

# NEC3 Professional Services Contract (PSC3)

# Contract between Eskom Holdings SOC Ltd (Reg No. 2002/015527/30)

and

### for Lethabo Power Station 5-yearly Dam Safety Evaluation Scope of Work

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CONTRACT No.

# PART C1: AGREEMENTS & CONTRACT DATA

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# 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:

### Dam Safety Inspections of all Lethabo Power Station's dams and associated works

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 *Consultant* 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	
Value Added Tax @ 15% is	
The offered total of the Prices inclusive of VAT is	

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 *Consultant* 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

### 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 Consultant 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: The Scope

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 and signed original copy of this document, including the Schedule of Deviations (if any).

Signature(s)			
Name(s)			
Capacity			
for the Employer			
	(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.

# C1.2 PSC3 Contract Data

## Part one - Data provided by the Employer

Claus e	Statement	Data	
1	General		
	The conditions of contract are the core clauses and the clauses for main Option		
		A:	Priced contract with activity schedule
	dispute resolution Option	W1:	Dispute resolution procedure
	and secondary Options		
		X7:	Delay damages
		X10	Employer's Agent
		X11:	Termination by the <i>Employer</i>
		X18:	Limitation of liability
		Z:	Additional conditions of contract
	of the NEC3 Professional Services Contract (April 2013) <sup>1</sup>		
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		tered office at Megawatt Park, Maxwell Sandton, Johannesburg
11.2(9)	The services are	Dam S	Safety Inspections and associated works
11.2(10)	The following matters will be included in the Risk Register	Vehicl	ks associated with the project e Risks nity work to live equipment
11.2(11)	The Scope is in	Part 3	: Scope of Work
40.0	The law of the contract is the law of	the Re	public of South Africa
12.2			
13.1	The language of this contract is	Englis	h

<sup>&</sup>lt;sup>1</sup> Available from Engineering Contract Strategies Tel 011 803 3008 Fax 011 803 3009 and www.ecs.co.za

## 2 The Parties' main responsibilities

25.2	The <i>Employer</i> provides access to the	aco	cess to	access date
	following persons, places and things		1	1
		1	As per Order	As per Order
3	Time			
31.2	The starting date is.	As	per accepted programm	ne
11.2(3)	The <i>completion date</i> for the whole of the <i>services</i> is.	As	per accepted programn	ne
11.2(6)	The <i>key date</i> s and the <i>condition</i> s to be met are:	Со	ndition to be met	key date
		1	As per accepted programme	As per accepted programme
4	Quality			
40.2	The quality policy statement and quality plan are provided within	Tw	o (2) weeks of the Cont	ract Date.
41	Correcting Defects	The defect date is 52 weeks after Completion of the whole of the services of the Task Order		
41.1		Co as Err find the hav Co as Err the	til the defects date, the nsultant of each Defect he finds it and the Cons ployer of each Defect a ds it. At Completion the Employer of the Defect ve not been corrected. A til the defects date, the nsultant notifies the Em soon as he finds it. The ployer's rights in respe Employer has not foun tified by the defects date	as soon sultant notifies the s soon as he Consultant notifies ts which After Completion and ployer of each Defect oct of a Defect which ad or
41.2		the Co min Em con rec ass De	e Consultant corrects a Employer notifies him nsultant corrects Defect nimises the adverse effect ployer or Others. If the prect a Defect within the puired by this contract, the sesses the cost to him of fect corrected by other nsultant pays this amou	of it. The ts within a time which ect on the Consultant does not time the Employer of having the people and the

5	Payment	
50.1	The assessment interval is	between the Twenty fifth (25 <sup>th</sup> ) day of each successive month.
		Per deliverable
51.1	The period within which payments are made is	Within 14 days depending on the BBBEE level of the consultant.
51.2	The currency of this contract is the	South African Rand
51.5	The <i>interest rate</i> is	the publicly quoted prime rate of interest charged by Standard Bank of South Africa Limited at the time an amount payable in SA Rand was due,
		and
		the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove
6	Compensation events	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.
7	Rights to material	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	Indemnity, insurance and liability	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.
81.1	The amounts of insurance and the periods for which the <i>Consultant</i>	

### maintains insurance are

Event		eriod following Completion of the whole of the ervices or earlier termination
Liability for failure by the <i>Consultant</i> to use the skill and care normally used by professionals providing services similar to the <i>service</i> s	Whatever the Consultant deems necessary in respect of ea claim, withou limit to the number of claims	ich
death of or bodily injury to a person (not an employee of the <i>Consultant</i> ) or loss of or damage to property arising from or in connection with the <i>Consultant</i> 's Providing the Services.	Whatever the Consultant deems necessary fo any occurrent or series of occurrences arising out of one event without limit the number of claims.	r nce f to
death of or bodily injury to employees of the Consultant arising out of and in the course of their employment in connection with this contract	As prescribe by the Compensation for Occupationa Injuries and Diseases Act No. 130 of 19 and the <i>Consultant's</i> common law liability for people falling outside the scope of the Act with a lin of indemnity not less than R500 000-00 (five hundred thousand) in respect of ea claim, withou	on I t 1933 g nit of d d
The <i>Employer</i> provides the following insurances		exure A for details of insurance the <i>Employer</i> .
The <i>Consultant</i> 's total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than the excluded matters, is limited to	The total of t	he Prices

81.1

82.1

### 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			
Α	Priced contract with activity schedule			
21.3	The <i>Consultant</i> prepares forecasts of the total <i>expenses</i> at intervals of no longer than			
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 <u>www.ice-sa.org.za</u> ). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).		South African g Panel of ending to refer a <u>-sa.org.za</u> ). If the ljudicator the by the Arbitration
W1.2(3)	The adjudicator nominating body is:	the Chairman of the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering. (See <u>www.ice-sa.org.za</u> ).		
W1.4(2)	The <i>tribunal</i> is:	arbitration		
W1.4(5)	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		
	<ul> <li>The person or organisation who will choose an arbitrator</li> <li>if the Parties cannot agree a choice or</li> <li>if the <i>arbitration procedure</i> does not state who selects an arbitrator, is</li> </ul>	the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.		
12	Data for secondary Option clauses			
X2	Changes in the law			
X2.1	The law of the project is		v within the Republic opplies to the Consulta	
X5	Sectional Completion			
X5.1	The <i>completion date</i> for each <i>section</i> of the <i>services</i> is:	section	description	completion date

		1	As per approved programme	As per approved programme
X7	Delay damages		1	<b>i</b>
X7.1	Delay damages for late Completion of the whole of the services are		lay to a maximum of 1 of the task order value	
X10	The Employer's Agent			
X10.1	The Employer's Agent is			
	Name:			
	Address		Power Station ring Building	
		e-mail:		
	The authority of the <i>Employer's Agent</i> is	this Con	out all the actions of t tract with the exceptic by clause 51.1 and 81	on of those
X11	Termination by the <i>Employer</i>	There is no reference to Contract Data in this Option and terms in italics used in this Option are identified elsewhere in this Contract Data.		ed in this Option
X18	Limitation of liability			
X18.1	The Consultant's liability to the Employer for indirect or consequential loss is limited to:	R0.00 (Z	ero Rand)	
X18.2	The Consultant's liability to the Employer for Defects that are not found until after the defects date is limited to:	The tota	l of the Prices	
X18.3	The end of liability date is		rs after Completion of task order.	the whole of the
Z	The Additional conditions of contract are	Z1 to Z1	1 always apply.	

#### Z1 Cession delegation and assignment

- Z1.1 The *Consultant* 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 *Consultant* 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 Joint ventures

Z2.1 If the *Consultant* 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 *Employer* within two weeks of the Contract Date of the key person who has the authority to bind the *Consultant* on their behalf.
- Z2.3 The *Consultant* 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 *Consultant* in writing.

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

- Z3.1 Where a change in the *Consultant's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Consultant's* B-BBEE status, the *Consultant* notifies the *Employer* within seven days of the change.
- Z3.2 The *Consultant* 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*.
- Z3.3 Where, as a result, the *Consultant's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Consultant's* obligation to Provide the Services.
- Z3.4 Failure by the *Consultant* 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 core clause 91. The payment on termination includes a deduction of the forecast of the additional cost to the *Employer* of completing the whole of the *services* in addition to the amounts due in terms of core clause 92.1.

### Z4 Confidentiality

- Z4.1 The Consultant 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 Consultant, enters the public domain or to information which was already in the possession of the Consultant at the time of disclosure (evidenced by written records in existence at that time). Should the Consultant disclose information to Others in terms of clause 23.1, the Consultant ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the *Consultant* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Employer*.
- Z4.3 In the event that the *Consultant* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Consultant*, 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 *Consultant* 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 *Employer*'s project works or any portion thereof, in the course of Providing the Services and after Completion, requires the prior written consent of the *Employer*. All rights in and to all such images vests exclusively in the *Employer*.

#### 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, 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 Provision of a Tax Invoice. Add to core clause 51

Z6.1 The *Consultant* (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.

### Z7 Notifying compensation events

Z7.1 Delete from the last sentence in core clause 61.3, "unless the *Employer* should have notified the event to the *Consultant* but did not".

#### Z8 *Employer's* limitation of liability

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

# Z9 Termination: Add to core clause 90.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":

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

# Z10 Delay damages: Addition to secondary Option X7 Delay damages (if applicable in this contract)

- Z10.1 If the *Consultant'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 *Consultant's* obligation to Provide the Services.
- Z10.2 If the *Employer* terminates in terms of this clause, the procedures on termination are those stated in core clause 91. The payment on termination includes a deduction of the forecast of the additional cost to the *Employer* of completing the whole of the *services* in addition to the amounts due in terms of core clause 92.1.

#### 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 *Consultant* or a third party, such party's employees, agents, or Subconsultants or Subconsultant's employees, or any one or more of all of these parties' relatives or friends,
- Coercivemeans to harm or threaten to harm, directly or indirectly, an Affected Party or the<br/>property of an Affected Party, or to otherwise influence or attempt to influence an<br/>Affected Party to act unlawfully or illegally,
- Collusivemeans where two or more parties co-operate to achieve an unlawful or illegalActionpurpose, including to influence an Affected Party to act unlawfully or illegally,

- **Committing** means, as the context requires, the *Consultant*, or any member thereof in the case of a joint venture, or its employees, agents, or Subconsultants or the Subconsultant'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** 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,
- Obstructivemeans a Committing Party unlawfully or illegally destroying, falsifying, altering or<br/>concealing information or making false statements to materially impede an<br/>investigation into allegations of Prohibited Action, and

Prohibitedmeans any one or more of a Coercive Action, Collusive Action Corrupt Action,ActionFraudulent Action or Obstructive Action.

- Z11.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.
- Z11.2 The Employer may terminate the Consultant's obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the Consultant 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 Consultant's obligation to Provide the Services for this reason.
- Z11.3 If the *Employer* terminates the *Consultant*'s obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.
- Z11.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Consultant* ensures that the Committing Party co-operates fully with an investigation.

### Z12 Insurance

- Z12.1 Replace core clause 81 with the following:
- 81.1 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.
- 81.2 The *Consultant* provides the insurances stated in-on page 8 & 9 under Clause 81.1 from the *starting date* until the earlier of Completion and the date of the termination certificate.
- 81.3 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 limit of indemnity
Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document

Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

### Z13 Nuclear Liability (Not applicable to this contract)

- Z13.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.
- Z13.2 The *Employer* is solely responsible for and indemnifies the *Consultant* or any other person against any and all liabilities which the *Consultant* 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 *Consultant* or any other person or the presence of the *Consultant* or that person or any property of the *Consultant* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z13.3 Subject to clause Z13.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Consultant* or any other person, or the presence of the *Consultant* or that person or any property of the *Consultant* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z13.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.
- Z13.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

#### Z14 Asbestos

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

- AAIA means approved asbestos inspection authority.
- ACM means asbestos containing materials.
- AL means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.
- Ambient Air means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.
- **Compliance** means compliance sampling used to assess whether or not the personal exposure

- **Monitoring** 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.
- Parallelmeans measurements performed in parallel, yet separately, to existingMeasurementsmeasurements 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 *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.
- SANAS means the South African National Accreditation System.
- **TWA** means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.
  - Z14.1 The *Employer* ensures that the Ambient Air in the area where the *Consultant* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.
  - Z14.2 Upon written request by the *Consultant*, 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 *Consultant* may perform Parallel Measurements and related control measures at the *Consultant*'s expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z14.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
  - Z14.3 The *Employer* manages asbestos and ACM according to the Standard.
  - Z14.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
  - Z14.5 The *Consultant*'s personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.
  - Z14.6 The Consultant continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
  - Z14.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer*'s expense, and conducted in line with South African legislation.

# C1.2 Contract Data

## Part two - Data provided by the Consultant

Clause	Statement	Data	
10.1	The Consultant is (Name):		
	Address		
	Tel No.		
	Fax No.		
22.1	The <i>key people</i> are:		
	1 Name:		
	Job:		
	Responsibilities:		
	Qualifications:		
	Experience:		
	2 Name:		
	Job		
	Responsibilities:		
	Qualifications:		
	Experience:		
11.2(3)	The completion date for the whole of the services is	As per accepted programme	
11.2(10)	The following matters will be included in the Risk Register	As per accepted programme	
11.2(13)	The staff rates are:	name/designation	rate
		N/A	
25.2	25.2 The <i>Employer</i> provides access to the following persons, places and things		access date
		1 As per accepted programme	As per accepted programme
31.1	The programme identified in the Contract Data is	As per the Scope of work	
50.3	The <i>expenses</i> stated by the <i>Consultant</i> are		
A	Priced contract with activity schedule		:

11.2(14)	The activity schedule is in	Page 17 under Pricing Data
11.2(18)	The tendered total of the Prices is	

# PART 2: PRICING DATA PSC3 Option A

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	[2]
C2.2	Staff rates, expenses and the task schedule.	[1]

# C2.1 Pricing assumptions: Option A

### How work is priced and assessed for payment

Option A is a lump sum form of contract where the work to be done is broken down into well defined activities each listed in the *activity schedule* and priced by the tendering consultant as a lump sum. (See clause 11.2(18)).

Only completed activities which are without Defects are assessed for payment at each assessment date; no part payment is made if the activity is not completed by the assessment date. (See clause 11.2(15)).

The *activity schedule* may change after the Contract Date as a result of compensation events. (See clause 11.2(14)).

### Function of the Activity Schedule

The Activity Schedule is only a pricing document. Clause 53.1 in Option A states: "Information in the Activity Schedule is not Scope". Specifications and descriptions of the service or any constraints on how it is to be done are included in the Scope and per Clause 21.1, "The *Consultant* Provides the Services in accordance with the Scope" and therefore not in accordance with the Activity Schedule.

### Link to the programme

Clause 31.4 states that "The *Consultant* 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 consultant will develop a high level programme first then resource each activity on the programme 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 consultant who prepares the *activity schedule* by breaking down the work described within the Scope into suitable activities which can be well defined, shown on a programme and priced as a lump sum.

The description of each activity must be sufficient to determine exactly what work is included within it and to know when it has been completed.

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

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

- Has taken account of the guidance given in the PSC3 Guidance Notes;
- 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 each programme which he submits for acceptance by the *Employer*,
- Has listed and priced activities in the *activity schedule* which are inclusive of everything necessary and incidental to Providing the Service in accordance with the Scope, as it was at the Contract Date, as well as correct Defects except correcting a Defect for which the *Consultant* is not liable;
- 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 *service* 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 *Consultant* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event.

However, the Consultant does not have to allow in his Prices for matters that may arise as a result of a

compensation event.

### Expenses

*Expenses* are not included in the *activity schedule* items and are assessed separately at each assessment date, unless an additional condition of contract (Z clause) is included which requires that expenses be included within activity Prices and not paid separately.

*Expenses* associated with employing a staff member in Providing the Services are listed separately either by the *Employer* in Contract Data provided by the *Employer* or by the *Consultant* in Contract Data provided by the *Consultant*. As only the *expenses* listed may be claimed by the *Consultant*, all other cost to the *Consultant* associated with Providing the Services must be included within the activity schedule prices or *staff rates*.

Rate adjustment for inflation of *expenses* is explained in the PSC3 Guidance Notes.

### Staff rates

When a compensation event occurs changes to the affected Activity Schedule item or new priced items in the Activity Schedule are assessed as the actual Time Charge for work already done and the forecast Time Charge for work not yet done. (See clause 63.1 and 63.14 in Option A)

The Time Charge is the sum of the products of each of the *staff rates* multiplied by the total staff time appropriate to that rate properly spent on work in this contract. (Clause 11.2(13))

Tendering consultants are advised to consult the NEC3 Professional Services Contract Guidance Notes and Flow Charts before entering *staff rates* into Contract Data, or in C2.2 below.

This is because *staff rates* can be established in one of three ways:

- rates for named staff,
- rates for categories of staff or
- rates related to salaries paid to staff.

Rate adjustment for inflation, if necessary, can be based either on actual salary adjustments or by using Option X1: Price adjustment for inflation. See pages 13 and 14 in the PSC3 Guidance Notes.

# C2.2 the activity schedule

## 1. The task schedule

	Activity Description (Refer to section in Part 3 Scope of Work)	Resource	Rate	Quantity (Hours)	Total
1	Section 4.1: Dam Safety Evaluation				
2	Section 4.2: Operation and Maintenance Manual & Emergency Preparedness Plan				
3	Health and Safety Requirements (including medicals and safety file)				
4	Travel				
5	QCP's, ITP's and Method Statements prior to commencement of the project				
6	Project Management and Overheads				
	Total				

Notes:

- 1. Where more than one resource is required for an activity, this must be indicated in the activity schedule.
- 2. The Contractor is required to provide a detailed cost schedule for each item listed in the scope of work. As a minimum the Contractor is to provide the following information"
  - a. Resource/s allocated for the specific activity
  - b. Rate/s for the allocated resources
  - c. Quantity (hours, number etc.) required to complete the activity
  - d. Total cost of each activity
- 3. The above activity schedule is to be used as a guideline, however the Contractor can submit the activity schedule in their own chosen format as long as the minimum required information is included.
- 4. A further breakdown of the activities can be requested by the Employer during the negotiations prior to contract award

# PART 3: SCOPE OF WORK

Document reference	Title	No of pages
	This cover page	1
C3.1	Employer's Scope	9
	Total number of pages	10

## C3.1: Employer's scope

### 1. INTRODUCTION

Lethabo power station is a coal-fired power station situated in the northern Free State province. The station has an output capacity of 3708 MW, which is produced by six 618 MW units. The first production units went into commercial operation in December 1985 and the last unit was commissioned in December 1990. The station has several dams which perform various functions such as the collection and storage of clean and dirty storm water, the collection and storage of dirty process water and the storage of raw water for production purposes.

As per the National Water Act (NWA) and the Dam Safety Regulations Government Notice R139, a dam safety evaluation of a Category II or III dam must be carried out by an approved professional person (APP) to identify any actual or potential shortcomings in the condition of the dam or in the quality and adequacy of the procedures followed for the maintenance, operation and monitoring of behaviour that might endanger human lives, cause damage to property, or have an adverse impact on resource quality.

A dam safety evaluation must be conducted by an approved professional person on the following dams at Lethabo Power Station:

- North and South raw water reservoirs (Capacity 885,000 m<sup>3</sup>)
- Main storm water dam (Approximate capacity 131,000 m<sup>3</sup>)
- Clean station drains dam (Approximate capacity 100,750 m<sup>3</sup>)
- Dirty station drains dam (Approximate capacity 83,125 m<sup>3</sup>)
- Emergency dam (Approximate capacity 43,750 m<sup>3</sup>)
- Oil Ponds (Approximate capacity 29,000 m<sup>3</sup>)
- Clean ash dam (Approximate capacity 42 225 m<sup>3</sup>)
- Dirty ash dam (Approximate capacity 40 400 m<sup>3</sup>)
- Winston Philip Dam (Approximate capacity 15 000 m<sup>3</sup>)
- North east corner dam (Approximate capacity 9 000 m<sup>3</sup>)

During the dam safety evaluation, it must be considered whether the safety norms pertaining to design, construction, monitoring, operation, performance and maintenance of the dam satisfy acceptable dam engineering practices.

## 2. SUPPORTING CLAUSES

### 2.1. SCOPE

This document covers the scope of works and requirements relating to the dam safety evaluation for Lethabo Power Station. The *works* are to be performed by the *Contractor*. The scope includes the following:

- Submission of the required application documents and letter to the Dam Safety Office (DSO) for the appointment of one of the Contractor's employees as the Approved Professional Person (APP) for the works.
- Dam safety evaluation of one (1) category I dam i.e. Main storm water dam
- Dam safety evaluation of two (2) category II dams i.e. North and South raw water reservoirs
- Dam safety evaluation of eight (8) dams that are not classified as dams with a safety risk
- Compilation of a dam safety evaluation report as per the requirements of the National Water Act and the Dam Safety Regulations Government Notice GN139.

- Submission of reports to the Dam Safety Office (DSO) and the Department of Water and Sanitation (DWS)
- All required engagements with the DSO and DWS, including but not limited to the attendance of meetings (in person or virtual), responding to queries (via email, telephonic, written etc.) and any other form of interaction as required during the execution of the works.
- Reviewing the existing operation and maintenance (O&M) manuals (refer to Section 4.2) for each dam and updating the O&M manuals as per the requirements of the NWA and Dam Safety Regulations Government Notice GN 139.
- Reviewing of the existing emergency preparedness plan (EPP) for each dam (Refer to Section 4.2) and updating the EPP's as per the requirements of the NWA and Dam Safety Regulations Government Notice GN 139.

### 2.1.1. Purpose

The purpose of this document is to provide a scope of work for the appointment of an approved professional person (APP) to conduct the dam safety evaluation and other tasks as listed in this document.

### 2.1.2. Applicability

This document is applicable to Lethabo Power Station and all other stakeholders involved on the project.

### 2.2. NORMATIVE / INFORMATIVE REFERENCES

Parties using this document shall apply the most recent edition of the documents listed in the following sections.

### 2.2.1. Normative

- [1] National Water Act, Act 36 of 1998
- [2] National Environmental Management Act, Act no 107 of 1998
- [3] National Environmental Management Waste Act, Act 59 of 2008
- [4] Regulations GN 704 and GN R 139
- [5] NEMWA National Norms and Standards (GN R 634, 635, 636) (2013), DEA
- [6] 32-727 Eskom Safety, Health, Environment and Quality (SHEQ) Policy
- [7] Occupational Health and Safety Act (Act 85 of 1993)
- [8] Lethabo WUL :Licence No. 08/C22F/ABG/1002 FILE NO. 16/2/7/C22F/

### 2.2.2. Informative

- [9] 240-4332798: Eskom's Engineering Policy
- [10] 240-53113685: Design Review Procedure
- [11] 240-99527377: Inspection Manual for Civil Works
- [12] 240-144332407: Standard for Eskom Power Stations Concrete Remedial Work
- [13] 240-144387236: Geotechnical Engineering Remedial Work Standard
- [14] 474-58 (Rev1): Document and Records Management

[15] All Previous Dam Safety Evaluation Reports

[16] 240-53114002: Engineering Change Management Procedure

### 2.3. DEFINITIONS

N/A

### 2.3.1. Disclosure Classification

**Controlled Disclosure:** Controlled Disclosure to external parties (either enforced by law, or discretionary).

### 2.4. ABBREVIATIONS

Abbreviation	Description
APP	Approved Professional Person
DSO	Dam Safety Office
DWS	Department of Water and Sanitation
EPP	Emergency Preparedness Plan
GN	Government Notice
HDPE	High Density Polyethylene
MW	Megawatt
NWA	National Water Act
O&M	Operation and Maintenance
SHEQ	Safety, Environment, Health, Quality
WUL	Water Use Licence

### 2.5 ROLES AND RESPONSIBILITIES

### Contractor

The Contractor's responsibilities are as follows:

- Provide the required resources for the project.
- Manage the cost and time for the project.
- Conduct the relevant investigations, assessment, designs, analysis, reports, manuals and construction drawings as detailed in the scope of work.
- Ensure that all relevant Eskom design standards, procedures and guidelines have been adhered to.
- Provide regular feedback on the status of the project.
- Ensure that the scope of work is executed in full.

### Eskom Engineering

Eskom Engineering's responsibilities are as follows:

- Ensure that the work conducted by the *Contractor* satisfies the requirements as per the scope of work
- Reviews all submissions made by the Contractor. .
- General technical oversight is provided over the works.

### 2.6 RELATED/SUPPORTING DOCUMENTS

N/A

### 2.7 PROCESS FOR MONITORING

N/A

### 3. EMPLOYER'S OBJECTIVES AND PURPOSE OF THE WORKS

The objective and purpose of the *works* is to:

• Conduct the dam safety evaluation on Lethabo Power Station's dams as per the requirements of the National Water Act and the Dam Safety Regulations Government Notice GN 139.

### 4. SCOPE OF WORKS

### 4.1. DAM SAFETY EVALUATION

A dam safety evaluation must be conducted by an Approved Professional Person (APP) in accordance with the requirements of the National Water Act and the Dam Safety Regulations Government Notice R. 139, on the following dams at Lethabo Power Station.

### 4.1.1. North and South Raw Water Reservoirs



Figure 1: Layout Raw Water Reservoirs

The raw water reservoir has an approximate capacity of 885 000 m<sup>3</sup> and is split into two (2) compartments i.e. Northerly and Southerly, and is divided by a division wall. The dam serves the plant with raw water for production processes. The dam is a homogeneous earthfill embankment dam and is lined with high-density polyethylene (HDPE). The HDPE membrane is overlaid with a 75 mm thick concrete slab. Each compartment has a 1400 mm nominal diameter steel inlet/outlet pipeline that leads through the wall, into a valve chamber.

The raw water reservoirs are classified as a category 2 dam with a safety risk.

### 4.1.2. Main Storm Water Dam



Figure 2: Layout Main Storm Water Dam

The main stormwater dam is located on the northern side of Lethabo Power Station adjacent to the clean ash dam. The main stormwater dam has an inlet/outlet infrastructure. The inlet gabion structure is located on the southern side of the dam and the outlet gabion structure is located on the north-western side of the dam. The main stormwater dam has an approximate capacity of 131 000 m<sup>3</sup> and the dam is a homogenous earthfill embankment dam with no HDPE lining.

The main stormwater dam is classified as a category 1 dam with a safety risk.

### 4.1.3. Clean Station Drains Dam



Figure 3: Layout Clean Station Drain Dam

The clean station drain dam is located on the eastern side of Lethabo Power Station adjacent to the dirty station drain dam and emergency dam. The clean station drain dam has one inlet concrete structure and one gabion outlet structure. The inlet is located on the western side of the dam and the outlet gabion structure is located on the eastern side of the dam. The source of inflow to the dam is from the stormwater catchment that flows from the station via a concrete-lined cut-off trench. Only the dam walls are lined with a geofabric.

### 4.1.4. Dirty Station Drains Dam



Figure 4: Layout Dirty Station Drain Dam

The dirty station drain dam consists of one compartment adjacent to the oil ponds. The inflow of water into the dam is from the oil ponds and the dirty stormwater from the station. The dam has one link spillway into the adjacent emergency dam and only the dam walls are lined with a geofabric.

### 4.1.5. Emergency Dam



Figure 5: Layout Emergency Dam

The emergency dam is located on the eastern side of Lethabo Power Station adjacent to the dirty station drains dam. The emergency dam has an inlet/outlet infrastructure. The inlet is located on the western side of the dam and the outlet gabion structure is located on the northern side of the dam. The emergency dam has a capacity of 43 750 m<sup>3</sup> and receives wastewater from the dirty station drains dam. The dam is a homogeneous earthfill embankment dam and has a geofabric liner only on the dam walls.

### 4.1.6. Oil Ponds



Figure 6: Layout Oil Separation Ponds

The oil ponds are located on the eastern side of Lethabo Power Station with a channel inlet/pipe outlet infrastructure. The inlet leads from the concrete silt trap that is located on the northern side of the ponds and the outlet concrete structures are located on the southern side of the final ponds. The oil ponds have a combined capacity of 29 000 m<sup>3</sup> and is split into four (4) compartments, with the inflow from the silt trap, flowing into one of the two compartments on the northern side. Flow then occurs through a submersed penstock and decants into either of the two compartments are divided by earth division walls. The ponds assist the plant with oil separation from the wastewater as part of the ash production process. The ponds are non-elevated homogenous earth dams.

### 4.1.7. Clean Ash Dam



Figure 7: Layout Clean Water Ash Dam

The clean water ash dam is located on the northern side of Lethabo Power Station adjacent to the main stormwater dam. The clean ash dam has an inlet/outlet structure. The gabion outlet spillway is located on the south-eastern corner of the dam next to the outlet spillway. The gabion outlet structure leads from the dam into the wetland. The dam is a homogeneous earthfill embankment dam with no HDPE lining.

### 4.1.8. Dirty Ash Dam



Figure 8: Layout Dirty Water Ash Dam

The dirty water ash dam is located east of the ash disposal facility. The dam receives dirty water from the ash disposal facility and is not lined with HDPE.

### 4.1.9. Winston Philip Dam



Figure 9: Layout Winston Philip Dam

The Winston Philip dam is situated on top of the ash dump. The dam is lined with HDPE and stormwater runoff from the ash dump is contained within the dam.

### 4.1.10. North East Corner Dam



Figure 10: Layout North East Corner Dam

The north east corner dam is located on the ash disposal facility, on the north east side of Lethabo Power Station. The dam collects stormwater runoff from the ash disposal facility. The dam is lined with HDPE.

#### 4.2. OPERATION AND MAINTENANCE MANUAL & EMERGENCY PREPAREDNESS PLAN

The Contractor is required to review the existing operation and maintenance manual for each dam and must update the manuals where required, ensuring that the manuals meet all requirements as per the National Water Act, the Dam Safety Regulations Government Notice R. 139 and best practice guidelines. The Contractor is to note that the Raw Water Reservoirs and the Main Stormwater Dam are classified as a category 2 and category 1 dam with a safety risk, respectively.

The Contractor is required to review the existing emergency preparedness plan for each dam and must update the plans, ensuring that the EPP meets all requirements as per the National Water Act, the Dam Safety Regulations Government Notice R. 139 and best practice guidelines. The Contractor is to note that the Raw Water Reservoirs and the Main Stormwater Dam are classified as a category 2 and category 1 dam with a safety risk, respectively.

The Contractor must consider, in consultation with the Client, whether a combined operation and maintenance manual and emergency preparedness plan, or a separate operation and maintenance manual and emergency preparedness plan is the most effective for operation, maintenance as well as disaster management related to the specific dam and the downstream area threatened by the failure of the specific dam. Currently the operation and maintenance manual and the emergency preparedness plan is combined into one (1) document for each of the dams on site.

The existing operations and maintenance manuals and emergency preparedness plans for the dams are as follows:

Document Number	Document Title
WPLAN02	Operation and Maintenance Manual and Emergency Preparedness Plan for the Station Drain Dams at Lethabo Power Station
WPLAN03	Operation and Maintenance Manual and Emergency Preparedness Plan for the Sewage Plant – Maturation Pond at Lethabo Power Station
WPLAN04	Operation and Maintenance Manual and Emergency Preparedness Plan for the Raw Water Reservoirs at Lethabo Power Station
WPLAN05	Operation and Maintenance Manual and Emergency Preparedness Plan for the Main Storm Water Dam at Lethabo Power Station
WPLAN06	Operation and Maintenance Manual and Emergency Preparedness Plan for the Ash Dams at Lethabo Power Station

### 4.3. GENERAL

- 1. The *Contractor* takes full professional accountability and liability for the works undertaken as part of the scope of work.
- 2. The *Contractor* performs the works in compliance with legislation, rules and regulations, applicable national and international engineering codes, environmental standards, other applicable standards, statutory requirements and this scope of work.
- 3. No deviation from this scope of work and its referenced documents is permissible without documented acceptance from the *Project Manager*. The *Contractor* includes a list of exceptions and/or clarifications as part of his tender. This list of exceptions and/or clarifications includes the section deviated from as reference number, the requirement in question and a detailed explanation of the deviation. In the event of conflicts or discrepancies between any of the specifications, the *Contractor* notifies the *Project Manager* for resolution in writing.
- 4. The *Contractor* adheres to all requirements, codes of standards and regulations stated in this scope of works.
- 5. Any discrepancy or ambiguity between the *Employer's* Specifications or requirements is to be immediately brought to the attention of the *Project Manager* for clarification.
- 6. All documentation, as specified in this document, forms part of the *works* and is supplied to the *Project Manager* by the *Contractor*. The *Employer* reserves the right to issue the *Contractor's* designs/drawings/documents to other *Contractors* for purposes of maintenance, spares, verifications, modifications in future or any other purposes required by the *Employer*. The *Employer* has total rights to use the designs/drawings/documents as the *Employer* requires. The *Contractor* notes that all documentation supplied to the *Employer* become the property of the *Employer* upon completion of the works.
- 7. The *Contractor* is required to conduct all engagements with the relevant authorities (DWS, DSO etc.) in order to execute the full scope of works as detailed in this document.

### 4.4. DELIVERABLES

The *Contractor* provides the following document deliverables as part of the works

### 4.4.1. Tender Phase

The Tenderer submits the following as a minimum in the tender submission:

- 1. The key resource of the project team must provide proof of registration as an Approved Professional Person (APP) as per the National Water Act and the Dam Safety Regulations Government Notice GN R. 139.
- 2. Tenderer's company profile showing relevant experience on previous projects of similar scope (i.e., experience in conducting dam safety evaluations for dams with a safety risk).
- 3. CV's of the proposed key resources each having a minimum of 5 years' relevant experience.
- 4. Technical proposal detailing the work methodology, which complies to the full scope and describes how the scope will be executed
- 5. A Level 3 scheduled for the assigned scope clearly highlighting all activities involved, major milestones and provision for the Employer review.

### 4.4.2. Planning Phase

The *Contractor* submits the following prior to the execution of the works:

- 1. Project specific safety file.
- 2. Detailed risk assessments
- 3. Level 3 schedule (updated)

### 4.4.3. Post Execution Phase

- 1. Dam safety evaluation report for all the specified dams.
- 2. Operation and Maintenance manuals for all the specified dams.
- 3. Emergency Preparedness Plans for all the specified dams.

Drawing Number	Drawing Title
0.63/10676	Lethabo Power Station Dirty Ash Water Dam Layout And Details
0.63/2305	Raw Water Reservoir General Arrangement
0.63/2306	Raw Water Reservoir Contract Layout And Access Route
0.63/2307	Raw Water Reservoir Sections And Details
0.63/2308	Raw Water Reservoir Inlet/Outlet Works
0.63/2310	Raw Water Reservoir Spillway Structure
0.63/2311	Raw Water Reservoir Spillway Structure Reinforcement Details
0.63/3865	Raw Water Reservoir Valve Chamber Reinforcement Details
0.63/3866	Raw Water Reservoir Valve Chamber Reinforcement Schedule
0.63/18348	Raw Water Reservoir Equipment Room Plan, Section And Elevation
0.63/19184	Raw Water Reservoir Equipment Room Concrete And Reinforcement Layout Details And Schedule
0.63/49051	Akz Coding Terrace Drains Station Dams Raw Water Reservoir And Buildings
0.63/51216	Ash Dump Drainage System Main Clean Water Dam
0.63/51217	Main Clean Water Dam Silt Basin, Servitude And Main Dam Cross Section Details
0.63/51218	Main Clean Water Dam Main Dam Canal Section Layout And Detail
0.63/51227	Main Clean Water Dam Silt Basins Layout
0.63/51228	Main Clean Water Dam Layout
0.63/421	Storm And Dirty Water Dams Excavation Details Plan
0.63/422	Storm And Dirty Water Dams Excavation Backfill And Dam Lining Details Sections
0.63/433	Storm And Dirty Water Dams Arrangement And Concrete Details Of Grit Channels For Storage Dam Spillway
0.63/434	Storm And Dirty Water Dams Oil Ponds Arrangement And Details Of Grit Channels And Gates

## APPENDIX A: DRAWING LIST

NB. The drawing list is not exhaustive and additional information will be provided to the *Contractor* during the execution of the works where required.

#### Resolution of disputes by adjudication

If a dispute cannot be settled between the *Client* and the *Consultant* within 30 days of notification by either Party to the other, then either Party may refer the dispute for decision by an Adjudicator before any reference of the matter to the *tribunal* in terms of this contract.

The Adjudicator is chosen by the Party wishing to refer a matter to him from the ICE-SA List of NEC Adjudicators<sup>2</sup>. The Parties conclude a NEC3 Adjudicator's Contract (April 2013) with the chosen Adjudicator within 7 days of the selection.

The matter is then referred and decided by the chosen Adjudicator as though the matter had been referred to him in accordance with Option W1 Dispute Resolution procedures in the NEC3 Professional Services Contract, April 2013, (PSC3). The chosen Adjudicator acts in the role of the *Adjudicator* in PSC3 and the Parties in this contract act as though they were the *Employer* and the *Consultant* respectively in Option W1 of the PSC3 (April 2013).

#### 2.2 Management meetings

- Before work starts on site, an inaugural meeting is held with the Contractor and the Employer, to explain in detail all requirements of the Site Regulations.
- The Contractor is issued with a file of current Site Regulations on arrival. The file remains the property of the Employer and the Contractor is responsible for its maintenance and updating to include new or revised regulations as issued by the Employer.
- The Contractor must ensure that all personnel performing work on the plant are authorised, this includes but not limited to;
  - Confine space locations
  - Working at heights
  - o Heat stress areas
  - Scaffolding
  - Hazardous substances

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

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.

#### 2.3 Contractor's management, supervision and key people

- The number of staff required to execute the works is to be decided by the Contractor after his/her assessment of the scope of work and submitted to the Employer for approval.
- The Contractor shall utilise/provide skilled and suitably qualified staff with current experience in the following but not limited disciplines;
- Occupational Health and Safety Act 85 of 1993
- NEC contract management
- Quality Management Control and Assurance procedures
- Plant Safety regulation authorisation
- Spares optimisation
- Procedure writing
- Staff must meet minimum requirements of Eskom job descriptions, with additional requirements specified.
- Personnel certified to perform and interpret and the following Non-destructive testing (NDT) activities;

<sup>&</sup>lt;sup>2</sup> ICE-SA is a joint Division of SAICE and the ICE (London). See <u>www.ice-sa.org.za</u> for the List of NEC Adjudicators.

- Other advance techniques
- All staff brought onto site in connection with this work scope should be able to fluently speak, understand and write in English.
- Proof of qualification is to be supplied on request by the Employer.
- The Contractor ensures that all staff brought onto Lethabo site has a valid fitness certificate based on the specified plant man-job specification.
- The Contractor shall employ in and about the execution of the works only such persons that are careful, competent and efficient in their several trades and callings and the Employer shall be at liberty to object to and require the Contractor to remove from the works forthwith any person employed by the Contractor in or about the execution of the works who, in the opinion of the Employer, misconduct's himself or is incompetent or negligent in the proper performance of his/her duties and such person shall not be again employed for the works without the written permission of the Employer.
- Provide daily supervision of all related plant through trained and competent personnel to ensure that inspections & work activities are conducted daily.
- Ensures proper behaviour of personnel under his/her supervision as per the Lethabo culture.
- Ensures training of all personnel under his/her supervision. The training required will include but not limited to Eskom safety training requirements, related plant training and Lethabo culture.
- Ensures high morale of staff and competency.

#### 2.4 Invoicing and payment

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

Eskom Holdings SOC Ltd (reg no: 2002/015527/30),

#### Lethabo Power Station Private Bag X415 VEREENIGING Attention: Accounts Payable Section

and include on each invoice the following information:

- Name and address of the Contractor and the Service Manager;
- The contract number and title;
- Contractor's VAT registration number;
- The Employer's VAT registration number 4740101508;
- Description of service provided for each item invoiced based on the Price List;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
- (add other as required)

#### 2.5 Quality assurance requirements

- The Contractor shall ensure that any witness, hold and inspection points are strictly adhered to.
- The Contractor to ensure that all measuring and test equipment is calibrated at all times & proof thereof must be readily available.
- All Quality References and Standards as stipulated in this document will be adhered to.
- Work will only be conducted with an Employer approved Quality Management Programme.
- The Contractor shall utilise the Employer's quality documentation management system and processes.

#### Quality

The Contracts Manager to ensure that the supplier will comply with QM58, ISO 9001 and other Eskom holdings SOC Limited's Standards and specifications.

The Service Provider to compile and submit QCP's and method statement for review and approval to Lethabo Engineer and Quality Control Inspector prior to execution of SOW.

The Service Provider shall adhere to interventions points (Hold and Witness) during execution of SOW.

The Service Provider QC inspector shall conduct first line inspection and complete inspection report.

Eskom QC inspector and Engineer shall conduct final inspection, and release note shall form part of quality records.

The service Provider shall provide with data book after completion of the SOW.

The data book shall consist of the following:

- Signed QCP's
- Method statement
- Drawing
- Visual and dimension inspection reports
- Final release report
- Warranty certificate

# C4 Site Information

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

#### 1. Site Procedures and Regulations

#### 1.1 Site location and Security

- The Site is at Lethabo Power Station situated ± 18 km South of Vereeniging on the Viljoensdrift Deneysville Road, Free State. Access to the site will be via the main security gate only.
- The *Employer* will inform the *Contractor* of the access procedures, and it should be expected that such procedures may change depending on the prevailing security situation.
- The *Contractor* to allow in his price and program for delays at the security gate. The *Employer* reserves the right for its Security personnel to search persons or vehicles entering or leaving the premises. This includes, but is not limited to briefcases and toolboxes.

#### **1.2 Temporary Gate Permits**

• The *Contractor* provides the *Employer* with the personal details of their staff at least two days prior to the occupation date. All names and details to be submitted to the *Employer* who arranges for all gate permits.

#### 1.3 Occupational Health and Safety Induction Course

- All the employees of the *Contractor* must attend a health and safety induction course provided by the *Employer* at the security offices before they will be allowed to work on the Site. It is the responsibility of the *Contractor* to ensure that all employees have attended the health and safety induction.
- The Induction course includes an awareness on the Error prevention and Improvement tools and techniques to ensure familiarisation and use of these error-prevention tools/techniques inclusive of, Pre and Post-job briefs, Risk Assessments, Self-checks (STAR principle), Peer Checks, Job observations, Accountability, Effective communications e.g. 3- way, Questioning attitude, Procedural adherence, Hand overs and other.
- A list of employees requiring safety induction must be submitted at least 2 days in advance arrival so that the details of the safety and health induction course can be communicated.

The *Contractor* and his sub-*Contractor*s ensure at all times compliance with safety regulations imposed by any Act of Parliament, ordinance or any regulation or by-law of any local or statutory authority. The *Contractor* acts in accordance with the health and safety requirements stated in the Works Information.

- In carrying out its obligations to the *Employer* in terms of this contract; in providing the Works; in using Plant, Materials and Equipment; and while at the Site for any reason, the *Contractor* complies and procures and ensures the compliance by its employees, agents, Sub-*Contractor*s and mandataries with:
- the provisions of the Occupational Health and Safety Act 85 of 1993 (as amended) and all regulations in force from time to time in terms of that Act ("the OHSA"); and the Eskom "Health, Safety and Environmental specifications for *Contractors*" document attached to the Works Information (as amended from time to time) and such other Eskom Safety Regulations as are applicable to the Works and are provided in writing to the *Contractor* (collectively "the Eskom Regulations"). The Eskom Regulations may be amended from time to time by the *Employer* and all amendments will be provided in writing to the *Contractor*. The *Contractor* complies with the provisions of the latest written version of the Eskom Regulations with which it has been provided; and the health and safety plan prepared by the *Contractor* in accordance with the SHEQ Requirements

(The OHSA and the Eskom Regulations are collectively referred to as the "SHEQ Requirements".)

- The *Contractor*, at all times, considers itself to be the "*Employer*" for the purposes of the OHSA and shall not consider itself under the supervision or management of the *Employer* with regard to compliance with the SHEQ Requirements, the *Contractor* shall furthermore not consider itself to be a subordinate or under the supervision of the *Employer* in respect of these matters. The *Contractor* is at all times responsible for the supervision of its employees, agents, Sub-*Contractors* and mandataries and takes full responsibility and accountability for ensuring they are competent, aware of the SHEQ Requirements and execute the Works in accordance with the SHEQ Requirements.
- The *Contractor* acknowledges that it is fully aware of the requirements of all the above and undertakes to employ only people who have been duly authorized in terms thereof and who have received sufficient training to ensure that they can comply therewith.
- The *Contractor* ensures that all statutory appointments and appointments required by any Eskom Regulations are made and that all appointees fully understand their responsibilities and is trained and competent to execute their duties. The *Contractor* supervises the execution of their duties by all such appointees.
- The *Contractor* 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, on request: supply the Eskom Safety Officer with copies of minutes of all Health And Safety Committee meetings, whenever he is required to do so; 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.

The *Employer*, or any person appointed by the *Employer*, may, at any stage during the duration of this contract:

- conduct health and safety audits regarding all aspects of compliance with the SHEQ Requirements, at any off-site place of work, or the site establishment of the *Contractor;*
- refuse any employee, Subcontractor or agent of the Contractor access to the premises if such person has been found to commit an unsafe act or any unsafe working practice or is found not to be qualified or authorised in terms of the SHEQ Requirements;
- Issue the Contractor with a stop order should the Employer become aware of any unsafe working procedure or condition or any non-compliance with any provision of the SHEQ Requirements.
- The *Contractor* immediately reports any disabling injury as well as any threat to health or safety of which it becomes aware at the Works or on the Site to the *Employer's Representative.*
- The *Contractor* 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 *Contractor* appoints a person, qualified in accordance with the SHEQ Requirements, as the liaison with the Eskom Safety Officer for all matters related to health and safety, this person shall be contactable 24 hours a day.
- The *Contractor* confirms that it has been provided with sufficient written information regarding the health and safety arrangements and procedures applicable to the Works to ensure compliance by it and all employees, agents, Sub-*Contractor*s or mandataries with the SHEQ Requirements while providing the Works in terms of this contract. As such, the *Contractor* confirms that this contract and the relevant Eskom Regulations referred to in this contract constitute written arrangements and procedures between the *Contractor* and the *Employer* regarding health and safety for the purposes of section 37(2) of the OHSA.
- The *Contractor* agrees that the *Employer* is relieved of any and all of its responsibilities and liabilities in terms of Section 37(1) of OHSA in respect of any acts or omissions of the *Contractor*, and the

Contractor's employees, agents or Sub-Contractors, to the extent permitted by the OHSA.

- The Contractor hereby indemnifies the Employer and holds the Employer harmless in respect of any and all loss, costs, claims, demands, liabilities, damage, penalties or expense that may be made against the Employer and/or suffered or incurred by the Employer (as the case may be) as a result of, any failure of the Contractor, its employees, agents, Sub-Contractors and/or mandataries to comply with their obligations in terms of clause 16, and/or the failure of the Employer to procure the compliance by the Contractor, its employees, agents, Sub-Contractors and/or mandataries with their responsibilities and/or obligations in terms of or arising from the OHSA.
  - In carrying out his obligation as the mandatory to the *Employer* for this contract in terms of the National Environmental Management Act No.107 of 1998, the *Contractor* ensures that he complies with the Act when Providing the Services or using plant, materials or equipment.

#### 1.5 Permit to Work System

- NO work shall be carried out without a "PERMIT TO WORK"
- The *Contractor*'s Responsible Person must satisfy himself that all sources of possible danger are isolated. Details of the Permit to Work system can be found in the Plant Safety Regulations for Lethabo Power Station, Eskom. The *Contractor* must also make provision for sufficient Authorise Supervisor(s) depending on the contractual obligations. The Authorised Supervisor will need to undergo a week's training, which will be arranged at a suitable Eskom facility. This person must also pass an exam to verify his understanding of the procedure, after which he/she will need to be interviewed by a panel to discuss the practical understanding of being appointed as an Authorised Supervisor.
- A Master Permit to Work is used on declared major outages, details can be found in local procedure LBA 00085. Permit changes are made during the dead time, if it is required by the *Contractor* that a certain supply be made available or plant tested than this can be applied for at the Outage Management Meeting at least 1 day in advance.
- Plant with a prohibitive sign attached may only be operated by appointed Eskom personnel. Any *Contractor* employee found tampering with such plant will be permanently removed from Site.

#### 1.6 Transportation of passengers: open LDV's:

No *Eskom employee* or *Contractor* would be allowed to transport passengers on the back of open light delivery vehicles (LDV's). It is a legal requirement to provide safe transportation of *Eskom* and *Contractor* employees – therefore the following will be enforced:

- All passengers must be transported in a closed vehicle with proper and adequate Seating, fitted with safety belt for the number of passengers to be transported.
- Tools and equipment must be properly secured.
- Only authorised drivers may transport passengers.
- Proof must be submitted on request in terms of valid roadworthiness of all vehicles
- The above must apply to on site and off site transportation of passengers.

#### 1.7 Eskom Life Saving Rules:

Life Saving Rules have been developed that will apply to all Eskom *Employees*, agents, consultants and *Contractors*.

<u>**Rule 1:**</u> Open, Isolate, Test, Earth, Bond, and/or Insulate before touch - that is any plant operating above 1 000 V.

Rule 2: Hook up at heights - no person may work at height where there is a risk of falling.

**<u>Rule 3</u>**: Buckle up – no person may drive any vehicle on Eskom business and/or on Eskom premises: unless the driver and all passengers are wearing seat belts.

**<u>Rule 4:</u>** Be sober (no person is allowed to work under the influence of drugs and alcohol.

Rule 5: Use a permit to work – where an authorization limitation exists, no person shall work without the required permit to work.

#### **1.8 Local Safety Procedures**

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The Contractor adheres to all local procedures. A list of local procedures is available on request from the Employer.

#### 1.9 Incidents / Accidents

- Incidents and accidents must be reported and investigated as detailed in LBA 00030. All incidents . must also be reported to the Employer within 24 hours.
- First aid must be made available either by the Contractor or use can be made of the Lethabo . medical centre at a fee. The availability of the Contractor's own first aid does not relieve the Contractor of his obligation to report and investigate the incident in accordance with Lethabo Procedure.
- The *Employer* will accompany the *Contractor* to hospital in the case of serious injury. •

#### 1.10 **Fire Prevention**

Fire prevention and protection requirements to which Contractors must comply are detailed in LBA . 00030.

#### 1.11 **Protective Equipment and Clothing**

- The Contractor supplies his own personal protective equipment necessary to carry out the works and ٠ the Contractor shall ensure that all overalls for his staff have clearly identifying company LOGO's
- The Contractor is also responsible to inspect and maintain such equipment as required in terms of the OHS Act and local procedures.

#### 1.12 Inspection of Equipment

- The Contractor's equipment is inspected by an authorised Eskom employee on arrival at the site. •
- The following documentation is required to accompany the equipment where applicable: copies of all test certificates and maintenance records.
- Lifting equipment and electrical equipment must be marked with a unique number, code or colour • code for identification. If the equipment is found to be in an unsatisfactory condition or if insufficient maintenance has been carried out on the equipment then it will not be approved for use on Site. A list of all lifting equipment and electrical equipment must be submitted to the Employer at least 2 days prior to the occupation date. This list must indicate the unique number and description of the equipment.
- Training requirements must comply with the Works Information and statutory requirements. .

#### 1.13 **Documentation**

The Contractor is responsible to have the following documentation available on site in accordance with LBA 00030:

- A copy of the OHS Act. •
- Copies of all site accident report forms as required by the OHS Act.
- Copies of minutes of health and safety meetings held on site.
- Copies of inspection reports produced by the accident prevention officer.
- Copies of attendance registers for all incidents or work stoppages

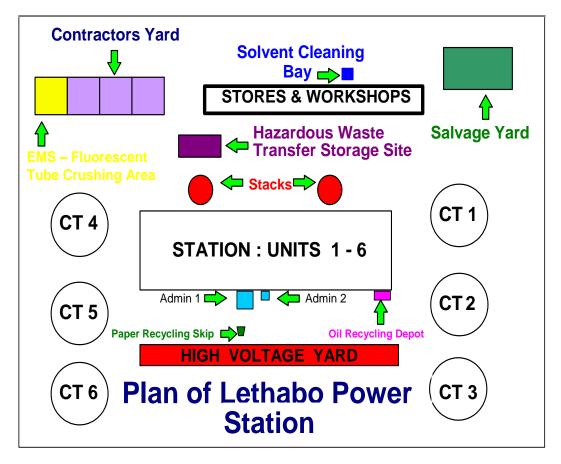
#### 1.14 Environmental Policy and Waste Handling

The *Contractor* shall submit an Environmental Management Plan (EMP) to be reviewed and approved by Eskom environmental officer, one week before the commencement of works if required as per the Works Information.

#### 1.15 Disposal of Waste

Waste shall be removed promptly to the designated disposal area as per below requirements:

- Domestic waste to the white waste bins
- No stockpiling will be permitted
- Production waste in the marked bins i.e. coal and ash only
- Paper in its recycling bin
- Contact Civil Engineering for the disposal of building rubble
- Scrap metal, Wood & Rubber, Redundant Valves, Pipes, and Equipment etc. to be placed in the marked bins in the Salvage Yard. Solvents and cloths used to the Cleaning Bay.



#### 1.16 Hazardous Waste Disposal and Handling

- Any new hazardous waste that comes to the temporary hazardous waste site must be accompanied by an SDS; all other hazardous waste can be delivered without the SDS.
- An inventory is signed by the person who delivers the hazardous waste and the waste coordinator must acknowledge the receipt of the waste.
- A 210I drum with lid will be issued to the person who has delivered the waste after the inventory is signed.
- Drums with incorrect colour coding or drums without lids will not be accepted at the temporary hazardous waste site.

#### 2. Additional General information

LBS00067 to be used as it contains statutory requirements as well as the minimum SHE requirements to which Eskom employees and contractors must comply whilst performing work on the premises of Lethabo Power Station.

The purpose of the procedure is to assist the Contract Supervisor or Project Manager, and the contractor to develop, implement and maintain an organised Safety, Health and Environment Management Plan performing work.

Contractors are accountable for taking all the necessary steps to protect all persons (including employees, visitors, and the general public), to protect the environment and property against any harm during the course of performing work or services in relation to their contractual obligations. In addition, all work procedures and equipment will be carried out in accordance with Eskom and legislative requirements.

Eskom's contractors have the fundamental accountability and responsibility for executing on-site safety, health, and environment issues for their activities, services, products, and work. Each contractor is responsible for ensuring that its employees and the employees of any appointed contractors comply with all occupational safety, health, and environmental (SHE) statutory requirements and the policies and procedures of Eskom Holdings SOC Limited.

This procedure is supplementary to the requirements of relevant legislation and the conditions of the contract.

#### 2.1 Plant & Materials

- The *Employer* may at his own discretion, supply any Plant and Materials as may be required by the *Contractor* to Provide the Works.
- The *Contractor* is to notify the *Employer* in writing, 48 hrs in advance, of such Plant and Materials required.

#### 2.2 Equipment or Material Access and Removal

#### 2.2.1 Access

• The *Contractor* ensures that all equipment and materials brought through the security gate is signed in at the main security gate on an OV18 form.

#### 2.2.2 Removal

- The *Contractor* is not allowed to remove any equipment or materials from site without producing the relevant OV18 forms or the equipment lists. (Security Access Sign In)
- If the equipment or material is to be removed the same day, on which they were brought on to site, then the OV18 form will need to be produced at the gate when leaving the site.
- If the equipment or material is removed after this time then a Non-Returnable Gate Release will be provided by the *Employer's Representative*, on receipt of the original OV18, with which the *Contractor* brought the equipment on site.

#### 2.2.3 Site or Area Establishment and Evacuation

#### 2.2.3.1 Application for Site Establishment:

- Sites are allocated according to availability, the period for which the *Contractor* is going to be on site, or if special circumstances warrant the allocation of a site. Documentation to support this application to be submitted as stipulated below
- The location of the site or area is indicated during the site or area take-over inspection.

#### 2.2.3.1 Site Establishment:

- The *Contractor* does not occupy any site or area other than that allocated to him.
- The Contractor does not occupy the site or area prior to the take-over inspection.
- The *Contractor* maintains the site or area provided to him to the satisfaction of the *Employer*. A site inspection to be conducted by both parties prior to site establishment
- The Employer will require full access at all times of the Contractor's site or area for inspection.
- The *Contractor* will remain accountable for the security of his designated site area. The *Employer* will accept no accountability for any theft, losses or damage under the *Contractors*' control

#### 2.2.3.2 Site De Establishment:

- The *Contractor* advises the *Employer* in writing, five (5) days prior to site de establishment in accordance with LBA 00030.
- Site de establishment cannot proceed without the approval of the *Employer* in writing. Final payment and the first portion of the retention (where applicable) will not be released if not supported by the *Employer*, as this is seen as part of the works.

#### 2.2.4 Information Required for Site Establishment:

- Note that the below will be based on the Contractor's planning for execution of the works. The price schedule should be completed as per required Section A
- The information supplied will assist in site allocation