Offices and storage sheds | monthly | 1 | |
| 5 | Living accommodation (site camps/ motel) | per day | 1 | |
| 6 | Ablution and latrine facilities | monthly | 1 | |
| 7 | Complying with Eskom Health and Safety Requirements and all statutory requirements as per OHS Act. | per site | 1 | |
| 8 | Complying with the Mine Health and Safety Specification (as per package if required). | per site | 1 | |
| 9 | Complying with Environmental Management Programme and all other statutory environmental requirements. | per site | 1 | |
| 10 | Security for the works duration construction. | per site | 1 | |
| 11 | Detailed "as built" records (as per works information) 3 soft copies and 1 hard copy | per project | 1 | |
| 12 | Site Survey (methodology to be agreed with Eskom Engineer) | km | 1 | |
| | | | | |
| | | | | |

| | | | | |
|----|--|----|---|--|
| | <u>SCHEDULE 2</u> | | | |
| | WORKS TO BE DONE AS PER THE WORK PACKAGE AS DETAILED IN THE WORKS INFORMATION AND TECHNICAL SPECIFICATIONS REQUIREMENT. | | | |
| | <u>Normal Working Labour:</u> | | | |
| 1 | Project Engineer/ Manager | hr | 1 | |
| 2 | Site Engineer | hr | 1 | |
| 3 | Design Engineer | hr | 1 | |
| 4 | Foreman | hr | 1 | |
| 5 | Supervisors | hr | 1 | |
| 6 | Leadinghands | hr | 1 | |
| 7 | Linesman/ Erector | hr | 1 | |
| 8 | Semi skilled Labourers | hr | 1 | |
| 9 | Unskilled Labourers | hr | 1 | |
| 10 | Driver Operator | hr | 1 | |
| 11 | Splicer | hr | 1 | |
| | <u>Overtime for Saturday & During the Week Working Labour:</u> | | | |
| 12 | Foreman | hr | 1 | |
| 13 | Supervisors | hr | 1 | |
| 14 | Leadinghands | hr | 1 | |
| 15 | Linesman/ Erector | hr | 1 | |
| 16 | Semi skilled Labourers | hr | 1 | |
| 17 | Unskilled Labourers | hr | 1 | |
| 18 | Driver Operator | hr | 1 | |
| 19 | Splicer | hr | 1 | |
| | <u>Overtime for Sunday & Public Holiday Working Labour:</u> | | | |

| | | | | |
|----|--|---------|---|--|
| 20 | Foreman | hr | 1 | |
| 21 | Supervisors | hr | 1 | |
| 22 | Leadinghands | hr | 1 | |
| 23 | Linesman/ Erector | hr | 1 | |
| 24 | Semi skilled Labourers | hr | 1 | |
| 25 | Unskilled Labourers | hr | 1 | |
| 26 | Driver Operator | hr | 1 | |
| 27 | Splicer | hr | 1 | |
| | | | | |
| | <u>Transport and Plant:</u> | | | |
| 29 | 4 x 4 Light vehicle | km | 1 | |
| 31 | 8 Ton truck | km | 1 | |
| 34 | 10 Ton truck | km | 1 | |
| 36 | 20 Ton Crane Truck | Km | 1 | |
| 37 | TLB | Km | 1 | |
| 38 | Splice Machine | each | 1 | |
| 39 | Ditch Witch | Km | 1 | |
| 42 | Winch and Tensioner for ADSS, including all sundry equipment | per day | 1 | |
| 43 | Winch and Tensioner for OPGW, including all sundry equipment | per day | 1 | |
| 45 | Bird flight diverters (sizes: 15.0-19.5mm), | each | 1 | |
| 47 | Helicopter Bell Long ranger | hr | 1 | |
| | | | | |
| | <u>SCHEDULE 3</u> | | | |
| | <u>Supply and Install Patch Panel</u> | | | |
| 1 | 24 way patch panel SC APC | each | 1 | |
| 2 | 48 way patch panel SC APC | each | 1 | |
| 3 | Brush Panel | each | 1 | |
| 4 | Galvanised pipe | m | 1 | |

| | | | | |
|----|---|-------------|---|--|
| 5 | Orange pipe | m | 1 | |
| 6 | 7m treated wooden pole | each | 1 | |
| 7 | 8m treated wooden pole | each | 1 | |
| 8 | 50mm HDPE pipe | m | 1 | |
| 9 | Supply and install class 6 HDPE, 32mm diameter pipe | m | 1 | |
| 10 | Sarel box (complete with APC ceramic mid couplers, APC pigtails unreggedised) | each | 1 | |
| 11 | Install single mode (9/125µm) metal free Heavy Duty Duct (HDD) cable, between the fibre optic cabinet and gantry. | m | 1 | |
| 12 | Supply and install 300 x 300 x 300mm concrete for encasing galvanised steel pipes at the bottom of towers | each | 1 | |
| | | | 1 | |
| | <u>SCHEDULE 4</u> | | 1 | |
| | <u>Documentation and Testing:</u> | | 1 | |
| 1 | Pre-haul Testing | per drum | 1 | |
| 2 | End to end Testing | per project | 1 | |
| | | | 1 | |
| | <u>SCHEDULE 5</u> | | 1 | |
| | <u>Earthworks:</u> | | 1 | |
| 1 | Excavate to all depth level and dispose the unwanted material to a registered dump | m3 | 1 | |
| 2 | Hand Excavation to pickable soil | m3 | 1 | |
| | <u>Extra Over:</u> | | 1 | |
| 3 | Intermediate excavation | m3 | 1 | |
| 4 | Hard rock excavation | m3 | 1 | |
| | | | 1 | |
| | <u>Site clearance:</u> | | 1 | |
| | As per TRMSCAAC5 and Environmental Management Plan to maintain all existing private farm roads and tracks used to gain access to the servitude for construction purposes and reinstate to at least the original condition upon completion. Photographic evidence of the original condition must be provided by the Contractor before use. | Km | 1 | |

| | | | | |
|---|--|----------------|---|--|
| 6 | As per TRMSCAAC5 and Environmental Management Plan to establish all temporary access roads necessary to gain access to the servitude and tower positions for construction purposes and close on completion, if instructed by the Supervisor. | Km | 1 | |
| 7 | Bush clearing the whole of the site with an average width of 10m including cutting and removing of trees, grubbing up and removal of roots, fill holes with earth selected from the excavated material and consolidate. | m ² | 1 | |
| | Ditto but including the removal and disposal of boulders to gain access to tower sites. | Item | 1 | |
| 8 | Rehabilitation of damage caused during construction to tower sites, access and servitude roads, camp sites, batching plant sites, etc. In accordance with the requirements of the ROD, EMP, TRMSCAAC5 and ESKASABG3. | m ² | 1 | |
| | | | | |
| | <u>SCHEDULE 6</u> | | | |
| | <u>CROSSINGS</u> | | | |
| 1 | HV line | | 1 | |
| 2 | MV line | | 1 | |
| 3 | National Roads | | 1 | |
| 4 | Regional Roads | | 1 | |
| 5 | Rural Roads | | 1 | |
| 6 | Railway line | | 1 | |
| 7 | Pipelines | | 1 | |
| 8 | Dam walls | | 1 | |
| 9 | River | | 1 | |
| | | | | |
| | <u>SCHEDULE 7</u> | | | |
| | <u>Concrete Works:</u> | | | |
| 1 | Supply and install manhole, size 1250mm diameter, 1000mm deep. | each | 1 | |
| 2 | Supply and install manhole, size 1000mm x 1000mm x 1000mm deep. | each | 1 | |
| 3 | Supply and install manhole bracket. | each | 1 | |

| | | | | |
|---|-------------------------------|------|---|--|
| 4 | Duct straight joint enclosure | each | 1 | |
| | | | | |

PART 3: SCOPE OF WORK

| Document reference | Title | No of pages |
|---------------------------|---------------------------------------|--------------------|
| | This cover page | 1 |
| C3.1 | <i>Employer's Works Information</i> | |
| C3.2 | <i>Contractor's Works Information</i> | |
| | Total number of pages | |

C3.1: EMPLOYER’S WORKS INFORMATION

Contents

When the document is complete, insert a ‘Table of Contents’. To do this go to: Insert, → Reference, → Index and tables → Table of Contents. Three levels and the title (but not the subtitle) may be shown if the formats used in this template are retained.

| | |
|---|-------------------------------------|
| Part 3: Scope of Work | 9 |
| C3.1: Employer’s works Information | 10 |
| 1 Description of the <i>works</i> | 12 |
| 1.1 Executive overview | 12 |
| 1.2 <i>Employer’s</i> objectives and purpose of the <i>works</i> | 13 |
| 1.3 Interpretation and terminology | 14 |
| 2 Management and start up. | 14 |
| 2.1 Management meetings | 14 |
| 2.2 Documentation control | 14 |
| 2.3 Health and safety risk management | 14 |
| 2.4 Environmental constraints and management | 15 |
| 2.5 Quality assurance requirements | 15 |
| 2.6 Programming constraints | Error! Bookmark not defined. |
| 2.7 <i>Contractor’s</i> management, supervision and key people | 16 |
| 2.8 Invoicing and payment | 16 |
| 2.9 Insurance provided by the <i>Employer</i> | 17 |
| 2.10 Contract change management | 17 |
| 2.11 Provision of bonds and guarantees | Error! Bookmark not defined. |
| 2.12 Records of Defined Cost, payments & assessments of compensation events to be kept by the <i>Contractor</i> | 17 |
| 2.13 Training workshops and technology transfer | Error! Bookmark not defined. |
| 3 Engineering and the <i>Contractor’s</i> design | Error! Bookmark not defined. |
| 3.1 <i>Employer’s</i> design | 18 |
| 3.2 Parts of the <i>works</i> which the <i>Contractor</i> is to design | 18 |
| 3.3 Procedure for submission and acceptance of <i>Contractor’s</i> design | Error! Bookmark not defined. |
| 3.4 Other requirements of the <i>Contractor’s</i> design | Error! Bookmark not defined. |
| 3.5 Use of <i>Contractor’s</i> design | Error! Bookmark not defined. |
| 3.6 Design of Equipment | Error! Bookmark not defined. |
| 3.7 Equipment required to be included in the <i>works</i> | 18 |
| 3.8 As-built drawings, operating manuals and maintenance schedules | 18 |
| 4 Procurement | 19 |
| 4.1 People | 19 |
| 4.1.1 Minimum requirements of people employed on the Site | 19 |
| 4.1.2 BBEE and preferencing scheme | 19 |
| 4.1.3 Accelerated Shared Growth Initiative – South Africa (ASGI-SA) | Error! Bookmark not defined. |
| 4.2 Subcontracting | 19 |
| 4.2.1 Preferred subcontractors | 19 |
| 4.2.2 Subcontract documentation, and assessment of subcontract tenders | 19 |
| 4.2.3 Limitations on subcontracting | 19 |
| 4.2.4 Attendance on subcontractors | Error! Bookmark not defined. |
| 4.3 Plant and Materials | 19 |
| 4.3.1 Quality | 19 |
| 4.3.2 Plant & Materials provided “free issue” by the <i>Employer</i> | 19 |
| 4.3.3 <i>Contractor’s</i> procurement of Plant and Materials | 19 |
| 4.3.4 Spares and consumables | 20 |
| 4.4 Tests and inspections before delivery | 20 |
| 4.5 Marking Plant and Materials outside the Working Areas | Error! Bookmark not defined. |

| | | |
|--------|--|-------------------------------------|
| 4.6 | Contractor's Equipment (including temporary works)..... | Error! Bookmark not defined. |
| 4.7 | Cataloguing requirements..... | Error! Bookmark not defined. |
| 5 | Construction 21 | |
| 5.1 | Temporary works, Site services & construction constraints | Error! Bookmark not defined. |
| 5.1.1 | Employer's Site entry and security control, permits, and Site regulations | 21 |
| 5.1.2 | Restrictions to access on Site, roads, walkways and barricades | Error! Bookmark not defined. |
| 5.1.3 | People restrictions on Site; hours of work, conduct and records | 21 |
| 5.1.4 | Health and safety facilities on Site | 21 |
| 5.1.5 | Environmental controls, fauna & flora, dealing with objects of historical interest | Error! Bookmark not defined. |
| | Bookmark not defined. | |
| 5.1.6 | Title to materials from demolition and excavation | Error! Bookmark not defined. |
| 5.1.7 | Cooperating with and obtaining acceptance of Others | 21 |
| 5.1.8 | Publicity and progress photographs | Error! Bookmark not defined. |
| 5.1.9 | Contractor's Equipment | Error! Bookmark not defined. |
| 5.1.10 | Equipment provided by the Employer | Error! Bookmark not defined. |
| 5.1.11 | Site services and facilities | 21 |
| 5.1.12 | Facilities provided by the Contractor | 21 |
| 5.1.13 | Existing premises, inspection of adjoining properties and checking work of Others | Error! Bookmark not defined. |
| | Bookmark not defined. | |
| 5.1.14 | Survey control and setting out of the works | 22 |
| 5.1.15 | Excavations and associated water control | 22 |
| 5.1.16 | Underground services, other existing services, cable and pipe trenches and covers | 22 |
| 5.1.17 | Control of noise, dust, water and waste | Error! Bookmark not defined. |
| 5.1.18 | Sequences of construction or installation | Error! Bookmark not defined. |
| 5.1.19 | Giving notice of work to be covered up | Error! Bookmark not defined. |
| 5.1.20 | Hook ups to existing works | Error! Bookmark not defined. |
| 5.2 | Completion, testing, commissioning and correction of Defects | 22 |
| 5.2.1 | Work to be done by the Completion Date | 22 |
| 5.2.2 | Use of the works before Completion has been certified | Error! Bookmark not defined. |
| 5.2.3 | Materials facilities and samples for tests and inspections | Error! Bookmark not defined. |
| 5.2.4 | Commissioning | 23 |
| 5.2.5 | Start-up procedures required to put the works into operation | 23 |
| 5.2.6 | Take over procedures | 23 |
| 5.2.7 | Access given by the Employer for correction of Defects | 23 |
| 5.2.8 | Performance tests after Completion | 23 |
| 5.2.9 | Training and technology transfer | Error! Bookmark not defined. |
| 5.2.10 | Operational maintenance after Completion | 23 |
| 6 | Plant and Materials standards and workmanship | Error! Bookmark not defined. |
| 6.1 | Investigation, survey and Site clearance | Error! Bookmark not defined. |
| 6.2 | Building works | 23 |
| 6.3 | Civil engineering and structural works | 23 |
| 6.4 | Electrical & mechanical engineering works | 23 |
| 6.5 | Process control and IT works | Error! Bookmark not defined. |
| 6.6 | Other [as required]..... | Error! Bookmark not defined. |
| 7 | List of drawings 24 | |
| 7.1 | Drawings issued by the Employer | 24 |
| C3.2 | Contractor's Works Information | 27 |

Description of the works

Executive overview

The installation and commissioning of various types of fibre optic cables for Gauteng Cluster for period of 5 years.

The establishment of the contract is for planned, breakdown maintenance and for the new installation of Optic fibre in the Eskom Distribution Network. The Distribution network is comprised of underground cables and Power Lines not exceeding 132kV.

This shall include underground installation (Duct), Retro-fit (ADSS-Optical Time Domain Reflectometer) and OPGW (Optical Ground Wire) fibre.

For new installation, the contractor shall install, terminate, test and commission. The test shall include PMLS (Power Meter Light source) and OTDR (Optical Time Domain Reflectometer) until then when the positive results are produced, the installation shall be declared as complete.

The scope of work shall be used in conjunction with the Bill of Quantities which will cover the provision of the appropriate resources and tools to fully commission and test the optic fibre communication links. The contract is as when and when required.

The following is a list of specifications and standards applicable to the (to the specific project):

- Tower, Foundations and Earthing Specification
- Insulators
- Hardware
- Fibre Cable
- Environmental Management Plan
- The specifications, standards and guides listed below are applicable to this contract and are available on request. Latest revision available at time of tender will apply.
- Optical Distribution Frame/Patch Panel 240-70733995
- OPGW Hardware and Installation Requirements for Overhead Lines 240-110403330
- NRS 061-2:2004 Specification for Overhead Ground Wire with Optical Fibre Part 2
- NRS 078-2:2005 Long-Span ADSS Cables Part 2
- NRS 088-2:2016 Duct and Direct-Buried Underground Fibre-Optic Cables Part 2
- OPGW Hardware and Installation Requirements for Overhead Lines 240-110403330
- Fibre Optic Cable System Acceptance Testing 240-____ (incomplete in image)
- Fibre-Optic Design Standard Part 2 Substations 240-46264031
- Externally attached (Helically Wrapped) Fibre Optic Cable 240-42990189
- Labelling of Fibre Optic Cables 240-46263618
- Optical Distribution Frame/Patch Panel 240-70733995
- OPGW Hardware and Installation requirements for Overhead Lines 240-110403330

- NRS 061-2:2004 Specification for Overhead Ground Wire with Optical Fibre Part 2
- NRS 078-2:2005 Long-Span ADSS Cables Part 2
- NRS 088-2:2016 Duct and Direct-Buried Underground Fibre-Optic Cables Part 2
- OPGW Hardware and Installation requirements for Overhead Lines 240-110403330
- Fibre Optic Cable System Acceptance Testing 240-70732888
- Fibre Optic Gantry to Substation Control Room Scope of Work Guideline 240-106030205
- Fibre-Optic Design Standard Part 2 Substations 240-46264231
- Externally attached (Helically wrapped) fibre optic cable 240-46264031
- Labelling of fibre optic cables 240-46263618

Employer's objectives and purpose of the works

The provision of Fibre Optic Cable line design, installation, testing and commissioning services which include the following:

- Provision of Supervisors on project sites
- Provision of SHEQ officers on project sites
- Provision of Splicer and commissioning technician/engineer on project sites
- Provision of Linesman (authorised to work at heights) on project sites
- Contractor must be in possession of a valid CIDB registration of company

Capacity in terms of equipment- list of equipment under company profile. Type, size and quantity for installation of fibre cable.

- People Carriers (Transport)
- Winch and tension set pulling capacity
- Dielectric pilot rope
- Running out blocks for OPGW and ADSS
- • Lifting Tackle & pulling blocks complete with wire rope
- Tensioning ratchet hoists
- Come along clamps
- Hydraulic Crimpers
- Hydraulic Cutters
- Tension measuring devices
- Specialized line construction tools and safety equipment
- Live line ladders
- Specialised equipment for back-staying of towers (use of stay assemblies, concrete blocks & sledges, e t c
- Authorisation Letter from Helically WRAP cable OEM indicating installation capability
- ORHVS Training Certification per supervisor (minimum 1 supervisor and must have completed ORHVS modules 1 to 7 as a minimum)

Fibre Testing & Splicing (including calibration certificates)

- CD AND PMD testing equipment
- OTDR,s & MAX Tester
- Power Meter and Light Source
- Optical Talk Sets
- Fusion splicers

PMD/CD testers will be done by Eskom Telecommunications. OTDR and PMLS tests will be done by the Installer/Contractor

Patch Panel (submit the A&B schedule 48, 24, 6way) (Full compliance is 15. minus half a point for every non-compliance.

Interpretation and terminology

The following abbreviations are used in this Works Information:

| Abbreviation | Meaning given to the abbreviation |
|--------------|--|
| SHEQ | Safety Health Environmental and Quality |
| OEM | Original Equipment Manufacture |
| ORHVS | Operating Regulations for High Voltage Systems |
| | |

Management and start up.

Management meetings

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

| Title and purpose | Approximate time & interval | Location | Attendance by: |
|--|-----------------------------|----------|----------------------------------|
| Risk register and compensation events | TBC | Gauteng | All relevant stakeholders |
| Overall contract progress and feedback | Monthly on _____ at ____ | Gauteng | <i>All relevant stakeholders</i> |
| | | | |
| | | | |

Meetings of a specialist nature may be convened as specified elsewhere in this Works Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the *works*. Records of these meetings shall be submitted to the *Project 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.

Documentation control

All communication submitted shall be done via e-mail and should follow Chronological order.

Use appropriate ECC forms for contractual communication, also note from ECC who issues what to whom.

Health and safety risk management

The Contractor shall control his activities and processes in accordance with the Occupational Health & Safety Act, No. 85 of 1993 and Eskom's Construction Safety, Health and Environmental Management 32-136, Safety, Health, Environment and Quality Policy, EPC32-727 and SHE Requirements for the Eskom Commercial Process, ST32-726.

The Contractors Project SHEQ File is to be updated on a continuous basis. The Contractor is to ensure that all relevant documentation and authorisations are contained in the file pertaining to the project. Upon completion of the project, the Contractor is to convert all documentation contained in the SHEQ file into electronic format and save it as a PDF File. The file name should contain the name of the Contractor and the project. The file should then be saved onto a disk or removal storage device and handed over to the Project Coordinator or Project Manager upon completion of the project.

Environmental constraints and management

The Contractor shall control his activities and processes in accordance with Environmental Requirements for the Procurement of Assets, Goods and Services, TST41-120 Rev. 2. The Eskom Environmental Management Plan provides the aspects and impacts that will require management and must be followed strictly. The Contractor is to prepare a site/factory specific separate EMP for all environmental concerns that might arise and any changes to the approved plan shall be reported and be approved by the Eskom Environmental Representative and Project Manager prior to the commencement of work.

In addition, the Contractor is required to ensure that all goods, services or works supplied in terms of this Works Information also conform to all applicable environment legislation(s), Safety, Health, Environment and Quality Policy, EPC32-727; SHE Requirements for the Eskom Commercial Process, ST32-726; (and additional requirements). The Contractor shall comply with the environmental criteria and constraints stated in Section 1.3.2.

When required, the Contractor must ensure that all Subcontractors' EMP comply with legal and other requirements and includes all the environmental risks associated with the scope of work. The Main (Principal) Contractor shall define the specific risks applicable to the Subcontractor's scope of work or supply of kiosks.

The Contractor is to send a flash report for any environmental incidents that have occurred on site as soon as possible or within 24 hours to the Eskom Environmental Representative and Project Manager clearly stating any impact to the environment.

No environmental records shall be destroyed or discarded by the Contractor. Eskom as the Employer and the Contractor shall agree that the Contractor retains certain environmental records. Waste generated during the course of the project must be disposed at a registered site and the Contractor shall retain records of disposal.

Deviations from these requirements will be regarded as a Non-Conformance. Should there be concerns regarding environmental performance and non-conformance to environmental requirements, management engagements and interventions will be introduced to determine a means to addressing the shortfalls. Once these interventions have been explored and exhausted, then the Eskom Contractor Disciplinary Process will be followed.

The cost to the Contractor to obtain permits should it become necessary to cut a protected tree, ensure that waste is disposed of on a permitted, legal waste site and all relevant costs payable to dumping site as well as safe storage of all equipment which will be removed and replaced from site which will be transported upon instruction to the nearest designated disposal site within the Gauteng Operating Unit.

Quality assurance requirements

As per attached quality requirements. Contractors to comply with Eskom supplier QM specification document and meet the minimum requirements of the ISO 9001:2015. Contractors also need to comply with QM 58 document. The suppliers must compile a CQP and QCP (prior to starting with the project to capture all the project activities; how they will be tested and accepted) for all works

Contractor’s management, supervision and key people

The Contractor is to submit an organogram showing all key people involved in the contract 7 days after contract award. All Key Personnel must be appointed in writing, must be current for the specific site and area of work and must be kept on file. This would be essential if the Contractor is a Joint Venture.

Invoicing and payment

The Z clauses make reference to invoicing procedures stated here in this Service Information. Also include a list of information which is to be shown on an invoice.

Within one week of receiving a payment certificate from the *Project 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 *Project Manager’s* payment certificate.

The *Contractor* shall address the tax invoice to Eskom Holdings SOC Ltd and include on each invoice the following information:

- Name and address of the *Contractor* and the *Project 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;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
- Purchase order number
- Invoice date
- Invoice Number
- Contractors’ bank details

Add procedures for invoice submission and payment (e. g. electronic payment instructions)

| General Information | X |
|---|---|
| - No Pro-forma Invoice | |
| - Check Vendor number against the Address and name on Tax invoice | |
| - Insert the Vendor number on Tax invoice (Top right hand corner) | |
| - Bank details must be on the invoice or on a attach sheet, but it does not require a bank stamp just a letter) | |
| - Check banking details on invoice against SAP system. If more than one banking account check bank account against banking details on invoice. If banking details not on invoice, write the bank code next to the vendor account (bank code 0002) | |
| - Check Vendor VAT number against the vendor master. (FK03) If VAT number not on master records, prepare a list and forward to Vendor Management to check and update the vendor master records | |
| - No fax copies of Tax invoices allowed | |
| - No copies of Tax invoices allowed unless originally printed by the Vendor if a photocopy tax invoice, it must be an original “certified copy” (i.e. not a copy of a “certified copy” invoice) from the vendor and check in system if not previously be paid. Put stamp “not previously paid” on invoice and sign. | |

| | |
|---|----------|
| - Ensure that date received stamp is clear on invoice | |
| - Stamp all Invoices with the Vat stamp, complete and sign (only when VAT is applicable) | |
| - The stamp should not be stamped over any written information | |
| - When scanning invoice, check the quality before linking in SAP (inboxes) | |
| With Reference Invoices | X |
| - Goods receipt must be done (payment with reference) | |
| - Ensure that the SAP purchase order number is clear and correct on the invoice | |
| - GR number to be written on the Invoices | |
| - If multiple lines on invoice write the line number of the order against the line to ensure that the processors match the correct lines (to ensure that 191100 is matched correctly) | |

All supporting documentation needs to be provided with each claim which includes but not limited to; trip sheets approved by Service Manager & invoices for materials purchased as requested by Services Manager (delivery notes to accompany the claim for a specific site).

Insurance provided by the *Employer*

Refer to Eskom ACAR document attached

Contract change management

There are no additional requirements to those stipulated in Core Clause 6

Records of Defined Cost, payments & assessments of compensation events to be kept by the *Contractor*

All records of defined costs are to be filed and access granted to the Project Manager at any time upon request.

Employer's design

The Employer is responsible for the design of the works and will bear the responsibility for the adequacy of his designs. The design of the works has been done by Lines Engineering Services of Eskom Technology. The design is done according to the Eskom Specification for Line Design and is depicted on the drawings and specifications that have been issued as part of this tender

- Supply of line profiles. Construction profiles are issued within 2 (two) weeks of the starting date.
- Servitude gate and game gate drawings.
- Shop drawings for all towers to be used in this contract are provided on request only. All tower designs specified are copyrighted by the Employer or the designer.
- Supply of conductor sag/tension data.

Parts of the works which the Contractor is to design

Parts of the works which the contractor is to design must be communicated and accepted by the Project Manager before implementation.

Equipment required to be included in the works

No plant will be provided as "free issue" to the Contractor for this Contract. All plant required for the execution of the works must be provided by the Contractor. Certain materials will be supplied to the Contractor as "free issue" items, as indicated in the Bill of Quantities and Clause 6 (Services and other things provided by the Employer).

As-built drawings, operating manuals and maintenance schedules

The Contractor shall prepare and submit as-built drawings showing the works as constructed. The as-built drawings shall be provided to the Project Manager within the period for reply after completion of the works or such other period as instructed by the Project Manager.

Procurement

People

Minimum requirements of people employed on the Site

The Contractor must ensure that all foreign national employees have valid work permits as required by the laws of South Africa.

All employees and subcontractors must comply with the Eskom Life Saving Rules at all times while working on site. Failure to comply may result in removal from site.

BBBEE and preferencing scheme

Refer to SDL&I requirements

Subcontracting

Preferred subcontractors

The subcontractor must be submitted to the Project Manager for review and acceptance before they are appointed. Refer to SDL&I requirements.

Subcontract documentation, and assessment of subcontract tenders

The subcontractor must be submitted to the Project Manager for review and acceptance before they are appointed

Limitations on subcontracting

Refer to SDL&I requirements

Plant and Materials

Quality

Refer to quality requirements

Plant & Materials provided “free issue” by the *Employer*

No plant will be provided as “free issue” to the Contractor for this Contract. All plant required for the execution of the works must be provided by the Contractor. Certain materials will be supplied to the Contractor as “free issue” items, as indicated in the Bill of Quantities and Clause 6 (Services and other things provided by the Employer).

***Contractor’s* procurement of Plant and Materials**

Employer may require warranties from suppliers to be in favour of the Employer and not just to the Contractor during the life of the contract.

All plant and materials required for this project must be transported to site by road. The Contractor must familiarise themselves with the road conditions and access routes to the site.

The Contractor must also establish a fenced storage yard, either on-site or off-site, for the offloading and safekeeping of all plant and materials delivered to the site. Materials must be offloaded and stored separately in designated areas allocated for this purpose.

The Contractor will be responsible for managing these storage areas to ensure compliance with safety requirements and to maintain the security of all plant and materials.

Spares and consumables

Any spares and consumables must be handed over to the supervisor during the take over procedure once the work is completed.

Tests and inspections before delivery

All materials shall be regularly tested at the manufacturers' factories. The Contractor shall make sure that regular quality control tests are carried out to ensure that good quality of the materials is maintained.

Construction

Employer's Site entry and security control, permits, and Site regulations

The Contractor shall monitor and control access to the Site. There is a single main access control point to the transmission substation. Eskom will provide security personnel who will man this access point during working hours.

All employees and visitors entering the Site must undergo an alcohol test, which shall be conducted by the Contractor's personnel.

The Contractor shall maintain a daily entry register of all vehicles and personnel entering the Contractor's Site.

People restrictions on Site; hours of work, conduct and records

The Contractor must clearly state the proposed working hours in the tender and in the programme submitted with the tender. After the contract is awarded, the Contractor must work according to these agreed working hours.

The Contractor must keep accurate records of the working hours. These records must be signed daily by the Supervisor and must be available to the Project Manager and Supervisor at any time.

If the Contractor requires shift work or extended working hours to meet the completion dates of the Task Order, this must be indicated in advance. Permission from the Project Manager and the SHEQ Manager must be obtained before working these hours.

Approval will only be granted if the extended working hours have been approved in writing by the Department of Labour.

Health and safety facilities on Site

Contractors must comply with Eskom's Safety, Health, and Environmental Specifications for fibre cable installation on all projects.

Cooperating with and obtaining acceptance of Others

Contractors may be required to share work areas with others during the execution of a Task Order. They are expected to collaborate effectively and ensure optimal cooperation throughout the process.

Site services and facilities

Public services and infrastructures are limited, and the Contractor shall arrange for the following: Sanitation and accommodation on site for own use as specified in Preliminary and General.

Contractor shall provide everything necessary for Providing the Works.

Facilities provided by the Contractor

The Preliminary and General section of the Price List provides for the Contractor to include prices for items and facilities required to execute the works. Among other things:

- The Contractor shall provide their own power supply (including generators) necessary for the works. Adequate and/or continuous supply is not guaranteed, and no claims for delays or standing time due to insufficiencies or failures will be considered. Any measures required to maintain continuity and quality of supply shall be arranged by the Contractor at their own cost.
- A site for the Contractor's yard will be allocated. The Contractor may not occupy any area beyond that which is assigned to them.
- If required, Eskom will make an area available for the Contractor to store equipment. The Contractor must include such requirements in their tender.
- Toilet facilities are not available on site; the Contractor is required to provide their own portable toilet facilities. The Contractor must ensure that these facilities are kept clean and maintained to Eskom's satisfaction.
- No drinking water is available on site; the Contractor must supply their own water.
- It is the Contractor's responsibility to provide their own living accommodation.
- The Contractor shall provide temporary office facilities, telephones, and workshops on site as needed.
- The Contractor shall also provide secure storage for materials and plant.

Survey control and setting out of the works

The employer marks the line route with iron pegs at each bend point and provide co ordinate of each bend points.

Excavations and associated water control

Contractor to provide barricading, shoring timber and pump water from excavations were required.

Underground services, other existing services, cable and pipe trenches and covers

Refer to wayleave

Completion, testing, commissioning and correction of Defects

Work to be done by the Completion Date

On or before the Completion Date the *Contractor* shall have done everything required to Provide the Works except for the work listed below which may be done after the Completion Date but in any case before the dates stated. The *Project Manager* cannot certify Completion until all the work except that listed below has been done and is also free of Defects which would have, in his opinion, prevented the *Employer* from using the *works* and Others from doing their work.

| | Item of work | To be completed by |
|--|--------------------------|----------------------------------|
| | As built drawings of TBA | Within TBA days after Completion |

| | | |
|--|---|---------------------------------------|
| | Performance testing of the <i>works</i> in use as specified in paragraph TBA of this Works Information. | See performance testing requirements. |
| | | |

Commissioning

Commissioning is to be done before or after Completion depending on the Programme from the Project Manager.

Start-up procedures required to put the *works* into operation

In order to put the works into operation the Project Manager may require the Contractor to either do Start-up procedures for him or be in attendance when its being done, depending on who is the responsible person.

Take over procedures

Take-over is after or at the same time as Completion. The Contractor is to arrange an inspection before completion of the installation to inspect and identify any outstanding or any defects. The Project Manager may require the Contractor to provide assistance, on an as and when required basis.

Access given by the *Employer* for correction of Defects

The Project Manager arranges access for the Contractor to use a part of the works which has been taken over if needed to correct any Defects. After the works have been put into operation, the Employer may require the Contractor to undertake certain procedures before such access can be granted. The Contractor will be responsible for ensuring that the area to be worked in is barricaded before correcting any Defects.

Performance tests after Completion

The *Contractor* to demonstrate that the *works* can operate as guaranteed by the *Contractor* (in *Contractor's* Works Information) or specified by the *Employer* either here or elsewhere in this Works Information.

Operational maintenance after Completion

The Employer may require the Contractor before the defects date to perform certain duties after Completion and take over which relate to maintenance of the works.

Building works

Refer to technical specifications

Civil engineering and structural works

Refer to technical specifications

Electrical & mechanical engineering works

Refer to technical specifications

List of drawings

Drawings issued by the *Employer*

This is the list of drawings issued by the *Employer* at or before the Contract Date and which apply to this contract.

Note: Some drawings may contain both Works Information and Site Information.

| Drawing number | Revision | Title |
|----------------|----------|--|
| | | Bend point co-ordinates,staking tables and profiles |
| | | Outline tower drawings |
| | | Conceptual hardware drawings |
| | | Eskom Standard Conventional foundations |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

PART 4: SITE INFORMATION

| Document reference | Title | No of pages |
|--------------------|-------------------------------------|-------------|
| C4 | This cover page Site Information | 1 |
| | Total number of pages | |

PART 4: SITE INFORMATION

Core clause 11.2(16) states

“Site Information is information which

- describes the Site and its surroundings and
- is in the documents which the Contract Data states it is in.”

In Contract Data, reference has been made to this Part 4 of the contract for the location of Site Information.

General description

All relevant descriptions will be specified in the Project Specific Agreement for any project executed in terms of this contract.

Existing buildings, structures, and plant & machinery on the Site

All relevant information will be specified in the Project Specific Agreement for any project executed in terms of this contract.

Subsoil information

All relevant information will be specified in the Project Specific Agreement for any project executed in terms of this contract.

Hidden services

All relevant information will be specified in the Project Specific Agreement for any project executed in terms of this contract.

Other reports and publicly available information

All relevant information will be specified in the Project Specific Agreement for any project executed in terms of this contract.

C3.2 *CONTRACTOR'S WORKS INFORMATION*

This section of the Works Information will always be contract specific depending on the nature of the *works*. It is most likely to be required for design and construct contracts where the tendering contractor will have proposed specifications and schedules for items of Plant and Materials and workmanship, which once accepted by the *Employer* prior to award of contract now become obligations of the *Contractor* per core clause 20.1.

Typical sub headings could be

- a) *Contractor's* design
- b) Plant and Materials specifications and schedules
- c) Other

This section could also be compiled as a separate file.
