

FOUNDATIONS ENABLING CONTRACT

Item	Bill description	Unit	Bill Quantity				Rate	Amount
B	FOUNDATIONS							-
B.1	BILL No. 1 - PRELIMINARIES & GENERAL							-
				Rates				
Item	Description	Unit	Qty	Fixed	Time Related		Total Rate	Total Amount
			(1)	(2)	(3)	(4)	(5)	(1)*(5)
							(1)x(2) OR (2)+(3)+(4)	
1	Bill No. 1 - Preliminary and General							R 0.00
<p>The <i>Contractor</i> is referred to the full intent and meaning of each clause or item herein. He shall allow opposite each clause or item, whatever payments he may consider necessary, to carry out and observance of same.</p> <p>The <i>Contractor</i> shall price Bill No. 1 - Preliminary and General in respect of all payment required for any work, risk, contingency or obligation whatsoever, that is not described in the <i>Bill of Quantities</i> and which is his responsibility under the Contract.</p> <p>The preliminary and general unit prices ought to cover a 36 months period, which is the duration of this contract</p>								
1.1	WORKS INFORMATION							
1.1.1	Programme ; Contractors Insurance ; Drawings & Specifications ; Quality management (incl. Contractor's Quality Plans)	sum	1				-	-
1.2	SITE COSTS AND OVERHEADS							
1.2.1	Establish staff accommodation and site camp, including sanitation as per OHS ACT's requirements and remove on completion.	sum	1				-	-
1.3	ADDITIONAL & MISCELLANEOUS COSTS							
1.3.1	Contractor to specify here any costs foreseen not made provision for.	PSUM	1				-	-
				Rates				
Item	Description	Unit	Qty	Fixed	Time Related	Value Related	Value Related	Total Price
			(1)	(2)	(3)	(4)	(4)	(1)x(2) OR (1)x(3) OR (2)+(3)+(4)
2.0	SAFETY MANAGEMENT							-
2.1	Supply of all items of Personal Protective Clothing/Equipment & ensure use thereof for full compliance							
2.1.1	Appropriate protective clothing as per Eskom SHE specification: Steel toe capped safety boots; Task specific gloves; Hard hats with three-point chin straps; Ear protection (earplugs etc); Eye protection appropriate to task performed; Induction tags/cards; Luminous high visibility safety vests, utility jackets and trousers	P. sum	1				-	-
2.2	Supply and provision of Equipment for working at Heights & ensure use thereof for full compliance to OHS ACT and Eskom's SHE spec							

Item	Bill description	Unit	Bill Quantity				Rate	Amount
2.2.1	Fall protection equipment incl but not limited to Safety Harness(double lanyard), ropes, pulleys etc. ; Evaluation of medical fitness of personnel working at heights. ; Access ladders. ; Portable Ladders as per Eskom requirements	P. sum	1				-	-
2.3	Barricading							
	Supply & install, including removal upon completion to ensure full compliance to legislation:							
2.3.1	Temporary fence barricading along perimeter of excavated areas ; Marking of excavations and peggings, rebar caps to protect from protruding rebars, all as per Eskom requirements	P. sum	1				-	-
2.4	SHE File							
	Recording & availability of SHE File/Site							
2.4.1	Compile SHE plan and file as per SHE specifications	P. sum	1				-	-
2.5	Transport							
2.5.1	Transportation of employees in compliance with the vehicle and driver safety management procedure, eskom vehicle safety specification as well as life saving rule directive (Preferred usage of local taxi association).	month	180				-	-
2.6	Compliance							
2.6.1	Full Compliance with latest revision of OHS Act 83 of 1995 and Regulations	sum	1				-	-
2.70	SHEQ Appointment							
2.7.1	Appointment of an SACPCMP registered SHEQ OFFICER FULL TIME ON SITE; Costs associated with the appointment of Safety personnel and actual time spent on implementation, managing, documenting, monitoring, reviewing, internal and external audits, incident investigations and mitigating safety related impacts.	MONTH	180				-	-
2.7.2	Appointment of a SACPCMP registered Construction Manager FULL TIME ON SITE.	month	180				-	-
3	BILL No. 2.1 - INSTALLATION OF FOUNDATIONS							-
3	CONVENTIONAL FOUNDATIONS							-
3.1	SELF SUPPORTING STRAIN TOWER- TYPE 248B Concrete Leg Foundations (1 per tower)							-
3.1.1	Type 1 Soil	no.	12					-
3.1.2	Type 2 Soil	no.	12					-
3.1.3	Type 3 Soil	no.	12					-

Item	Bill description	Unit	Bill Quantity				Rate	Amount
3.1.4	Type 4 Soil	no.	12					-
3.1.5	Hard Rock	no.	8					-
3.1.6	Soft Rock	no.	8					-
3.2	SELF-SUPPORTING ANGLE STRAIN TOWERS - TYPE 518C Concrete Leg Foundations (4 per tower)							-
3.2.1	Type 1 Soil	no.	52					-
3.2.2	Type 2 Soil	no.	36					-
3.2.3	Type 3 Soil	no.	85					-
3.2.4	Type 4 Soil	no.	81					-
3.2.5	Hard Rock	no.	41					-
3.2.6	Soft Rock	no.	41					-
3.3	SELF-SUPPORTING ANGLE STRAIN TOWERS - TYPE 518D Concrete Leg Foundations (4 per tower)							-
3.3.1	Type 1 Soil	no.	8					-
3.3.2	Type 2 Soil	no.	8					-
3.3.3	Type 3 Soil	no.	24					-
3.3.4	Type 4 Soil	no.	24					-
3.3.5	Hard Rock	no.	16					-
3.3.6	Soft Rock	no.	16					-
3.4	SELF-SUPPORTING SUSPENSION TOWER - TYPE 518F Concrete Leg Foundations (4 per tower)							-
3.4.1	Type 1 Soil	no.	0					-
3.4.2	Type 2 Soil	no.	2					-
3.4.3	Type 3 Soil	no.	4					-
3.4.4	Type 4 Soil	no.	4					-
3.4.5	Hard Rock	no.	4					-
3.4.6	Soft Rock	no.	4					-
3.5	SELF-SUPPORTING SUSPENSION TOWER - TYPE 518H Concrete Leg Foundations (4 per tower)							-

Item	Bill description	Unit	Bill Quantity				Rate	Amount
3.5.1	Type 1 Soil	no.	156					-
3.5.2	Type 2 Soil	no.	156					-
3.5.3	Type 3 Soil	no.	223					-
3.5.4	Type 4 Soil	no.	223					-
3.5.5	Hard Rock	no.	99					-
3.5.6	Soft Rock	no.	99					-
3.6	GUYED - CROSS ROPE SUSPENSION TOWERS - TYPE 529A Concrete Guy-Anchor Foundations (4 per tower) Type 520 B/ 528 C							-
3.6.1	Type 1 Soil	no.	72					-
3.6.2	Type 2 Soil	no.	72					-
3.6.3	Type 3 Soil	no.	126					-
3.6.4	Type 4 Soil	no.	198					-
3.6.5	Hard Rock	no.	72					-
3.6.6	Soft Rock	no.	72					-
	Pad and Plinth (small pier) mast foundations (2 per tower)							
3.6.7	Type 1 Soil	no.	48					-
3.6.8	Type 2 Soil	no.	30					-
3.6.9	Type 3 Soil	no.	75					-
3.6.10	Type 4 Soil	no.	96					-
3.6.11	Hard Rock	no.	44					-
3.6.12	Soft Rock	no.	44					-
4	MICROPILE FOUNDATIONS							-
4.1	SELF-SUPPORTING ANGLE STRAIN TOWERS - TYPE 518C Concrete Leg Foundations (4 per tower)							-
4.1.1	Type 1 Soil	no.	3					-
4.1.2	Type 2 Soil	no.	3					-
4.1.3	Type 3 Soil	no.	6					-

Item	Bill description	Unit	Bill Quantity				Rate	Amount
4.1.4	Type 4 Soil	no.	9					-
4.1.5	Hard Rock	no.	9					-
4.1.6	Soft Rock	no.	6					-
4.2	SELF-SUPPORTING ANGLE STRAIN TOWERS - TYPE 518D Concrete Leg Foundations (4 per tower)							-
4.2.1	Type 1 Soil	no.	8					-
4.2.2	Type 2 Soil	no.	8					-
4.2.3	Type 3 Soil	no.	12					-
4.2.4	Type 4 Soil	no.	20					-
4.2.5	Hard Rock	no.	20					-
4.2.6	Soft Rock	no.	12					-
4.3	SELF-SUPPORTING SUSPENSION TOWER - TYPE 518H Concrete Leg Foundations (4 per tower)							-
4.3.1	Type 1 Soil	no.	2					-
4.3.2	Type 2 Soil	no.	2					-
4.3.3	Type 3 Soil	no.	4					-
4.3.4	Type 4 Soil	no.	8					-
4.3.5	Hard Rock	no.	8					-
4.3.6	Soft Rock	no.	4					-
4.4	SELF SUPPORTING STEEL MONOPOLE STRAIN TOWER - TYPE 531E							-
4.4.1	Type 1 Soil	no.	0					Rate only
4.4.2	Type 2 Soil	no.	0					Rate only
4.4.3	Type 3 Soil	no.	0					Rate only
4.4.4	Type 4 Soil	no.	0					Rate only
4.4.5	Hard Rock	no.	1					-
4.4.6	Soft Rock	no.	0					Rate only
5	ALTERNATIVE CONSTRUCTION METHODS (used where vehicular access is impossible or prohibited on the Supervisor's agreement/instruction)							-

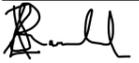
Item	Bill description	Unit	Bill Quantity				Rate	Amount
5	ALTERNATIVE CONSTRUCTION METHODS (used where vehicular access is impossible or prohibited on the Supervisor's agreement/instruction)							-
5.1	Extra over rates above for hand excavation in all soil types	m3	40					-
5.2	Extra over rates above for hand excavation in all rock types, including mechanical means and/or blasting if necessary	m3	40					-
5.3	Other means of transporting foundation steel to work site for installation including all machinery that may be required (Contractor to specify).	ton	10					-
5.4	Other means of transporting foundation concrete to work site for installation, including pumping of concrete to tower positions and (Contractor to specify for acceptance).	m3	15					-
B.11	REMOVAL OF FOUNDATIONS ON EXISTING TOWERS							-
6	REMOVAL OF FOUNDATIONS ON EXISTING TOWERS							-
6.1	Dismantling of tower foundations type 516A as per works information	no.	2					-
6.2	Dismantling of tower foundations type 524A as per works information	no.	2					-
6.3	Dismantling of tower foundations type 248A as per works information	no.	2					-
7	MISCELLANEOUS WORKS							-
7	MISCELLANEOUS WORKS							-
7.1	Imported backfill compacted to 90% as per Works Information	m3	350					-
7.2	10MPa concrete	m3	100					-
7.3	Encasing of anchor links in concrete (using rigid plastic pipe)	tower	64					-
7.4	Relocation of complete foundation teams and equipment necessary for out of sequence work due to instruction by the Employer.	per mo	10					-
7.5	Proof-load testing of guy anchors (before installation of caps) including all necessary equipment and machinery	no. of	10					-

Item	Bill description	Unit	Bill Quantity				Rate	Amount
7.6	Soil resistivity measurements	tower	10					-
7.7	As an alternative for anchors and anchor foundations, grout injected drilled anchors including caps and all relevant material requirements for any soil/rock/water logged condition (i.e Dowelling)	no. of	40					-
7.8	De-establishment and re-establishment of complete foundation teams and equipment due to instruction by the Employer.	per mo	4					-
8	FOUNDATION LOAD TESTS (On the Project Manager's instruction)							-
	8 FOUNDATION LOAD TESTS (On the Project Manager's instruction)							-
8.1.1	Proof load test	NO	30					-
9	ENVIRONMENTAL AND REHABILITATION REQUIREMENTS							-
	9.1 ENVIRONMENTAL AND REHABILITATION REQUIREMENTS							-
9.1.1	Rehabilitation of damage caused during construction to tower sites, access and servitude roads, camp sites, batching plant site, etc. in accordance with the requirements of the ROD, EMP, TRMSCAAC 5.2 and ESKASABG3	km	39					-
	9.2 ENVIRONMENTAL AND REHABILITATION REQUIREMENTS							-
9.2.1	Install new berms in accordance with TRMSCAAC latest revision(in-situ material).	no.	11					-
9.2.2	Install new berms in accordance with TRMSCAAC latest revision (imported material).	no.	11					-

Compiled by:

Name: Segametsi Ramoshaba

Title: Snr Quantity Surveyor

Signature 

Date: