NEC3 Engineering and Construction

Short Contract (ECSC3)

An Enquiry Document between **Eskom Holdings SOC Ltd (Reg No. 2002/015527/30)**

and

for **Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months**

Contents: Compiled in accordance with CIDB Standard for Uniformity in Construction Procurement (May 2010 amendments)

Contract No.: **TBA**

Documentation prepared by: Contracts Management LOU

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:

Supply, deliver and construct the 25m telecommunication tower at Naboomspruit Substation over a period of 12 months. The Tenderer, identified in the signature block below, having examined the documents listed in the Contract Data and addenda thereto as listed in the Contract Schedules, and by submitting this Offer has accepted the Conditions of Contract.

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 Tenderer 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	**R**
Value Added Tax @ 15% is	**R**
The offered total of the Prices inclusive of VAT is	**R**
(in words) Excluding VAT	

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 Contract Data, or other period as agreed, whereupon the Tenderer becomes the party named as the Tenderer 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: .....

Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months

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 Tenderer 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 Contract Data and any addenda thereto listed in the Contract 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)		
Capacity		
for the Employer		*(Insert name and address of organisation)*
Name & signature of witness		Date

Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months

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 Contracting.
2. The extent of deviations from the Contract documents issued by the Employer prior to the Contract closing date is limited to those permitted in terms of the Conditions of Contract.
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 Contract Data and any addenda thereto listed in the Contract 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 Contract 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)*
Name & signature of witness		
Date		

C1.2 Contract Data

Data provided by the *Employer*

Clause	Statement	Data
	General	
10.1	The *Employer* 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 *Employer*'s representative to whom the *Employer* in terms of clause 14.4 delegates his actions[1] is (Name):	**Ndivhuwo Radzilani**
	Address	**90 Hans Van Rensburg Street, Polokwane, 0102**
	Tel No.	**+27 15 230 1532**
	E-mail address	RadzilNM@eskom.co.za
11.2(11)	The *works* are	**Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months**
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 *site* is	**as described in the Task Order.**
30.1	The *starting date* is.	**To be advised**
11.2(2)	The *completion date* is.	**To be advised**
13.2	The *period for reply* is	**Five working days (one week)**
40	The *defects date* is	**52 weeks after Completion**
41.3	The *defect correction period* is	**2 weeks**
50.1	The *assessment day* is the	**25th of each month.**
50.5	The *delay damages* are	**0.5 % of the Task Order value per complete week of delay to a maximum of 10%**
50.6	The retention is	**5%**
51.2	The interest rate on late payment is	**0.5% per week of delay**

80.1	The *Tenderer* is not liable to the *Employer* for loss of or damage to the *Employer*'s property in excess of	**the amount of the deductibles relevant to the event described in the applicable "Format ECSC3" policy available on** *http://www.eskom.co.za/Contracts/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx*
82.1	The *Employer* provides this insurance	**as stated for "Format ECSC3" available on** *http://www.eskom.co.za/Contracts/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx* **(See Annexure A for basic guidance)**
82.1	The minimum amount of cover for the third insurance stated in the Insurance Table is:	**whatever the *Tenderer* deems necessary in addition to that provided by the *Employer*.**
82.1	The minimum amount of cover for the fourth insurance stated in the Insurance Table is:	**As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the *Tenderer's* common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R500 000 (Five hundred thousand Rands)**
	Does the United Kingdom Housing Grants, Construction and Regeneration Act (1996) apply?	**No**
93.1	The *Adjudicator* 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).**
93.2(2)	The *Adjudicator nominating body* 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 *tribunal* is:	**arbitration.**
	The *arbitration procedure* 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	**South Africa**

The person or organisation who will choose an arbitrator - if the Parties cannot agree a choice or - if the arbitration procedure does not state who selects an arbitrator, is	**the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.**

The *conditions of contract* are the NEC3 Engineering and Construction Short Contract June 2005 and the following additional conditions Z1 to Z11 which always apply:

Z1 Cession delegation and assignment

Z1.1 The *Tenderer* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer.*

Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Tenderer* 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 *Tenderer's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Tenderer*'s B-BBEE status, the *Tenderer* notifies the *Employer* within seven days of the change.

Z2.2 The *Tenderer* 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 *Tenderer's* B-BBEE status has decreased since the *starting date* the *Employer* may either re-negotiate this contract or alternatively, terminate the *Tenderer*'s obligation to Provide the Works.

Z2.4 Failure by the *Tenderer* 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 *Tenderer* 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 *Tenderer*, enters the public domain or to information which was already in the possession of the *Tenderer* at the time of disclosure (evidenced by written records in existence at that time). Should the *Tenderer* disclose information to others where required by this contract the *Tenderer* ensures that the provisions of this clause are complied with by the recipient.

Z3.2 If the *Tenderer* 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 *Tenderer* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Tenderer*, 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 *Tenderer* 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 *Tenderer* ensures that all his subTenderers 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 *Tenderer* 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 *Tenderer*:

accepts that the *Employer* may appoint him as the "Principal Tenderer" (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 SubTenderers, employees and others under the *Tenderer's* direction and control, likewise observe and comply with the foregoing.

Z5.2 The *Tenderer*, 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 subTenderers, employees and others under the *Tenderer'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 *Tenderer* 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 *Tenderer* 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 *Tenderer* 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 *Tenderer* for the *Tenderer'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 *Tenderer*'s payment of *delay damages* reaches the limits stated in this Contract Data (if any), the *Employer* may terminate the *Tenderer*'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 *Tenderer* or a third party, such party's employees, agents, or SubTenderers or SubTenderer'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 *Tenderer*, or any member thereof in the case of a joint venture, or its employees, agents, or SubTenderers or the SubTenderer'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.

Z 11.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

Z 11.2 The *Employer* may terminate the *Tenderer*'s obligation to Provide the Works if a Committing Party has taken such Prohibited Action and the *Tenderer* 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 *Tenderer*'s obligation to Provide the Works for this reason.

Z 11.3 If the *Employer* terminates the *Tenderer*'s obligation to Provide the Works for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.

Z 11.4 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 *Tenderer* ensures that the Committing Party co-operates fully with an investigation.

Annexure A: Insurance provided by the Employer

These notes are provided as guidance to Contracting Tenderers and the Tenderer about the insurance provided by the Employer. The Tenderer must obtain its own advice. Details of the insurance itself are available from the internet web link given below.

1. For the purpose of works contracts likely to be let under this contract (low value straight forward work), insurance provided by Eskom (the *Employer*) has been arranged on the basis of "**Format ECSC3**" as described on the web link given at the foot of this page.

2. Contracting Tenderers should note that cover provided by the *Employer* is only per the policies available on the internet web link listed below under the **Format ECSC3** and may not be the cover required by the Contracting Tenderer or as intended by each of the listed insurances in the left hand column of the Insurance Table in clause 82.1. In terms of clause 82.1 "The *Tenderer* provides the insurances stated in the Insurance Table. The *Tenderer* does not provide an insurance which the *Employer* is to provide as stated in the Contract Data". Hence the *Tenderer* provides insurance which the *Employer* does not provide and in cases where the *Employer* does provide insurance the *Tenderer* insures for the difference between what the Insurance Table requires and what the *Employer* provides.

3. When Marine Insurance is required the *Tenderer* needs to obtain a copy of the latest edition of Eskom's Marine Policies Procedures found at internet website given below.

4. **Further information and full details of all Eskom provided policies and procedures may be obtained from:**

http://www.eskom.co.za/Contracts/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx

Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months

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

The Contracting Tenderer is advised to read both the NEC3 Engineering and Construction Short Contract (April 2013) and the relevant parts of its Guidance Notes (ECSC3-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 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 *Tenderer* 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	**R** **Excl. Value Added Tax (VAT).**

[2] 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 Contracting Tenderer

If the *Tenderer* 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 *Tenderer* 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 Contract 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.

C2.2 Price List

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	SECTION NO.1 BILL No. 1 PRELIMINARY AND GENERAL (SANS 1200)				
	FIXED CHARGE ITEMS				
1	Contractual requirements.	SUM	1		
	Facilities for Contractor				
2	Site establishment.	SUM	1		
3	Removal of site establishment.	SUM	1		
4	Water supplies, electric power and communications	SUM	1		
	Sub-Total				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	TIME RELATED ITEMS				
	Operation and Maintenance of Facilities on Site, for Duration of Construction, (unless otherwise stated)				
	Facilities for Contractor				
1	Offices and storage sheds.	SUM	1		
2	Living accommodation.	SUM	1		
3	Ablution and latrine facilities.	SUM	1		
4	Water supplies, electric power , communications, dealing, with water, and access.	SUM	1		
5	Supervision for duration of construction.	SUM	1		
6	Complying with Health and Safety Specifications including for COVID 19	SUM	1		
7	Complying with Environmental Management Plan and all other compliance obligations.	SUM	1		
8	Security for the works for the duration of the contract.	SUM	1		
	Sub-Total				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	SECTION NO.2 BILL No. 1 SITEWORKS As per detailed drawing 0.53/2567: Concrete_Pad_Type_foundations_layout_and_details". Protection of the works				

1	Supply and install barricading (Shark Net) around the working area, compliant to Eskom Safety requirements (Provisional).	m	17		
	Site works				
2	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	27		
3	Stripping average 150mm thick layer of top soil and stockpiling on site	m2	18		
	EXCAVATION				
	Excavate in all material and use for backfill or dispose within a free haul distance of the site boundary				
4	Tower bases	m3	40		
	Extra over all excavations to all depths for				
5	Intermediate material	m3	4		
6	Hard rock	m3	2		
	Earth filling obtained from the excavations and/or prescribed stock piles on site				
7	Backfilling to trenches,	m3	24		
	Importation of Materials from Commercial Sources. (Provisional)				
8	G7 Material from commercial sources in accordance with SABS 1200 DM compacted to 95% Mod AASHTO density to be approved by the Engineer.	m3	3		
	Soil Poisoning				
9	Approved weedkiller applied in strict accordance to the manufacturer's instructions.	m2	18		
	SUB-TOTAL				
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	SECTION NO.2				
	BILL No. 2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	As per detailed drawing 0.53/2567: Concrete_Pad_Type_foundations_layout_and_details"				
	CONCRETE				
	15MPa/19mm concrete, in				
1	75mm Thick blinding layer	m2	18		
	REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	30MPa/19mm concrete				
2	Tower bases	m3	16		
	FORMWORK				
	Smooth				
3	Vertical to bases	m2	35		
4	20 x 20mm Chamfer at edge	m	17		
	REINFORCEMENT				
	Foundation (all 4 legs)- See drawing no 0.53/2567: Concrete _Pad_Type_foundations_layout_and_details"				
	High tensile				
5	12mm Bars	kg	895		
	H.D. BOLTS				
6	30mm Diameter galvanised high tensile steel holding down bolt 955mm long with one end threaded for a length of 100mm including nuts nuts, etc. and other end with and including 160 x 160 x 16mm base plate welded on.	No	16		
	SLEEVE PIPES				

7	80mm Diameter uPVC pipes 600mm long with both ends skew cut and cast into concrete	No	3		
	EARTHMAT				
8	Earthing to tower as detailed by Eskom engineer	Sum	1		
	SUB-TOTAL				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	SECTION NO.2				
	BILL No. 3				
	STRUCTURAL STEELWORK				
	SUPPLY AND FABRICATION OF ONE 25m HIGH TOWER				
1	Mild steel sections in plates, catladder,landing welded and/or bolted together and complete.	Kg	3323		
2	Horizontal cable tray/racking-heavy duty include supports	m	3		
3	Earthing terminating plates	No	1		
4	Supply and install waveguide entry plate (including earthing) – 600 x 380 x mm THK plate see drawing no “0.54/8732 Control building wave guide entry details”	No	1		
	Supply and Install universal microwave antenna brackets detailed in drawing no 0.53/1020. Per Table 2-1: Antenna Mounting Brackets ScheduleTable 2-1				
5	Antenna Mounting brackets MB 2/2A	No	2		
	Warning light as per Eskom standard 240-138048594				
6	Low intensity lights per leg @ half tower height - Type B(32cd)	No	4		
7	Day light switch	No	1		
	Delivery to site				
8	Normal delivery (+/- 100km)	Kg	3323		
	Erection on site				
9	Off loading, stacking on site, and erection of steelwork complete	Kg	3323		
	Bolts and nuts				
	Supply, deliver to site and store				
10	Hot dipped galvanised bolts (Grade 4.8), including nut and washers	Kg	370		
11	After final tightening of all nuts, they shall be fixed in position by punching three indentations at approximately 120-degree intervals around the threads with a round pointed centre punch. The nuts and exposed bolt thread shall be painted with a single pack waterborne anti corrosive paint with a life expectancy of 20 years	Item	1		
	Paint work				
12	Tower painting as per CAA requirements – (red and white, equal spacing with red band on top)	M2	123		
	Fencing				
13	Supply & install 9 x 9 x 1.8 m 3-side galvanised steel palisade fence with 19 - 25 mm granite crusher stone as specified by the Engineer	m	36		
14	Supply and install padestrian gate as specified by the Engineer	No	1		
	SUB-TOTAL				

FINAL SUMMARY

Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months

25m Tower at Naboomspruit SS

SCHEDULE	DESCRIPTIONS	AMOUNT
	SECTION 1: PRELIMINARY AND GENERAL	
1	Preliminaries (Fixed & Time Related Items)	
2	Preliminaries (Provisional Day Works)	
	SUB-TOTAL	
	SECTION 2	
1	Bill No.1: EARTHWORKS	
2	Bill No.2: CONCRETE, FORMWORK AND REINFORCEMENT	
3	Bill No.3: STRUCTURAL STEELWORK	
	SUB-TOTAL	
	CONTRACT AMOUNT	

***TENDERER*:**

....

PRINT NAME SIGNATURE DATE

C3: Scope of Work

C3.1 Works Information

3.1. SCOPE

Introduction

This document is to give detailed scope of work for construction of 25 m tower at Naboomspruit Substation site (SS) [coordinate 24º 31' 12.09" S, 28º 42' 02.62" E]. The tower is to be used to provide telecommunication network for purpose of SCADA RTU and Telephone lines.

Scope OF WORK

The document covers the general Scope of work needed to be done at Naboomspruit SS. It gives the guideline of the scope of work to be covered by appointed contractor for construction of 25 m Tower i.e. Supply, delivery and erection of 25 m Tower at Naboomspruit SS in the Limpopo operating unit (OU).

Phase 1: PRODUCTION of manufacturing drawings

Eskom will provide

Phase 2: design of tower foundation

The construction of the foundation shall be in accordance with the following drawing:

"0.53/2567: Concrete_Pad_Type_foundations_layout_and_details"

Should the soil conditions be unfavourable for the installation of this design, the contractor shall inform Eskom.

Phase 3: manufacturing and tower construction

Material Quality

The following material grades shall be utilized:

Steel Sections	S355JR
Plates (less than 19mm thick)	S355JR
Plates (greater than 19mm thick)	S355J0 (for better workability)
Bolts	Grade 8.8 to ISO 898
Nuts	Grade 8
Washers and Packers	S275JR

Impact properties in the longitudinal direction of all structural materials shall be determined for grade S355JR material greater than 19mm in thickness in accordance with the Charpy V-notch test. Charpy V-notch

requirements at a minimum, shall meet the requirements of 27 J absorbed energy at room temperature (21° Celsius)

Silicon and Phosphorous content of steel is limited as follows:

“Aluminium Killed Steel”: Silicon (Si) = 0.01 to 0.04%, Phosphorous (P) < 0.015% max

“Silicon Killed Steel” : Silicon (Si) = 0.15 to 0.25%, Phosphorous (P) < 0.02% max

Tower fabrication

Tower fabrication must be done as per general tower specification, 240-59967638

The supplier and his manufacturing facility shall employ a production process that has an integrated Quality Management System (QMS). The Quality Management System employed shall be based on the framework of SABS /ISO 9001 standards for Quality Management Systems or be an equivalent recognised system approved by Eskom Quality Assurance Division. Details of the QMS shall be provided.

Quality inspection of the supplied steel

The contractor to send an inspection notification to Eskom 7 days in advance for the inspection of the steel to be used in order for Eskom to verify the quality of the steel provided.

Prototype Assembly

a) All structures shall be test assembled in the shop to the extent necessary to ensure accurate fit in the field. Prototype assembly shall include all structure components and accessories. Assembly procedure shall demonstrate that each section fits the adjacent section.

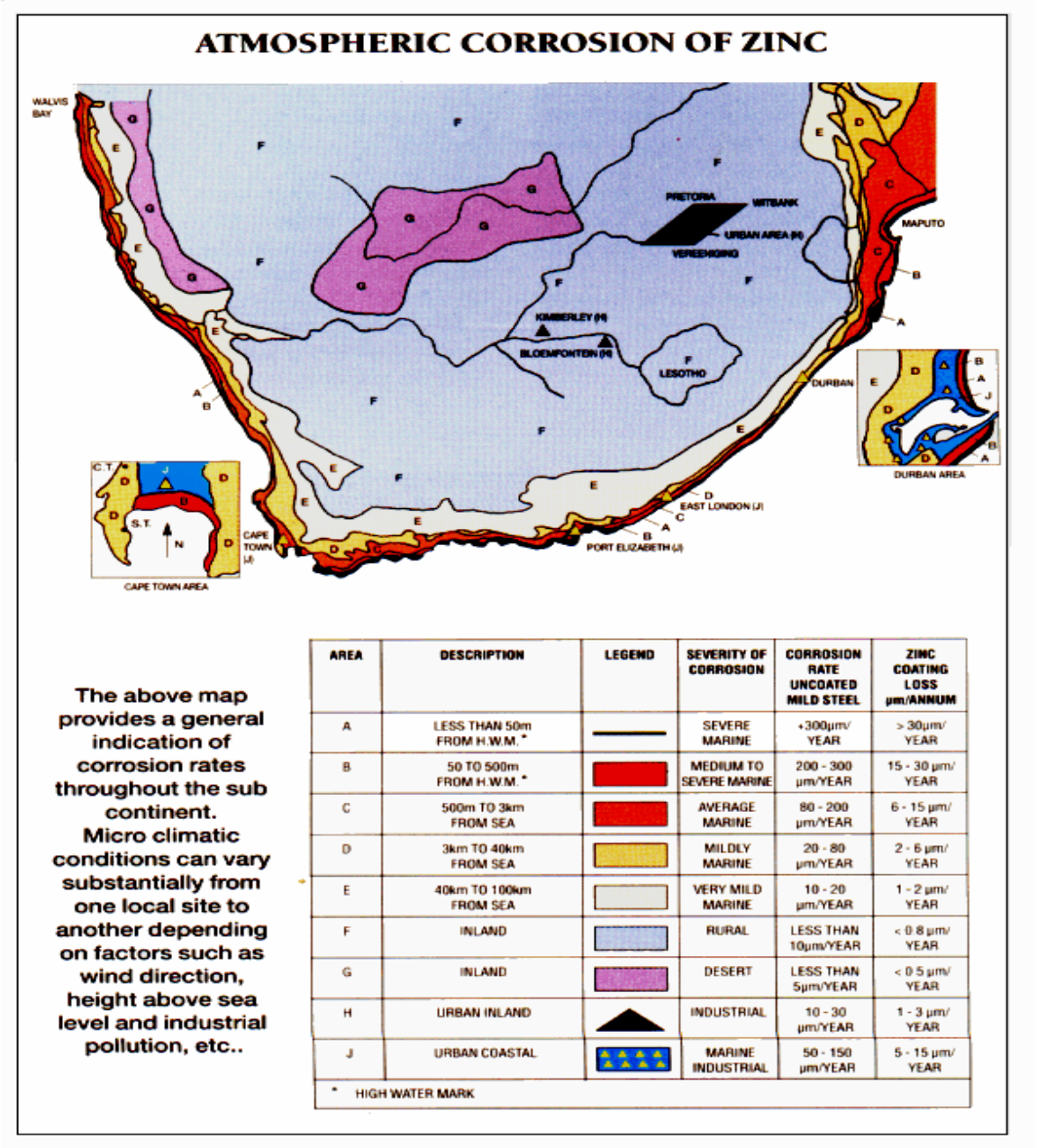
b) A Prototype Assembly Report shall summarize the findings of the prototype assembly and all necessary modifications to the members.

c) The prototype structure shall be assembled with the correct fasteners and bolts tightened to the correct torque.

Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months

Corrosion levels

The position of the tower is about located in the Limpopo province which falls under the rural inland category as per **Figure 2.1**. The expected corrosion level in the region is less than 10 µm/year. Therefore, standard galvanizing is specified with a thickness of 85µm in order to carter for rate of corrosion on the tower steel.



AREA	DESCRIPTION	LEGEND	SEVERITY OF CORROSION	CORROSION RATE UNCOATED MILD STEEL	ZINC COATING LOSS µm/ANNUM
A	LESS THAN 50m FROM H.W.M.*		SEVERE MARINE	+300µm/ YEAR	> 30µm/ YEAR
B	50 TO 500m FROM H.W.M.*		MEDIUM TO SEVERE MARINE	200 - 300 µm/YEAR	15 - 30 µm/ YEAR
C	500m TO 3km FROM SEA		AVERAGE MARINE	80 - 200 µm/YEAR	6 - 15 µm/ YEAR
D	3km TO 40km FROM SEA		MILDLY MARINE	20 - 80 µm/YEAR	2 - 6 µm/ YEAR
E	40km TO 100km FROM SEA		VERY MILD MARINE	10 - 20 µm/YEAR	1 - 2 µm/ YEAR
F	INLAND		RURAL	LESS THAN 10µm/YEAR	< 0 8 µm/ YEAR
G	INLAND		DESERT	LESS THAN 5µm/YEAR	< 0 5 µm/ YEAR
H	URBAN INLAND		INDUSTRIAL	10 - 30 µm/YEAR	1 - 3 µm/ YEAR
J	URBAN COASTAL		MARINE INDUSTRIAL	50 - 150 µm/YEAR	5 - 15 µm/ YEAR

* HIGH WATER MARK

FIGURE 2.1: CORROSION LEVELS EXPERIENCED IN REGIONS OF SOUTH AFRICA

Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months

Other pre-construction activities

The contractor to supply the following documents to Eskom for review and acceptance before construction commences:

a) All the Safe Work Procedures to be used detailing step by step methodology that will be used by the contractor during construction to ensure that the tower is safely constructed.

b) The contractor to note that ORVHS authorization is required for all the sites that are located within the substation yard

c) The contractor to provide Eskom with a quality, inspection and test plan (QITP) for acceptance before any construction can take place. An example of this will be provided to the contractor once the contract has been awarded.

Construction activities

The construction of the tower must be done in accordance to the Eskom standard 240 – 59967638.

Geo-Technical information

Eskom will provide the report (Naboomspruit SS *Geotech Report*)

Total tower mass

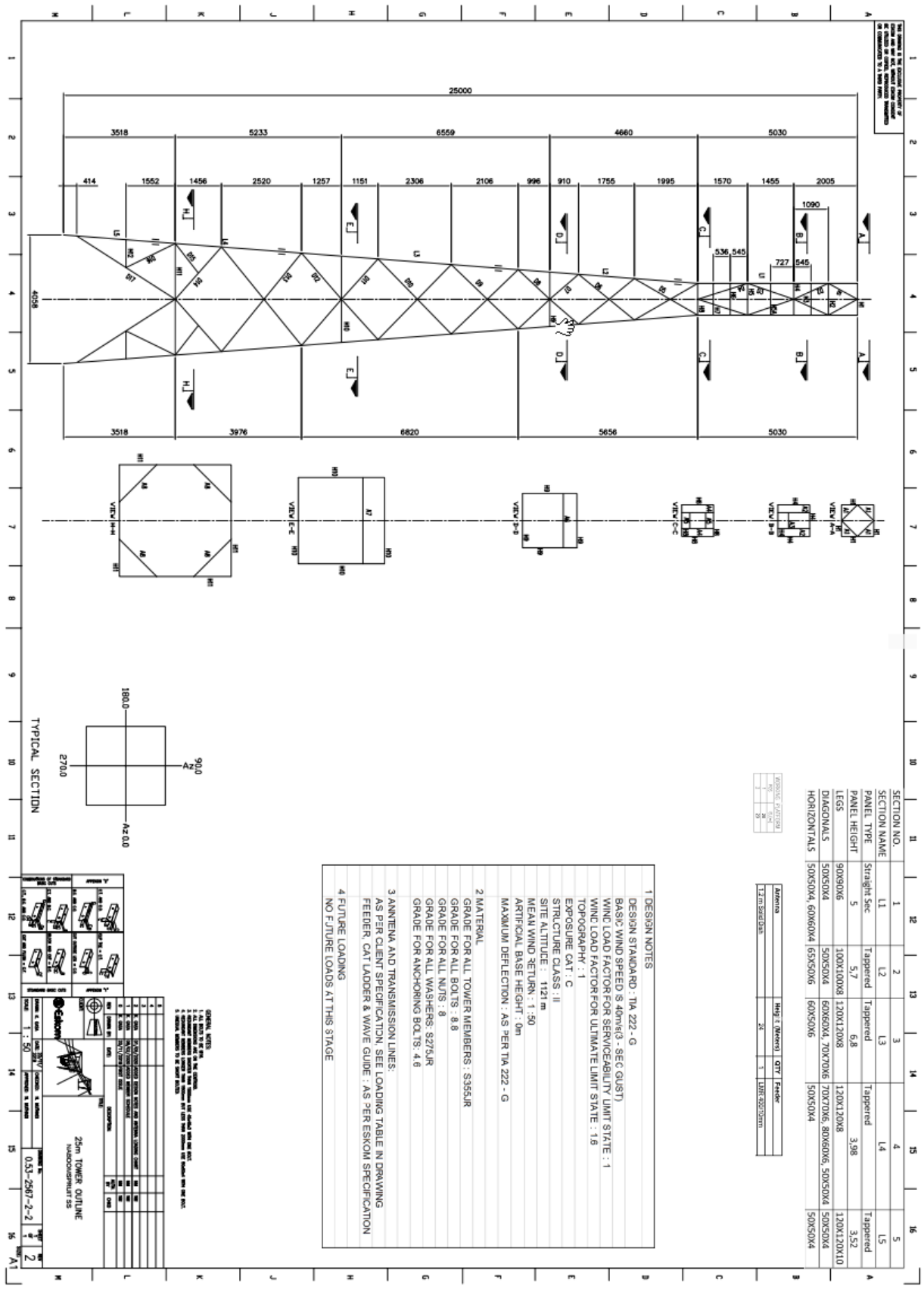
The total tower steel mass including the plates, bolts platforms, and ladders = **5174 kg. This should be used when costing as well.**

Phase 4: dismantling and scrapping of existing tower

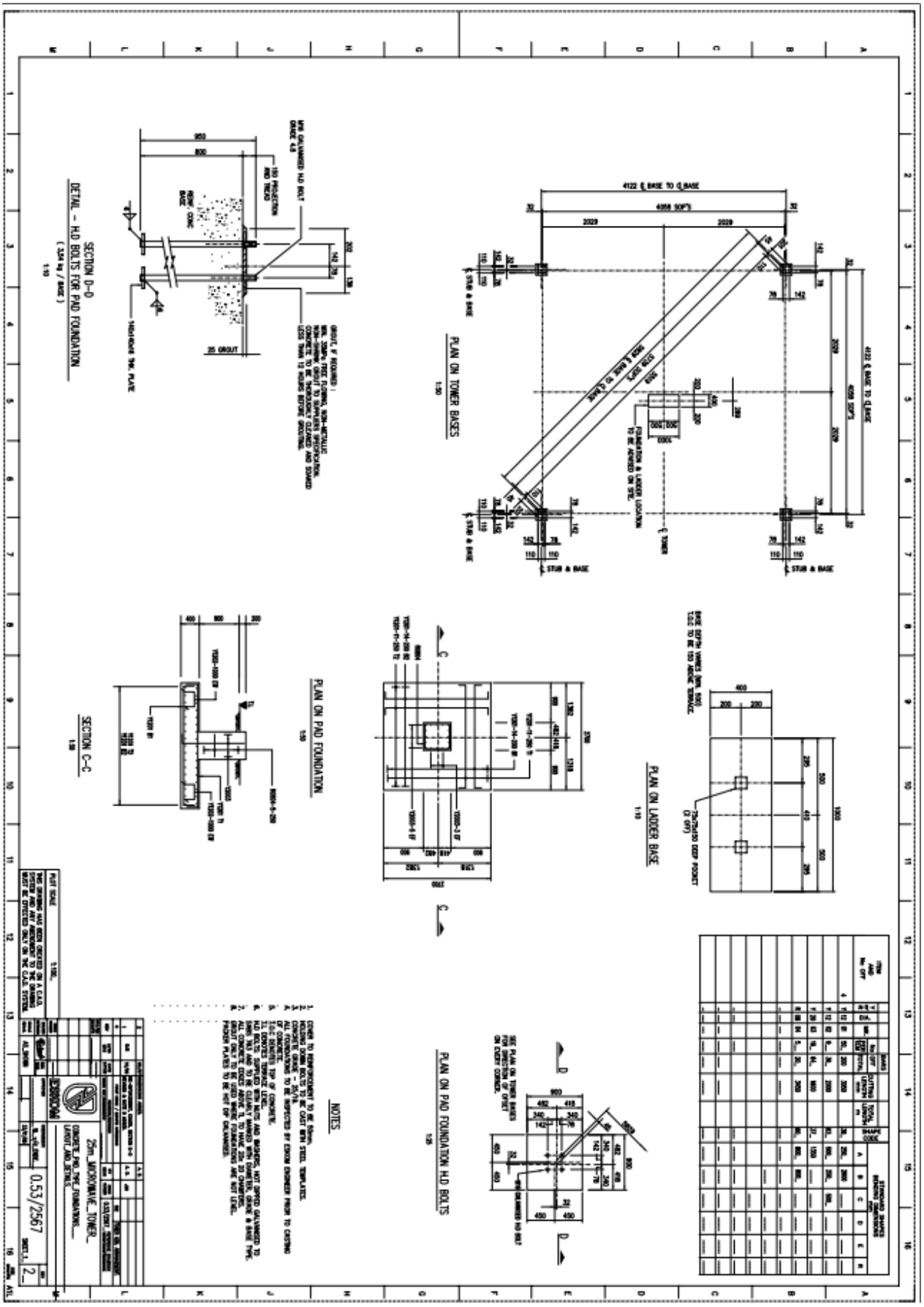
No dismantling scope of work is required.

Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months

Tower drawings



Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months



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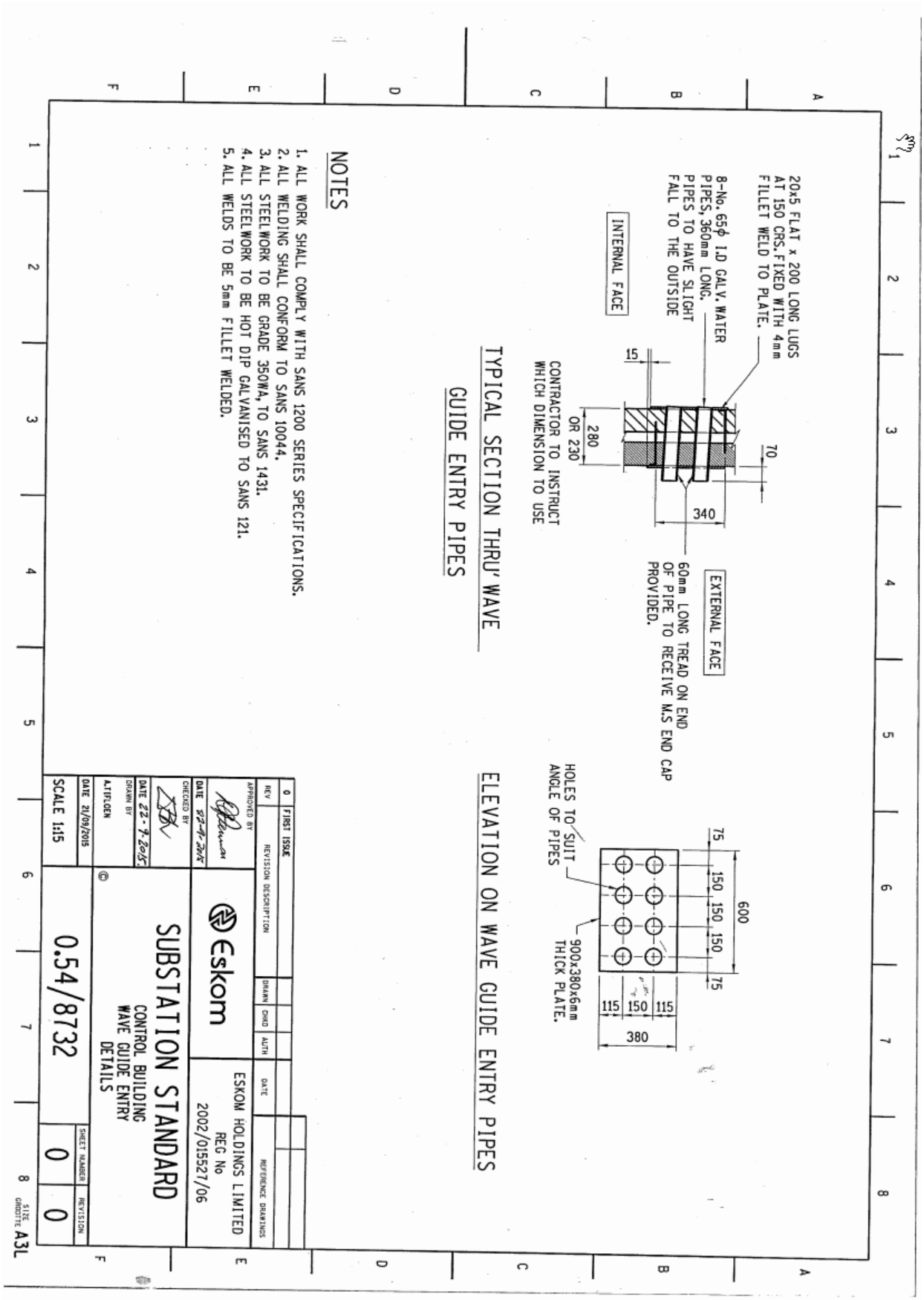

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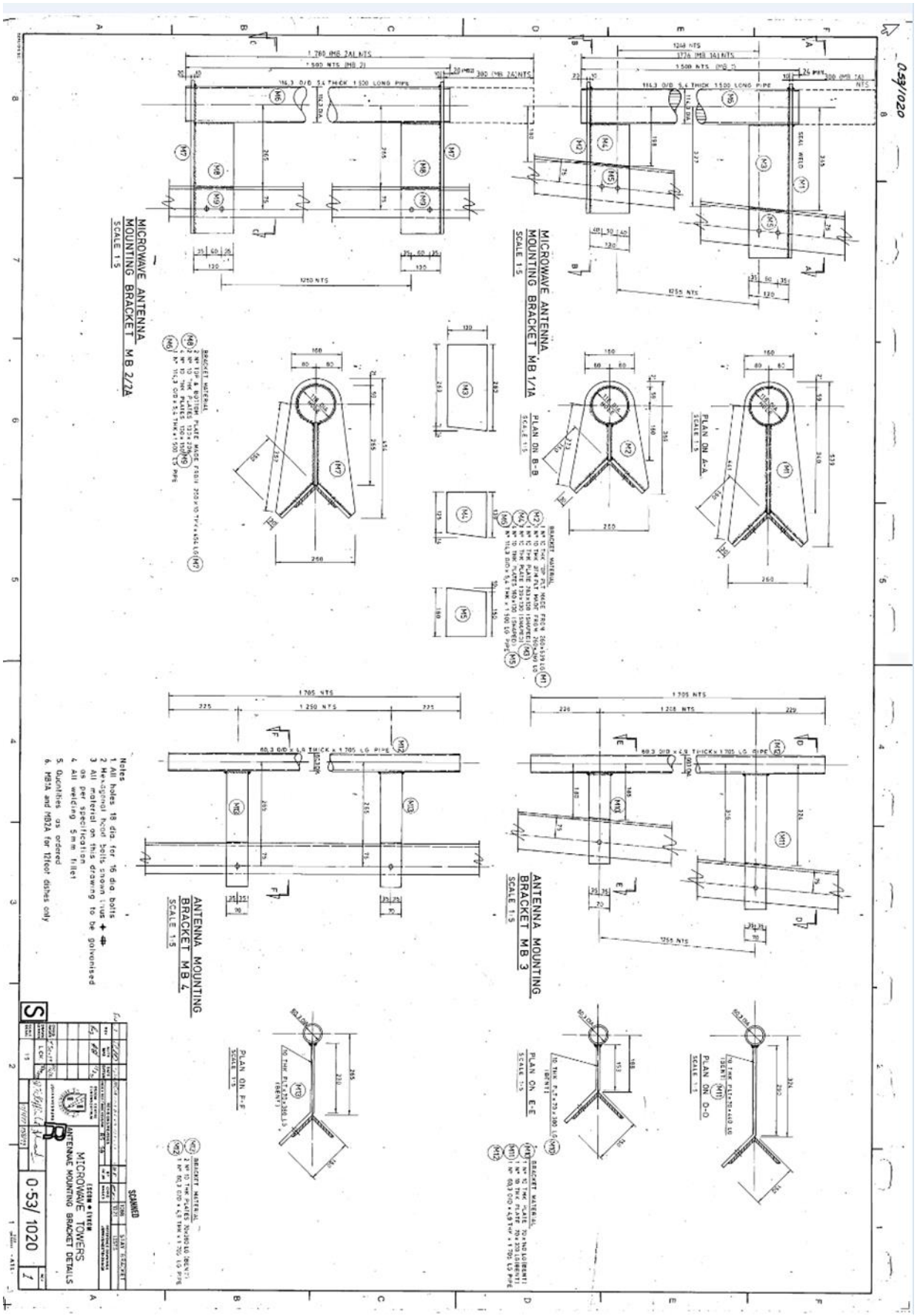


Tower earthing and bonding

The tower earthing and bonding must be done in strict accordance to the radio station earthing and bonding standard - **240-56872313**

other user defined requirements

1. The contractor shall provide AS-built document such as engineering Certificate signed off by contractor professional engineer to declare that tower is safe, earth test certificate, site drawing and any other documents that deemed applicable by them and Eskom telecommunication and/or Provide documentation related to 25 m tower.

2. The tower shall have platform (full landing zone) with trap doors at the positions as per manufacturing drawings.

Notes:

- Trap door should be lockable on open and closed position.
- Ensure kick plates are minimum 150 mm x 2.5 mm thick.
- Ensure resting stations or platforms do not interfere with the direct routing paths of the feeder ladder
- Provide earthing terminal plates at each landing with brass bolts for terminating equipment earthing leads. This must be bonded to main tower down earth or structural steel if a down conductor was nor required.

3. Tower shall have cat ladder to its full length with guard rails as per Eskom standard.

4. Provide earthing terminal plates with brass bolts as per *Eskom Telecommunications General Tower Specification (240-59967638)* and *Radio station Earthing and Bonding standard (240-56872313)* for terminating equipment earthing leads. This must be bonded to main tower earthing system.

5. The contractor must supply and Install universal microwave antenna brackets **(*see drawing no 0.53/1020*)** per Error! Reference source not found.Error! Reference source not found.

Notes:

- *The Supplier can submit alternative antenna mounting brackets to ESKOM for review and approval were necessary.*
- *Contractor is required to verify the slope of the mounting brackets to ensure they fit the slope of the tower before manufacturing.*

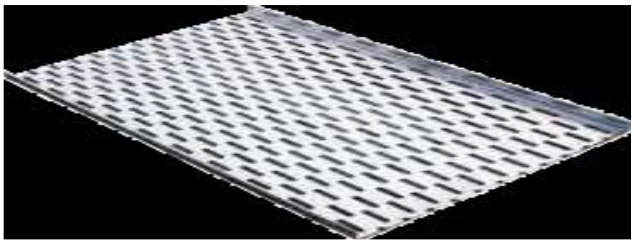
Table 0-1: Antenna Mounting Brackets Schedule

Attachment level	Bracket Type	Quantity
Not required	MB 2/2A	0
2 x @Working platform @ 21 m on diagonal legs	MB 1/1A	2
Not required	MB 3	0
Not required	MB 4	0

6. **Tower Cable Tray /Feeder entry panel:**

- Contractor to install a 13 m **horizontal cable tray/racking** from the tower to the wall of control room.
- The cable tray must be installed upside down to prevent feeder cable from hail damage.
- The cable tray shall be a **heavy-duty** cable tray pre galvanised standard finish and the splicing method must be overlap with M6 gutter bolts and square nuts. Where bends are required it shall be of horizontal bend (**see example** of horizontal cable tray and horizontal bend below)

Horizontal bend



Straight cable tray heavy duty pre-Galvanised.

- Additional criteria for cable Tray

Width (mm)	304
Height (mm)	19
Finish fasteners	Electro - Galvanised
Number of Gutter bolts and square nuts per joint	3

7. Wave guide plate details

Waveguide entry plate shall be installed as per drawing no *"0.54/8732 Control building wave guide entry details"*

8. Fence around the Tower

Fencing requirements are listed as per below

- 9 x 9 x 2.4 m standard galvanised steel palisade fence is required around the tower (with a pedestrian gate).
- The fenced floor area to be covered with 19 – 25 mm granite crusher stone.

site information

The tower is to be constructed at the existing Naboomspruit SS, which is located in Limpopo OU.

GPS Coordinate: **24º 31' 12.09" S, 28º 42' 02.62" E**

Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months

BILL OF MATERIALS (BOM)

The table below shows high level bill of material required for the tower and not meant to nullify other items that are specified on the Eskom standard 240 – 59967638.

Item	Description	Unit	Qty.	rate	Total
1	**Foundation (all 4 legs)- See drawing no 0.53/2567: Cencrete_Pad_Type_foundations_layout_and_details**				
1.1	Reinforcement steel weight	kg	895		
1.2	Concrete volume	m^3	15.5		
1.3	Excavation volume	m^3	38		
1.4	Formwork Surface	m^2	34.52		
1.5	Backfill	m^3	22.03		
1.6	35Mpa Non-Metallic No shrink grout	m^3	0.0212		
1.7	M36 GRADE 4.8 GALVANIZED H.D BOLTS WITH 140 x140x16 THK PLATES	n/a	16 x 950 mm LONG		
2	**Main tower - See drawing no 25 m Tower outline – Naboomspruit SS**				
2.1	Supply steel – **including** plates, cat ladder, working platforms galvanised at **85 µm**	kg	4704		
2.2	**Supply bolts** – After final tightening of all nuts, they shall be fixed in position by punching three indentations at approximately 120-degree intervals around the threads with a round pointed centre punch. The nuts and exposed bolt thread shall be painted with a single pack waterborne anti corrosive paint with a life expectancy of 20 years	kg	470		
2.3	Tower Assembly	hr	24		
2.4	Tower Erection	hr	12		
3	**Working/resting platforms - supply and install**				
3.1	Already included under 2.1				
4	**Antenna Mounting Brackets - Supply and install**				
4.1	Antenna Mounting brackets **MB 2/2A**	Unit	2		
5	**Miscellaneous - Supply and install**				
5.1	Cat ladder and cage – already included under section 2.1				
5.2	Earthing terminating plates	Unit	1		
5.3	Horizontal cable tray/racking-heavy duty including supports	m	13		
5.4	Supply and install waveguide entry plate – 600 x 380 x mm THK plate see drawing no no *"0.54/8732 Control building wave guide entry details"*	n/a	1		
5.5	**Tower lights as per Eskom standard 240-138048594**				
5.5.1	Double low intensity lights at tower top – Type B(32cd)	Unit	2		
5.6	No tower painting is required	m^2	0		
6	**Equipment - hire**				
6.1	Use of specialized equipment i.e. Crane	hr	12		
7	**Fencing –Supply and Install**				

7.1	9 x 9 x 1.8 m standard galvanised steel palisade fence (including pedestrian gate)	Unit	1		
7.2	Fenced off area layered with 19 - 25 mm granite crusher stone	m^3	7.5		
8	**Dismantling work**				
8.1	N/A	Rate	N/A		

applicable standards

Mast/Tower must comply with Eskom Telecommunication specification as listed.

240-59967638 General Tower Specification

240-56872313 ET Radio Station Earthing and Bonding

240-103616544 Aviation requirements Towers rev 1

240-138048594 LED Aircraft Warning Light for Eskom Telecommunication Towers

Informative references

SANS 10160-3 Basis of structural design and actions for buildings

and industrial structures Part 3 Wind actions

ETSP 0459 ET Tower Lights Specification_rev1

SCSASACF6 Power lines and telecommunications tower Aviation regulations

The civil Aviation Act relating to Obstacles (RSA)

ETPN 1490 Environmental Impact Assessment principles

Documents available on request or at http://dt.eskom.co.za/ or Hyperwave

Latest revision must always be applied.

Definitions

Disclosure Classification

Controlled Disclosure: **the information is readily available to Eskom employees (internal use). Information may also be accessed by or disclosed to third parties with specific authorisation or consent (either enforced by law or discretionary).**

This information includes a wide spectrum of internal business data that can be used by all employees and can be shared with authorised business partners.

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Where activities subject to Inspection and Test procedures are to be undertaken by a *SubTenderer*, the QCP/ITP shall make reference to this fact and shall include descriptive details of *SubTenderers* involvement. A separate QCP/ITP shall be required for each *SubTenderer* Scope of Work.

Tenderer may authorise use of *SubTenderer* QCP/ITP format providing it is in compliance with the above. *Tenderer* shall be ultimately responsible for the development and proper implementation of all SubTenderer QCP/ITPs, including those reviewed or developed by *SubTenderers*.

Eskom reserves the right to select witness and hold points within all developed *SubTenderer* QCP/ITPs for Eskom oversight of selected functions and to perform surveillance or audits of the Work.

Tenderer shall establish processes and procedures for formal assessment of *SubTenderer* inspection and testing programs. These shall include review of *SubTenderer* inspection reports and other Quality Control documentation. Additional formal assessment of manufacturing, fabrication and assembly facility operations shall be conducted by *Tenderer* to ensure continuing suitability, adequacy and effectiveness of the *SubTenderer* inspection and testing programs. Assessment frequency shall be established in consideration of *SubTenderer* Scope of Work, Criticality of Scope of Work deliverables and performance information. Assessment scope and schedule shall be developed in consultation with Eskom.

Mandatory pre-inspection meetings will be convened by Eskom or its Inspection Agency or AIA to be attended by the *Tenderer* and *SubTenderers* representatives, including their Quality representatives who will be involved with the Works and records to be kept.

Eskom reserves the right to appoint resident quality inspectors that can be based at the *Tenderer* or *SubTenderer*'s premises and on site where the work is being performed. The *Tenderer* is expected to provide work space at no cost to Eskom, for the inspector as required;

All Project Materials sourced externally shall comply with the provided specifications;

Payments:

On completion of each Task Order the Tax Invoice with a copy of the Task Order, Completion Certificate and the Completion certificate attachment must be submitted to the relevant Clerk of Works. Any deviation from the planned work must be adjusted on the Tax Invoice. The COW will inspect the work and sign the certificate and Tax Invoice if satisfied with the standard of work. The COW will make adjustment according to work not yet completed. The COW will have one week to perform this work. The invoice and the Completion Certificate must be submitted to the Project Coordinator for approval. The PC will then perform a spot check and sign the invoice if satisfied. A detailed breakdown of the work not performed must be completed on the Completion certificate attachment. An electronic copy of this report must be submitted to the COW and the Employers Agent via e-mail. No payments will be processed by the Employers agent if he is not in possession of the electronic report.

On approval of the invoice the signed original Tax invoice and Completion certificate must be submitted to the Employers Agent for processing. All enquiries regarding payment must be followed up with the Employers Agent. It is preferred that only one invoice is submitted for each Task Order issued. If the scope of work is such that the work is longer than one month a progress payment may be submitted on the 25th day of each month. The Tenderer should only include the work for one task order on an invoice.

The Tenderer must ensure that his invoice is according to the exact work completed on site. No work may be claimed that has not been completed. If work is claimed which is not complete this will be seen as a fraudulent claim which may lead to termination of the contract.

The Tenderer will submit his claim on the assessment day as per the NEC Payment Certificate format attached to this contract with supporting Bill of Quantities. The Contract Number must be clearly visible on

the Tax Invoice. The Employer will assess Payment certificates on actual work completed. Any possible issues regarding the claim will be addressed by the Employer to the Tenderer. On acceptance of the Payment Certificate by the Employer the Tenderer submits his invoice as agreed upon with the Employer. Payment will take place as per the Eskom Procurement's Invoice Payment Processes.

Tax Invoices

The Tenderer must submit the invoice to programme management department within 3 days of the hand over date or acceptance of work done by the Eskom Representative.

The *Tenderer* ensures that the requirement in terms of Section 20(4) (C) of the Value Added Tax Act, no 89 of 1991 (as amended by the Revenue Laws Amendment Act 45 of 2003), that the *VAT registration number* of the recipient of the tax invoice, appears on the said tax invoice in order for the invoice to fully comply with the requirements of a valid invoice for VAT purposes as contained in the said Section 10(4) (C), is adhered to. The *Employer* requires adherence by the *Tenderer* to this requirement as from 1 June 2004. No payment will be made on tax invoices not fully meeting the requirement.

Tax invoices must meet the following requirements where the consideration (VAT inclusive amount) exceeds R3 000:

1. The words "**TAX INVOICE**" in a prominent place (preferably at the top of the page).
2. **Name**, **address** and **VAT registration number** of the **supplier.**
3. **Name**, **address** and **VAT registration number** of the **recipient. ***

Please note: Eskom's name has to be reflected as ESKOM HOLDINGS SOC LIMITED on all tax invoices and Eskom's VAT number is 4740101508.

4. An **individual serial number** (tax invoice number) and **date issued.**
5. A **full and proper description** of goods and/or services supplied.

Please note: Merely referring to a contract is not sufficient.

6. The **quantity** or **volume** of goods or services supplied.*****
7. Where the supply is subject to VAT at the standard rate, the following in Rand:

    - The value, VAT amount and consideration OR
    - The total consideration with a statement that VAT is included @15% OR
    - The total consideration and the amount of VAT charged.

Rates

Only Eskom approved are applicable.

Weekly reports

Tenderer will submit a weekly report indicating the project status.

- The Start and Completion date must be agreed upon prior to signing the Task Order. Late completion may result in penalty clause being applied as per contract document.
- Original tax invoices must be submitted to the Programme Management Department containing all the relevant mentioned above. (See a full attached tick list)

Performance Management

- The Tenderer's Performance will be assessed in accordance with a Performance Appraisal Process.

LEGAL COMPLIANCE GUIDE IN COMPLIANCE TO CONSTRUCTION REGULATION

- No task will be allocated to Tenderers in whose registration and good standing with the compensation commissioner is not valid and in order.
- Provided in the standard rates are costs of Health and Safety. (See the safety remuneration letter attached)

Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months

Health and Safety Management

- The Tenderer shall comply with:
  - The Occupational Health and Safety Act, 1993, and all regulations made there under as per the standard clause A1, stipulated on page 4 of this contract.
  - The Construction Regulations, 2014
  - The Health and Safety Requirements of the Employer more fully set out in Eskom procedure 32-136 and the SHE specification.
  - All Eskom Safety and Operating Procedures as outlined in the ORHVS (Operating Regulations on High Voltage Systems) and the standards attached to this document.
- The Tenderer acknowledges that he is fully aware of the requirements of all of the above and undertakes to employ people who have been duly authorized in terms thereof and who have received sufficient safety training to ensure that they can comply therewith.
- The Tenderer undertakes not to do, or not to allow anything to be done which will contravene any of the provisions of the Act, Regulations or Safety and Operating Procedures
- The Tenderer shall ensure that a team member of the Tenderer is authorized as a Responsible Person in terms of the ORHVS. This includes the completion of all the pre-authorization training required for ORHVS Responsible Person (at the Tenderer's expense) as detailed in standard 34-146. The Responsible Person shall supervise the works at all times and be available to take permits where necessary.
- The Tenderer shall ensure that the Responsible person completes a training logbook (as per standard 34-146) and arrange with the appropriate Eskom representative for evaluation of the authorized person prior to the Construction start date. This needs to be arranged by the Tenderer.
- The Tenderer shall appoint a person who will liaise with the Eskom Safety Officer responsible for the premises relevant to this contract. The person so appointed shall:
  - Supply the Eskom Safety Officer with copies of minutes of all Health and Safety Committee meetings (if relevant), on a monthly basis.
  - Supply the Eskom Safety Officer with copies of all appointments in respect of employees employed on this contract, in terms of the Act and Regulations and shall advise the Eskom Safety Officer of any changes thereto – to be handed over to the Employer prior to construction start.
- Eskom may, at any stage during the currency of this agreement, be entitled to;
  - do safety audits at the Tenderer's premises, its work-places and on its employees;
  - refuse any employee, sub-Tenderer or agent of the Tenderer access to its premises if such person has been found to commit any unlawful act or any unsafe working practice or is found to be not authorized or qualified in terms of the Act
  - issue the Tenderer with a work stop order or a compliance order should Eskom become aware of any unsafe working procedures or conditions or any non-compliance with the Act, Regulations and Procedures referred to in 1 above by the Tenderer or any of its employees, sub-Tenderers or agents.
- No extension of time will be allowed as a result of any action taken by Eskom in terms of the above and the Tenderer shall have no claim against Eskom as a result thereof. Furthermore, no amendments to the Act or the Regulations or reasonable amendment to Eskom's Safety and Operating Procedures will entitle the Tenderer to claim any additional costs incurred in complying therewith from Eskom.

- An authorized Eskom representative will be on site for regular site visits to monitor the Tenderer's implementation of health, safety and quality Standards.
- The Tenderer shall be responsible for all expenses incurred to ensure adherence to Health and Safety Regulations as stipulated above which includes but is not restricted to ORHVS training courses, etc.
- The Tenderer shall adhere to the Standard on Working Clearances at MV Structures with pole-mounted auxiliary equipment as attached to this contract.
- The Tenderer shall comply with all the requirements of the CONSTRUCTION REGULATIONS.

Please Note: (Before carrying out work, Tenderer to notify the provincial director in writing of the construction work in line with requirements Construction Regulations)

- It is an Eskom requirement that the Tenderer shall use a Fall Arrest System (FAS) as defined in the Construction Regulations whenever a risk of falling exists. The Tenderer shall adhere to the applicable standards and procedures attached to this contract.

Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months

Typically, the following identified risks could endanger the work as done by the Tenderer. The Tenderer should identify mitigation actions for these risks, as well as identify any additional risks and submit at Contract:

Typical Risk	Yes/No
Live underground cables	**Yes**
Work in live chambers/restricted areas	**Yes**
Live overhead conductors/crossings	**Yes**
Close proximity work to live equipment	**Yes**
Work in elevated positions/on ladders/from crane buckets	**Yes**
Operating of cranes/vehicle mounted	**Yes**
Static electricity/induction , step potential etc	**Yes**
Work with chainsaws/mechanical cutters	**Yes**
Materials handling/ heavy equipment handling	**Yes**
Conductor stringing and tensioning	**Yes**
Vehicle risks	**Yes**
Work in open trenches/excavations	**Yes**
Biological/Health risks (camps)	**Yes**
Weather related risks (UV, heat, cold)	**Yes**
Environmental risks	**Yes**
Ergonomic risks (body position, fatigue)	**Yes**
Work on/dismantling of rusted & rotten poles and structures	**Yes**
Fire risks	**Yes**
Public safety risks	**Yes**

Health and Safety Plan

I/We ……will prepare and submit Health and Safety Plan to Project Co-ordinator before the commencement of each Task and Resource Capacity Schedule, including following details:-

1. Authorised Persons for High Voltage Authorisation and LV Switching providing the ID Numbers of the authorised person/s with the permit/ certification date or number and the date of expiry.
2. Safety Representatives and First Aiders names, providing their ID Numbers and details of certification.
3. Serial numbers, calibration certificates and expiry dates of the tested tools and equipment.
4. Make, model and registration number of vehicles to be used.

Project health and safety file shall be developed in line with the requirements of the SHE specification and shall be submitted for evaluation and approval by the client safety department.

Subcontracting

Tenderers are requested to submit names of proposed “SubTenderers” to be utilized on this project. Tenderers are advised that only Eskom Approved Consultants and Tenderers who have completed the necessary Eskom Tenderer Training & Accreditation may be used.

Construction Safety

- The Tenderer shall be responsible for ensuring that all equipment supplied and used and all work carried out under this contract shall be in accordance with the Occupational Health and Safety Act (Act 85 of 1993) and regulations remaining in force, as may be amended from time to time.
- In addition, the Tenderer shall comply with other Safety application provisions of Government, Provincial, Municipal Safety Laws, Building, Construction, Electricity Regulations and Eskom Distribution Standards.
- The Tenderer shall accept full responsibility for the means, methods, sequence or procedures of construction for safety precautions or programmes incident to the work of the Tenderer.

Supply, Delivery, Construction, and Erection of 25m telecommunication Tower at Naboomspruit SS over a period of 12 months

- The Tenderer is required to submit a working methodology statement with regards to the Safety Standards while working within hazardous areas such as live substations or in close proximity of energized apparatus.
- The Tenderer shall indemnify the employer and the Engineer against responsibility for safety on the site of the works.
- The Tenderer shall enter into an agreement to complete the work required for the construction of the works in accordance with the provisions of all pertinent legislation and in particular with the provisions of the Occupational Health and Safety Act (Act 85 of 1993) and the regulations promulgated there under.
- Reference of the Safety Methodology Statement can be found in the Government Occupational Health and Safety Act (Act 8 of 1993) and Construction Regulations Document which is available publicly.
- The safety of the Tenderers personnel and employees acquire precedence over the construction works.
- Tenderer to assess and make provision for security services to protect the demolished material should the need arise

Life saving Rules (Refer to the attached document)

Due to the importance to safe life's and apparatus of Eskom it is recommended that if a Tenderer abuse any life saving rules, all work allocated to the Tenderer will immediately put on hold until final outcome with investigation. Safety is the combined responsibility of the team and therefore team leader or team will be punished together. There are five life saving rules that may not be broken by the Team Leader and his/her team.

The five Eskom Life saving Rules are as follows:

Rule 1:*Open, isolated, tests, earth, and bond and/or insulate before touch*
Rule 2:*Hook up at height*
Rule 3:*Buckle Up*
Rule 4*Be Sober*
Rule 5:*Ensure that you have a permit to work*

ACCEPTANCE NOTE

I/WE _____ HEREBY ACCEPT THE ABOVE TERM FOR BREACHING OF LIVE SAFETY RULES.

SIGNED BY: _____ DATE:____ /_____/

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Compensation for Occupational Injury and Diseases Act

- The Tenderer shall submit with his Contract proof of adherence to the above act.

General Environmental Management Requirements

- The Tenderer shall receive an Environmental Management Plan – EMPr (normally as part of the DESD) and must adhere to all its requirements.
- Tenderer to provide toilet facilities, water and electricity.
- All environmental legal Liabilities and claims arising from the negligent activities of the Tenderer shall be for the Tenderers expense.
- The Tenderer shall have an understanding of Eskom's basic environmental principles and commitments (covered during Eskom Environmental Law Course)

Vegetation Management:

The supplier shall ensure:

- That all indigenous and protected trees (in terms of national and provincial legislation) are not cut, trimmed or disturbed without a permit obtained from the relevant authorities (acquired from Eskom Environmental Management Section).
- That permits be available on site where such trees are cut.
- That the owner is consulted, and his/her consent being obtained, prior to the cutting of any trees.

Waste Disposal

The supplier shall ensure that:

- Waste is disposed of on a permitted / legal waste site, for the applicable waste type, in terms of the Environment Conservation Act, 73 of 1989 and the National Environmental Waste Management Act (Act 59 of 2008).
- Disposal certificate (waste manifest) for all waste disposed of i.e. general, hazardous and toilets waste is obtained
  and proof is kept onsite.
- Where appropriate, waste is recycled or re-used.

General

- Except for site management and specialised labour such as operators for plant and equipment, the Tenderer is encouraged to use "local" labour on a temporary basis for all manual tasks.
- The Tenderer will attend all site meetings as arranged by the Employer
- All Construction work shall be carried out in accordance with all the statutory requirements applicable to the area, Eskom's specifications, standards and regulations
- The Tenderer will be given access to the proposed site and the Tenderer must comply with Eskom's national, Provincial and local environmental policies and laws.
- The onus is on the Tenderer to obtain the latest revision of standards applicable.
- The Employer reserves the right to alter the scope of the works and programme.
- The Employer reserves the right to remove certain sections from the detailed scope of works as described in this contract

Emergency work

The supplier shall ensure:

- That all environmental risks associated with the activity be assessed and documented prior to the execution of the activity.
- Identified environmental risks must be avoided and where it cannot be avoided, be remediated to the satisfaction of Eskom, the landowner, or any relevant Government authority.

- That all environmental incidents and complaints are reported to the project manager within 24 hours.

Weather Data

No weather data are included in this specifications and the Tenderer is referred to the Weather Bureau, Department of transport, Private Bag X097, Pretoria 0001.

The contract places the responsibility on the Tenderer to foresee inclement weather. The Tenderer shall take into account large variations in the weather patterns. No extension of time will be granted for delays arising out of normal weather conditions
Where the abnormal, unfavourable weather conditions are experienced, an extension of the contract period may be considered by the Employer, as stated in the conditions of contract. No claim for additional Preliminary and General or escalation of the contract price for the extended period will be granted.

Title to site materials

The Tenderer ensures that during the period of procurement and installation, all materials and part of the plant are suitably stored on site in such a manner as to prevent damage by weather, fire, manhandling, corrosion, theft and any other peril. The cost of providing necessary protection, storing, handling and security is borne by the Tenderer for the duration of this contract. The Tenderer returns all un-used spares to the Employer store where applicable.

Meetings

Regular meetings to be held such as safety and planning meetings, early warning and compensation event meetings every week

Use of standard forms

Contracting parties must use NEC3 standard forms available in the Eskom Intranet for the administration of the contract

Records of Defined Cost

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

Accelerated Shared Growth Initiative – South Africa (ASGI-SA)
The *Tenderer* complies with and fulfils the *Tenderer's* obligations in respect of the Accelerated and Shared Growth Initiative - South Africa in accordance with and as provided for in the *Tenderer*'s ASGI-SA Compliance Schedule
.The *Tenderer* shall keep accurate records and provide the *Employer* with reports on the *Tenderer*'s actual delivery against the above stated ASGI-SA criteria

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

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

Facilities to be provided by the *Tenderer*
N/A

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Title to material from excavation and demolition
N/A

Designs by the *Tenderer*
N/A

Requirements for the programme

If required the program will be submitted on or as part of "works order" Tenderers will be requested to quote within 24 hours. The Tenderer must visit the site, verify the designs and Eskom BOM and if the project can be executed. Failure to do so will result in project being withdrawn from the Tenderer.

- The program for the work must be submitted to the Employers Representative for acceptance two weeks before the commencement of the project. Any variance to the contract should be communicated to the Employer Representative before commencing with the task.
- The required program submitted for acceptance should include the following data:

- The starting date

- Possession dates
- The completion date
- For each operation, a method statement which identifies the services and other resources which the

Tenderer plan to use

- The key dates for the Employer to provide "services and other resources
- The Tenderer must submit a project specific risk assessment with each quote.

Completion

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

Services and other things provided by the *Employer*

Item	Date by which it will be provided
1. Eskom supply materials are to be collected from the Eskom Stores. The rest of the material, labour, transport and equipments etc. will be supplied by the Tenderer.	As per Task Order
2. The Tenderer will be supplied with all the relevant information regarding each individual Task Order.	As per Task Order

Supplier Development & Localisation (SD&L) compliance

Skills Development

Not applicable.

Local Production and content

This Contract concerns a “designated sector” as per regulation 9 of the Preferential Procurement Regulations, 2011 as **Fabricated Structural Steel and Steel Lattice Towers** have been designated for local production with a **threshold of 100%.**

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Environmental Requirements

Guidelines of Compiling an Environmental Policy
Environmental policy
The environmental policy is the driver for implementing and improving the organization's environmental management system so that it can maintain and potentially improve its environmental performance. The policy should therefore reflect the commitment of top management to comply with applicable laws and to demonstrate continual improvement. The policy forms the basis upon which the organization sets its objectives and targets. The policy should be sufficiently clear to be capable of being understood by internal and external interested parties and should be periodically reviewed and revised to reflect changing conditions and information.
Top management shall define the organization's environmental policy and ensure that it:
Top management includes people on site, at head office, or any member of a controlling group designated to be management of the organization.
A site or an operating unit does not need to document its formal adoption of a corporate environmental policy if the corporate policy, as defined by its scope, applies to the site or operating unit. In addition, the corporate policy will need to be adequately specific to the site or operating unit.
If the site or corporate policy is modified to suit the site or operating unit, then these changes must be documented.
4.2a) is appropriate to the nature, scale and environmental impacts of its activities, products or services;
for example, an organization involved in activities with a high environmental risk (for example, scheduled processes) would be expected to provide more specific undertakings in its environmental policy than an organization involved in low risk activities. The environmental policy should also address the different types of environmental impacts of the organization's activities, products or services.
This does not imply that all environmental impacts be addressed in the policy but that the framework of the policy covers all significant impacts (see 4.2 d).
4.2b) includes a commitment to continual improvement and prevention of pollution;
The words "continual improvement" and "pollution prevention" do not need to be explicitly mentioned as long as similar words are used or there are clear statements in the policy that directly address pollution reduction (for example, waste minimization, source reduction and cleaner technologies) and continual improvement. Pollution prevention is more than just pollution control and requires preventive measures, instead of only control.
4.2c) includes a commitment to comply with relevant environmental legislation and regulations,
Compliance with all relevant legislated and other requirements (National, provincial and local) is a minimum requirement for certification.
Exceptions to this are where:
a) The authorities have been informed of the non-compliance in writing;
b) A corrective action programme is in place;
c) Evidence is available that the authorities have accepted the corrective action programme;
d) Evidence is available that the corrective action programme is being implemented.

Where a permit for a process of the organization has expired and the organization can provide evidence of due diligence, for example, records of telephone calls, faxes to the regulator or minutes of meetings with the regulator showing that they are in the process of applying for new permits.
The word comply does not need to be explicitly mentioned in the environmental policy, as long as there are similar words (for example, adhere to, in accordance with) clearly communicating commitment to compliance with legislation and regulations.
4.2c) and with other requirements to which the organization subscribes;
The "*other requirements*" may include:
a) Industry initiatives, non-regulatory guidelines or codes of practice such as Responsible Care or more general environmental initiatives such as the business Charter for Sustainable Development to the extent that the organization has formally adopted them;
b) Agreements with public authorities;
c) Formal management systems such as SABS ISO 9001/2, NOSA and ISRS; and
d) Corporate or Head office requirements.
If an organization subscribes to other requirements (as in 4.2(c) a) and b) above in their environmental policy then:

1) The certification body will verify compliance with these requirements;
2) Compliance with those requirements will not be included in the scope of the certificate; and
3) Non-compliance with these requirements could provide grounds for not granting certification.

If an organization subscribes to other requirements (as in 4.2(c)) c) above then the certification body will only verify compliance with the SABS ISO 14001 requirements and not to those other formal management systems. (An exception to this is where the organization requests a combined SABS ISO 14001 and SABS ISO 9000 certification assessment/audit).

4.2d) provides the framework for setting and reviewing environmental objectives and targets;

The policy should be sufficiently detailed to provide a yardstick against which the organization's environmental performance can be evaluated.

The policy wording must be specific enough so that specific objectives and targets can be formulated from it by the organization in order to implement the policy.

4.2e) is documented, implemented and maintained …

The policy can be documented in any form (i.e. paper or electronic).

All the requirements of SABS ISO 14001 shall be addressed and an organization cannot elect to omit any of these requirements from its environmental management system.

Policies tend to set long-term goals.

The policy should be periodically reviewed and revised in response to new information and changing circumstances.

The policy must be reviewed periodically – at least annually.

It is not expected that the policy be reissued annually. A well-developed policy can effectively drive the organization's environmental management system for several years.

4.2f) … and communicated to all employees;

Communication involves both the transmission and the understanding of the policy.

Communication mechanisms can include posting the policy in common areas, distributing it by memo, and reviewing it at staff or "toolbox talks" meetings.

A person's level of knowledge of the policy should be proportional to his/her level of responsibility in the environmental management system i.e. senior staff responsible for ensuring implementation need a greater knowledge of the policy than personnel at shop-floor level. In the South African context, unskilled, illiterate workers cannot be expected to have in-depth knowledge of the contents of the environmental policy, however all employees are expected to have an idea of the concepts of the environment, why it is important to protect the environment, and of their role in achieving this (see also 4.4.2).

4.2g) Is available to the public

The policy must be available to any interested party on request.

The words "is available" do not necessarily mean that the organization has to pro-actively distribute the policy to the public. The organization should however make the public aware of the fact that the policy is available.

A mechanism should be in place to have the policy available to the public.

4.2.1 Key component of the policy

The policy provides an environmental purpose and set of values for the organization to follow.

The policy should:

a) Be relevant and straightforward;
b) Relay that protection of the environment is a top priority of the organization;
c) Show commitment to continued improvement of environmental performance and compliance with the laws and regulations;
d) Clearly specify which organizational activities are covered by the statement;
e) Be a natural jumping-off point for setting environmental objectives and targets;
f) Provide a framework for assessing progress made with the targets and objectives that are oriented towards minimizing environmental impacts.

4.2.2 Communication, promotion and support of policy

The policy statement will be totally ineffective if the commitment it contains is not communicated, made available, promoted and supported by all. It is important to note that the policy:

a) Should be available to all employees in the organization;
b) Should be communicated repeatedly after a period of time as a reminder;
c) Should be made available to the public;
d) Should be promptly provided whenever a copy is required;
e) Should be signed by top management to show commitment and support.

Repeated exposure is the key to communicating the policy effectively thus it can be posted, communicated through news letters or sent to desktop personal computers.

C4: Site Information

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

1. Access limitations

As per Task Order

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

As per Task Order

3. Hidden and other services within the *site*

As per Task Order

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

The site is within the servitude of the line or substation as described in the task order.