



NGAKA MODIRI MOLEMA DISTRICT MUNICIPALITY

BID DESCRIPTION:

APPOINTMENT OF A PANEL OF NOT MORE THAN FIFTEEN (15) SERVICE PROVIDERS FOR SUPPLY AND DELIVERY OF WATER & SANITATION MATERIAL, TOOLS AND ELECTRICAL COMPONENTS ON AS AND WHEN REQUIRED BASIS FOR A PERIOD OF THREE YEARS

BID NUMBER: NMMDM 23/24/04 PWBS

TENDER SUBMITTED BY (DIRECTOR) :

NAME OF BIDDING COMPANY:.....

BUSINESS ADDRESS:

.....

.....

TEL. / CELL NUMBER :

E-MAIL ADDRESS :

ISSUED BY:

**Municipal Manager
Ngaka Modiri Molema District Municipality
Private Bag X 2167
Mafikeng
2745
Tel: (018) 381 9400**

CLOSING DATE: 03 MAY 2024 @ 11H00AM

INDEX

INVITATION TO BID	3
PART A INVITATION TO BID	4
PART B TERMS AND CONDITIONS FOR BIDDING	Error! Bookmark not defined.
LIST OF RETURNABLE DOCUMENTS	6
MBD 4	6
MBD 6.1	Error! Bookmark not defined.
80/20 or 90/10	Error! Bookmark not defined.
MBD7.2	Error! Bookmark not defined.
CONTRACT FORM - RENDERING OF SERVICES	Error! Bookmark not defined.
PART 1 (TO BE FILLED IN BY THE SERVICE PROVIDER).....	Error! Bookmark not defined.
MBD 7.2	Error! Bookmark not defined.
PART 2 (TO BE FILLED IN BY THE PURCHASER)	Error! Bookmark not defined.
DESCRIPTION OF	Error! Bookmark not defined.
SERVICE	Error! Bookmark not defined.
MBD 8	Error! Bookmark not defined.
MBD 8	21
MBD 9	24
SPECIFICATIONS	28
SCOPE OF WORK.....	31
SPECIFICATION AND FORM OF OFFER (RATES ONLY).....	31
NB: THE SPECIFICATION AND FORM OF OFFER MUST BE COMPLETED IN FULL, ALL ITEMS MUST BE PRICED FAILURE TO DO SO WILL RENDER THE BID DOCUMENT NON-RESPONSIVE.	31
Performance	69
Mono Positive Displacement Borehole Pump Range	69
Performance	69
Features	69
PRICING SCHEDULE.....	Error! Bookmark not defined.
GENERAL CONDITIONS OF CONTRACT	79



NGAKA MODIRI MOLEMA DISTRICT MUNICIPALITY

APPOINTMENT OF A PANEL OF NOT MORE THAN FIFTEEN (15) SERVICE PROVIDERS FOR SUPPLY AND DELIVERY OF WATER & SANITATION MATERIAL, TOOLS AND ELECTRICAL COMPONENTS ON AS AND WHEN REQUIRED BASIS FOR A PERIOD OF THREE YEARS

TENDER NO: NMMDM 23/24/04 PWBS

INVITATION TO BID

Prospective service providers are hereby invited to bids for the **APPOINTMENT OF A PANEL OF NOT MORE THAN FIFTEEN (15) SERVICE PROVIDERS FOR SUPPLY AND DELIVERY OF WATER & SANITATION MATERIAL, TOOLS AND ELECTRICAL COMPONENTS ON AS AND WHEN REQUIRED BASIS FOR A PERIOD OF THREE YEARS**

Detailed bids documents are obtainable from www.etenders.gov.za / www.nmmdm.gov.za/tenders

Tenders completed as prescribed shall be sealed in an envelope marked “**BID NO: NMMDM 23/24/04 PWBS – APPOINTMENT OF A PANEL OF NOT MORE THAN FIFTEEN (15) SERVICE PROVIDERS FOR SUPPLY AND DELIVERY OF WATER & SANITATION MATERIAL, TOOLS AND ELECTRICAL COMPONENTS ON AS AND WHEN REQUIRED BASIS FOR A PERIOD OF THREE YEARS**” and deposited in the bid box at Ngaka Modiri Molema District Municipality, Cnr Carrington and 1st Avenue, Industrial Sites, Mahikeng, to reach its destination not later than **03 MAY 2024 AT 11H00AM** when tenders shall be opened in public.

Bids will be adjudicated based on the Preferential Procurement Regulations 2022 using compliance, local content, functionality and 90/10 points system.

The stipulated minimum threshold percentage compliance on specified local production & content on designated items as stipulated by the Department of Trade and Industry (DTI) will be applicable. For the purpose of the above, MBD 6.2 has been attached to this tender document and the annexures are downloadable from the e-tender and municipal website.

The validity period for this tender is 90 days.

Any enquiries regarding the bidding procedure may be directed to:

Ms T Manyeneng, Tel: +27 18 381 9400, E-mail manyenengt@nmmdm.gov.za /

Mr P. Tauetsile, Tel: +27 18 381 9400, E-mail tauetsilep@nmmdm.gov.za /

Ms B.D Mokate, Tel: +27 01 381 9400, E-mail mokateb@nmmdm.gov.za

Any enquiries regarding technical information may be directed to:

Mr M. Manonyane – Water Supply Material and Tools, Tel: +27 18 381 9400, E-mail manonyanem@gmail.com

Mrs. M Mokgalagadi – Electrical Components, Tel: +27 18 381 9400, Email: mimokhasi@gmail.com

SIGNED

O.A LOSABA

MUNICIPAL MANAGER

PART A INVITATION TO BID

**PART A
INVITATION TO BID**

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF MUNICIPALITY/ MUNICIPAL ENTITY)

BID NUMBER:		CLOSING DATE:		CLOSING TIME:	
DESCRIPTION					

THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7).

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS

SUPPLIER INFORMATION

NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
TAX COMPLIANCE STATUS	TCS PIN:		OR	CSD No:	
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER PART B:3]	
TOTAL NUMBER OF ITEMS OFFERED			TOTAL BID PRICE	R	
SIGNATURE OF BIDDER		DATE		
CAPACITY UNDER WHICH THIS BID IS SIGNED					

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:	TECHNICAL INFORMATION MAY BE DIRECTED TO:
--	--

DEPARTMENT		CONTACT PERSON	
CONTACT PERSON		TELEPHONE NUMBER	
TELEPHONE NUMBER		FACSIMILE NUMBER	
FACSIMILE NUMBER		E-MAIL ADDRESS	
E-MAIL ADDRESS			

PART B TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:	
1.1.	BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2.	ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED (NOT TO BE RE-TYPED) OR ONLINE
1.3.	THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
2. TAX COMPLIANCE REQUIREMENTS	
2.1	BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2	BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3	APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA.
2.4	FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3.
2.5	BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.6	IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.7	WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS	
3.1.	IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)? <input type="checkbox"/> YES <input type="checkbox"/> NO
3.2.	DOES THE ENTITY HAVE A BRANCH IN THE RSA? <input type="checkbox"/> YES <input type="checkbox"/> NO
3.3.	DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? <input type="checkbox"/> YES <input type="checkbox"/> NO
3.4.	DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? <input type="checkbox"/> YES <input type="checkbox"/> NO
3.5.	IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? <input type="checkbox"/> YES <input type="checkbox"/> NO
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.	

**NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.
NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE.**

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:

DATE:

LIST OF RETURNABLE DOCUMENTS

1. Proof of Central Suppliers Database (CSD) registration
2. C.K Document
3. Certified ID copies (of not more than three months) of company director
4. A signed Joint Venture Agreement (In case of a Joint Venture)
5. Recent Statement of Municipal rates and taxes or municipal service charges of every Director Listed on the C.K Document not older than three months from the date issued (the address that appears on the rates statement must correspond to the address on the CSD).
6. Recent Statement of Municipal rates and taxes or municipal service charges of the Company (Bidder) not older than three months from the date issued.
7. Should a Company (Bidder) Lease a property, the lease agreement will replace the requirement on (No.6).
8. Should Directors be residing in rural areas, Letter from Tribal Authority confirming your stay in that Area (the address that appears in the letter from tribal authority must correspond to the address on the CSD).
9. Should the Director not be responsible for rates and taxes but residing in an area where there is Municipal Services offered, the director should submit the Original Affidavit from South African Police Service Confirming as such.
10. Should the Company (Bidder) be operating from the Same Address as the Director, an affidavit confirming such should be submitted.
11. Requirements should be submitted for J.V based on their applicability.
12. Three (03) Years Audited Annual Financial Statements
13. **Soft Copy of the entire tender document including returnable saved in a USB. (Failure to submit the USB will result in a disqualification)**

NB:

1. Certified copies must have a date of certification and should be not older than 3 months as at the close of the tender. (Should the copy not have the date of certification the tender will be regarded as non-responsive)
2. Only original stamp and signature will be accepted.
3. Copy of a certified document will be considered non-responsive.
4. Should any of the returnable documents stated not be attached to this bid document, your bid will be declared invalid.

BID REQUIREMENTS

1. Late bids will not be considered. Please note that bids are late if they are received after the closing date and time.
2. Bids will be valid for 90 days.
3. All prices must be quoted in South African currency and must be VAT Inclusive.
4. All items must be priced, failure to price all items will render your bid non-responsive.
5. All relevant forms attached to this bid document must be completed and signed in black ink where applicable by a duly authorised official. Use of tipex and pencil will not be acceptable.

NGAKA MODIRI MOLEMA DISTRICT MUNICIPALITY

SIGNATORY AUTHORISATION

(To be completed by the Bidder)

SIGNATORY AUTHORISATION

I/We the undersigned, am/are authorized to enter into this contract on behalf of

(Name of Firm)

By virtue of resolution dated -----day of -----20-----
(Month)

The certified copy of resolution that is herewith attached to this Bid.

AS WITNESSES:

1.
(Initials and Surname in full) Signature

Firm/Company's Name:

.....
.....

Physical Address:

.....
.....

2.
(Initials and Surname in full) Signature

Firm/Company's Name:

.....
.....

Physical Address:

.....
.....

NGAKA MODIRI MOLEMA DISTRICT MUNICIPALITY

DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state*.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest.
3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.
 - 3.1 Full Name:
 - 3.2 Identity Number:
 - 3.3 Position occupied in the Company (director, trustee, shareholder).....
 - 3.3 Company Registration Number:.....
 - 3.5 Tax Reference Number:
 - 3.6 VAT Registration Number:
 - 3.7 The names of all directors / trustees / shareholder members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.
 - 3.8 Are you presently in the service of the state*
YES/NO
 - 3.8.1 If so, furnish particulars:

* MSCM Regulations: “in the service of the state” means to be –

1. a member of –
 - (i) any municipal council;
 - (ii) any provincial legislature; or
 - (iii) the national Assembly or the national Council of provinces;
2. a member of the board of directors of any municipal entity;
3. an official of any municipality or municipal entity;
4. an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);
5. a member of the accounting authority of any national or provincial public entity; or
6. an employee of Parliament or a provincial legislature.

3.9 Have you been in the service of the state for the past twelve months?
YES/NO

3.9.1 If so, furnish particulars:

.....

3.10 Do you, have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? **YES/NO**

3.10.1 If so, furnish particulars:

.....

.....

3.11 Are you, aware of any relationship (family, friend, other) between any bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? **YES/NO**

3.11.1 If so, furnish particulars:

.....

.....

3.12 Are any of the company's directors, managers, principle shareholders or stakeholders in service of the state?
YES/NO

3.12.1 If so, furnish particulars:

.....

3.13 Are any spouse, child or parent of the company's directors Managers, principle shareholders or stakeholders in service of the state?
YES/NO

3.13.1 If so, furnish particulars:

.....

3.14 Do you or any other of the directors, **YES/NO**
Managers, principle shareholders or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract?

3.14.1 If so, furnish particulars:

.....

4. Full details of directors / trustees, members / shareholders.

Full Name	Identity Number	State Employee Number

I, THE UNDERSIGNED (NAME)

.....
CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.
I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)

For all procurement expected to exceed R10 million (all applicable taxes included), bidders must complete the following questionnaire:

1. Are you by law required to prepare annual financial statements for auditing?

***YES / NO**

1.1 If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.

.....
.....

2 Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days?

***YES / NO**

2.1 If no, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than three months or other service provider in respect of which payment is overdue for more than 30 days.

2.2 If yes, provide particulars.

.....
.....

*** Delete if not applicable**

3. Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract?

***YES / NO**

3.1 If yes, furnish particulars

.....
.....

4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic?

***YES / NO**

4.1 If yes, furnish particulars

.....
.....

CERTIFICATION

I, THE UNDERSIGNED (NAME)

.....
.....

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.

I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

Signature

Date

Position

Name of Bidder

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:
 - the 90/10 system for requirements with a Rand value of above R50 000 000 (all applicable taxes included)

1.2 To be completed by the organ of state
 (delete whichever is not applicable for this tender).

- a. The applicable preference point system for this tender is the 90/10 preference point system.
- b. 90/10 preference point system will be applicable in this tender. The lowest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- a. Price; and
- b. Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	90
SPECIFIC GOALS	10
RACE (BLACK) [AS PER BBBEE ACT AND HISTORICALLY DISADVANTAGED INDIVIDUALS (HDI)] = 2	
GENDER (WOMEN) = 3	
LOCALITY = 5	
(WITHIN NMMDM JURISDICTION = 5)	
(WITHIN NW PROVINCE = 3)	
(NATIONAL = 1)	
Total points for Price and SPECIFIC GOALS	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- a. **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- b. **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- c. **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- d. **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- e. **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1 POINTS AWARDED FOR PRICE

3.1.1 THE 90/10 PREFERENCE POINT SYSTEMS

A maximum of 90 points is allocated for price on the following basis:

90/10

$$P_s = 90 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$$

Where

P_s = Points scored for price of tender under consideration

P_t = Price of tender under consideration

P_{min} = Price of lowest acceptable tender

3.2 FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1 POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20

or

90/10

$$Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right) \text{ or } Ps = 90 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

4.1 In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

4.2 In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

- a. an invitation for tender for income-generating contracts, that the 80/20 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
- b. any other invitation for tender, that the 80/20 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.)

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)
RACE (BLACK)	2	
GENDER (WOMEN)	3	
LOCALITY (WITHIN NMMDM JURISDICTION = 5) (WITHIN NW PROVINCE = 3) (NATIONAL = 1)	5	

DECLARATION WITH REGARD TO COMPANY/FIRM

3.1. Name of company/firm.....

3.2. Company registration number:

3.3. TYPE OF COMPANY/ FIRM

- Partnership/Joint Venture / Consortium
- One-person business/sole propriety
- Close corporation
- Public Company
- Personal Liability Company
- (Pty) Limited
- Non-Profit Company
- State Owned Company

[TICK APPLICABLE BOX]

3.4. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person’s conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and

forward the matter for criminal prosecution, if deemed necessary.

..... SIGNATURE(S) OF TENDERER(S)	
SURNAME AND NAME:
DATE:
ADDRESS:

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

This Municipal Bidding Document (MBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2011 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2011 (Regulation 9) makes provision for the promotion of local production and content.
- 1.2. Regulation 9.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for bids referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

Where

x is the imported content in Rand

y is the bid price in Rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by the South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as required in paragraph 4.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on Error! Hyperlink reference not valid.<http://www.thedti.gov.za/industrialdevelopment/ip.jsp> at no cost.

1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;

2. Definitions

2.1. **“bid”** includes written price quotations, advertised competitive bids or proposals;

2.2. **“bid price”** price offered by the bidder, excluding value added tax (VAT);

2.3. **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;

2.4. **“designated sector”** means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;

2.5. **“duly sign”** means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility (close corporation, partnership or individual).

2.6. **“imported content”** means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour and intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;

2.7. **“local content”** means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;

2.8. **“stipulated minimum threshold”** means that portion of local production and content as determined by the Department of Trade and Industry; and

2.9. **“sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.

3. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
_____	_____ %
_____	_____ %
_____	_____ %

4. Does any portion of the services, works or goods offered have any imported content?

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

- 4.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

5. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the Accounting Officer / Accounting Authority provide directives in this regard.

LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO.

ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Entity):
.....

NB

- 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on <http://www.thedti.gov.za/industrialdevelopment/ip.jsp>. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful

bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),
do hereby declare, in my capacity as
of(name of bidder
entity), the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
 - (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011;
- (c) The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C;

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

- (d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

CONTRACT FORM - RENDERING OF SERVICES

THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SERVICE PROVIDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SERVICE PROVIDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.

PART 1 (TO BE FILLED IN BY THE SERVICE PROVIDER)

1. I hereby undertake to render services described in the attached bidding documents to (name of the institution)..... in accordance with the requirements and task directives / proposals specifications stipulated in Bid Number..... at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the Purchaser during the validity period indicated and calculated from the closing date of the bid.
2. The following documents shall be deemed to form and be read and construed as part of this agreement:
 - (i) Bidding documents, viz
 - Invitation to bid;
 - Proof of tax compliance status;
 - Pricing schedule(s);
 - Filled in task directive/proposal;
 - Preference claim form for Preferential Procurement in terms of the Preferential Procurement Regulations;
 - Declaration of interest;
 - Declaration of Bidder's past SCM practices;
 - Certificate of Independent Bid Determination;
 - Special Conditions of Contract;
 - (ii) General Conditions of Contract; and
 - (iii) Other (specify)
3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the services specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.
4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfillment of this contract.
5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.
6. I confirm that I am duly authorised to sign this contract.

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM

DATE

WITNESSES	
1
2
---	---

CONTRACT FORM - RENDERING OF SERVICES
PART 2 (TO BE FILLED IN BY THE PURCHASER)

1. I in my capacity as accept your bid under reference number dated for the rendering of services indicated hereunder and/or further specified in the annexure(s).
2. An official order indicating service delivery instructions is forthcoming.
3. I undertake to make payment for the services rendered in accordance with the terms and conditions of the contract, within 30 (thirty) days after receipt of an invoice.

DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	TOTAL PREFERENCE POINTS CLAIMED	POINTS CLAIMED FOR EACH SPECIFIC GOAL

4. I confirm that I am duly authorised to sign this contract.

SIGNED AT ON

NAME (PRINT)

SIGNATURE

OFFICIAL STAMP

WITNESSES

1

2

— — —

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

1. This Municipal Bidding Documents must form part of all bids invited.
2. It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
3. The bid of any bidder may be rejected if that bidder, or any of its directors have:
 - 3.1 abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - 3.2 been convicted for fraud or corruption during the past five years;
 - 3.3 wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector during the past five years;
 - 3.4 been listed in the Register for Tender defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act(no 12 of 2004).
4. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

Item	Question	Yes	No
4.1.	Is the bidder or any of its directors listed on the National Treasury's database as a company or person prohibited from doing business with the public sector? (Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the audi alteram partum rule was applied)	<input type="checkbox"/>	<input type="checkbox"/>
4.1.1	If so, furnish particulars		
4.2.	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? (To access this Register enter the National Treasury's website, www.treasury.gov.za , click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number (012) 326 5445).	<input type="checkbox"/>	<input type="checkbox"/>
4.2.1	If so, furnish particulars		
4.3.	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	<input type="checkbox"/>	<input type="checkbox"/>
Item	Question	Yes	No
4.3.1	If so, furnish particulars		
4.4.	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	<input type="checkbox"/>	<input type="checkbox"/>
4.4.1	If so, furnish particulars		

4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	<input type="checkbox"/>	<input type="checkbox"/>
4.5.1	If so, furnish particulars		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME)

.....

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS TRUE AND CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....

Signature

.....

Date

.....

Position

.....

Name of Bidder

CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Municipal Bidding Document (MBD) must form part of all bids¹ invited.
- 2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. take all reasonable steps to prevent such abuse;
 - b. reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
- 4 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- 5 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Municipality / Municipal Entity)

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of: _____ that:
(Name of Bidder)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - (a) has been requested to submit a bid in response to this bid invitation;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder
6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a bid;
 - (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
 - (f) bidding with the intention not to win the bid.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Signature

Date

Position

Name of Bidder

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

FUNTIONALITY

EVALUATION CRITERIA:

Bid will be evaluated on functionality and 90/10 (price and preference points)

FUNCTIONALITY

Description		Number of Points	
		Maximum	Claimed
FUNCTIONALITY	Experience: Supply and delivery in any material and goods in government institutions & parastatals . 1. Appointment Letter or Purchase Order (Original certified signed and stamped) and 2. Corresponding Reference letters (Original Certified Stamped and Signed) NB: both Purchase order and Corresponding Reference letter or Appointment letter and Corresponding Reference letter must be submitted, non-submission of either will result in non-allocation of points.	50	
	<ul style="list-style-type: none"> • R1 000 000 - R1 500 000 	35	
	<ul style="list-style-type: none"> • R1 500 001 - R2 000 000 	40	
	<ul style="list-style-type: none"> • R2 000 001 & above 	50	
	Total	50	
Maximum threshold		35	

NOTE:

1. The minimum threshold required is 35 points, bidders scored below the required minimum threshold will not be evaluated further on price and preference points.
2. First step will be on Supply Chain Management legal documents (submission of list of returnable documents)

SPECIFICATIONS AND PRICING SCHEDULE

SUPPLY AND DELIVERY OF WATER & SANITATION MATERIAL, TOOLS AND ELECTRICAL COMPONENTS ON AS AND WHEN REQUIRED BASIS FOR A PERIOD OF THREE (03) YEARS

SCOPE OF WORK

The work to be tendered under this contract comprises mainly of the following:

1. *Supply and delivery of water and sanitation material, Working Tools & Electrical Components*

The Water & Sanitation Material and Electrical Components to be used mainly for:

- *Borehole Maintenance*
- *Repairs and Maintenance of all water supply schemes*
- *Repairs and Maintenance of all Sanitation Services Schemes*
- *Repairs and maintenance of NMMDM buildings and infrastructures*
- *Burst pipelines and Leakages (War on leaks)*
- *Standpipe Repairs*
- *Yard connections*
- *Tankering Services*
- *Implementation of emergency water projects*

The Working Tools to be used:

- *To assist officials to ease the workload*

SPECIFICATION AND FORM OF OFFER (RATES ONLY)

NB: THE SPECIFICATION AND FORM OF OFFER MUST BE COMPLETED IN FULL, ALL ITEMS MUST BE PRICED FAILURE TO DO SO WILL RENDER THE BID DOCUMENT NON-RESPONSIVE.

Description	Unit Price Excluding Vat	15% VAT	Total Rate Including 15% VAT
1. HDPE PIPES (CLASS 10) (SABS Approved)			
1.1. 15mm x 100m - HDPE Pipe (Class 10)			
1.2. 20mm x 100m - HDPE Pipe (Class 10)			
1.3. 25mm x 100m - HDPE Pipe (Class 10)			
1.4. 32mm x 100m – HDPE Pipe (Class 10)			
1.5. 40mm x 100m – HDPE Pipe (Class 10)			
1.6. 50mm x 100m – HDPE Pipe (Class 10)			
2. HDPE PIPES (CLASS 11) (SABS Approved)			
2.1. 15mm x 100m - HDPE Pipe (Class 11)			
2.2. 20mm x 100m - HDPE Pipe (Class 11)			
2.3. 25mm x 100m - HDPE Pipe (Class 11)			
2.4. 32mm x 100m – HDPE Pipe (Class 11)			

2.5. 40mm x 100m – HDPE Pipe (Class 11)			
2.6. 50mm x 100m – HDPE Pipe (Class 11)			
3. HDPE PIPES (CLASS 12) (SABS Approved)			
3.1. 15mm x 100m - HDPE Pipe (Class 12)			
3.2. 20mm x 100m - HDPE Pipe (Class 12)			
3.3. 25mm x 100m - HDPE Pipe (Class 12)			
3.4. 32mm x 100m – HDPE Pipe (Class 12)			
3.5. 40mm x 100m – HDPE Pipe (Class 12)			
3.6. 50mm x 100m – HDPE Pipe (Class 12)			
4. COPPER PIPES (SABS Approved)			
4.1. 15mm x 5.5m Copper Pipe			
4.2. 22mm x 5.5m Copper Pipe			
5. POLYPIPES (SABS Approved)			
5.1. 15mm Poly Pipe			
5.2. 22mm Poly Pipe			
6. UG PIPES (SABS)			
6.1. 50mm PVC Pipe			
6.2. 110mm x 6m PVC Pipe (100 KPA)			
7. HOSE BIP TAPS (Must comply ISO 6509/SANS 226) (SABS Approved)			
7.1. 15mm Bib Tap			
7.2. 20mm Bib Tap			
8. GARDEN PLASTIC TAPS (SABS Approved)			
8.1. 15mm Plastic Tap			
8.2. 20mm Plastic Tap			
9. SINK/BASIN TAPS (CHROME) (SABS Approved)			
9.1. 15mm Pillar Tap			
9.2. 20mm Pillar Tap			
10. PLASSON MALE ADAPTERS (Must Range From Class 10 – 12)			
10.1. 15 x 20mm Male Adaptor			

10.2.	20 x 20mm Male Adaptor			
10.3.	25 x 20mm Male Adapter			
10.4.	32 x 20mm Male Adaptor			
10.5.	40 x 20mm Male Adaptor			
10.6.	40 x 32mm Male Adaptor			
10.7.	40 x 40mm Male Adaptor			
10.8.	50 x 20mm Male Adaptor			
10.9.	50 x 32mm Male Adaptor			
10.10.	50 x 40mm Male Adaptor			
10.11.	50 x 50mm Male Adapter			
10.12.	63 x 50mm Male Adapter			
10.13.	75 x 50mm Male Adapter			
10.14.	80 x 50mm Male Adapter			
10.15.	100 x 50mm Male Adapter			
11. PLASSON STRAIGHT COUPLINGS (Must Range From Class 10 – 12)				
11.1.	20mm Straight Coupling			
11.2.	25mm Straight Coupling			
11.3.	25 x 20mm Straight Coupling			
11.4.	32mm Straight Coupling			
11.5.	32 x 20mm Straight coupling			
11.6.	32 x 25mm Straight coupling			
11.7.	40mm Straight coupling			
11.8.	40 x 20mm Straight coupling			
11.9.	40 x 25mm Straight coupling			
11.10.	40 x 32mm Straight coupling			
11.11.	50mm Straight Coupling			
11.12.	50 x 20mm Straight Coupling			
11.13.	50 x 25mm Straight Coupling			
11.14.	50 x 32mm Straight Coupling			
12. UPVC REDUCERS & STRAIGHT COUPLING (Must Range from Class 10 – 12)				
12.1.	63mm UPVC Straight Coupling			
12.2.	63mm x 50mm UPVC Reducer/Straight Coupling			
12.3.	75mm UPVC Straight Coupling			

12.4.	75mm x 63mm UPVC Reducer/Straight Coupling			
12.5.	90mm UPVC Straight Coupling			
12.6.	90mm x 50mm UPVC Reducer/Straight Coupling			
12.7.	90mm x 63mm UPVC Reducer/Straight Coupling			
12.8.	90mm x 75mm UPVC Reducer/Straight Coupling			
12.9.	110mm UPVC Straight Coupling			
12.10.	110mm x 63mm UPVC Reducer/Straight Coupling			
12.11.	110mm x 75mm UPVC Reducer/Straight Coupling			
12.12.	110mm x 90mm UPVC Reducer/Straight Coupling			
12.13.	140mm UPVC Straight Coupling			
12.14.	140mm x 75mm UPVC Reducer/Straight Coupling			
12.15.	140mm x 90mm UPVC Reducer/Straight Coupling			
12.16.	140mm x 110mm UPVC Reducer/Straight Coupling			
12.17.	160mm UPVC Straight Coupling			
12.18.	160mm x 75mm UPVC Reducer/Straight Coupling			
12.19.	160mm x 90mm UPVC Reducer/Straight Coupling			
12.20.	160mm x 110mm UPVC Reducer/Straight Coupling			
12.21.	160mm x 140mm UPVC Reducer/Straight Coupling			
12.22.	200mm UPVC Straight Coupling			
12.23.	200mm x 110mm UPVC Reducer/Straight Coupling			
12.24.	200mm x 140mm UPVC Reducer/Straight Coupling			
12.25.	200mm x 160mm UPVC Reducer/Straight Coupling			
12.26.	250mm UPVC Straight Coupling			
12.27.	250mm x 140mm UPVC Reducer/Straight Coupling			
12.28.	250mm x 160mm UPVC Reducer/Straight Coupling			
12.29.	250mm x 200mm UPVC Reducer/Straight Coupling			
12.30.	300mm x UPVC Straight Coupling			
12.31.	300mm x 160mm UPVC Reducer/Straight Coupling			
12.32.	300mm x 200mm UPVC Reducer/Straight Coupling			
12.33.	300mm x 250mm UPVC Reducer/Straight Coupling			
12.34.	350mm UPVC Straight Coupling			
12.35.	350mm x 160mm UPVC Reducer/Straight Coupling			
12.36.	350mm x 200mm UPVC Reducer/Straight Coupling			
12.37.	350mm x 250mm UPVC Reducer/Straight Coupling			

12.38. 350mm x 300mm UPVC Reducer/Straight Coupling			
12.39. 400mm UPVC Straight Coupling			
12.40. 400mm x 200mm UPVC Reducer/Straight Coupling			
12.41. 400mm x 250mm UPVC Reducer/Straight Coupling			
12.42. 400mm x 300mm UPVC Reducer/Straight Coupling			
12.43. 450mm UPVC Straight Coupling			
12.44. 450mm x 200mm UPVC Reducer/Straight Coupling			
12.45. 450mm x 250mm UPVC Reducer/Straight Coupling			
12.46. 450mm x 300mm UPVC Reducer/Straight Coupling			
13. UPVC PIPES (SABS) (CLASS 10) (SABS Approved)			
13.1. 63mm x 6m UPVC Pipe			
13.2. 75mm x 6m UPVC Pipe			
13.3. 90mm x 6m UPVC Pipe			
13.4. 110mm x 6m UPVC Pipe			
13.5. 140mm x 6m UPVC Pipe			
13.6. 160mm x 6m UPVC Pipe			
13.7. 200mm x 6m UPVC Pipe			
13.8. 250mm x 6m UPVC Pipe			
13.9. 300mm x 6m UPVC Pipe			
13.10. 350mm x 6m UPVC Pipe			
13.11. 400mm x 6m UPVC Pipe			
13.12. 420mm x 6m UPVC Pipe			
13.13. 450mm x 6m UPVC Pipe			
14. UPVC PIPES (SABS) (CLASS 12) (SABS Approved)			
14.1. 63mm x 6m UPVC Pipe			
14.2. 75mm x 6m UPVC Pipe			
14.3. 90mm x 6m UPVC Pipe			
14.4. 110mm x 6m UPVC Pipe			
14.5. 140mm x 6m UPVC Pipe			
14.6. 160mm x 6m UPVC Pipe			
14.7. 200mm x 6m UPVC Pipe			
14.8. 250mm x 6m UPVC Pipe			
14.9. 300mm x 6m UPVC Pipe			

14.10. 350mm x 6m UPVC Pipe			
14.11. 400mm x 6m UPVC Pipe			
14.12. 420mm x 6m UPVC Pipe			
14.13. 450mm x 6m UPVC Pipe			
15. UPVC PIPES VINYL COLUMN (STANDARD) FOR SUBMERSIBLE PUMPS UPTO 150M DEPTH (SABS Approved)			
15.1. 50mm x 3m PVC Pipe Vinyl			
15.2. 65mm x 3m PVC Pipe Vinyl			
15.3. 75mm x 3m PVC Pipe Vinyl			
15.4. 80mm x 3m PVC Pipe Vinyl			
15.5. 100mm x 3m PVC Pipe Vinyl			
16. UPVC PIPES VINYL COLUMN (HEAVY) FOR SUBMERSIBLE PUMPS UPTO 250M DEPTH (SABS Approved)			
16.1. 50mm x 3m PVC Pipe Vinyl			
16.2. 65mm x 3m PVC Pipe Vinyl			
16.3. 75mm x 3m PVC Pipe Vinyl			
16.4. 80mm x 3m PVC Pipe Vinyl			
16.5. 100mm x 3m PVC Pipe Vinyl			
17. MILD STEEL TOP ADAPTER (SABS Approved)			
17.1. 50mm Mild Steel Top Adapter			
17.2. 65mm Mild Steel Top Adapter			
17.3. 75mm Mild Steel Top Adapter			
17.4. 80mm Mild Steel Top Adapter			
17.5. 100mm Mild Steel Top Adapter			
18. STAINLESS STEEL BOTTOM ADAPTER (SABS Approved)			
18.1. 50mm Stainless Steel Bottom Adapter			
18.2. 65mm Stainless Steel Bottom Adapter			
18.3. 75mm Stainless Steel Bottom Adapter			
18.4. 80mm Stainless Steel Bottom Adapter			
18.5. 100mm Stainless Steel Bottom Adapter			
19. GALVANISED PIPES (SABS) with threads on end both sides			
19.1. 15mm x 6m Galvanized Pipe			

19.2.	20mm x 6m Galvanised Pipe			
19.3.	25mm x 6m Galvanised Pipe			
19.4.	40mm x 3m Galvanised Pipe			
19.5.	50mm x 3m Galvanised Pipe			
19.6.	65mm x 3m Galvanised Pipe			
19.7.	75mm x 3m Galvanised Pipe			
19.8.	80mm x 3m Galvanised Pipe			
19.9.	100mm x 3m Galvanised Pipe			
20.	MONOPIPES (SABS Approved) with threads on end both sides			
20.1.	40mm x 3m Monopipe			
20.2.	50mm x 3m Monopipe			
20.3.	65mm x 3m Monopipe			
20.4.	75mm x 3m Monopipe			
20.5.	80mm x 3m Monopipe			
20.6.	100mm x 3m Monopipe			
21.	CASCADE CLAMPS (SABS Approved)			
21.1.	63mm Cascade Clamp			
21.2.	75mm Cascade Clamp			
21.3.	90mm Cascade Clamp			
21.4.	110mm Cascade Clamp			
21.5.	140mm Cascade Clamp			
21.6.	160mm Cascade Clamp			
21.7.	200mm Cascade Clamp			
21.8.	250mm Cascade Clamp			
21.9.	300mm Cascade Clamp			
21.10.	315mm Cascade Clamp			
21.11.	350mm Cascade Clamp			
21.12.	400mm Cascade Clamp			
21.13.	415mm Cascade Clamp			
21.14.	450mm Cascade Clamp			
21.15.	500mm Cascade Clamp			

22. CASCADE SADDLE (SABS Approved)			
22.1. 63 x 50mm Cascade Saddle			
22.2. 75 x 50mm Cascade Saddle			
22.3. 90 x 50mm Cascade Saddle			
22.4. 110 x 50mm Cascade Saddle			
22.5. 125 x 50mm Cascade Saddle			
22.6. 140 x 50mm Cascade Saddle			
22.7. 160 x 50mm Cascade Saddle			
22.8. 200 x 50mm Cascade Saddle			
22.9. 240 x 50mm Cascade Saddle			
22.10. 300 x 50mm Cascade Saddle			
22.11. 315 x 50mm Cascade Saddle			
22.12. 350 x 50mm Cascade Saddle			
22.13. 400 x 50mm Cascade Saddle			
22.14. 415 x 50mm Cascade Saddle			
22.15. 450 x 50mm Cascade Saddle			
22.16. 500 x 50mm Cascade Saddle			
23. VJ CLAMPS (SABS Approved)			
23.1. 140mm VJ Clamps			
23.2. 160mm VJ Clamps			
23.3. 200mm VJ Clamps			
23.4. 250mm VJ Clamps			
23.5. 300mm VJ Clamps			
23.6. 315mm VJ Clamps			
23.7. 350mm VJ Clamps			
23.8. 400mm VJ Clamps			
23.9. 415mm VJ Clamps			
23.10. 450mm VJ Clamps			
23.11. 500mm VJ Clamps			
24. SADDLES (RE-INFORCED) (SABS Approved)			
24.1. 50 x 20mm Saddle			
24.2. 63 x 50mm Saddle			

24.3.	75 x 50mm Saddle			
24.4.	90 x 50mm Saddle			
24.5.	110 x 50mm Saddle			
24.6.	125 x 50mm Saddle			
24.7.	140 x 50mm Saddle			
24.8.	160 x 50mm Saddle			
24.9.	200 x 50mm Saddle			
24.10.	250 x 50mm Saddle			
24.11.	300 x 50mm Saddle			
24.12.	315 x 50mm Saddle			
24.13.	350 x 50mm Saddle			
24.14.	400 x 50mm Saddle			
24.15.	415 x 50mm Saddle			
24.16.	450 x 50mm Saddle			
24.17.	500 x 50mm Saddle			
25. REDUCING BUSH (GALVANISED) (SABS Approved)				
25.1.	15 x 20mm Galvanised Red Bush			
25.2.	25 x 20mm Galvanised Red Bush			
25.3.	32 x 20mm Galvanised Red Bush			
25.4.	32 x 25mm Galvanised Red Bush			
25.5.	40 x 20mm Galvanised Red Bush			
25.6.	40 x 25mm Galvanised Red Bush			
25.7.	40 x 32mm Galvanised Red Bush			
25.8.	50 x 20mm Galvanised Red Bush			
25.9.	50 x 25mm Galvanised Red Bush			
25.10.	50 x 32mm Galvanised Red Bush			
25.11.	50 x 40mm Galvanised Red Bush			
25.12.	65 x 25mm Galvanised Red Bush			
25.13.	65 x 32mm Galvanised Red Bush			
25.14.	65 x 40mm Galvanised Red Bush			
25.15.	65 x 50mm Galvanised Red Bush			
25.16.	75 x 32mm Galvanised Red Bush			
25.17.	75 x 40mm Galvanised Red Bush			

25.18. 75 x 50mm Galvanised Red Bush			
25.19. 75 x 65mm Galvanised Red Bush			
25.20. 80 x 50mm Galvanised Red Bush			
25.21. 80 x 65mm Galvanised Red Bush			
25.22. 80 x 75mm Galvanised Red Bush			
25.23. 100 x 50mm Galvanised Red Bush			
25.24. 100 x 65mm Galvanised Red Bush			
25.25. 100 x 75mm Galvanised Red Bush			
25.26. 100 x 80mm Galvanised Red Bush			
26. PLASSON MALE ELBOWS (Must Range From Class 10 – 12) (SABS Approved)			
26.1. 20 x 15mm Male Elbow			
26.2. 20mm Male Elbow			
26.3. 25 x 20mm Male Elbow			
26.4. 32mm Male Elbow			
26.5. 32 x 20mm Male Elbow			
26.6. 32 x 25mm Male Elbow			
26.7. 32 x 40mm Male Elbow			
26.8. 32 x 50mm Male Elbow			
26.9. 40mm Male Elbow			
26.10. 40 x 20mm Male Elbow			
26.11. 40 x 25mm Male Elbow			
26.12. 40 x 32mm Male Elbow			
26.13. 50mm Male Elbow			
26.14. 50 x 20mm Male Elbow			
26.15. 50 x 25mm Male Elbow			
26.16. 50 x 32mm Male Elbow			
26.17. 50 x 40mm Male Elbow			
27. PLASSON FEMALE ELBOWS (Must Range From Class 10 – 12) (SABS)			
27.1. 20mm Female Elbow			
27.2. 25mm Female Elbow			
27.3. 32mm Female Elbow			
27.4. 40mm Female Elbow			
27.5. 50mm Female Elbow			
27.6. 63mm Female Elbow			
27.7. 75mm Female Elbow			
27.8. 90mm Female Elbow			

27.9. 110mm Female Elbow			
27.10. 140mm Female Elbow			
27.11. 160mm Female Elbow			
27.12. 200mm Female Elbow			
27.13. 250mm Female Elbow			
27.14. 300mm Female Elbow			
27.15. 350mm Female Elbow			
28. GALVANISED ELBOWS (SABS Approved)			
28.1. 15mm Galvanised Elbow			
28.2. 20mm Galvanised Elbow			
28.3. 25mm Galvanised Elbow			
28.4. 32mm Galvanised Elbow			
28.5. 40mm Galvanised Elbow			
28.6. 50mm Galvanised Elbow			
28.7. 65mm Galvanised Elbow			
28.8. 75mm Galvanised Elbow			
28.9. 80mm Galvanised Elbow			
28.10. 100mm Galvanised Elbow			
29. SOCKETS (GALVANISED) (SABS Approved)			
29.1. 15mm Socket			
29.2. 20mm Socket			
29.3. 32mm Socket			
29.4. 32 x 20mm Socket			
29.5. 40mm x Socket			
29.6. 40 x 20mm Socket			
29.7. 40 x 32mm Socket			
29.8. 50mm Socket			
29.9. 50 x 20mm Socket			
29.10. 50 x 32mm Socket			
29.11. 50 x 40mm Socket			
29.12. 65mm Socket			
29.13. 65 x 20mm Socket			
29.14. 65 x 25mm Socket			
29.15. 65 x 32mm Socket			
29.16. 65 x 40mm Socket			
29.17. 65 x 50mm Socket			
29.18. 75mm Socket			
29.19. 75 x 20mm Socket			

29.20. 75 x 25mm Socket			
29.21. 75 x 32mm Socket			
29.22. 75 x 40mm Socket			
29.23. 75 x 50mm Socket			
29.24. 75 x 65mm Socket			
29.25. 80mm Socket			
29.26. 80 x 20mm Socket			
29.27. 80 x 25mm Socket			
29.28. 80 x 32mm Socket			
29.29. 80 x 40mm Socket			
29.30. 80 x 50mm Socket			
29.31. 80 x 65mm Socket			
29.32. 80 x 75mm Socket			
29.33. 100mm Socket			
29.34. 100 x 40mm Socket			
29.35. 100 x 50mm Socket			
29.36. 100 x 65mm Socket			
29.37. 100 x 75mm Socket			
29.38. 100 x 80mm Socket			
30. GALVANISED NIPPLES (SABS Approved)			
30.1. 15mm Galvanised Nipple			
30.2. 20mm Galvanised Nipple			
30.3. 25mm Galvanised Nipple			
30.4. 32mm Galvanised Nipple			
30.5. 40mm Galvanised Nipple			
30.6. 50mm Galvanised Nipple			
30.7. 65mm Galvanised Nipple			
30.8. 75mm Galvanised Nipple			
30.9. 80mm Galvanised Nipple			
30.10. 100mm Galvanised Nipple			
31. GALVANISED UNION (SABS Approved)			
31.1. 15mm Galvanised Union			
31.2. 20 x 15mm Galvanised Union			
31.3. 20mm Galvanised Union			
31.4. 32mm Galvanised Union			
31.5. 32 x 20mm Galvanised Union			
31.6. 40 x 20mm Galvanised Union			
31.7. 40 x 32mm Galvanised Union			

31.8.	50mm Galvanised Union			
31.9.	50 x 20mm Galvanised Union			
31.10.	50 x 32mm Galvanised Union			
31.11.	50 x 40mm Galvanised Union			
31.12.	65mm Galvanised Union			
31.13.	75mm Galvanised Union			
31.14.	75 x 20mm Galvanised Union			
31.15.	75 x 32mm Galvanised Union			
31.16.	75 x 40mm Galvanised Union			
31.17.	75 x 65mm Galvanised Union			
31.18.	80mm Galvanised Union			
31.19.	80 x 32mm Galvanised Union			
31.20.	80 x 40mm Galvanised Union			
31.21.	80 x 65mm Galvanised Union			
31.22.	80 x 75mm Galvanised Union			
31.23.	100mm Galvanised Union			
31.24.	100 x 40mm Galvanised Union			
31.25.	100 x 65mm Galvanised Union			
31.26.	100 x 75mm Galvanised Union			
31.27.	100 x 80mm Galvanised Union			
32.	GALVANISED TEE'S (SABS Approved)			
32.1.	15mm Galvanised EQ Tee			
32.2.	20mm Galvanised EQ Tee			
32.3.	25mm Galvanised EQ Tee			
32.4.	20 x 25mm Galvanised Tee			
32.5.	32mm Galvanised EQ Tee			
32.6.	32 x 20mm Galvanised Tee			
32.7.	32 x 25mm Galvanised Tee			
32.8.	40mm Galvanised EQ Tee			
32.9.	40 x 20mm Galvanised Tee			
32.10.	40 x 25mm Galvanised Tee			
32.11.	40 x 32mm Galvanised Tee			
32.12.	50mm Galvanised EQ Tee			
32.13.	50 x 20mm Galvanised Tee			
32.14.	50 x 25mm Galvanised Tee			
32.15.	50 x 32mm Galvanised Tee			
32.16.	50 x 40mm Galvanised Tee			
32.17.	65mm Galvanised EQ Tee			
32.18.	65 x 40mm Galvanised Tee			

32.19.	65 x 50mm Galvanised Tee			
32.20.	80mm Galvanised EQ Tee			
32.21.	80 x 40mm Galvanised Tee			
32.22.	80 x 50mm Galvanised Tee			
32.23.	80 x 65mm Galvanised Tee			
32.24.	100mm Galvanised EQ Tee			
32.25.	100 x 50mm Galvanised Tee			
32.26.	100 x 65mm Galvanised Tee			
32.27.	100 x 80mm Galvanised Tee			
33. PLASSON TEE'S (Must Range From Class 10 – 12) (SABS Approved)				
33.1.	15mm EQ Tee			
33.2.	20mm EQ Tee			
33.3.	25mm EQ Tee			
33.4.	20 x 25mm Tee			
33.5.	32mm EQ Tee			
33.6.	32 x 20mm Tee			
33.7.	32 x 25mm Tee			
33.8.	40mm EQ Tee			
33.9.	40 x 20mm Tee			
33.10.	40 x 25mm Tee			
33.11.	40 x 32mm Tee			
33.12.	50mm EQ Tee			
33.13.	50 x 20mm Tee			
33.14.	50 x 25mm Tee			
33.15.	50 x 32mm Tee			
33.16.	50 x 40mm Tee			
34. UPVC TEE'S (Must Range From Class 10 – 12) (SABS Approved)				
34.1.	63mm UPVC EQ Tee			
34.2.	63 x 50mm UPVC Tee			
34.3.	75mm UPVC EQ Tee			
34.4.	75 x 50mm UPVC Tee			
34.5.	75 x 63mm UPVC Tee			
34.6.	90mm UPVC EQ Tee			
34.7.	90 x 50mm UPVC Tee			
34.8.	90 x 63mm UPVC Tee			
34.9.	90 x 75mm UPVC Tee			
34.10.	110mm UPVC EQ Tee			
34.11.	100 x 63mm UPVC Tee			

34.12. 110 x 90mm UPVC Tee			
34.13. 140mm UPVC EQ Tee			
34.14. 140 x 90mm UPVC Tee			
34.15. 140 x 110mm UPVC Tee			
34.16. 160mm UPVC EQ Tee			
34.17. 160 x 110mm UPVC Tee			
34.18. 160 x 140mm UPVC Tee			
34.19. 200mm UPVC EQ Tee			
34.20. 200 x 110mm UPVC Tee			
34.21. 200 x 140mm UPVC Tee			
34.22. 200 x 160mm UPVC Tee			
34.23. 250mm UPVC EQ Tee			
34.24. 250 x 140mm UPVC Tee			
34.25. 250 x 160mm UPVC Tee			
34.26. 250 x 200mm UPVC Tee			
34.27. 300mm EQ UPVC Tee			
34.28. 300 x 160mm UPVC Tee			
34.29. 300 x 200mm UPVC Tee			
34.30. 300 x 250mm UPVC Tee			
34.31. 350mm UPVC EQ Tee			
34.32. 350 x 160mm UPVC Tee			
34.33. 350 x 200mm UPVC Tee			
34.34. 350 x 300mm UPVC Tee			
34.35. 400mm UPVC EQ Tee			
34.36. 400 x 200mm UPVC Tee			
34.37. 400 x 250mm UPVC Tee			
34.38. 400 x 300mm UPVC Tee			
34.39. 400 x 350mm UPVC Tee			
35. CAST IRON TEE'S (SABS Approved)			
35.1. 65mm Cast Iron EQ Tee			
35.2. 75mm Cast Iron EQ Tee			
35.3. 90mm Cast Iron EQ Tee			
35.4. 110mm Cast Iron EQ Tee			
35.5. 140mm Cast Iron EQ Tee			
35.6. 160mm Cast Iron EQ Tee			
35.7. 200mm Cast Iron EQ Tee			
35.8. 250mm Cast Iron EQ Tee			
35.9. 300mm Cast Iron EQ Tee			
35.10. 350mm Cast Iron EQ Tee			

35.11. 400mm Cast Iron EQ Tee			
35.12. 450mm Cast Iron EQ Tee			
36. BP MONO ELEMENTS (SUPER D - HIGH PRESSURE) Refer to additional Spec (SABS Approved)			
36.1. BP3 Mono Element HP (Column 40-50mm, Shaft 13-16mm & Power 3kw-7.5kw)			
36.2. BP4 Mono Element HP (Column 40-50mm, Shaft 13-16mm & Power 3kw-7.5kw)			
36.3. BP6 Mono Element HP (Column 40-50mm, Shaft 13-16mm & Power 3kw-7.5kw)			
36.4. BP8 Mono Element HP (Column 50-65mm, Shaft 16-19mm & Power 7.5kw-15kw)			
36.5. BP10 Mono Element HP (Column 50-65mm, Shaft 16-19mm & Power 7.5kw-15kw)			
36.6. BP12 Mono Element HP (Column 50-65mm, Shaft 16-19mm & Power 7.5kw-15kw)			
36.7. BP16 Mono Element HP (Column 65mm, Shaft 19mm & Power 7.5kw-15kw)			
36.8. BP23 Mono Element HP (Column 65mm, Shaft 19mm & Power 7.5kw-15kw)			
36.9. BP30 Mono Element HP (Column 80mm, Shaft 22mm & Power 30kw)			
36.10. BP40 Mono Element HP (Column 80mm, Shaft 22mm & Power 11kw-30kw)			
36.11. BP50 Mono Element HP (Column 100mm, Shaft 22-25mm & Power 37-45kw)			
36.12. BP65 Mono Element HP (Column 100mm, Shaft 22-25mm & Power 15-45kw)			
36.13. BP90 Mono Element HP (Column 100mm, Shaft 22-25mm & Power 37-45kw)			
37. SUBMISSIBLE PUMPS (Refer to additional Spec) (SABS Approved)			
37.1. 0.37kw Submersible Pump (Single Phase 220v – 240v)			
37.2. 0.37kw Submersible Pump (3 Phase 380v – 420v)			
37.3. 0.55kw Submersible Pump (Single Phase 220v – 240v)			
37.4. 0.55kw Submersible Pump (3 Phase 380v – 420v)			
37.5. 0.75kw Submersible Pump (Single Phase 220v – 240v)			
37.6. 0.75kw Submersible Pump (3 Phase 380v - 420v)			
37.7. 1.1kw Submersible Pump (Single Phase 220v – 240v)			
37.8. 1.1kw Submersible Pump (3 Phase 380v – 415v)			
37.9. 1.5kw Submersible Pump (Single Phase 220v – 240v)			
37.10. 1.5kw Submersible Pump (3 Phase 380v – 400v)			
37.11. 2.2kw Submersible Pump (Single Phase 220v – 240v)			
37.12. 2.2kw Submersible Pump (3 Phase 380v – 400v)			
37.13. 3.7kw Submersible Pump (3 Phase 380v – 400v)			
37.14. 5.5kw Submersible Pump (3 Phase 380v – 400v)			
37.15. 7.5kw Submersible Pump (3 Phase 380v – 400v)			
37.16. 11kw Submersible Pump (3 Phase 380v – 400v)			
37.17. 15kw Submersible Pump (3 Phase 380v – 400v)			
37.18. 18kw Submersible Pump (3 Phase 380v – 400v)			
37.19. 22kw Submersible Pump (3 Phase 380v – 400v)			
37.20. 30kw Submersible Pump (3 Phase 380v – 400v)			
37.21. 35kw Submersible Pump (3 Phase 380v – 400v)			

37.22.	45kw submersible Pump (3 Phase 380v – 400v)			
37.23.	60kw submersible Pump (3 Phase 380v – 400v)			
38. SUBMISSIBLE MOTORS (Refer to additional Spec) (SABS Approved)				
38.1.	0.37kw Submersible Motor (Single Phase 220v – 240v)			
38.2.	0.37kw Submersible Motor (3 Phase 380v – 420v)			
38.3.	0.55kw Submersible Motor (Single Phase 220v – 240v)			
38.4.	0.55kw Submersible Motor (3 Phase 380v – 420v)			
38.5.	0.75kw Submersible Motor (Single Phase 220v – 240v)			
38.6.	0.75kw Submersible Motor (3 Phase 380v - 400v)			
38.7.	1.1kw Submersible Motor (Single Phase 220v – 240v)			
38.8.	1.1kw Submersible Motor (3 Phase 380v – 415v)			
38.9.	1.5kw Submersible Motor (Single Phase 220v – 240v)			
38.10.	1.5kw Submersible Motor (3 Phase 380v – 400v)			
38.11.	2.2kw Submersible Motor (Single Phase 220v – 240v)			
38.12.	2.2kw Submersible Motor (3 Phase 380v – 400v)			
38.13.	3.7kw Submersible Motor (3 Phase 380v – 400v)			
38.14.	5.5kw Submersible Motor (3 Phase 380v – 400v)			
38.15.	7.5kw Submersible Motor (3 Phase 380v – 400v)			
38.16.	11kw Submersible Motor (3 Phase 380v – 400v)			
38.17.	15kw Submersible Motor (3 Phase 380v – 400v)			
38.18.	18kw Submersible Motor (3 Phase 380v – 400v)			
38.19.	22kw Submersible Motor (3 Phase 380v – 400v)			
38.20.	30kw Submersible Motor (3 Phase 380v – 400v)			
38.21.	35kw Submersible Motor (3 Phase 380v – 400v)			
38.22.	45kw submersible Motor (3 Phase 380v – 400v)			
38.23.	60kw submersible Motor (3 Phase 380v – 400v)			
39. CONTROL BOXES (Refer to additional Spec) (SABS Approved)				
39.1.	0.37kw Control Box (Single Phase 220v – 240v)			
39.2.	0.37kw Control Box (3 Phase 380v – 400v)			
39.3.	0.55kw Control Box (Single Phase 220v – 240v)			
39.4.	0.55kw Control Box (3 Phase 380v – 400v)			
39.5.	0.75kw Control Box (Single Phase 220v – 240v)			
39.6.	0.75kw Control Box (3 Phase 380v – 4 0v)			
39.7.	1.1kw Control Box (Single Phase 220v – 240v)			
39.8.	1.1kw Control Box (3 Phase 380v – 415v) Direct Online Panel			
39.9.	1.5kw Control Box (Single Phase 220v – 240v)			
39.10.	1.5kw Control Box (3 Phase 380v – 400v) Direct Online Panel			
39.11.	2.2kw Control Box (Single Phase 220v – 240v)			

39.12.	2.2kw Control Box (3 Phase 380v – 400v) Direct Online Panel			
39.13.	3.7kw Control Box (3 Phase 380v – 400v) Direct Online Panel			
39.14.	5.5kw Control Box (3 Phase 380v – 400v) Direct Online Panel			
39.15.	7.5kw Control Box (3 Phase 380v – 400v) Direct Online Panel			
39.16.	11kw Control Box (3 Phase 380v – 400v) Star Delta			
39.17.	15kw Control Box (3 Phase 380v – 400v) Star Delta			
39.18.	18kw Control Box (3 Phase 380v – 400v) Star Delta			
39.19.	22kw Control Box (3 Phase 380v – 400v) Star Delta			
39.20.	30kw Control Box (3 Phase 380v – 400v) Star Delta			
39.21.	37kw Control Box (3 Phase 380v – 400v) Star Delta			
39.22.	45kw Control Box (3 Phase 380v – 400v) Star Delta			
39.23.	60kw Control Box (3 Phase 380v – 400v) Star Delta			
40.	ELECTRIC INDUCTOR MOTOR (SABS Approved)			
40.1.	2.2kw Motor with Complete Pulley and Base Plate (Single Phase 220v – 240v)			
40.2.	2.2kw Motor with Complete Pulley and Base Plate (3 Phase 380v – 400v)			
40.3.	3.7kw Motor with Complete Pulley and Base Plate (3 Phase 380v – 400v)			
40.4.	4kw Motor with Complete Pulley and Base Plate (Single Phase 220v – 240v)			
40.5.	4kw Motor with Complete Pulley and Base Plate (3 Phase 380v – 400v)			
40.6.	5.5kw Motor with Complete Pulley and Base Plate (3 Phase 380v – 400v)			
40.7.	7.5kw Motor with Complete Pulley and Base Plate (3 Phase 380v – 400v)			
40.8.	11kw Motor with Complete Pulley and Base Plate (3 Phase 380v – 400v)			
40.9.	15kw Motor with Complete Pulley and Base Plate (3 Phase 380v – 400v)			
40.10.	18kw Motor with Complete Pulley and Base Plate (3 Phase 380v – 400v)			
40.11.	22kw Motor with Complete Pulley and Base Plate (3 Phase 380v – 400v)			
40.12.	30kw Motor with Complete Pulley and Base Plate (3 Phase 380v – 400v)			
40.13.	37kw Motor with Complete Pulley and Base Plate (3 Phase 380v – 400v)			
40.14.	45kw Motor with Complete Pulley and Base Plate (3 Phase 380v – 400v)			
40.15.	60kw Motor with Complete Pulley and Base Plate (3 Phase 380v – 400v)			
41.	DIESEL SILENT GENERATOR WITH CANOPY (SABS Approved)			
41.1.	5kVA Diesel Silent Generator with Canopy (Three Phase)			
41.2.	8.5kVA Diesel Silent Generator with Canopy (Three Phase)			
41.3.	12kVA Diesel Silent Generator with Canopy (Three Phase)			
41.4.	15kVA Diesel Silent Generator with Canopy (Three Phase)			
41.5.	20kVA Diesel Silent Generator with Canopy (Three Phase)			
41.6.	23kVA Diesel Silent Generator with Canopy (Three Phase)			
41.7.	25kVA Diesel Silent Generator with Canopy (Three Phase)			
41.8.	30kVA Diesel Silent Generator with Canopy (Three Phase)			
41.9.	40kVA Diesel Silent Generator with Canopy (Three Phase)			

41.10. 50kVA Diesel Silent Generator with Canopy (Three Phase)			
41.11. 60kVA Diesel Silent Generator with Canopy (Three Phase)			
41.12. 80kVA Diesel Silent Generator with Canopy (Three Phase)			
41.13. 150kVA Diesel Silent Generator with Canopy (Three Phase)			
41.14. 200kVA Diesel Silent Generator with Canopy (Three Phase)			
41.15. 250kVA Diesel Silent Generator with Canopy (Three Phase)			
41.16. 300kVA Diesel Silent Generator with Canopy (Three Phase)			
42. PETROL GENERATOR (SABS Approved)			
42.1. 5kVA Petrol Generator (Three Phase)			
42.2. 8.5kVA Petrol Generator (Three Phase)			
42.3. 12kVA Petrol Generator (Three Phase)			
42.4. 15kVA Petrol Generator (Three Phase)			
42.5. 20kVA Petrol Generator (Three Phase)			
43. WELDING DIESEL GENERATOR (SABS Approved)			
43.1. 7.5kVA Welding Diesel Generator (Three Phase)			
43.2. 12kVA Welding Diesel Generator (Three Phase)			
44. SUFFIX CABLE (SABS Approved)			
44.1. 1.5mm Suffix Cable (Per Meter)			
44.2. 2.5mm Suffix Cable (Per Meter)			
45. SUBMERSIBLE 4 CORE CABLE (SABS Approved)			
45.1. 1.5mm 4 Core Submersible Cable (Per Meter)			
45.2. 2.5mm 4 Core Submersible Cable (Per Meter)			
45.3. 6mm 4 Core Submersible Cable (Per Meter)			
45.4. 10mm 4 Core Submersible Cable (Per Meter)			
45.5. 12mm 4 Core Submersible Cable (Per Meter)			
45.6. 16mm 4 Core Submersible Cable (Per Meter)			
45.7. 20mm 4 Core Submersible Cable (Per Meter)			
45.8. 25mm 4 Core Submersible Cable (Per Meter)			
46. ARMoured 4 CORE CABLE (SABS Approved)			
46.1. 4mm 2 Core Armoured Cable (Per Meter)			
46.2. 16mm 4 Core Armoured Cable (Per Meter)			
46.3. 25mm 4 Core Armoured Cable (Per Meter)			
46.4. 60mm 4 Core Armoured Cable (Per Meter)			
46.5. 70mm 4 Core Armoured Cable (Per Meter)			
46.6. 75mm 4 Core Armoured Cable (Per Meter)			
46.7. 85mm 4 Core Armoured Cable (Per Meter)			

47. BOOSTER PUMPS COMPLETE WITH MOTORS (SABS Approved)			
47.1. 0.55kw Booster Pump Complete Set with Motor			
47.2. 0.75kw Booster Pump Complete Set with Motor			
47.3. 1.1kw Booster Pump Complete Set with Motor			
47.4. 2.2kw Booster Pump Complete Set with Motor			
47.5. 3.75kw Booster Pump Complete Set with Motor			
47.6. 5.5kw Booster Pump Complete Set with Motor			
47.7. 7.5kw Booster Pump Complete Set with Motor			
48. HIGH LIFT PUMPS COMPLETE WITH MOTORS (SABS Approved)			
48.1. 11kw High Lift Pumps Complete Set with Motor			
48.2. 15kw High Lift Pumps Complete Set with Motor			
48.3. 18kw High Lift Pumps Complete Set with Motor			
48.4. 22kw High Lift Pumps Complete Set with Motor			
48.5. 37kw High Lift Pumps Complete Set with Motor			
48.6. 56kw High Lift Pumps Complete Set with Motor			
48.7. 160kw High Lift Pumps Complete Set with Motor			
48.8. 350kw High Lift Pumps Complete Set with Motor			
49. VARIABLE SPEED DRIVERS (SABS Approved)			
49.1. 22kw Variable Speed Driver			
49.2. 37kw Variable Speed Driver			
49.3. 56kw Variable Speed Driver			
49.4. 160kw Variable Speed Driver			
49.5. 350kw Variable Speed Driver			
50. LISTER V-BELTS (SABS Approved)			
50.1. 17 x 1100 V-Belt			
50.2. 17 x 1110 V-Belt			
50.3. 17 x 1120 V-Belt			
50.4. 17 x 1160 V-Belt			
50.5. 17 x 1210 V-Belt			
50.6. 17 x 1260 V-Belt			
50.7. 17 x 1400 V-Belt			
50.8. 17 x 1440 V-Belt			
50.9. 17 x 1470 V-Belt			
50.10. 17 x 1775 V-Belt			
50.11. 17 x 1820 V-Belt			
50.12. 17 x 2890 V-Belt			
50.13. 17 x 3150 V-Belt			
50.14. 17 x 3190 V-Belt			

50.15. 17 x 3658 V-Belt			
50.16. 17 x 3700 V-Belt			
50.17. 17 x 3950 V-Belt			
50.18. 17 X 4000 V-Belt			
50.19. 17 x 4060 V-Belt			
50.20. 17 x 4200 V-Belt			
50.21. 17 x 4500 V-Belt			
50.22. 17 x 5000 V-Belt			
51. TR DIESEL ENGINES (Refer to additional Spec)			
51.1. TR 1 Diesel Engine complete with Pulley and Slinger			
51.2. TR 2 Diesel Engine complete with Pulley and Slinger			
51.3. TR 3 Diesel Engine complete with Pulley and Slinger			
52. TAF DIESEL ENGINES (Refer to additional Spec)			
52.1. TAF 1 Diesel Engine complete with Pulley and Slinger			
52.2. TAF 2 Diesel Engine complete with Pulley and Slinger			
52.3. TAF 3 Diesel Engine complete with Pulley and Slinger			
53. TR DIESEL ENGINES (PARTS)			
53.1. Air Filter			
53.2. Diesel Filter			
53.3. Oil Filter			
53.4. Exhaust			
53.5. Clutch Pulley			
54. TAF DIESEL ENGINES (PARTS)			
54.1. Air Filter			
54.2. Diesel Filter			
54.3. Oil Filter			
54.4. Exhaust			
54.5. Clutch Pulley			
55. RODS/MONOSHAFTS (SABS Approved)			
55.1. 12mm Mono-shaft			
55.2. 16mm Mono-shaft			
55.3. 19mm Mono-shaft			
55.4. 22mm Mono-shaft			
55.5. 25mm Mono-shaft			
56. TOP RODS/SHAFTS (SABS Approved)			
56.1. 12mm Top shaft			

56.2.	16mm Top shaft			
56.3.	19mm Top shaft			
56.4.	22mm Top shaft			
56.5.	25mm Top shaft			
57. BOBBIN BEARINGS (SABS Approved)				
57.1.	12mm Bobbin Bearing			
57.2.	16mm Bobbin Bearing			
57.3.	19mm Bobbin Bearing			
57.4.	22mm Bobbin Bearing			
57.5.	25mm Bobbin Bearing			
58. MONO ADAPTER (SABS Approved)				
58.1.	12mm x 16mm Mono Adapter			
58.2.	16mm x 19mm Mono Adapter			
58.3.	19mm x 22mm Mono Adapter			
59. MONOHEADS SET (SABS Approved)				
59.1.	50mm Monohead Set (Pulley, Top Shaft and Short Pipe)			
59.2.	65mm Monohead Set (Pulley, Top Shaft and Short Pipe)			
59.3.	80mm Monohead Set (Pulley, Top Shaft and Short Pipe)			
59.4.	100mm Monohead Set (Pulley, Top Shaft and Short Pipe)			
60. MONOHEAD PULLEYS (SABS Approved)				
60.1.	50mm Monohead Pulley (200mm Head)			
60.2.	50mm Monohead Pulley (250mm Head)			
60.3.	65mm Monohead Pulley (200mm Head)			
60.4.	65mm Monohead Pulley (250mm Head)			
60.5.	65mm Monohead Pulley 300mmHead)			
60.6.	80mm Monohead Pulley 300mmHead)			
60.7.	100mm Monohead Pulley 300mmHead)			
61. MONO STABILISERS (SABS Approved)				
61.1.	50mm Mono Stabilizer			
61.2.	65mm Mono Stabilizer			
61.3.	75mm Mono Stabilizer			
61.4.	80mm Mono Stabilizer			
61.5.	100mm Mono Stabilizer			
62. NON-RETURN VALVES (SABS Approved)				
62.1.	40mm Non-Return Valve			
62.2.	50mm Non-Return Valve			

62.3.	65mm Non-Return Valve			
62.4.	75mm Non-Return Valve			
62.5.	80mm Non-Return Valve			
62.6.	100mm Non-Return Valve			
63. CHECK RITE NON-RETURN VALVE (SABS Approved)				
63.1.	40mm Check Rite Non-Return Valve			
63.2.	50mm Check Rite Non-Return Valve			
63.3.	65mm Check Rite Non-Return Valve			
63.4.	75mm Check Rite Non-Return Valve			
63.5.	80mm Check Rite Non-Return Valve			
63.6.	100mm Check Rite Non-Return Valve			
64. FLANGE + GASKET (SABS Approved)				
64.1.	40mm Flange + Gasket			
64.2.	50mm Flange + Gasket			
64.3.	65mm Flange + Gasket			
64.4.	75mm Flange + Gasket			
64.5.	80mm Flange + Gasket			
64.6.	100mm Flange + Gasket			
65. AIR RELIEVE VALVES (SABS Approved)				
65.1.	25mm Air Valve			
65.2.	50mm Air Valve			
66. BASE PLATES (SABS Approved)				
66.1.	40mm Base Plate			
66.2.	50mm Base Plate			
66.3.	65mm Base Plate			
66.4.	80mm Base Plate			
66.5.	100mm Base Plate			
67. GATE VALVES GALVANISED (SABS Approved)				
67.1.	20mm Gate Valve			
67.2.	50mm Gate Valve			
67.3.	65mm Gate Valve			
67.4.	80mm Gate Valve			
67.5.	100mm Gate Valve			
68. BALL VALVES GALVANISED (SABS Approved)				
68.1.	20mm Ball Valve			
68.2.	50mm Ball Valve			

68.3.	65mm Ball Valve			
68.4.	80mm Ball Valve			
68.5.	100mm Ball Valve			
69. LINE VALVES FOR UPVC PIPE WITH RUBBERS (SABS Approved)				
69.1.	63mm Line Valve			
69.2.	75mm Line Valve			
69.3.	90mm Line Valve			
69.4.	110mm Line Valve			
69.5.	140mm Line Valve			
69.6.	160mm Line Valve			
69.7.	200mm Line Valve			
69.8.	250mm Line Valve			
69.9.	300mm Line Valve			
69.10.	350mm Line Valve			
69.11.	400mm Line Valve			
69.12.	450mm Line Valve			
70. SPLICING KITS (SABS Approved)				
70.1.	MX1 Splicing Kit			
70.2.	MX2 Splicing Kit			
70.3.	MX3 Splicing Kit			
71. PRESSURE GAUGE (10-70 PSI) (SABS Approved)				
71.1.	15mm Pressure Gauge			
71.2.	20mm Pressure Gauge			
72. PLASTIC STORAGE TANKS (SABS Approved)				
72.1.	2.5KL – Plastic Storage Tank			
72.2.	5KL – Plastic Storage Tank			
72.3.	10KL – Plastic Storage Tank			
72.4.	20KL – Plastic Storage Tank			
73. STORAGE TANKS STEEL STAND (SABS Approved)				
73.1.	2.5KL – Storage Tank Stand			
73.2.	5KL – Storage Tank Stand			
73.3.	10KL – Storage Tank Stand			
74. BULK METERS WITH RUBBER (CALIBRATED CERTIFICATE) (SABS Approved) AUTOMATED METER READER (AMR) COMPLIANT				
74.1.	50mm Bulk Meter			
74.2.	100mm Bulk Meter			

74.3.	150mm Bulk Meter (x10)			
74.4.	200mm Bulk Meter (x10)			
74.5.	250mm Bulk Meter (x10)			
74.6.	300mm Bulk Meter (x10)			
74.7.	350mm Bulk Meter (x10)			
74.8.	400mm Bulk Meter (x10)			
74.9.	450mm Bulk Meter (x10)			
75. BULK METERS FOR MONOPIPES WITH FLANGES AND GASKETS (CALIBRATED CERTIFICATE) (SABS Approved) AUTOMATED METER READER (AMR) COMPLIANT				
75.1.	50mm Bulk Meter (x10)			
75.2.	100mm Bulk Meter (x10)			
75.3.	150mm Bulk Meter (x10)			
75.4.	200mm Bulk Meter (x10)			
75.5.	250mm Bulk Meter (x10)			
75.6.	300mm Bulk Meter (x10)			
75.7.	350mm Bulk Meter (x10)			
75.8.	400mm Bulk Meter (x10)			
75.9.	450mm Bulk Meter (x10)			
76. BULK METERS FOR MONOPIPES WITH THREADS (CALIBRATED CERTIFICATE) (SABS Approved) AUTOMATED METER READER (AMR) COMPLIANT				
76.1.	40mm Bulk Meter (x10)			
76.2.	50mm Bulk Meter (x10)			
76.3.	65mm Bulk Meter (x10)			
76.4.	80mm Bulk Meter (x10)			
76.5.	100mm Bulk Meter (x10)			
77. CEMENTS (SABS Approved) (42.5N MPa STRENGTH)				
77.1.	50KG Cement			
78. CRUSHER STONES & SAND				
78.1.	6M ³ Crusher Stone (26.5mm)			
78.2.	6M ³ River Sand			
78.3.	6M ³ Plaster Sand			
79. STOP-ENDS (UPVC or PLASSON) (SABS Approved)				
79.1.	20mm Stop-End			
79.2.	50mm Stop-End			
79.3.	63mm Stop-End			
79.4.	75mm Stop-End			
79.5.	90mm Stop-End			

79.6.	110mm Stop-End			
79.7.	140mm Stop-End			
79.8.	160mm Stop-End			
79.9.	200mm Stop-End			
79.10.	250mm Stop-End			
79.11.	300mm Stop-End			
79.12.	350mm Stop-End			
79.13.	400mm Stop-End			
80.	GALVANISED STOP-ENDS			
80.1.	15mm Stop End			
80.2.	20mm Stop-End			
80.3.	40mm Stop-End			
80.4.	50mm Stop-End			
80.5.	65mm Stop-End			
80.6.	80mm Stop-End			
80.7.	100mm Stop-End			
81.	CENTRIFUGAL HIGH-PRESSURE PUMP			
81.1.	50mm Centrifugal High-Pressure Pump			
81.2.	100mm Centrifugal High-Pressure Pump			
82.	THREAD RODS AND NUTS			
82.1.	10mm x 1m Thread Rod and Nuts			
82.2.	12mm x 1m Thread Rod and Nuts			
82.3.	16mm x 1m Thread Rod and Nuts			
82.4.	19mm x 1m Thread Rod and Nuts			
82.5.	22mm x 1m Thread Rod and Nuts			
82.6.	24mm x 1m Thread Rod and Nuts			
82.7.	32mm x 1m Thread Rod and Nuts			
83.	ROCKLER RINGS & LIDS			
83.1.	500mm Rockler Lids			
83.2.	750 x 500mm Rockler Cover Slab			
83.3.	750 x 250mm Rockler Ring			
83.4.	750 x 500mm Rockler Ring			
83.5.	Concrete Pipeline Bench-marker			
84.	UPVC Y-JUNCTION (SABS)			
84.1.	63 mm Y-Junction			
84.2.	63 mm x 75mm Y-Junction			

84.3.	75 mm Y-Junction			
84.4.	90mm Y-Junction			
84.5.	90mm x 63mm Y-Junction			
84.6.	90mm x 75mm Y Junction			
84.7.	110mm x 63mm Y-Junction			
84.8.	110mm x 75mm Y-Junction			
84.9.	110mm x 90mm Y-Junction			
84.10.	140mm Y-Junction			
84.11.	140mm x 90mm Y-Junction			
84.12.	140mm x 110mm Y-Junction			
84.13.	160mm Y-Junction			
84.14.	160mm x 110mm Y-Junction			
84.15.	160mm x 140mm Y-Junction			
84.16.	200mm Y-Junction			
84.17.	200mm x 140mm Y-Junction			
84.18.	200mm x 160mm Y-Junction			
84.19.	250mm Y-Junction			
84.20.	250mm x 160mm Y-Junction			
84.21.	250mm x 200mm Y-Junction			
84.22.	300mm Y-Junction			
84.23.	300mm x 200mm Y-Junction			
84.24.	300mm x 250mm Y-Junction			
84.25.	350mm Y-Junction			
84.26.	350mm x 200mm Y-Junction			
84.27.	350mm x 250mm Y-Junction			
84.28.	350mm x 300mm Y-Junction			
84.29.	400mm Y-Junction			
84.30.	400mm x 200mm Y-Junction			
84.31.	400mm x 250mm Y-Junction			
84.32.	400mm x 300mm Y-Junction			
84.33.	400mm x 350mm Y-Junction			
84.34.	450mm Y-Junction			
84.35.	450mm x 200mm Y-Junction			
84.36.	450mm x 250mm Y-Junction			
84.37.	450mm x 300mm Y-Junction			
84.38.	450mm x 350mm Y-Junction			
84.39.	450mm x 400mm Y-Junction			
84.40.	600mm x 400mm Y-Junction			
85.	UPVC BENDS (SABS Approved)			

85.1.	63mm UPVC Bend 450			
85.2.	63mm UPVC Bend 900			
85.3.	75mm UPVC Bend 450			
85.4.	75mm UPVC Bend 900			
85.5.	90mm UPVC Bend 450			
85.6.	90mm UPVC Bend 900			
85.7.	110mm UPVC Bend 450			
85.8.	110mm UPVC Bend 900			
85.9.	140mm UPVC Bend 450			
85.10.	140mm UPVC Bend 900			
85.11.	160mm UPVC Bend 450			
85.12.	160mm UPVC Bend 900			
85.13.	200mm UPVC Bend 450			
85.14.	200mm UPVC Bend 900			
85.15.	250mm UPVC Bend 450			
85.16.	250mm UPVC Bend 900			
85.17.	300mm UPVC Bend 450			
85.18.	300mm UPVC Bend 900			
85.19.	350mm UPVC Bend 900			
85.20.	350mm UPVC Bend 900			
85.21.	400mm UPVC Bend 900			
85.22.	400mm UPVC Bend 900			
85.23.	450mm UPVC Bend 900			
85.24.	450mm UPVC Bend 900			
85.25.	600mm UPVC Bend 900			
85.26.	600mm UPVC Bend 900			
86. SANITATION MATERIAL (SABS Approved)				
86.1.	50mm Trap White Sink Comb			
86.2.	50mm Trap White "P"			
86.3.	Flush Unit Urinal			
86.4.	Bracket Mounting Urinal			
86.5.	Spreader for Urinal			
86.6.	Spreader Pipe including Nut and Ring			
86.7.	40mm Waste Urinal			
86.8.	Basin Mini White			
86.9.	Toilet Seat Plastic White Econo B2			
86.10.	Fitting Cistern Semi Close Couple			
86.11.	50mm x 6m SV Pipe SABS Espec			
86.12.	32 x 40mm Bottle Trap Universal			

86.13. 450mm Connector Braided			
86.14. 15mm Valve Float Side Inlet Plastic			
86.15. Close Couple Suite in Box			
86.16. Sink Mixer Wall Type (SABS)			
86.17. 110mm x 900 UG Bend Plain (SABS)			
86.18. 110mm x 450 UG Bend Plain (SABS)			
86.19. 110mm x 900 UG Junction Plain (SABS)			
86.20. 110mm x 450 UG Junction Plain (SABS)			
86.21. 110mm SV Pan Collar Straight (SABS)			
86.22. 110mm SV Pan Collar Extendable			
86.23. 50mm x 450 SV Bend IE (SABS)			
86.24. 50mm x 900 SV Bend Plain (SABS)			
86.25. Gas Torch			
86.26. Gas Torch Cartridges			
86.27. 15mm ISCA Alpi Pillar Tap (SABS)			
86.28. 15mm ISCA Ballcock (SABS)			
86.29. 40mm Waste Bath Brass			
86.30. 32mm Waste Basin Brass			
86.31. 115mm Force Cup + Handle			
86.32. 15mm Co CXC Straight Coupling			
86.33. 22mm Co CXC Straight Coupling			
86.34. 15mm Co CXC 450 Bend			
86.35. 22mm Co CXC 450 Bend			
86.36. 15mm Co CXC 900 Bend			
86.37. 22mm Co CXC 900 Bend			
86.38. 15mm Co CXC 450 Elbow			
86.39. 22mm Co CXC 450 Elbow			
86.40. 15mm Co CXC 900 Elbow			
86.41. 22mm Co CXC 900 Elbow			
86.42. 15mm CXMI Straight Coupling			
86.43. 22mm CXMI Straight Coupling			
86.44. 15 x 22mm Co CXC Straight Coupling Reducer			
86.45. 75g CB Flux			
86.46. 200g CB Flux			
86.47. 15mm x 300mm Flexi Pipe			
86.48. 22mm x 300mm Flexi Pipe			
86.49. 15mm x 450mm Flexi Pipe			
86.50. 22mm x 450mm Flexi Pipe			
86.51. Sink Mixer Tap			
86.52. 15mm Bip Tap Extension (Chrome)			

86.53. 20mm Bip Tap Extension (Chrome)			
86.54. Toilet System Mechanism			
86.55. Geysler Spanner			
86.56. Geysler Control Valve			
86.57. Geysler Relieve Control Valve			
86.58. 100L Element (220V – 280V)			
86.59. 150L Element (220V – 280V)			
86.60. 200L Element (220V – 280V)			
86.61. 100L Thermostat (220V – 280V)			
86.62. 150L Thermostat (220V – 280V)			
86.63. 200L Thermostat (220V – 280V)			
87. ELECTRICAL PARTS/COMPONENTS (SABS Approved)			
87.1. 5,5kw - 7,5kw 240v Conductor - (Single Phase)			
87.2. 5.5kw - 7,5kw 415v Conductors - (Three Phase)			
87.3. 11kw - 22kw 240v Conductor - (Three Phase)			
87.4. 11kw - 22kw 415 Conductor - (Three Phase)			
87.5. 35mm Bundle Conductors			
87.6. 70mm Bundle Conductors			
87.7. 10A (Single Phase) Circuit Breaker			
87.8. 15A (Single Phase) Circuit Breaker			
87.9. 20A (Single Phase) Circuit Breaker			
87.10. 25A (Single Phase) Circuit Breaker			
87.11. 30A (Single Phase) Circuit Breaker			
87.12. 40A (Single Phase) Circuit Breaker			
87.13. 45A (Single Phase) Circuit Breaker			
87.14. 60A Double Pole Circuit Breaker			
87.15. 63A Circuit Breaker (Three Phase)			
87.16. 80A Circuit Breaker (Three Phase)			
87.17. 100A Circuit Breaker (Three Phase)			
87.18. 125A Circuit Breaker (Three Phase)			
87.19. 63A Earth Leakages			
87.20. 10A Overload			
87.21. 13A Overload			
87.22. 18A Overload			
87.23. 36A Overload			
87.24. 50A Overload			
87.25. Neutral Bar (5 Points)			
87.26. Earth Bar (5 Points)			
87.27. 16mm Steel Gland			

87.28. 25mm Steel Gland			
87.29. 40mm Steel Gland			
87.30. 85mm Steel Gland			
87.31. 4mm Fisher Plugs			
87.32. 5mm Fisher Plugs			
87.33. 6mm Fisher Plugs			
87.34. 8mm Fisher Plugs			
87.35. 10mm Fisher Plugs			
87.36. 12mm Fisher Plugs			
87.37. 16mm Fisher Plugs			
87.38. 4mm Lux & Washers			
87.39. 5mm Lux & Washers			
87.40. 6mm Lux & Washers			
87.41. 8mm Lux & Washers			
87.42. 10mm Lux & Washers			
87.43. 16mm Lux & Washers			
87.44. 25mm Lux & Washers			
87.45. 4mm Ferrules			
87.46. 6mm Ferrules			
87.47. 10mm Ferrules			
87.48. 12mm Ferrules			
87.49. 16mm Ferrules			
87.50. 20mm Ferrules			
87.51. 25mm Ferrules			
87.52. 25mm Plastic Trunking			
87.53. 25mm Steel Trunking			
87.54. 85mm Steel Trunking			
87.55. 20mm Whole Saw			
87.56. 25mm Whole Saw			
87.57. 40mm Whole Saw			
87.58. 75mm Whole Saw			
87.59. 4A Fuse (500V-1000V)			
87.60. 6A Fuse (500V-1000V)			
87.61. 10A Fuse (500V-1000V)			
87.62. 12A Fuse (500V-1000V)			
87.63. 20A Fuse (500V-1000V)			
87.64. 6kva Fuse Link			
87.65. 33kva Fuse Link			
87.66. Electrical Tester (Fluke Tester 1000v)			
87.67. 12v - 1000v Multimeter (automatic)			

87.68. 0 - 500v Mega Tester			
87.69. Line Tester 11kva			
87.70. Insulation Tape (Red)			
87.71. Insulation Tape (Black)			
87.72. Insulation Tape (White)			
87.73. Insulation Tape (Blue)			
87.74. Insulation Tape (Yellow)			
87.75. Electrical Tool Kit			
87.76. HX-50B Cable Lug Crimping Tool			
87.77. 10m Link Stick			
87.78. 230V Star Delta Timer Switch (11 Pin)			
87.79. 400V Star Delta Timer Switch (11 Pin)			
87.80. Timer Switch 230V (Supply Monitor) – (11 Pin)			
87.81. Timer Switch 400V (Supply Monitor) – (11 Pin)			
87.82. 230V Electro Multirage Timer Switch			
87.83. 400V Electro Multirage Timer Switch			
87.84. 230V Electro Unequal Repeating Timer Switch			
87.85. 400V Electro Unequal Repeating Timer Switch			
87.86. 230V Liquid Control			
87.87. 400V Liquid Control			
87.88. 240V Phase Failure			
87.89. 400V Phase Failure			
87.90. 240V Relay Switch (11 Pin)			
87.91. 400V Relay Switch (11 Pin)			
87.92. Emergency Light (Battery Operated)			
87.93. Automatic Battery Charger (Model: CHR-2685) Power: 80-250 Vac			
87.94. 1610 x 28 Taper Bush			
87.95. 1610 x 38 Taper Bush			
87.96. 1610 x 42 Taper Bush			
87.97. 2517 x 42 Taper Bush			
87.98. 2517 x 48 Taper Bush			
87.99. 2517 x 50 Taper Bush			
88. TOOLS OF TRADE (SABS Approved)			
88.1. 375ml Permanent Spray Marker (Black)			
88.2. 375ml Permanent Spray Marker (White)			
88.3. 150g Multi-Purpose Lubricant Spray			
88.4. 375g Multi-Purpose Lubricant Spray			
88.5. Rain Gauge (Plastic) with measurement			
88.6. Measuring Wheel – Distance – Digital – 32cm			

88.7.	Well Casing & Depth Indicator (See attached spec)			
88.8.	Cable and Pipeline Locator – (See attached spec)			
88.9.	Water Level Meter (150m – 200m)			
88.10.	Carpenters Brace – 4 Jaw (Hand Drill)			
88.11.	Electric Drill Machine (Small)			
88.12.	Electric Drill Machine (Big)			
88.13.	Electric Grinding Machine (Small)			
88.14.	Electric Grinding Machine (Small)			
88.15.	10m Thread Tape PTFE Pipe Seal tape			
88.16.	50g Hemp Tape (Sealing Thread)			
88.17.	8mm Packing Gland Graphite Seal			
88.18.	10mm Packing Gland Graphite Seal			
88.19.	12.5mm Packing Gland Graphite Seal			
88.20.	50mm 1 Ton Single Pulley Katrol			
88.21.	50mm 2 Ton Single Pulley Katrol			
88.22.	50mm 3 Ton Single Pulley Katrol			
88.23.	50mm 4 Ton Single Pulley Katrol			
88.24.	50mm 5 Ton Single Pulley Katrol			
88.25.	50mm 1 Ton Double Pulley Katrol			
88.26.	50mm 2 Ton Double Pulley Katrol			
88.27.	50mm 3 Ton Double Pulley Katrol			
88.28.	50mm 4 Ton Double Pulley Katrol			
88.29.	50mm 5 Ton Double Pulley Katrol			
88.30.	50mm 1 Ton Triple Pulley Katrol			
88.31.	50mm 2 Ton Triple Pulley Katrol			
88.32.	50mm 3 Ton Triple Pulley Katrol			
88.33.	50mm 4 Ton Triple Pulley Katrol			
88.34.	50mm 5 Ton Triple Pulley Katrol			
88.35.	6" Pipe Chain Pipe Wrench (50" Tool Length)			
88.36.	8" Pipe Chain Pipe Wrench (50" Tool Length)			
88.37.	1 Ton Chain Pulley Block with 3m Chain			
88.38.	2 Ton Chain Pulley Block with 3m Chain			
88.39.	3 Ton Chain Pulley Block with 3m Chain			
88.40.	4 Ton Chain Pulley Block with 3m Chain			
88.41.	5 Ton Chain Pulley Block with 3m Chain			
88.42.	10mm Nylon Rope (Per Meter)			
88.43.	12mm Nylon Rope (Per Meter)			
88.44.	15mm Katrol Rope (Per Meter)			
88.45.	20mm Katrol Rope (Per Meter)			
88.46.	40mm Steel Dooley (Pipe Clamps for Monopipes)			

88.47. 50mm Steel Dooley (Pipe Clamps for Monopipes)			
88.48. 65mm Steel Dooley (Pipe Clamps for Monopipes)			
88.49. 80mm Steel Dooley (Pipe Clamps for Monopipes)			
88.50. 100mm Steel Dooley (Pipe Clamps for Monopipes)			
88.51. Complete Toolbox Kit with Spanners, Sockets, Allen Keys, Screw Drivers and Accessories (<i>Additional spec attached</i>)			
88.52. 3 x 60mm Plastic Nylon Cable Ties (100 pieces Pack)			
88.53. 3 x 80mm Plastic Nylon Cable Ties (100 pieces Pack)			
88.54. 3 x 100mm Plastic Nylon Cable Ties (100 pieces Pack)			
88.55. 3 x 120mm Plastic Nylon Cable Ties (100 pieces Pack)			
88.56. 3 x 150mm Plastic Nylon Cable Ties (100 pieces Pack)			
88.57. 3 x 200mm Plastic Nylon Cable Ties (100 pieces Pack)			
88.58. 4 x 150mm Plastic Nylon Cable Ties (100 pieces Pack)			
88.59. 4 x 200mm Plastic Nylon Cable Ties (100 pieces Pack)			
88.60. 4 x 250mm Plastic Nylon Cable Ties (100 pieces Pack)			
88.61. 4 x 300mm Plastic Nylon Cable Ties (100 pieces Pack)			
88.62. 5 x 200mm Plastic Nylon Cable Ties (100 pieces Pack)			
88.63. 5 x 300mm Plastic Nylon Cable Ties (100 pieces Pack)			
88.64. 300mm Steel Frame Hacksaw (Heavy Duty)			
88.65. 300mm Hacksaw Blade (Fine-toothed)			
88.66. 5kg Welding Rods			
88.67. 5kg x 3,15mm Galvanised Wire			
88.68. Steel Cutting Disc – Small			
88.69. Steel Cutting Disc – Big			
88.70. Masonery Cutting Disc – Small			
88.71. Masonery Cutting Disc – Big			
88.72. Super-Cut Steel Pipe Ratchet Threader (15mm – 100mm Pipe)			
88.73. Electric steel pipe cut and tread machine			
88.74. Steel Drill Bit 4.5mm			
88.75. Steel Drill Bit 6mm			
88.76. Steel Drill Bit 8mm			
88.77. Steel Drill Bit 10mm			
88.78. Steel Drill Bit 12mm			
88.79. Steel Drill Bit 14mm			
88.80. Steel Drill Bit 19mm			
88.81. Steel Drill Bit 22mm			
88.82. Steel Drill Bit 24mm			
88.83. Steel Drill Bit 32mm			
88.84. Masonery Drill Bit 4.5mm			
88.85. Masonery Drill Bit 6mm			

88.86. Masonry Drill Bit 8mm			
88.87. Masonry Drill Bit 10mm			
88.88. Masonry Drill Bit 12mm			
88.89. Masonry Drill Bit 14mm			
88.90. Masonry Drill Bit 14mm			
88.91. Masonry Drill Bit 19mm			
88.92. Masonry Drill Bit 22mm			
88.93. Masonry Drill Bit 24mm			
88.94. Masonry Drill Bit 32mm			
88.95. 20mm Drill Auger Eye			
88.96. 32mm Drill Auger Eye			
88.97. 40mm Drill Auger Eye			
88.98. Carpenters Brace – 4 Jaw (Hand Drill)			
88.99. Jack Hammer (Petrol)			
88.100. Jack hammer TE 3000			
88.101. Drain Unblocking Rods Set (1m x 8mm) heavy duty			
88.102. Drain Cleaning Machine with 32mm Spiral and tool set			
88.103. Raw Bolt 4.5mm			
88.104. Raw Bolt 6mm			
88.105. Raw Bolt 8mm			
88.106. Raw Bolt 10mm			
88.107. Raw Bolt 12mm			
88.108. Raw Bolt 14mm			
88.109. Raw Bolt 14mm			
88.110. Raw Bolt 19mm			
88.111. Raw Bolt 22mm			
88.112. Raw Bolt 24mm			
88.113. Raw Bolt 32mm			
88.114. Pik			
88.115. Pik Handle (Plastic)			
88.116. Steel Rake			
88.117. Garden Rake (Plastic)			
88.118. Shovel			
88.119. Spade Shovel			
88.120. Spade Fork			
88.121. Grass Slasher with poly handle			
88.122. Builder Concrete Wheelbarrow (Heavy Duty)			
88.123. Polypan Concrete Wheelbarrow (Heavy Duty)			
88.124. 250mm Heavy Duty Straight Pipe Wrench (OD Range 33mm-42mm)			
88.125. 300mm Heavy Duty Straight Pipe Wrench (OD Range 42mm-52mm)			

88.126.	350mm Heavy Duty Straight Pipe Wrench (OD Range 48mm-55mm)			
88.127.	450mm Heavy Duty Straight Pipe Wrench (OD Range 60mm-68mm)			
88.128.	600mm Heavy Duty Straight Pipe Wrench (OD Range 73mm-85mm)			
88.129.	900mm Heavy Duty Straight Pipe Wrench (OD Range 102mm-110mm)			
88.130.	1200mm Heavy Duty Straight Pipe Wrench (OD Range 141mm-145mm)			
88.131.	Welding Clamp Earth			
88.132.	Welding Electrode Holder Jaw Type			
88.133.	Welding Chipping Hammer (Spring Handle)			
88.134.	Welding and Cutting Touch Kit			
88.135.	Helmet Welding Trade weld			
88.136.	50mm Welding Cable PVC			
88.137.	Petrol Chainsaw (Heavy-duty)			
88.138.	8mm Chain (Per Meter)			
88.139.	10mm Chain (Per Meter)			
88.140.	12mm Chain (Per Meter)			
88.141.	4kg Pounds Hammer Poly Handle Lasher			
88.142.	6kg Pounds Hammer Poly Handle Lasher			
88.143.	8kg Pounds Hammer Poly Handle Lasher			
88.144.	Electric Pressure Pump 7.5HP 230v			
TOTAL RATES				

SPECIAL CONDITIONS OF CONTRACT

1. The increment equivalent to the Consumer Price Index (CPI) plus 1% but not exceeding 7.5% of Rates offered will be subject to approval after 1 year of contract.
2. Contact Person
The Municipality requires the name and telephone number of the Contractor's contact person. All discussions and enquiries will be directed to this contact person.
3. Official Orders
 - 3.1. No material will be supplied before an official order is issued.
 - 3.2. Material supplied must be in line with the issued site instruction (Quantity, Description and Amount).
 - 3.3. Supply and Delivery of Water Material, Tools and Electrical Components will be on as and when required
4. The delivery of material should be within SIXTY (60) days after the issuing of signed Site Instruction or order.

ADDITIONAL SPECIFICATIONS

SPECIFICATIONS FOR SUBMERSIBLE PUMPS & MOTORS

1. Hermetically sealed stator, anti track, self healing stator resin prevents motor burn out
2. 37 and 45 kW Motors up to 50 °C ambient temperature
3. Removable "Water Bloc" lead connector
4. Cable material according to drinking water regulations (VDE / ACS / KTW approved)
5. Sand fighter® Motor with SiC-Mechanical Seal
6. High efficiency electrical design for low operation cost
7. All motors prefilled and 100% tested
8. Max. storage temperature -15 °C - + 60 °C
9. Non contaminating FES91 –filled design
10. 45 kN High Thrust Versions

TECHNICAL SPECIFICATION FOR SUBMERSIBLE PUMPS & MOTORS

1. 4 - 45 kW
2. 6" NEMA flange
3. Protection: IP 68
4. Starts per hour: max. 20
5. Installation: vertical/horizontal
6. Standard Voltage: 380-415 V/50 Hz, 460 V/60 Hz
7. Voltage tolerance 50 Hz: -10% / +6% UN [380-415 V = (380-10%) – (415+6%)]
8. Voltage tolerance 60 Hz: ±10% UN
9. Motor protection: Select thermal overloads according to DIN 61947-4-1
10. Insulation: Class F
11. Rated ambient temperature: 4- 30 kW up to 30 °C; 37 & 45 kW up to 50 °C
12. Cooling flow: min. 0,16 m/s
13. Motor lead in 4m length (VDE / ACS / KTW approved)

OPTIONS

1. Other voltages
2. YΔ - start (pos. of cables 90°)
3. 45 kN High Thrust Version (Standard in 37 / 45 kW Motors)
4. Motors complete in 304 SS and in complete 316 SS
5. PT 100 temperature sensor (sold separately)
6. Special Lead lengths up to 50 m
7. Built-in PTC temperature sensor
8. Built-in Sub Monitor Transmitter (standard for 37 & 45 kW)

6-INCH MOTOR DESIGN 4 - 30 KW

P _N [kW]	CI-304SS L [mm]	304SS L [mm]	316SS L [mm]	Motor Package size [mm]	Shipping Weight [kg]	
					DOL	YΔ
4	581,2	570,7	570,7	155 x 212 x 800	41,3	40,3

P _N [kW]	CI-304SS L [mm]	304SS L [mm]	316SS L [mm]	Motor Package size [mm]	Shipping Weight [kg]	
					DOL	YΔ
5,5	614,4	604,0	604,0	155 x 212 x 800	44,9	43,9
7,5	646,2	635,8	635,8	155 x 212 x 800	49,0	48,0
9,3	678,7	668,3	668,3	155 x 212 x 1070	51,3	50,3
11	711,2	700,8	700,8	155 x 212 x 1070	54,7	53,7
15	776,2	765,8	765,8	155 x 212 x 1070	60,5	59,5
18,5	841,5	831,1	831,1	155 x 212 x 1070	67,1	66,1
22	906,5	896,1	896,1	155 x 212 x 1070	73,1	72,1
30	1036,6	1026,2	1026,2	155 x 212 x 1200	87,7	87,7

6-INCH ENCAPSULATED 4 - 30 KW MOTOR LENGTHS AND WEIGHTS / PACKING SIZES

Part	CI-304SS	304SS	316 SS
Shell	1.4301	1.4301	1.4571
Upper end bell	Cast iron powder coated	1.4301	1.4408
Lower end bell	Cast iron	Cast iron	1.4401
Thrust housing	Cast iron powder coated	Cast Iron / 1.4301 (Shell)	1.4408
Mechanical seal	SiC / SiC	SiC / SiC	SiC / SiC
Seal cover	1.4301	1.4301	1.4401
Slinger	NBR	NBR	NBR
Shaft end	1.4305	1.4305	1.4462
Diaphragm	NBR	NBR	NBR
Lead	EPR	EPR	EPR
Other seals	BUNA N	BUNA N	BUNA N

MATERIAL DIN / AISI 4,0 - 30,0 KW

6-INCH MOTOR DESIGN 4 - 30 KW

6-INCH ENCAPSULATED 37 - 45 KW MOTOR LENGTHS AND WEIGHTS / PACKING SIZES

P _N [kW]	304 L [mm]	316 L [mm]	Motor Package size [mm]	Shipping Weight [kg]
37	1476.7	1476.7	223 x 267 x 1823	136
45	1629.2	1629.2	223 x 267 x 1823	154

Part	304	316 SS
Shell	1.4301	1.4571
Upper end bell	Cast iron powder coated	1.4408
Lower end bell	Cast iron	1.4401
Thrust housing	Cast iron powder coated	1.4408
Mechanical seal	SiC / SiC	SiC / SiC
Seal cover	1.4301	1.4401
Slinger	Viton	Viton
Shaft end	1.4305	1.4542
Diaphragm	Viton	Viton

Part	304	316 SS
Lead	EPR	EPR
Jam Nut (Lead)	Brass	1.4401
Lead bushing	Rubber	Rubber

MATERIAL DIN / AISI

CABLE DESIGN VDE/ACS/KTW APPROVED

6-INCH ENCAPSULATED 37 - 45 KW MOTOR LENGTHS AND WEIGHTS / PACKING SIZES

Ø [mm ²]	Motor			B [± 0,3 mm]	B1 [± 0,3 mm]	H [± 0,3 mm]
	220 V	380 - 415 V	500 V			
4G4 (L=4m)	4 - 11 kW, DOL	4 - 22 kW, DOL	4-30 kW, DOL	19,0 mm	-	7,0 mm
	4 - 22 kW, YΔ	4-30 kW, YΔ				
3X8, 4+1G8, 4 (L=4 m)	15 - 22 kW, DOL	30 - 45 kW, DOL	-	29,5 mm	19,5 mm	8,9 mm
	30 - 37 kW, YΔ	37 - 45 kW, YΔ				

Specification for Control Box Panels

Performance

- Single and three phase control panels should be designed and optimized to operate the same pump as per size
- They should include: Wire supply, NC On/Off Reset button, MC, Overload Relay and Capacitor

Specification for Mono Columns, Monoshaft and Bobbin Bearings

Mono Positive Displacement Borehole Pump Range

Performance

1. Pumping up to 100 000L/H and heads up to 300m.

Features

1. New FE design offers improved performance and efficiency
2. Mono progressing cavity pumping technology proven for over 60 years
3. Long-life, fully machined flexible shafts with rolled threads eliminate the need for vulnerable universal coupling
4. Monostroom and Monomeester discharge heads use sealed pre-greased bearings for optimum, maintenance-free operation
5. Precision-machined and threaded column pipes incorporating truncated threads for maximum strength
6. Twin datum bearings fitted to all larger pump elements to eliminate drive shaft stresses
7. A stilling tube to assist with the release of silt by reducing inlet velocity

SPECIFICATION for 15mm Hose Bib tap

Standard Brass SABS Approved - SANS 226 and manufactured to pass ISO 6509

1. With ¾" hose union + wingnut + lining for ½" hose
2. ½" BSP male inlet

INCLUDES

1. Hose bibtap
2. Wing nut and lining for 1/2" hose pipe
3. ½" heavy pattern low resistance for low pressure or high water demand installations

4. DZR Brass
5. JASWIC Listed

SPARES

1. Headpart complete S-25RB-15
2. ½" heavy pattern tap washer C-097-15

20mm Hose Bib tap

Standard Brass (SABS) Approved - SANS 226 and manufactured to pass ISO 6509

1. With ¾" hose union + wingnut + lining for ¾" hose.
2. ¾" BSP male inlet

INCLUDES

1. Hose Bib Tap
2. Wing nut and lining for ¾" hose pipe
3. ¾" low resistance for low pressure or high water demand installations
4. DZR Brass
5. ASWIC Listed

SPARES

1. Head part complete S-26RB
2. ½" heavy pattern tap washer C-097-20

SPECIFICATION for ready made steel stand for 10kl storage tank

Ready-made steel stands that will fit the base of a 10kl storage Tank as per under mentioned specifications are needed:-

1. Square of 2.6m x 100mm x 6mm angle iron;
2. 2.6m x 100mm x 6mm lip channels (carrier beams) be welded closely next to each other on the square;
3. 80mm x 6mm angle iron be welded across the lip channels underneath the carrier beams;
4. 80mm x 6mm angle iron be welded at four corners of the square as stays which will carry the load; and
5. 75mm x 6mm square tubes be welded 45 degrees opposite all four corners with a 500mm length as anchors to support the stays (in case of 1m high stands).
6. 80mm x 6mm angle iron be welded against all four stays supporting the stand with three compartments from the carrier beams to make the stand well balanced (in case of a 6m high stand)
7. 20mm round bars be welded across each other on all four sides from top to bottom.
8. 500mm (w) x 5m (L) steel steps mounted on the stand
9. All the stands be painted with maroon coloured oil paint.

SPECIFICATION for TR Diesel Water Engine

TR1 ENGINE

Power ranges: 5.5 - 9.5 kW; 7.4 - 12.7 bhp

Variable or fixed speed; full load speed range: 1500 - 2500 r/min

Reliable, durable, heavy duty, air cooled diesel engines

Special Attributes

1. Variable and fixed-speed builds available
2. Designed for continuous operation in ambient temperatures up to 52°C (122°F)
3. Oil cooling by means of air flow over deep crankcase finning

Basic Engine Characteristics

1. diesel fuelled

2. direct injection
3. 1 cylinder
4. air cooled
5. naturally aspirated
6. handstart (electric optional)

Design Features and Equipment

1. air cleaner
2. inlet and exhaust manifolds
3. self vent fuel system with individual fuel injection pumps
4. fuel filter
5. self regulating plunger type lubricating oil pump
6. spin-on lubricating oil filter
7. decompressor levers
8. flywheel
9. flywheel housing with SAE4 flange
10. 250 hour service intervals
11. mechanical governing
12. variable speed 900-2500 r/min
13. fixed speed 1500 and 1800 r/min
14. operators' handbook

Emissions

1. Models under 19kW comply with EU Stage 3A exhaust emissions regulations

Optional Items

1. 12V electric start
2. gear case power take-off (see over)

TR2 ENGINE

Power ranges: 11.0kW - 19.0 kW; 14.8 - 25.5 bhp

Variable or fixed speed; full load speed range: 1500 - 2500 r/min

Reliable, durable heavy duty air cooled diesel engines

Special Attributes

1. variable and fixed-speed builds available
2. designed for continuous operation in ambient temperatures up to 52°C (122°F)
3. oil cooling by means of air flow over deep crankcase finning

Basic Engine Characteristics

1. diesel fuelled
2. direct injection
3. 2 cylinders
4. air cooled
5. naturally aspirated
6. handstart (electric optional)

Design Features and Equipment

1. air cleaner
2. inlet and exhaust manifolds
3. self vent fuel system with individual fuel injection pumps
4. fuel filter
5. self regulating plunger type lubricating oil pump
6. spin-on lubricating oil filter
7. decompressor levers
8. flywheel

9. flywheel housing with SAE4 flange
10. 250 hour service intervals
11. mechanical governing:
12. variable speed 900-2500 r/min
13. fixed speed 1500 and 1800 r/min
14. operators' handbook

Emissions

1. models under 19kW comply with EU Stage 3A exhaust emissions regulations

Optional Items

1. 12V electric start
2. gear case power take-off (see over)

TR3 ENGINE

Power ranges: 16.8kW - 28.5 kW; 22.5 - 38.2 bhp

Variable or fixed speed; full load speed range: 1500 - 2500 r/min

Reliable, durable heavy duty air cooled diesel engines

Special Attributes

1. variable and fixed-speed builds available
2. designed for continuous operation in ambient temperatures up to 52°C (122°F)
3. oil cooling by means of air flow over deep crankcase finning

Basic Engine Characteristics

1. diesel fuelled
2. direct injection
3. 3 cylinders
4. air cooled
5. naturally aspirated
6. handstart (electric optional)

Design Features and Equipment

1. air cleaner
2. inlet and exhaust manifolds
3. self vent fuel system with individual fuel injection pumps
4. fuel filter
5. self regulating plunger type lubricating oil pump
6. spin-on lubricating oil filter
7. decompressor levers
8. flywheel
9. flywheel housing with SAE4 flange
10. 250 hour service intervals
11. mechanical governing:
 - variable speed 900-2500 r/min
 - fixed speed 1500 and 1800 r/min
12. operators' handbook

Emissions

1. models under 19kW comply with EU Stage 3A exhaust emissions regulations

Optional Items

1. 12V electric start
2. gear case power take-off (see over)

TR ENGINES TECHNICAL DATA SHEET

POWER OUTPUTS TO ISO 3046						
Variable Speed		r/min	1500*	1800*	2000	2500
TR1	Continuous Power	kW	5.5	6.7	7.3	8.6
		bhp	7.4	9.0	9.8	11.5
	Fuel Stop	kW	6.1	7.4	8.0	9.5
		bhp	8.2	9.9	10.7	12.7
TR2	Continuous Power	kW	11.0	13.1	14.5	17.3
		bhp	14.8	17.6	19.4	23.2
	Fuel Stop	kW	12.1	14.4	16.0	19.0
		bhp	16.2	19.3	21.5	25.5
TR3	Continuous Power	kW	16.8	20.2	22.2	25.9
		bhp	22.5	27.1	29.8	34.7
	Fuel Stop	kW	18.5	22.2	24.4	28.5
		bhp	24.8	29.8	32.7	38.2

TORQUE TO ISO 3046						
Variable Speed		r/min	1500	1800	2000	2500
TR1	Fuel Stop	Nm	38.8	39.2	38.2	36.3
		lbf ft	28.6	28.9	28.2	26.8
TR2		Nm	77.0	76.4	76.4	72.6
		lbf ft	56.8	56.3	56.3	53.5
TR3	Nm	117.8	117.8	116.5	108.9	
	lbf ft	86.9	86.9	85.9	80.3	

SPECIFICATION for TAF Diesel Water Engine

TAF1 ENGINE

ENGINE TYPE – Vertical, single cylinder, air-cooled, four-stroke cycle, compression ignition diesel engine

TECHNICAL SPECIFICATION		
No. of Cylinders		1
Bore x Stroke	(mm)	87.5 X 110
Cubic Capacity	(Ltr)	0.662
Compression Ratio		17.5 : 1
Rated Output as per IS: 11170	kW(hp)	4.41(6)
Rated Speed	rpm	1500
Torque at full load (Crankshaft drive)	kN-m(kg-m)	0.029 (2.865)
Torque at full load (Camshaft drive)	kN-m(kg-m)	0.057 (5.730)
Crankshaft Center Height	(mm)	203
Specific Fuel Consumption (SFC)	(gm/hp-hr)	195 +5%

Lub Oil Consumption		0.8 % of SFC
Lub Oil Sump Capacity	(Ltr)	3.7 at higher level mark on dipstick
Fuel Tank Capacity	(Ltr)	6.5
Overall Dimensions of the standard engine (Length X Width X Height)	(mm)	531 X 546 X 856
Engine Weight (dry) with all fittings excluding packaging	(kg)	163
Rotation while looking at the flywheel		Clockwise / Anti clockwise
Power Take-off		Gear end
Starting		Hand Start
Governing		Class"A2/B1"
Type of fuel injection		Direct Injection
Overloading capacity of engine		10% of the rated output

TAF2 ENGINE

ENGINE TYPE – Vertical, double cylinder, air-cooled, four-stroke cycle, compression ignition diesel engine

TECHNICAL SPECIFICATION		
No. of Cylinders		2
Bore x Stroke	(mm)	87.5 X 110
Cubic Capacity	(Ltr)	1.324
Compression Ratio		17.5 : 1
Rated Output as per IS: 11170	kW(hp)	8.83(12)
Rated Speed	rpm	1500
Torque at full load (Crankshaft drive)	kN-m(kg-m)	0.057 (5.730)
Torque at full load (Camshaft drive)	kN-m(kg-m)	0.115 (11.459)
Crankshaft Center Height	(mm)	203
Specific Fuel Consumption (SFC)	(gm/hp-hr)	195 +5%
Lub Oil Consumption		0.8 % of SFC
Lub Oil Sump Capacity	(Ltr)	7.2 at higher level mark on dipstick
Fuel Tank Capacity	(Ltr)	11.5
Overall Dimensions of the standard engine (Length X Width X Height)	(mm)	700 X 546 X 878
Engine Weight (dry) with all fittings excluding packaging	(kg)	276
Rotation while looking at the flywheel		Clockwise
Power Take-off		Gear end
Starting		Hand Start
Governing		Class"A2/B1"
Type of fuel injection		Direct Injection
Overloading capacity of engine		10% of the rated output

TAF3 ENGINE

ENGINE TYPE – Vertical, triple cylinder, air-cooled, four-stroke cycle, compression ignition diesel engine

TECHNICAL SPECIFICATION		
No. of Cylinders		3
Bore x Stroke	(mm)	87.5 X 110
Cubic Capacity	(Ltr)	1.324
Compression Ratio		17.5 : 1
Rated Output as per IS: 11170	kW(hp)	8.83(12)
Rated Speed	rpm	1500
Torque at full load (Crankshaft drive)	kN-m(kg-m)	0.057 (5.730)
Torque at full load (Camshaft drive)	kN-m(kg-m)	0.115 (11.459)
Crankshaft Center Height	(mm)	203

Specific Fuel Consumption (SFC)	(gm/hp-hr)	195 +5%
Lub Oil Consumption		0.8 % of SFC
Lub Oil Sump Capacity	(Ltr)	7.2 at higher level mark on dipstick
Fuel Tank Capacity	(Ltr)	11.5
Overall Dimensions of the standard engine (Length X Width X Height)	(mm)	700 X 546 X 878
Engine Weight (dry) with all fittings excluding packaging	(kg)	276
Rotation while looking at the flywheel		Clockwise
Power Take-off		Gear end
Starting		Hand Start
Governing		Class"A2/B1"
Type of fuel injection		Direct Injection
Overloading capacity of engine		10% of the rated output

SPECIFICATION for Centrifugal High Pressure Pumps

50mm High Pressure Engine made in

With capacity to deliver 1,100 litres per minute, this 3" Volume Water Pump has a maximum suction head of 8m and a maximum total head of 28m.

Like so many other Honda products, the WB30 starts first time, every time with Honda's famous one pull easy start system.

It runs on unleaded fuel, so you'll never have to mix oil and petrol again. The result? An environmentally friendly pump with low emissions & fuel consumption.

Specifications:

1. Engine: GX160 5.0 hp commercial 4-stroke
2. Displacement cc: 163 cc
3. Start: Recoil Start
4. Fuel Type: Unleaded
5. Fuel Tank Capacity: 3.6 Litres
6. Fuel Consumption: 1.4 L/h 1.5 -2 hours run time per tank approx
7. Total Head: 28 m head max, 38 psi - 2.6 bar (max pressure this pump will pump to)
8. Suction Head: 7.6 metres (25ft) (this is the maximum depth that this pump will suck water from)
9. Maximum Pumping Capacity: 1100 litres (66,000 litres/hour)
10. Suction Port Diameter: 80mm (3") BSP (??mm) threaded inlet.
11. Discharge Port Diameter: 80 mm (3") BSP (??mm) threaded outlet.
12. Self Priming Pump: Yes
13. Self Priming Time (AT 5m): 150 sec at 5m
14. Pump Type: Centrifugal volume pump
15. Pump: Aluminum pump head with cast iron impellor and volute
16. Mechanical seal: Carbon Ceramic
17. Oil Alert: Yes (Low oil cut out system)
18. Dimensions: 510 X 385 X 455
19. Dry Weight (KG): 27
20. Mounting Type: Rubber
21. Frame: Heavy duty roll frame with rubber feet
22. Hose Band/Strainer: Yes (No Hose)
23. Framed with carry handle & light enough for 1 person to carry.

Warranty 1 year Limited (subject to annual service)

100mm High Pressure Engine made in

Open Frame Pump Trash Pump. The water pumps and trash pumps are specially designed for job sites and applications where high-volume trash water capacity is required.

Pumps offer highly desired features including, easy-starting and reliable OHV commercial-grade engine, rugged full frame protection, quick release clean-out and durable silicon carbide mechanical seals.

Other features include a unique conical impeller for improved priming and durability, replaceable stainless steel wear plate for extended life and convenient multi-tool for on-site servicing and clean-out.

Features:

1. Heavy-duty 4" construction trash pump
2. Easy starting commercial engine
3. 423 gal./min capacity
4. Solid handling capability up to 27mm
5. Cast iron volute and impeller
6. Quick clean out port

Specifications:

1. Engine: GX390 8.1 Kw (11hp) 4-stroke OHV single cylinder
2. Displacement cc: 389 cc
3. Start: Recoil Start
4. Fuel Type: Unleaded
5. Fuel Tank Capacity: 6.1 Litres
6. Fuel Consumption: 3.7 L/h at 3,600 rpm
7. Continuous Operating Hours: 1.5 hours run time per tank approx
8. Solid handling capability: up to 27 mm
9. Total Head: 25 m head max, 36 psi (max pressure this pump will pump to)
10. Suction Head: 8 metres (this is the maximum depth that this pump will suck water from)
11. Maximum Pumping Capacity: 1640 litres (41655 litres/hour)
12. Suction Port Diameter : 100mm (4") BSP threaded inlet
13. Discharge Port Diameter: 100 mm (4") BSP threaded outlet
14. Self Priming Pump: Yes
15. Self Priming Time (AT 5m): 150 sec at 5m
16. Pump Type: Trash Centrifugal Self-priming
17. Volute: Rigid Mounted Cast Iron w Stainless Wear Plate
18. Impeller: Conical Cast Iron
19. Mechanical Seal (Pump case impeller): Silicon Carbide
20. Pressure: 3.0 bar pressure
21. Cast iron volute and impeller
22. Quick clean out port
23. Aluminium body, BUNA seals
24. Oil Alert: Yes (Low oil cut out system)
25. Dimensions: 735 x 536 x 564
26. Dry Weight (KG): 78
27. Mounting Type: Rubber
28. Frame: Roll frame with rubber feet
29. Hose Band/Strainer: Yes (No Hose)
30. Framed with carry handle & light enough for 1 person to carry.

Warranty 1 year Limited (subject to annual service)

CABLE AND PIPE LOCATOR (Success AG-438.15N and AG-319N)

1. Detection of energized and non energized cables including fiber optic cables, Underground up to 6 - 10 Meter Deep
2. Detection of metal pipelines
3. Detection of PVC and HDPE Pipes
4. Display Of Cable Depth
5. Current in live cable display
6. Data logging of located points with GPS coordinated, downloadable via USB cable into supplied free software
7. Display Of Current In The Cable
8. 3 - 5km tracing range from the transmitter placement
9. indirect pipe and cable depth measurement

PVC VINYL COLUMN PIPE

1. Super strong rust free pipes for submersible pumps that improve overall life and efficiency of the water well
2. 1" – 6" suitable for upto 45 Bar and 1400 Fts
3. power lock feature which is absent in steel or iron pipes
4. 92% PVC polymer content
5. 3% reinforcing agents, and additives
6. 3% Titanium
7. 100% Load proof, leak proof, jerk proof, torque proof and fail proof
8. Must have O-Ring, LP Ring and Power Spline
9. High quality processing
10. Polyvinyl Chlorides
11. Explicit operating parameters
12. Adaptable designing
13. High tensile strength
14. Safe and suitable for huge depths

Benefits:

1. 100% Resistance to corrosion
2. 0 Zero maintenance cost
3. 5 x high durability
4. 60% Cost effective
5. 1/6 Lightweight
6. 23% Consume less energy
7. 100% Free from Leakage
8. High Value

Heavy Duty Petrol Chainsaw

1. Powerful 55.5cc engine inside lightweight machine weighing under 13 pounds
2. Centrifugal air cleaning system for less frequent
3. X-torque engine cuts fuel consumption by up to 20 percent and emission by upto 60

Casing Detector

1. The shorted casing detector , Model SCD-2, is a self-contained instrument with an internal 24 volt rechargeable battery, complete with a charger, necessary leads, stainless steel pins, carrying case and operating instructions. This instrument utilizes the Industry approved Panhandle Eastern Method of determining the resistance between the casing and the pipeline. This unit provides a quick, efficient means of checking casings for shorts.

Toolbox Kit Specification

Spanners

6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 26, 28, 30, 32

Allen Keys Screwdrivers

2, 2.5, 3, 4, 5, 6, 8, 10

Screwdrivers (star & Straight)

4, 5.5, 6.5, 8

Sockets

8-5/16, 10-3/8, 11, 12, 13-1/2, 14, 15-19/32, 16-5/8, 17, 18-11/16, 19-3/4, 21-13/16, 22, 24-15/16, 26-1, 27-1.1/16, 29-1.1/8, 30-1.3/16, 32-1.1/4

Accessories

50/20.8 Spark Plug Socket, 145/250 Universal Pliers, 1990-75 Extension, 1990-125 Extension, 1990-250 Extension, 137/250 Grip Pliers, 1987 Sliding T-Bar, 1993U-10T Rev. Ratchet, 1997/375 Power Bar, 1995 Universal Joint

ANNEXURE A
GENERAL CONDITIONS OF CONTRACT