Eskom

NEC3 Supply

Short Contract (SSC3)

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

and

for **The supply of small bore valves for west half station shutdown at Camden power station**

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

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Documentation prepared by: **Itumeleng Sekgololo**

C1 Agreements & Contract Data

C1.1 Form of Offer and Acceptance

Offer

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

The supply of small bore Valves for west half station shutdown at Camden power station

The tenderer, identified in the signature block below, has

either	examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.
or	examined the draft contract as listed in the Acceptance section and agreed to provide this Offer.

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 Supplier under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the Contract Data.

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

This Offer may be accepted by the Purchaser by signing the form of Acceptance overleaf and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the Supplier 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 Purchaser identified below accepts the tenderer's Offer. In consideration thereof, the Purchaser shall pay the Supplier 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 Purchaser and the tenderer upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the Contract, are contained in:

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

Part 2 Pricing Data

Part 3 Scope of Work: Goods Information

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

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Purchaser during this process of Offer and Acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be signed by the duly authorised representative(s) for both parties.

The tenderer shall within one week of receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Purchaser'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 copy of this document, including the Schedule of Deviations (if any) together with all the terms of the contract as listed above.

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

Signature(s)		
Name(s)		
Capacity	General Manager: Eskom Camden Power Station	Camden Power Station, Piet Retief Road, Nucam, 2355
for the Purchaser		*(Insert name and address of organisation)*
Name & signature of witness		Date

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

Schedule of Deviations

Note:

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

No.	Subject	Details
1		
2		
3		
4		

By the duly authorised representatives signing this Schedule of Deviations below, the Purchaser and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Purchaser during this process of Offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

	For the tenderer:	**For the Purchaser**
Signature		
Name		
Capacity		General Manager: Eskom Camden Power Station
On behalf of	*(Insert name and address of organisation)*	*(Insert name and address of organisation)* Camden Power Station, Piet Retief Road, Nucam, 2355
Name & signature of witness		
Date		

C1.2 Contract Data

Data provided by the *Purchaser*

Clause	Statement	Data
	General	
10.1	The *Purchaser* is (Name):	**Eskom Holdings SOC Limited (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa**
	Address	**Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg**
	Tel No.	**+27 17 827 8045**
	E-mail address	
11.2(4)	The *delivery date* is **[If the *goods* are instructed by Batch Order enter the data, "The delivery date is identified in the Batch Order"]**	**4 weeks from order placement**
11.2(5)	The Goods Information is in	**the document called 'Goods Information' in Part 3 of this contract.**
11.2(8)	The *goods* are	**The supply of small bore valves for west half station shutdown**
12.2	The *law of the contract* is	**The Republic of South Africa**
13.2	The *period for reply* is	**5 working days**
15.1	The *premises* are	**Camden Power Station**
23.1	The *Purchaser* requires the *Supplier* to Provide the Goods when instructed by Batch Order.	**No**
23.1	If the *goods* are instructed by Batch Order,	
	the batch order interval is	**N/A**
	the end date is	**N/A**
	the quantity range of *goods* in a batch is	**N/A**
30.1	The *starting date* is.	**TBC**
41.1	The *defects date* is	**26 weeks from Delivery.**
42.2	The period for the correction of Defects after Delivery is	**To be mutually agreed between the parties which will be based on the nature of the defect.**
50.1	The *assessment day* is the	**5 days after delivery.**
50.5	The *delay damages* are **[If the *goods* are instructed by Batch Order enter a *delay damages* amount appropriate to the quantity or use of the *goods* in the Batch]**	**2% per day to a maximum of 10%for the affected component.**
51.2	The interest rate on late payment is	**Zero**

86.1	The *Supplier*'s liability to the *Purchaser* for indirect or consequential loss, including loss of profit, revenue and goodwill is limited to	**Zero**
86.2	The *Supplier* is not liable to the *Purchaser* for loss of or damage to the *Purchaser*'s property in excess of	**For any one event.**
93.1	The *Adjudicator* is	**the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the ICE-SA Division.**
93.2(2)	The *Adjudicator nominating body* is:	**the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the Institution of Civil Engineers (UK) or its successor body (See www.ice-sa.org.za).**
93.4	The *tribunal* is: If the *tribunal* is arbitration, the arbitration procedure is	**arbitration.** **the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.**
11.1	**The *conditions of contract* are the NEC3 Supply Short Contract (April 2013)[1] [2]and the following additional conditions.** **[Only enter details here if additional conditions are required, otherwise state 'none']**	

[1] Can be obtained from Engineering Contract Strategies on www.ecs.co.za, Tel 011 803 3008, Fax 086 539 1902
[2] If the December 2009 edition is being used, replace April 2013 with December 2009

Z1 Cession delegation and assignment

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

Z1.2 Notwithstanding the above, the *Purchaser* may on written notice to the *Supplier* 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 and the Electricity Distribution Industry.

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

Z2.1 Where a change in the *Supplier's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Supplier*'s B-BBEE status, the *Supplier* notifies the *Purchaser* within seven days of the change.

Z2.2 The *Supplier* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Purchaser* within thirty days of the notification or as otherwise instructed by the *Purchaser*.

Z2.3 Where, as a result, the *Supplier's* B-BBEE status has decreased since the Contract Date the *Purchaser* may either re-negotiate this contract or alternatively, terminate the *Supplier*'s obligation to Provide the Goods.

Z2.4 Failure by the *Supplier* to notify the *Purchaser* of a change in its B-BBEE status may constitute a reason for termination. If the *Purchaser* terminates in terms of this clause, the procedures on termination are the same as for Reason 3 identified in clause 90.3.

Z3 Waiver and estoppel: Add to clause 12.3:

Z3.1 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.

Z4 Provision of a Tax Invoice and interest. Add to clause 51

Z4.1 The *Supplier* provides the *Purchaser* with a tax invoice in accordance with the *Purchaser*'s procedures stated in the Goods Information, showing the correctly assessed amount due.

Z4.2 If the *Supplier* does not provide a tax invoice by the time required in this contract for his assessment of each amount due, the time by when the *Purchaser* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Purchaser* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.

Z4.3 The *Supplier* (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 *Purchaser*'s VAT number 4740101508 on each invoice he submits for payment.

Z5 *Purchaser's* limitation of liability

Z5.1 The *Purchaser's* liability to the *Supplier* for the *Supplier's* indirect or consequential loss is

limited to R0.00 (zero Rand)

Z5.2 The *Supplier*'s entitlement under the indemnity in 83.1 is provided for in 60.1(8) and the *Purchaser*'s liability under the indemnity is limited.

Z6 Termination: Add to clause 90.2 before (Reason 1)

Z6.1 or had a judicial management order granted against it.

Z7 Addition to clause 50.5

Z7.1 If the amount due for the *Supplier*'s payment of *delay damages* reaches the limits stated in this Contract Data (if any), the *Purchaser* may terminate the *Supplier*'s obligation to Provide the Goods using the same procedures and payment on termination as those applied for Reason 3. Identified in clause 90.3.

Z8 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 *Supplier* or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,
Coercive Action	means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,
Collusive Action	means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,
Committing Party	means, as the context requires, the *Supplier*, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,
Corrupt Action	means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,
Fraudulent Action	means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,
Obstructive Action	means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and
Prohibited Action	means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.

Z8.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.

Z8.2 The *Purchaser* may terminate the *Supplier*'s obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Supplier* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Purchaser* 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 *Purchaser* can terminate the *Supplier*'s obligation to Provide the Services for this reason.

Z8.3 If the *Purchaser* terminates the *Supplier*'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.

Z8.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Purchaser* does not have a contractual bond with the Committing Party, the *Supplier* ensures that the Committing Party co-operates fully with an investigation.

Z9 Insurance

Replace condition of contract 84 with the following:

Insurance cover **84**

84.1 When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.

84.2 The *Supplier* provides the insurances in this Insurance Table A from the *starting date* until Delivery and against any risks he carries under this contract between Delivery and the *defects date*.

INSURANCE TABLE A

Insurance against	**Minimum amount of cover or minimum limit of indemnity**
Loss of or damage to the *goods*, plant and materials	The replacement cost where not covered by the *Purchaser*'s insurance. The *Purchaser*'s policy deductible as at contract date where covered by the *Purchaser*'s insurance.
Liability for loss of or damage to property (except the *goods*, plant and materials and equipment) and liability for bodily injury to or death of a person (not an employee of the *Supplier*) caused by activity in connection with this contract	**Loss of or damage to property** *Purchaser*'s property The replacement cost where not covered by the *Purchaser*'s insurance. The *Purchaser*'s policy deductible as at contract date, where covered by the *Purchaser*'s insurance.

	Other property The replacement cost **Death of or bodily injury** The amount required by the applicable law.
Liability for death of or bodily injury to employees of the *Supplier* arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

84.2 The *Purchaser* provides the insurances in this 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

Z10 Nuclear Liability

Z10.1 The *Purchaser* 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.

Z10.2 The *Purchaser* is solely responsible for and indemnifies the *Supplier* or any other person against any and all liabilities which the *Supplier* 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 *Supplier* or any other person or the presence of the *Supplier* or that person or any property of the *Supplier* or such person at or in the KNPS or on the KNPS site, without the permission of the *Purchaser* or of a person acting on behalf of the *Purchaser*.

Z10.3 Subject to clause Z10.4 below, the *Purchaser* 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 *Supplier* or any other person, or the presence of the *Supplier* or that person or any property of the *Supplier* or such person at or in the KNPS or on the KNPS site, without the permission of the *Purchaser* or of a person acting on behalf of the *Purchaser*.

Z10.4 The *Purchaser* 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.

Z10.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z11 Asbestos

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

AAIA means approved asbestos inspection authority.

ACM means asbestos containing materials.

AL means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.

Ambient Air means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.

Compliance Monitoring means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.

OEL means occupational exposure limit.

Parallel Measurements means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.

Safe Levels means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.

Standard means the *Purchaser*'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.

Z11.1 The *Purchaser* ensures that the Ambient Air in the area where the *Supplier* 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.

Z11.2 Upon written request by the *Supplier*, the *Purchaser* 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 *Supplier* may perform Parallel Measurements and related control measures at the *Supplier*'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 Z11.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.

Z11.3 The *Purchaser* manages asbestos and ACM according to the Standard.

Z11.4 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.

Z11.5 The *Supplier*'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.

Z11.6 The *Supplier* 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.

Z11.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Purchaser* at the *Purchaser*'s expense, and

conducted in line with South African legislation.

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

The tendering Supplier is advised to read both the NEC3 Supply Short Contract (April 2013) and the relevant parts of its Guidance Notes (SSC3-GN)[3] in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on page 28 of the SSC3 Guidance Notes and Flow Charts.

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

10.1	The *Supplier* is (Name):	:
	Address	:
	Tel No.	:
	Fax No.	:
	E-mail address	:
11.2(7)	The Price Schedule is in	**the document called 'Price Schedule' in Part 2 of this contract.**
11.2(7)	The offered total of the Prices	**See C1.1 Form of Offer and Acceptance**
63.2	The percentage for overheads and profit added to the Defined Cost is	**%**

[3] Available from Engineering Contract Strategies on www.ecs.co.za Tel 011 803 3008, Fax 086 539 1902.

C2 Pricing Data

C2.1 Pricing assumptions

Entries in the first four columns of this Price Schedule are made either by the *Purchaser* or the tenderer. If the *Supplier* is to be paid an amount for the item which is not adjusted if the quantity of goods in the item changes, the tenderer enters the amount in the Price column only, the Unit, Quantity and Rate columns being left blank.

If the *Supplier* is to be paid an amount for the item of goods which is the rate for the goods multiplied by the quantity supplied, the tenderer enters a rate for each item and multiplies it by the Quantity to produce the Price, to be entered in the final column.

The rates and Prices entered for each item includes for all work and other things necessary to supply the item.

C2.2 Price Schedule

The rates and Prices entered for each item includes for all work and other things necessary to supply the item.

Item no.	Camden PS Material No.	Technical Component Description	Unit	Quantity	Rate	Price
1	774675	VALVE, BUTTERFLY; TYPE: WAFER; NOMINAL SIZE: DN80; PRESSURE RATING: PN10; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: WAFER, SUITABLE FOR INSTALLATION BETWEEN EN 1092-1 PN10 FLANGES; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, EN-GJS-400-15, MATERIAL NUMBER EN-JS1030 (5.3106), TO EN 1563; FACE-TO-FACE DIMENSION: 46 MM, EN 558 SERIES 20; OPERATION: MANUAL; SEAT/LINING MATERIAL: EPDM; DESIGN STANDARD: EN 593; EACH VALVE SHALL BE SUPPLIED WITH AN EN 10204 TYPE 2.2 MATERIAL CERTIFICATE IN ENGLISH FOR ALL METALLIC PRESSURE-CONTAINING COMPONENTS; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION.	EA	8		
2	774676	VALVE, BUTTERFLY; TYPE: WAFER; NOMINAL SIZE: DN100; PRESSURE RATING: PN10; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: WAFER, SUITABLE FOR INSTALLATION BETWEEN EN 1092-1 PN10 FLANGES; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, EN-GJS-400-15, MATERIAL NUMBER EN-JS1030 (5.3106), TO EN	EA	16		

		1563; FACE-TO-FACE DIMENSION: 52 MM, EN 558 SERIES 20; OPERATION: MANUAL; SEAT/LINING MATERIAL: EPDM; DESIGN STANDARD: EN 593; EACH VALVE SHALL BE SUPPLIED WITH AN EN 10204 TYPE 2.2 MATERIAL CERTIFICATE IN ENGLISH FOR ALL METALLIC PRESSURE-CONTAINING COMPONENTS; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION.				
3	774695	VALVE, AIR RELEASE; TYPE: AUTOMATIC DOUBLE-ORIFICE AIR RELEASE VALVE; NOMINAL SIZE: DN100; PRESSURE RATING: PN16; MAXIMUM OPERATING TEMPERATURE: 65 °C; END CONNECTION: FLANGED, EN 1092-1 PN10; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, BS 2789 GRADE 420/12; INTERNAL TRIM: STAINLESS STEEL; OPERATION: AUTOMATIC; FUNCTION: AUTOMATIC AIR RELEASE AND AIR ADMISSION; MODEL NO.: VENT-O-MAT RTX 1601 DOUBLE ORIFICE; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION.	EA	16		
4	774682	VALVE, GATE; TYPE: RESILIENT-SEATED, RISING STEM; NOMINAL SIZE: DN150; PRESSURE RATING: PN10; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: FLANGED, EN 1092-2, PN10; FLANGE TYPE: 21; FACING: TYPE B, RAISED FACE; FACE-TO-FACE DIMENSION: 267 MM, EN 558 SERIES 3; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, EN-GJS-500-7 (GGG-50); WEDGE: EPDM RUBBER ENCAPSULATED; OPERATION: MANUAL, HANDWHEEL; DESIGN STANDARD: EN 1074-1 AND EN 1074-2; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION. THE DATA SHEET SHALL CONFIRM, AS A MINIMUM, THE VALVE SIZE, PRESSURE RATING, TEMPERATURE RATING, BODY MATERIAL, WEDGE/SEAT MATERIAL, STEM CONFIGURATION, FLANGE STANDARD AND FACE-TO-FACE DIMENSION.	EA	9		
5	774671	VALVE, BUTTERFLY; TYPE: WAFER; NOMINAL SIZE: DN200; PRESSURE RATING: PN10; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: WAFER, SUITABLE FOR INSTALLATION BETWEEN EN 1092-1 PN10 FLANGES; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, EN-GJS-400-15, MATERIAL NUMBER EN-JS1030 (5.3106), TO EN 1563; FACE-TO-FACE DIMENSION: 60 MM, EN 558 SERIES 20; OPERATION: MANUAL;	EA	8		

		SEAT/LINING MATERIAL: EPDM; DESIGN STANDARD: EN 593; EACH VALVE SHALL BE SUPPLIED WITH AN EN 10204 TYPE 2.2 MATERIAL CERTIFICATE IN ENGLISH FOR ALL METALLIC PRESSURE-CONTAINING COMPONENTS; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION.				
6	774678	VALVE, GATE; TYPE: RESILIENT-SEATED, RISING STEM; NOMINAL SIZE: DN250; PRESSURE RATING: PN10; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: FLANGED, EN 1092-2, PN10; FLANGE TYPE: 21; FACING: TYPE B, RAISED FACE; FACE-TO-FACE DIMENSION: 330 MM, EN 558 SERIES 3; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, EN-GJS-500-7 (GGG-50); WEDGE: EPDM RUBBER ENCAPSULATED; OPERATION: MANUAL, HANDWHEEL; DESIGN STANDARD: EN 1074-1 AND EN 1074-2; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION. THE DATA SHEET SHALL CONFIRM, AS A MINIMUM, THE VALVE SIZE, PRESSURE RATING, TEMPERATURE RATING, BODY MATERIAL, WEDGE/SEAT MATERIAL, STEM CONFIGURATION, FLANGE STANDARD AND FACE-TO-FACE DIMENSION.	EA	30		
7	774677	VALVE, BUTTERFLY; TYPE: WAFER; NOMINAL SIZE: DN250; PRESSURE RATING: PN10; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: WAFER, SUITABLE FOR INSTALLATION BETWEEN EN 1092-1 PN10 FLANGES; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, EN-GJS-400-15, MATERIAL NUMBER EN-JS1030 (5.3106), TO EN 1563; FACE-TO-FACE DIMENSION: 68 MM, EN 558 SERIES 20; OPERATION: MANUAL; SEAT/LINING MATERIAL: EPDM; DESIGN STANDARD: EN 593; EACH VALVE SHALL BE SUPPLIED WITH AN EN 10204 TYPE 2.2 MATERIAL CERTIFICATE IN ENGLISH FOR ALL METALLIC PRESSURE-CONTAINING COMPONENTS; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION.	EA	24		
8	774680	VALVE, BUTTERFLY; TYPE: WAFER, RESILIENT-SEATED; NOMINAL SIZE: DN450 (NPS 18); PRESSURE RATING: CLASS 150; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: WAFER, SUITABLE FOR INSTALLATION BETWEEN ASME B16.5 CLASS 150 FLANGES; BODY MATERIAL: FERRITIC DUCTILE IRON, ASTM A395 GRADE 60-40-18; FACE-TO-FACE DIMENSION: 114 MM, API 609	EA	23		

		CATEGORY A; OPERATION: MANUAL; SEAT/LINING MATERIAL: EPDM; DESIGN STANDARD: API 609, CATEGORY A; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION. THE DATA SHEET SHALL CONFIRM, AS A MINIMUM, THE VALVE SIZE, PRESSURE RATING, TEMPERATURE RATING, BODY MATERIAL, DISC MATERIAL, SHAFT MATERIAL, SEAT/LINING MATERIAL, FLANGE COMPATIBILITY, FACE-TO-FACE DIMENSION AND OPERATING ARRANGEMENT.				
9	774694	VALVE, GATE; TYPE: METAL-SEATED, WEDGE GATE; NOMINAL SIZE: DN450 (NPS 18); PRESSURE CLASS: ASME CLASS 150; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: FLANGED, ASME B16.5 CLASS 150, RAISED FACE (RF); FACE-TO-FACE DIMENSION: 432 MM, ASME B16.10; BODY MATERIAL: ASTM A216 GRADE WCB; TRIM: 13Cr STAINLESS STEEL; OPERATION: MANUAL, GEARBOX AND HANDWHEEL; DESIGN STANDARD: ASME B16.34, API600; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION. THE DATA SHEET SHALL CONFIRM, AS A MINIMUM, THE VALVE SIZE, PRESSURE CLASS, TEMPERATURE RATING, BODY MATERIAL, TRIM MATERIAL, SEAT CONFIGURATION, END CONNECTION, FACE-TO-FACE DIMENSION AND OPERATING ARRANGEMENT.	EA	8		
10	784561	VALVE; TYPE: WAFER CHECK (NON-RETURN); NOMINAL SIZE: DN150 (NPS 6); VALVE PRESSURE CLASS: CLASS 125; MAXIMUM OPERATING TEMPERATURE: 50 °C; FACE-TO-FACE DIMENSION: ±80 MM; END CONNECTION: WAFER, SUITABLE FOR INSTALLATION BETWEEN DN150 (NPS 6) ASME B16.5 CLASS 150 FLANGES; BODY MATERIAL: ASTM A126 CLASS B; SEAT/SEAL TYPE: RESILIENT SEATED; SEAT/SEAL MATERIAL: NBR (BUNA-N); DESIGN STANDARD: API 594, WHERE APPLICABLE; VALVE DESIGN SHALL BE SUITABLE FOR THE SPECIFIED SERVICE CONDITIONS AND INSTALLATION INTERFACE. TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED, CLEARLY INDICATING THE VALVE GENERAL ARRANGEMENT/CROSS-SECTIONAL DRAWING, MATERIALS OF CONSTRUCTION FOR ALL MAJOR COMPONENTS, APPLICABLE DESIGN STANDARD(S), PRESSURE-TEMPERATURE RATING, FACE-TO-FACE DIMENSION AND FLANGE COMPATIBILITY.	EA	8		

11	774690	KIT, VALVE INSTALLATION; APPLICATION: DN80 WAFER-TYPE RESILIENT-SEATED BUTTERFLY VALVE, CW SYSTEM; VALVE DESIGN STANDARD: EN 593; FLANGE INTERFACE: EN 1092, PN10; KIT CONTENTS: STUDS: 8 OFF, M16 × 130 MM LONG, PROPERTY CLASS 4.6 TO ISO 898-1, HOT-DIP GALVANISED; NUTS: 16 OFF, M16 HEXAGON NUTS TO ISO 4032, PROPERTY CLASS 5 TO ISO 898-2, HOT-DIP GALVANISED; WASHERS: 16 OFF, M16 PLAIN WASHERS, NORMAL SERIES, TO ISO 7089, HOT-DIP GALVANISED; FASTENER HOT-DIP GALVANISED COATING TO ISO 10684; GASKETS: 2 OFF, NEOPRENE RUBBER, 200 MM OD × 90 MM ID × 3 MM THICK, SHORE A HARDNESS 60–75, SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS, PROPERTY CLASSES AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.	EA	8		
12	774668	KIT, VALVE INSTALLATION; APPLICATION: DN100 WAFER-TYPE BUTTERFLY VALVE, CW SYSTEM; VALVE DESIGN STANDARD: EN 593; FLANGE INTERFACE: EN 1092, PN10; KIT CONTENTS: STUDS: 8 OFF, M16 × 140 MM LONG, PROPERTY CLASS 4.6 TO ISO 898-1, HOT-DIP GALVANISED; NUTS: 16 OFF, M16 HEXAGON NUTS, PROPERTY CLASS 5 TO ISO 898-2, HOT-DIP GALVANISED; WASHERS: 16 OFF, M16 PLAIN WASHERS, NORMAL SERIES, TO ISO 7089, HOT-DIP GALVANISED; GASKETS: 2 OFF, NEOPRENE RUBBER, 220 MM OD × 116 MM ID × 3 MM THICK, SHORE A HARDNESS 60–75, SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS, PROPERTY CLASSES AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.	EA	16		

13	774673	KIT, VALVE INSTALLATION; APPLICATION: DN150 MCW RESILIENT-SEATED GATE ISOLATION VALVE, CW SYSTEM; VALVE DESIGN STANDARD: EN 1074-1 AND EN 1074-2; FLANGE INTERFACE: EN 1092-2, PN10; KIT CONTENTS: STUDS: 16 OFF, M20 × 100 MM LONG, PROPERTY CLASS 4.6 TO ISO 898-1, HOT-DIP GALVANISED; NUTS: 32 OFF, M20 HEXAGON NUTS, PROPERTY CLASS 5 TO ISO 898-2, HOT-DIP GALVANISED; WASHERS: 32 OFF, M20 PLAIN WASHERS, NORMAL SERIES, TO ISO 7089, HOT-DIP GALVANISED; GASKETS: 2 OFF, NEOPRENE RUBBER, 285 MM OD × 170 MM ID × 3 MM THICK, SHORE A HARDNESS 60–75, SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS, PROPERTY CLASSES AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.	EA	9		
14	774686	KIT, VALVE INSTALLATION; APPLICATION: DN200 WAFER-TYPE BUTTERFLY VALVE, CW SYSTEM; VALVE DESIGN STANDARD: EN 593; FLANGE INTERFACE: EN 1092, PN10; KIT CONTENTS: STUDS: 8 OFF, M20 × 160 MM LONG, PROPERTY CLASS 4.6 TO ISO 898-1, HOT-DIP GALVANISED; NUTS: 16 OFF, M20 HEXAGON NUTS, PROPERTY CLASS 5 TO ISO 898-2, HOT-DIP GALVANISED; WASHERS: 16 OFF, M20 PLAIN WASHERS, NORMAL SERIES, TO ISO 7089, HOT-DIP GALVANISED; GASKETS: 2 OFF, NEOPRENE RUBBER, 340 MM OD × 221 MM ID × 3 MM THICK, SHORE A HARDNESS 60–75, SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS, PROPERTY CLASSES AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.	EA	8		
15	774669	KIT, VALVE INSTALLATION; APPLICATION:	EA	30		

		DN250 MCW RESILIENT-SEATED GATE ISOLATION VALVE, CW SYSTEM; VALVE DESIGN STANDARD: EN 1074-1 AND EN 1074-2; FLANGE INTERFACE: EN 1092-2, PN10; KIT CONTENTS: STUDS: 24 OFF, M20 × 110 MM LONG, PROPERTY CLASS 4.6 TO ISO 898-1, HOT-DIP GALVANISED; NUTS: 48 OFF, M20 HEXAGON NUTS, PROPERTY CLASS 5 TO ISO 898-2, HOT-DIP GALVANISED; WASHERS: 48 OFF, M20 PLAIN WASHERS, NORMAL SERIES, TO ISO 7089, HOT-DIP GALVANISED; GASKETS: 2 OFF, NEOPRENE RUBBER, 395 MM OD × 276 MM ID × 3 MM THICK, SHORE A HARDNESS 60–75, SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS, PROPERTY CLASSES AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.				
16	774666	VALVE KIT - WAFER VALVE - KIT, VALVE REPAIR: TYPE: DN 250 WAFER TYPE BUTTERFLY VALVE (EN); APPLICATION: CW SYSTEM; SPECIFICATION: EN 593.EN1092 PN10; STUDS: 12 OF M20 X 170 MM LONG ISO 898-1 PROPERTY CLASS: 4.6 HOT-DIP GALVANIZED; NUTS: 24 OF M20 REGULAR NUTS ISO 898-2 PROPERTY CLASS: 5 HOT-DIP GALVANIZED; WASHERS: 24 OF NOMINAL SIZE 20 FLAT WASHERS ISO 7089 HOT-DIP GALVANIZED; GASKETS: TWO OFF NEOPRENE RUBBER GASKETS 395 MM X 276 MM X 3 MM THK; SHORE A HARDNESS 60–75 SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT DATASHEETS FOR ALL STUDS;NUTS; WASHERS AND GASKETS FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; VERIFY THAT THE QUANTITIES SUPPLIED AND THE TECHNICAL SPECIFICATIONS OF THE DELIVERED COMPONENTS COMPLY WITH THE STOCK DESCRIPTION	EA	24		
17	774689	KIT, VALVE INSTALLATION; APPLICATION: DN450 (NPS 18) METAL-SEATED GATE ISOLATION VALVE, CW SYSTEM; FLANGE INTERFACE: ASME B16.5 CLASS 150; KIT	EA	8		

		CONTENTS: STUDS: 32 OFF, 1⅛ IN × 160 MM LONG, 8UN THREAD, ASTM A193 GRADE B7; NUTS: 64 OFF, 1⅛ IN HEAVY HEXAGON NUTS, 8UN THREAD, ASTM A194 GRADE 2H; WASHERS: 64 OFF, PLAIN WASHERS SUITABLE FOR 1⅛ IN STUDS; CORROSION PROTECTION: HOT-DIP GALVANISED; GASKETS: 2 OFF, NEOPRENE RUBBER, 635 MM OD × 461 MM ID × 3 MM THICK, SHORE A HARDNESS 60–75, SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.				
18	774667	KIT, VALVE INSTALLATION; APPLICATION: DN450 (NPS 18) WAFER-TYPE BUTTERFLY VALVE, CW SYSTEM; VALVE DESIGN STANDARD: API 609; FLANGE INTERFACE: ASME B16.5 CLASS 150; KIT CONTENTS: STUDS: 16 OFF, 1⅛ IN DIAMETER × 260 MM LONG, SUITABLE FOR ASME B16.5 CLASS 150 FLANGE BOLTING, HOT-DIP GALVANISED; NUTS: 32 OFF, HEXAGON NUTS, SUITABLE FOR 1⅛ IN STUDS, HOT-DIP GALVANISED; WASHERS: 32 OFF, PLAIN WASHERS, SUITABLE FOR 1⅛ IN STUDS, HOT-DIP GALVANISED; GASKETS: 2 OFF, NEOPRENE RUBBER, 635 MM OD × 461 MM ID × 3 MM THICK, SHORE A HARDNESS 60–75, SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.	EA	23		
19	774702	COUPLING, PIPE; TYPE: FLANGED PIPE COUPLING; NOMINAL SIZE: NPS 18 (DN450); SERVICE: COOLING WATER; PRESSURE RATING: ASME CLASS 150; FLANGED CONNECTION: NPS 18, ASME B16.5 CLASS 150; PIPE OUTSIDE DIAMETER: 480 MM; COUPLING SHALL BE DESIGNED AND SIZED TO PROVIDE	EA	6		

		AN EFFECTIVE PRESSURE-TIGHT SEAL ON A PIPE WITH AN OUTSIDE DIAMETER OF 480 MM; BODY MATERIAL: STRUCTURAL STEEL, EN 10025 GRADE S275; ELASTOMERIC SEALS: EPDM, COMPLIANT WITH BS EN 681-1 AND SUITABLE FOR WATER SERVICE; FASTENERS: STAINLESS STEEL, GRADE A4-70, TO ISO 3506; COATING: WRAS-APPROVED COATING SYSTEM SUITABLE FOR WATER SERVICE, MINIMUM TOTAL DRY FILM THICKNESS: 300 µM; OVERALL COUPLING LENGTH: 253 MM; DESIGN REQUIREMENTS: EN 13480, WHERE APPLICABLE; EN 10204 TYPE 3.1 INSPECTION CERTIFICATES IN ENGLISH SHALL BE PROVIDED FOR ALL METALLIC COMPONENTS; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET AND DIMENSIONAL DRAWING FOR THE COUPLING OFFERED FOR TECHNICAL EVALUATION. THE SUBMITTED DOCUMENTATION SHALL CONFIRM, AS A MINIMUM, THE PRESSURE RATING, FLANGE STANDARD AND CLASS, BODY MATERIAL, PIPE OD/SEALING RANGE, ELASTOMER MATERIAL, FASTENER MATERIAL, COATING SYSTEM AND THICKNESS, AND OVERALL COUPLING LENGTH.				
20		Delivery transportation	EA	1		

Total of the Prices | |

C3: Scope of Work

C3.1 Goods Information

Supply & delivery of small bore valves for Camden west half station shutdown project.

The Supplier shall be responsible for supplying all items strictly in accordance with the applicable descriptions and associated technical requirements outline in sections of part C3: scope of work.

Technical abbreviations used in part C3

Abbreviations **Abbreviation**	**Description**
CW	Cooling Water / (Circulating Water)
HSSD	Half Station Shut Down
MCW	Main Cooling Water
NB	Nominal Bore
SBV	Small Bore Valve
NDT	Non-destructive Testing
OD	Outside Diameter
PCD	Pitch Circle Diameter
QCP	Quality Control Plan
GR	Goods Receipt

Technical definitions used in part C3

Definition	**Description**
Small Bore	When referenced in this document, small bore refers to a nominal size less than 1000mm.
Manufacturer	The original equipment manufacturer (OEM), fabricator, or production facility responsible for the manufacture, assembly, coating, machining, or refurbishment of the final product or component supplied under this Scope of Work.
Pipework	Pipes and fittings are used for the conveyance of steam, water, gases or other fluids.
Quality Control Plan (QCP)	A document specifying the activities to be inspected throughout the execution of the project, inclusive of test methods, procedures and acceptance criteria. (This term is equivalent to QIP and ITP)
Supplier	The company, manufacturer, contractor, service provider, or authorised representative responsible for the supply, refurbishment, manufacture, testing, inspection, documentation, and delivery of the equipment, materials, or services specified in this Scope of Work.

Valve	A device that regulates the flow of gases, liquids, fluidized solids and slurries by opening, closing or partially obstructing various passageways.

1. Description of the *goods*

The table below lists the full technical descriptions, unit of measure and required quantities for the small bore valves (goods to be supplied)

Item no.	Camden PS Material No.	Technical Component Description	Unit	Quantity
1	774675	VALVE, BUTTERFLY; TYPE: WAFER; NOMINAL SIZE: DN80; PRESSURE RATING: PN10; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: WAFER, SUITABLE FOR INSTALLATION BETWEEN EN 1092-1 PN10 FLANGES; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, EN-GJS-400-15, MATERIAL NUMBER EN-JS1030 (5.3106), TO EN 1563; FACE-TO-FACE DIMENSION: 46 MM, EN 558 SERIES 20; OPERATION: MANUAL; SEAT/LINING MATERIAL: EPDM; DESIGN STANDARD: EN 593; EACH VALVE SHALL BE SUPPLIED WITH AN EN 10204 TYPE 2.2 MATERIAL CERTIFICATE IN ENGLISH FOR ALL METALLIC PRESSURE-CONTAINING COMPONENTS; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION.	EA	8
2	774676	VALVE, BUTTERFLY; TYPE: WAFER; NOMINAL SIZE: DN100; PRESSURE RATING: PN10; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: WAFER, SUITABLE FOR INSTALLATION BETWEEN EN 1092-1 PN10 FLANGES; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, EN-GJS-400-15, MATERIAL NUMBER EN-JS1030 (5.3106), TO EN 1563; FACE-TO-FACE DIMENSION: 52 MM, EN 558 SERIES 20; OPERATION: MANUAL; SEAT/LINING MATERIAL: EPDM; DESIGN STANDARD: EN 593; EACH VALVE SHALL BE SUPPLIED WITH AN EN 10204 TYPE 2.2 MATERIAL CERTIFICATE IN ENGLISH FOR ALL METALLIC PRESSURE-CONTAINING COMPONENTS; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION.	EA	16
3	774695	VALVE, AIR RELEASE; TYPE: AUTOMATIC DOUBLE-ORIFICE AIR RELEASE VALVE; NOMINAL SIZE: DN100; PRESSURE RATING: PN16; MAXIMUM OPERATING TEMPERATURE: 65 °C; END CONNECTION: FLANGED, EN 1092-1 PN10; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, BS 2789 GRADE 420/12; INTERNAL TRIM: STAINLESS STEEL; OPERATION: AUTOMATIC; FUNCTION: AUTOMATIC AIR RELEASE AND AIR ADMISSION; MODEL NO.: VENT-O-MAT RTX 1601 DOUBLE ORIFICE; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION.	EA	16
4	774682	VALVE, GATE; TYPE: RESILIENT-SEATED, RISING STEM; NOMINAL SIZE: DN150; PRESSURE RATING: PN10; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: FLANGED, EN 1092-2,	EA	9

		PN10; FLANGE TYPE: 21; FACING: TYPE B, RAISED FACE; FACE-TO-FACE DIMENSION: 267 MM, EN 558 SERIES 3; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, EN-GJS-500-7 (GGG-50); WEDGE: EPDM RUBBER ENCAPSULATED; OPERATION: MANUAL, HANDWHEEL; DESIGN STANDARD: EN 1074-1 AND EN 1074-2; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION. THE DATA SHEET SHALL CONFIRM, AS A MINIMUM, THE VALVE SIZE, PRESSURE RATING, TEMPERATURE RATING, BODY MATERIAL, WEDGE/SEAT MATERIAL, STEM CONFIGURATION, FLANGE STANDARD AND FACE-TO-FACE DIMENSION.		
5	774671	VALVE, BUTTERFLY; TYPE: WAFER; NOMINAL SIZE: DN200; PRESSURE RATING: PN10; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: WAFER, SUITABLE FOR INSTALLATION BETWEEN EN 1092-1 PN10 FLANGES; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, EN-GJS-400-15, MATERIAL NUMBER EN-JS1030 (5.3106), TO EN 1563; FACE-TO-FACE DIMENSION: 60 MM, EN 558 SERIES 20; OPERATION: MANUAL; SEAT/LINING MATERIAL: EPDM; DESIGN STANDARD: EN 593; EACH VALVE SHALL BE SUPPLIED WITH AN EN 10204 TYPE 2.2 MATERIAL CERTIFICATE IN ENGLISH FOR ALL METALLIC PRESSURE-CONTAINING COMPONENTS; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION.	EA	8
6	774678	VALVE, GATE; TYPE: RESILIENT-SEATED, RISING STEM; NOMINAL SIZE: DN250; PRESSURE RATING: PN10; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: FLANGED, EN 1092-2, PN10; FLANGE TYPE: 21; FACING: TYPE B, RAISED FACE; FACE-TO-FACE DIMENSION: 330 MM, EN 558 SERIES 3; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, EN-GJS-500-7 (GGG-50); WEDGE: EPDM RUBBER ENCAPSULATED; OPERATION: MANUAL, HANDWHEEL; DESIGN STANDARD: EN 1074-1 AND EN 1074-2; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION. THE DATA SHEET SHALL CONFIRM, AS A MINIMUM, THE VALVE SIZE, PRESSURE RATING, TEMPERATURE RATING, BODY MATERIAL, WEDGE/SEAT MATERIAL, STEM CONFIGURATION, FLANGE STANDARD AND FACE-TO-FACE DIMENSION.	EA	30
7	774677	VALVE, BUTTERFLY; TYPE: WAFER; NOMINAL SIZE: DN250; PRESSURE RATING: PN10; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: WAFER, SUITABLE FOR INSTALLATION BETWEEN EN 1092-1 PN10 FLANGES; BODY MATERIAL: SPHEROIDAL GRAPHITE CAST IRON, EN-GJS-400-15, MATERIAL NUMBER EN-JS1030 (5.3106), TO EN 1563; FACE-TO-FACE DIMENSION: 68 MM, EN 558 SERIES 20; OPERATION: MANUAL; SEAT/LINING MATERIAL: EPDM; DESIGN STANDARD: EN 593; EACH VALVE SHALL BE SUPPLIED WITH AN EN 10204 TYPE 2.2 MATERIAL CERTIFICATE IN ENGLISH FOR ALL METALLIC PRESSURE-CONTAINING COMPONENTS; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION.	EA	24
8	774680	VALVE, BUTTERFLY; TYPE: WAFER, RESILIENT-SEATED; NOMINAL SIZE: DN450 (NPS 18); PRESSURE RATING: CLASS 150; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: WAFER,	EA	23

		SUITABLE FOR INSTALLATION BETWEEN ASME B16.5 CLASS 150 FLANGES; BODY MATERIAL: FERRITIC DUCTILE IRON, ASTM A395 GRADE 60-40-18; FACE-TO-FACE DIMENSION: 114 MM, API 609 CATEGORY A; OPERATION: MANUAL; SEAT/LINING MATERIAL: EPDM; DESIGN STANDARD: API 609, CATEGORY A; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION. THE DATA SHEET SHALL CONFIRM, AS A MINIMUM, THE VALVE SIZE, PRESSURE RATING, TEMPERATURE RATING, BODY MATERIAL, DISC MATERIAL, SHAFT MATERIAL, SEAT/LINING MATERIAL, FLANGE COMPATIBILITY, FACE-TO-FACE DIMENSION AND OPERATING ARRANGEMENT.		
9	774694	VALVE, GATE; TYPE: METAL-SEATED, WEDGE GATE; NOMINAL SIZE: DN450 (NPS 18); PRESSURE CLASS: ASME CLASS 150; MAXIMUM OPERATING TEMPERATURE: 70 °C; END CONNECTION: FLANGED, ASME B16.5 CLASS 150, RAISED FACE (RF); FACE-TO-FACE DIMENSION: 432 MM, ASME B16.10; BODY MATERIAL: ASTM A216 GRADE WCB; TRIM: 13Cr STAINLESS STEEL; OPERATION: MANUAL, GEARBOX AND HANDWHEEL; DESIGN STANDARD: ASME B16.34, API600; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED FOR TECHNICAL EVALUATION. THE DATA SHEET SHALL CONFIRM, AS A MINIMUM, THE VALVE SIZE, PRESSURE CLASS, TEMPERATURE RATING, BODY MATERIAL, TRIM MATERIAL, SEAT CONFIGURATION, END CONNECTION, FACE-TO-FACE DIMENSION AND OPERATING ARRANGEMENT.	EA	8
10	784561	VALVE; TYPE: WAFER CHECK (NON-RETURN); NOMINAL SIZE: DN150 (NPS 6); VALVE PRESSURE CLASS: CLASS 125; MAXIMUM OPERATING TEMPERATURE: 50 °C; FACE-TO-FACE DIMENSION: ±80 MM; END CONNECTION: WAFER, SUITABLE FOR INSTALLATION BETWEEN DN150 (NPS 6) ASME B16.5 CLASS 150 FLANGES; BODY MATERIAL: ASTM A126 CLASS B; SEAT/SEAL TYPE: RESILIENT SEATED; SEAT/SEAL MATERIAL: NBR (BUNA-N); DESIGN STANDARD: API 594, WHERE APPLICABLE; VALVE DESIGN SHALL BE SUITABLE FOR THE SPECIFIED SERVICE CONDITIONS AND INSTALLATION INTERFACE. TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET FOR THE VALVE OFFERED, CLEARLY INDICATING THE VALVE GENERAL ARRANGEMENT/CROSS-SECTIONAL DRAWING, MATERIALS OF CONSTRUCTION FOR ALL MAJOR COMPONENTS, APPLICABLE DESIGN STANDARD(S), PRESSURE-TEMPERATURE RATING, FACE-TO-FACE DIMENSION AND FLANGE COMPATIBILITY.	EA	8
11	774690	KIT, VALVE INSTALLATION; APPLICATION: DN80 WAFER-TYPE RESILIENT-SEATED BUTTERFLY VALVE, CW SYSTEM; VALVE DESIGN STANDARD: EN 593; FLANGE INTERFACE: EN 1092, PN10; KIT CONTENTS: STUDS: 8 OFF, M16 × 130 MM LONG, PROPERTY CLASS 4.6 TO ISO 898-1, HOT-DIP GALVANISED; NUTS: 16 OFF, M16 HEXAGON NUTS TO ISO 4032, PROPERTY CLASS 5 TO ISO 898-2, HOT-DIP GALVANISED; WASHERS: 16 OFF, M16 PLAIN WASHERS, NORMAL SERIES, TO ISO 7089, HOT-DIP GALVANISED; FASTENER HOT-DIP GALVANISED COATING TO ISO 10684; GASKETS: 2 OFF, NEOPRENE RUBBER, 200 MM OD × 90 MM ID × 3 MM THICK, SHORE A HARDNESS 60–75, SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR	EA	8

		ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS, PROPERTY CLASSES AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.		
12	774668	KIT, VALVE INSTALLATION; APPLICATION: DN100 WAFER-TYPE BUTTERFLY VALVE, CW SYSTEM; VALVE DESIGN STANDARD: EN 593; FLANGE INTERFACE: EN 1092, PN10; KIT CONTENTS: STUDS: 8 OFF, M16 × 140 MM LONG, PROPERTY CLASS 4.6 TO ISO 898-1, HOT-DIP GALVANISED; NUTS: 16 OFF, M16 HEXAGON NUTS, PROPERTY CLASS 5 TO ISO 898-2, HOT-DIP GALVANISED; WASHERS: 16 OFF, M16 PLAIN WASHERS, NORMAL SERIES, TO ISO 7089, HOT-DIP GALVANISED; GASKETS: 2 OFF, NEOPRENE RUBBER, 220 MM OD × 116 MM ID × 3 MM THICK, SHORE A HARDNESS 60–75, SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS, PROPERTY CLASSES AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.	EA	16
13	774673	KIT, VALVE INSTALLATION; APPLICATION: DN150 MCW RESILIENT-SEATED GATE ISOLATION VALVE, CW SYSTEM; VALVE DESIGN STANDARD: EN 1074-1 AND EN 1074-2; FLANGE INTERFACE: EN 1092-2, PN10; KIT CONTENTS: STUDS: 16 OFF, M20 × 100 MM LONG, PROPERTY CLASS 4.6 TO ISO 898-1, HOT-DIP GALVANISED; NUTS: 32 OFF, M20 HEXAGON NUTS, PROPERTY CLASS 5 TO ISO 898-2, HOT-DIP GALVANISED; WASHERS: 32 OFF, M20 PLAIN WASHERS, NORMAL SERIES, TO ISO 7089, HOT-DIP GALVANISED; GASKETS: 2 OFF, NEOPRENE RUBBER, 285 MM OD × 170 MM ID × 3 MM THICK, SHORE A HARDNESS 60–75, SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS, PROPERTY CLASSES AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.	EA	9
14	774686	KIT, VALVE INSTALLATION; APPLICATION: DN200 WAFER-TYPE BUTTERFLY VALVE, CW SYSTEM; VALVE DESIGN STANDARD: EN 593; FLANGE INTERFACE: EN 1092, PN10; KIT CONTENTS: STUDS: 8 OFF, M20 × 160 MM LONG, PROPERTY CLASS 4.6 TO ISO 898-1, HOT-DIP GALVANISED; NUTS: 16 OFF, M20 HEXAGON NUTS, PROPERTY CLASS 5 TO ISO 898-2, HOT-DIP GALVANISED; WASHERS: 16 OFF, M20 PLAIN WASHERS, NORMAL SERIES, TO ISO 7089, HOT-DIP GALVANISED; GASKETS: 2 OFF, NEOPRENE RUBBER, 340 MM OD × 221 MM ID × 3 MM THICK, SHORE A HARDNESS 60–75,	EA	8

		SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS, PROPERTY CLASSES AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.		
15	774669	KIT, VALVE INSTALLATION; APPLICATION: DN250 MCW RESILIENT-SEATED GATE ISOLATION VALVE, CW SYSTEM; VALVE DESIGN STANDARD: EN 1074-1 AND EN 1074-2; FLANGE INTERFACE: EN 1092-2, PN10; KIT CONTENTS: STUDS: 24 OFF, M20 × 110 MM LONG, PROPERTY CLASS 4.6 TO ISO 898-1, HOT-DIP GALVANISED; NUTS: 48 OFF, M20 HEXAGON NUTS, PROPERTY CLASS 5 TO ISO 898-2, HOT-DIP GALVANISED; WASHERS: 48 OFF, M20 PLAIN WASHERS, NORMAL SERIES, TO ISO 7089, HOT-DIP GALVANISED; GASKETS: 2 OFF, NEOPRENE RUBBER, 395 MM OD × 276 MM ID × 3 MM THICK, SHORE A HARDNESS 60–75, SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS, PROPERTY CLASSES AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.	EA	30
16	774666	VALVE KIT - WAFER VALVE - KIT, VALVE REPAIR: TYPE: DN 250 WAFER TYPE BUTTERFLY VALVE (EN); APPLICATION: CW SYSTEM; SPECIFICATION: EN 593.EN1092 PN10; STUDS: 12 OF M20 X 170 MM LONG ISO 898-1 PROPERTY CLASS: 4.6 HOT-DIP GALVANIZED; NUTS: 24 OF M20 REGULAR NUTS ISO 898-2 PROPERTY CLASS: 5 HOT-DIP GALVANIZED; WASHERS: 24 OF NOMINAL SIZE 20 FLAT WASHERS ISO 7089 HOT-DIP GALVANIZED; GASKETS: TWO OFF NEOPRENE RUBBER GASKETS 395 MM X 276 MM X 3 MM THK; SHORE A HARDNESS 60–75 SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT DATASHEETS FOR ALL STUDS;NUTS; WASHERS AND GASKETS FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; VERIFY THAT THE QUANTITIES SUPPLIED AND THE TECHNICAL SPECIFICATIONS OF THE DELIVERED COMPONENTS COMPLY WITH THE STOCK DESCRIPTION	EA	24
17	774689	KIT, VALVE INSTALLATION; APPLICATION: DN450 (NPS 18) METAL-SEATED GATE ISOLATION VALVE, CW SYSTEM; FLANGE INTERFACE: ASME B16.5 CLASS 150; KIT CONTENTS: STUDS: 32 OFF, 1⅛ IN × 160 MM LONG, 8UN THREAD, ASTM A193 GRADE B7; NUTS: 64 OFF, 1⅛ IN HEAVY HEXAGON NUTS, 8UN THREAD, ASTM A194 GRADE 2H; WASHERS: 64 OFF, PLAIN WASHERS SUITABLE FOR 1⅛ IN STUDS; CORROSION PROTECTION: HOT-DIP GALVANISED; GASKETS: 2 OFF, NEOPRENE RUBBER, 635 MM OD × 461 MM ID × 3 MM	EA	8

		THICK, SHORE A HARDNESS 60–75, SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.		
18	774667	KIT, VALVE INSTALLATION; APPLICATION: DN450 (NPS 18) WAFER-TYPE BUTTERFLY VALVE, CW SYSTEM; VALVE DESIGN STANDARD: API 609; FLANGE INTERFACE: ASME B16.5 CLASS 150; KIT CONTENTS: STUDS: 16 OFF, 1⅛ IN DIAMETER × 260 MM LONG, SUITABLE FOR ASME B16.5 CLASS 150 FLANGE BOLTING, HOT-DIP GALVANISED; NUTS: 32 OFF, HEXAGON NUTS, SUITABLE FOR 1⅛ IN STUDS, HOT-DIP GALVANISED; WASHERS: 32 OFF, PLAIN WASHERS, SUITABLE FOR 1⅛ IN STUDS, HOT-DIP GALVANISED; GASKETS: 2 OFF, NEOPRENE RUBBER, 635 MM OD × 461 MM ID × 3 MM THICK, SHORE A HARDNESS 60–75, SUITABLE FOR WATER SERVICE; TENDERERS SHALL SUBMIT TECHNICAL DATA SHEETS FOR ALL STUDS, NUTS, WASHERS AND GASKETS OFFERED FOR ESKOM ENGINEERING REVIEW AND APPROVAL PRIOR TO DELIVERY; ALL COMPONENT QUANTITIES, DIMENSIONS, MATERIALS AND APPLICABLE STANDARDS SHALL COMPLY WITH THIS STOCK DESCRIPTION.	EA	23
19	774702	COUPLING, PIPE; TYPE: FLANGED PIPE COUPLING; NOMINAL SIZE: NPS 18 (DN450); SERVICE: COOLING WATER; PRESSURE RATING: ASME CLASS 150; FLANGED CONNECTION: NPS 18, ASME B16.5 CLASS 150; PIPE OUTSIDE DIAMETER: 480 MM; COUPLING SHALL BE DESIGNED AND SIZED TO PROVIDE AN EFFECTIVE PRESSURE-TIGHT SEAL ON A PIPE WITH AN OUTSIDE DIAMETER OF 480 MM; BODY MATERIAL: STRUCTURAL STEEL, EN 10025 GRADE S275; ELASTOMERIC SEALS: EPDM, COMPLIANT WITH BS EN 681-1 AND SUITABLE FOR WATER SERVICE; FASTENERS: STAINLESS STEEL, GRADE A4-70, TO ISO 3506; COATING: WRAS-APPROVED COATING SYSTEM SUITABLE FOR WATER SERVICE, MINIMUM TOTAL DRY FILM THICKNESS: 300 µM; OVERALL COUPLING LENGTH: 253 MM; DESIGN REQUIREMENTS: EN 13480, WHERE APPLICABLE; EN 10204 TYPE 3.1 INSPECTION CERTIFICATES IN ENGLISH SHALL BE PROVIDED FOR ALL METALLIC COMPONENTS; TENDERERS SHALL SUBMIT A TECHNICAL DATA SHEET AND DIMENSIONAL DRAWING FOR THE COUPLING OFFERED FOR TECHNICAL EVALUATION. THE SUBMITTED DOCUMENTATION SHALL CONFIRM, AS A MINIMUM, THE PRESSURE RATING, FLANGE STANDARD AND CLASS, BODY MATERIAL, PIPE OD/SEALING RANGE, ELASTOMER MATERIAL, FASTENER MATERIAL, COATING SYSTEM AND THICKNESS, AND OVERALL COUPLING LENGTH.	EA	6

2. Specifications

There is currently no installed base or preferred OEM for these valves. The selection of a suitable manufacturer shall therefore be based primarily on compliance with the specified technical descriptions and requirements also considering overall cost-effectiveness.

Prior to delivery of any small-bore valve or pipe coupling to Camden Power Station, the Supplier shall submit the following documentation to Eskom Camden Turbine Engineering for review and acceptance:

- Technical data sheets for the proposed items; and
- Cross-sectional drawings identifying the materials of construction for all relevant components.

To ensure proper installation of the new small-bore valves, each valve shall be supplied complete with a gasket and bolting kit. The associated gasket and bolting requirements are listed in the technical descriptions of each respective valve. The DN 450 butterfly valves require pipe couplings also to be supplied for their installation, the pipe couplings are listed in the technical descriptions of each respective valve.

Eskom Camden Turbine Engineering shall review the submitted documentation to verify compliance with the applicable material descriptions and specified technical requirements. The Supplier shall obtain formal acceptance from Eskom Camden Turbine Engineering prior to delivering any of the items to the station.

The Supplier shall not proceed with the delivery of any valve until formal acceptance has been provided by Camden Turbine Engineering. Only valves that have been reviewed and formally accepted by Camden Turbine Engineering shall be supplied to Camden Power Station.

Any items delivered to Camden Power Station without prior formal acceptance by Eskom Camden Turbine Engineering shall be rejected.

3. Constraints on how the *Supplier* Provides the Goods

3.1 Use of standard forms

All standard NEC short supply contract forms are applicable for the administration of the contract for, but not limited to communication, instructions, notifications, etc.

3.2 Invoicing and payment

In terms of core clause 50 the *Supplier* assesses the amount due and applies to the *Purchaser* for payment. The *Supplier* applies for payment with a tax invoice addressed to the *Purchaser* as follows:

_____

The *Supplier* includes the following minimum information on each tax invoice:

- Name and address of the *Supplier*
- The contract number and title;
- *Supplier*'s VAT registration number;
- The *Purchaser*'s VAT registration number which is _____;
- The total of
  - The Price for each lump sum item in the Price Schedule or Batch Order which the *Supplier* has completed;
  - Where a quantity is stated for an item in the Price Schedule or Batch Order, an amount calculated by multiplying the quantity which the *Supplier* has completed by the rate,
- Other amounts to be paid to the *Supplier*;
- Less amounts to be paid by or retained from the *Supplier*;

- The invoiced amount - excluding VAT, the VAT and including VAT;

Invoices are to be submitted for processing once the assessment certificate has been fully completed & signed by all parties. Invoices will be submitted for processing after 5 working days from the last signature on the assessment certificate, this is to allow for Eskom to complete all internal SAP entries, approvals & GR number generation.

4. Services and other things provided by the *Purchaser*

The Purchase will provide permit entrance into Camden power station and will assist with unloading of goods.

5. Supply requirements

The Supplier will provide own transport to transit the goods for delivery at Eskom Camden power station. Delivery will be between 09h00 to 14h00 Mondays to Thursdays and 09h00 to 10h00 on Fridays. No deliveries during non-working days. All deliveries will be made to Camden stores (receiving) and the supplier will ensure that the delivery note is fully signed by Eskom Stores receiving personnel.

All goods to be packaged to ensure no damage to the goods during loading, transportation and delivery. All goods packaging to be clearly marked with goods description, quantity, order number and any relevant information.

The supplier will ensure that the delivery vehicle is road worthy. The delivery drive will comply with Eskom cardinal rules when transporting goods destine for delivery to Camden power station & also when entering the power station.

Minimum applicable Eskom Cardinal rules for the delivery of goods

- Be sober
- Buckle up
- Hook up at heights
- Permit to work - Risk assessment to be conducted for every activity/work regardless of permit to work applicability. Loading & unloading goods is deemed work/activity & a risk assessment is applicable