



## UMGUNGUNDLOVU DISTRICT MUNICIPALITY

### MUNICIPAL INFRASTRUCTURE GRANT (MIG)

### UMSHWATHI LOCAL MUNICIPALITY : COMMUNITY WATER SUPPLY TO TRUSTFEED

#### TECHNICAL REPORT

PROVINCE	:	Kwa- Zulu Natal
PROJECT NAME	:	Community Water Supply to Trustfeed
DATE	:	October 2020
MIG FUNDING (Incl CPA)	:	R 58 726 268.84
VAT	:	R 8 808 940.33
PROJECT COST	:	R 67 535 209.17
<u>MIG FUNDING PHASE 1</u>		
MIG FUNDING (Incl CPA)	:	R 19 200 487.17
VAT	:	R 2 880 073.08
PHASE 1 COST	:	<u>R 22 080 560.24</u>

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# COMMUNITY WATER SUPPLY TO TRUSTFEED

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## COMMUNITY WATER SUPPLY TO TRUSTFEED

### 1. INTRODUCTION

#### 1.1 PROJECT INFORMATION

<b>Project Name:</b>	<b>Community Water Supply to Trustfeed</b>
<b>District Municipality:</b>	DC22 – uMgungundlovu District Municipality
<b>Local Municipality:</b>	uMshwathi Local Municipality
<b>Water Services Authority :</b>	uMgungundlovu District Municipality.
<b>Water Services Provider :</b>	uMgungundlovu District Municipality
<b>Implementing Agent :</b>	uMgungundlovu District Municipality
<b>Original Population :</b>	4800 (800 households)
<b>Current Population :</b>	5832 (972 households)
<b>Ultimate Population :</b>	7200 (1200 households)

#### 1.2 PROJECT LOCATION

The uMshwathi Local Municipality falls on the north-eastern part of the Umgungundlovu District Municipality confines in the province of Kwa-Zulu Natal.

This feasibility study addresses the water needs of approximately 972 current housing units within the project area which is located approximately 4km North West of Wartburg, on the eastern periphery of the uMshwathi LM boundary (refer **Locality Map**) within Ward 8 of uMshwathi Local Municipality.

Access to the area is off District Road 75 . The coordinates of the project area, taken in the centre of the area, are Latitude 29 ° 24' 17,03" south and Longitude 30 °31' 58,62" east.

### 2. BACKGROUND

#### 2.1 COMMUNITY WATER SUPPLY TO CAMELHOEK AND TRUSTFEED

The Community water supply scheme to the uMshwathi Ridge housing development (Farm Camelhoek) and Trustfeed originally approved in February 2013 for the reticulation supply to the communities of uMshwathi Ridge and Trustfeed comprised the following:

- The existing semi-formal low income housing development known as Trust Feeds , which comprises approximately 800 houses;
- A proposed 3000 unit low income development which has been approved by the Department of Housing to eliminate the housing backlog within the region. The new development is adjacent to Trust Feeds and is situated on:
  - Rem of Portion 8 (of 5) of the Farm Camel Hoek No. 1320
  - Rem of Portion 16 (of 12) of the Farm Camel Hoek No. 1320

#### 2.2.1 uMshwathi Ridge housing development (Camelhoek Low Income Housing)

The low income development on the Farm Camelhoek was implemented between 2014 and 2016 and the water supply implemented at the same time comprised the following:

- Supply to an average household population of 6 x 3000 households  
= 18 000 persons  
with an original demand of 200 litres/day per formal connection and ultimate demands of 600l/site/day (which equates to 100litres per person per day based on a household occupancy of 6 people per household).

#### 2.1.2 Trustfeed

The water supply to the more peri-urban area of Trustfeed comprised water reticulation networks was designed to supply the following:

Current Population :

- Assuming an average household population of 6 x 800 households =  
= 4800 persons  
with an original demand of 55 litres per person per day, demands typical for yard connections which was the current level of service for the trust feeds development

Ultimate Population

- Allowing for nominal growth of 0.8% x 20 years x 4800 (current population)  
= 5622 persons  
with an ultimate level of service calculated at 100 litres per person for the semi-formal layout pattern of the households within Trust Feeds.

## **2.2 WATER SOURCE AND SUFFICIENCY**

The entire uMshwathi area is dependent on a Regional water supply from Umgeni Water, which feeds from Pietermaritzburg to Wartburg and beyond.

Umgeni Water has completed the construction of the 4MI Reservoir at Wartburg which supplies Trustfeed and the adjacent uMshwathi Ridge housing development (Farm Camelhoek).

In addition, Umgeni Water has also completed the upgrading of the main supply from Wartburg to the common boundary of Trustfeed and Camelhoek, and to the existing reservoir at Trustfeed, in 2017.

Trust Feeds is currently served by an ageing  $\pm$  350 kl reservoir and an ageing asbestos cement pipe network which was installed around 1990. The network is only capable of providing a limited supply to the Trustfeed area, and does not meet current minimum design requirements for a residential area of this nature in terms of network capacity and fire standards.

In addition to network deficiencies the elevation of the existing reservoir is such that it cannot provide adequate pressures to approximately 720 residents situated within approximately 120 households positioned below the existing reservoir.

## **3. TRUSTFEED WATER RETICULATION**

### **10.1 REVISED DEMOGRAPHICS AND DEMANDS**

#### **10.1.1 Existing and Current Demographics**

Total population figures as per the household survey undertaken by uMDM in 2015 shows a total of 5805 people residing in 964 households within Trustfeed.

Total household count as per the on-site survey taken in August-September 2020 shows a total of 974 household within Trustfeed

#### **10.1.2 Future Growth**

The uMshwathi Local Municipality has made allocation to the Department of Human Settlements for the approval of 1000 housing subsidies for the provision of formal housing in the area. This would entail in-situ of existing residences and may also include a small "Greenfields component".

Assuming that the Greenfields component forms 20% of the development, resultant household numbers will increase to approximately 1200 households on completion of the project.

Negotiations are underway with DOHS at present and no timeframes for the development are available.

The total design population adopted at this stage is therefore 7200 persons based on 1200 households at an average of 6 persons per household.

The table below details the populations and demands of the scheme from Business Plan Stage to the Design Horizon.

**TABLE 3.1 : DEMOGRAPHICS AND DEMANDS**

Area	Original Population 2012	Current Population 2020	Ultimate Population 2032	Original Demand 2008	Current Demand 2020	Ultimate Demands 2028
	Original Households 2012	Current Households 2020	Ultimate Households 2032			
Design Standards				55lpcpd	73lpcpd	100lpcpd
Trustfeed Population	4800	5844	7200	264kl/day	426.6kl/day	720kl/day
Trustfeed Households	800	974**	1200	50.6m <sup>3</sup> /hr	81.8m <sup>3</sup> /hr	138m <sup>3</sup> /hr

\*\* Matches the on-site household count of August / September 2020.

An annual growth factor of 2.05% has been applied over a 20 year design horizon

### 3.2 SCOPE OF WORKS

The planned scope of work consists of the following items:

- Subdivision of the supply into appropriate pressure zones to provide adequate pressure to serve the high lying areas.
- The introduction of pressure reducing valves to address high static pressures in the lower lying areas of Trustfeed and to limit static pressures within applicable and preferred limits, also forming part of a water loss management within these areas;
- Construction of 42,7 km distribution and reticulation UPVC mains ranging from 250mm diameter to 75mm and 50mm diameter HDPE mains through the Trustfeed development .
- Construction of approximately 8km HDPE 32mm and 25mm pipelines to provide individual household connections.
- The network will include for air valves, isolating valves, scour valves and hydrants. Isolating valves will be located to minimise the effect of closure on the supply and to suit hydrant / scour activities;
- Bulk meters and flow control will be provided at the reservoir, the supply point to the higher lying zone as well as bulk metering to the lower lying area.

- The networks are designed to cater for ultimate demands of 600l/site/day for the area which equates to 100l/c/day, based on demographics of 6 people per household.
- Demolition and replacement of the existing 350kl reservoir with a 500 kl reinforced concrete reservoir, which will function as a break pressure tank with limited storage to supply the middle and lower pressure zones.
- Provision of individual metered yard standpipes to each site.

### 3.2.1 PHASE 1

The project will be implemented in phases. Phase one entails the following:

- Construction of 9.8km of reticulation networks, ranging between 250mm and 50mm in size, to serve the existing 122 residential sites in the lower extremities of the area that is currently without any formal reticulation infrastructure.
- Construction of reticulation network to serve the existing 120 residential sites in the high lying area currently experiencing very low pressures.
- Installation of erf connections comprising approximately 7.1km of small bore HDPE pipelines, metered standpipe connections to the existing 122 residential sites currently without any formal reticulation.
- Installation of 852 domestic meters to the current remaining households.
- The construction of pipeline associated infrastructure such as isolating valves, air valves, scour valves, meters and chambers and miscellaneous specials as required.
- Construction of a 500kl reinforced concrete reservoir and associated fittings.

### 3.2.2 REGIONAL SUPPLY BY UMGENI WATER

As mentioned previously, Umgeni Water has completed the construction of the 4MI Reservoir at Wartburg and the upgrading of the supply main from Wartburg to the common boundary of Trustfeed and Camelhoek, which supplies Trustfeed and the adjacent uMshwathi Ridge housing development (Farm Camelhoek).

The source and supply implemented by Umgeni Water has taken into the revised demographics for the Trustfeed area.

#### 4. PROJECT STATUS

The Trustfeed Water Reticulation project was sub-divided into two phases. Phase 1 went out to tender in 2019 and an award was made in May 2020. Due to delays in commencement of the contract as a result of delays in receiving final Environmental Approval and Construction Works Permits following the COVID-19 epidemic, construction commenced in July 2020.

Following award of the tender for the Trustfeed Water Reticulation : Phase 1 there have been additional cost impacts as a result of the following:

- Large labour wage increase in accordance with the BCCEI amounting to 200%.
- Implementation of COVID-19 protocols in accordance with recent legislation

The estimated project costs are summarized in Annexure A : Cost Summaries and Schedule of Quantities and Annexure B : Additional Costs due to Recent Legislation.

#### 5. PREVIOUS FUNDING APPROVALS

The following table depicts the funds already approved on this project under SAC Approval 04/2013-04-KZN.

**TABLE 5.1 PREVIOUS FUNDING APPROVALS**

Description	Funding Approved		
	Camelhoek	Trustfeed	Total
SUB TOTAL Estimated Construction Cost	R 8 599 811	R 14 025 000	R 22 624 811
SUB TOTAL: Professional Fees	R 1 431 973	R 2 594 810	R 3 841 783
<b>SUB TOTAL</b>	<b>R 10 031 784</b>	<b>R 16 619 810</b>	<b>R 26 651 594</b>
Escalation (7% p.a.)	R 702 225		
Escalation (7% p.a.)		R 2 408 210	
<b>SUB TOTAL, EXCLUDING VAT</b>	<b>R 10 031 784</b>	<b>R 16 619 810</b>	<b>R 26 651 594</b>
VAT AT 14%	R 1 502 761	R 2 663 923	R 4 166 684
<b>TOTAL</b>	<b>R 12 236 770</b>	<b>R 21 691 943</b>	<b>R 33 928 713</b>



## 6. COST ESTIMATE

The estimated project costs are summarized as follows:

Please refer to Annexure A for Cost Summaries and Schedule of Quantities

ITEM	DESCRIPTION	PROJECTED FINAL COST TRUSTFEED PHASE 1	ADDITIONAL COST TRUSTFEED PHASE 2	TOTAL BUDGET
1	PRELIMINARY & GENERAL	R 3 997 783.85	R 5 047 750.00	R 9 045 533.85
2	EARTHWORKS (PIPE TRENCHES)	R 3 883 032.00	R 5 004 613.75	R 8 887 645.75
3	MEDIUM PRESSURE PIPELINES	R 10 843 087.15	R 12 751 826.30	R 23 594 913.46
4	BEDDING	R 1 165 555.00	R 1 412 670.00	R 2 578 225.00
5	GABIONS AND PITCHING	R 50 486.00	66 365.00	R 116 831.00
6	RESERVOIRS, BREAK PRESSURE TANKS	R 2 321 864.30		R 2 321 864.30
7	RESERVOIR PIPEWORK	R 384 294.50		R 384 294.90
	<b>SUB TOTAL</b>	<b>R 22 646 103.20</b>	<b>R 24 283 225.05</b>	<b>R 46 929 328.25</b>
	CONTINGENCIES AT 10%	R 2 264 610.32	R 2 428 321.51	R 4 692 932.83
	<b>SUB TOTAL CONSTRUCTION COST</b>	<b>R 24 910 713.52</b>	<b>R 26 711 547.56</b>	<b>R 51 622 261.08</b>
	Professional Fees (Engineering)	R3 612 053.46	R 3 873 174.40	R 7 485 227.86
	Professional Fees (Environmental)	R 530 244.26	R 76 862.62	R 607 106.88
	Professional Fees (ISD)	R 996 428.54	R 1 068 461.90	R 2 064 890.44
	Additional Professional Fees (ISD) Beneficiaries	R 498 722.49	R 534 765.19	R 1 033 477.66
	<b>SUB TOTAL PROFESSIONAL FEES</b>	<b>R 5 637 438.75</b>	<b>R5 553 264.11</b>	<b>R 11 190 702.86</b>
	<b>SUB TOTAL</b>	<b>R 30 548 152.27</b>	<b>R 32 264 811.67</b>	<b>R 62 812 963.94</b>
	Escalation (18 months)	R 3 263 049.95		R 3 263 049.95
	Escalation (3 years)		R 7 260 970.01	R 7 260 970.01
	<b>SUB TOTAL</b>	<b>R 33 811 202.22</b>	<b>R 39 525 781.68</b>	<b>R 77 336 983.90</b>
	VAT at 15%	R 3 071 680.38	R 5 928 867.25	R 11 000 547.63
	<b>TOTAL ESTIMATED BUDGET</b>	<b>R 38 882 882. 55</b>	<b>R 45 454 648.93</b>	<b>R 84 337 531.48</b>

## 7. PROJECT BUDGET REQUIREMENTS AND FUNDING

**TABLE 7.1 EXPENDITURE TO DATE**

Description	Expenditure To Date: Camelhoek (uMshwathi Ridge Housing)	Expenditure To Date: Trustfeed	Expenditure To Date: Total
Construction Cost	R 7 419 178.18	R 3 704 591.22	R 11 123 769.40
Professional Fees: uMshwathi Water and Sanitation	R 7 603 971.99		R 7 603 971.9
Professional Fees: Trustfeed		R 2 175 542.03	R 2 175 542.03
<b>SUB TOTAL, EXCLUDING VAT</b>	<b>R 15 023 150.18</b>	<b>R 5 880 133.24</b>	<b>R 20 903 283.42</b>
VAT AT 14%	R 2 103 241.02		R 2 103 241 .02
VAT at 15%		R 882 019.99	R 882 019.99
<b>TOTAL</b>	<b>R 17 126 391.20</b>	<b>R 6 762 153.23</b>	<b>R 23 888 544.43</b>
BUSINESS PLAN APPROVAL	R 12 236 770.17	R 21 691 943.34	R 33 928 713.50
<b>BALANCE OF FUNDING AVAILABLE (INCL VAT)</b>	<b>R 10 040 169.08</b>		

**TABLE 7.2 FUNDING REQUIRED (VAT INCLUSIVE)**

DESCRIPTION	TRUSTFEED PHASES IN PROGRESS	FINAL PHASES	TRUSTFEED TOTAL
Trustfeed Estimated Costs	R 38 882 882. 55	R 45 454 648.93	R 84 337 531.48
Trustfeed Expenditure to date	R 6 762 153.23		R 6 672 153.23
Balance of Funding Available	R 10 040 169.08		R 10 040 169.08
<b>TRUSTFEED FUNDING REQUIRED, INCL VAT</b>	<b>R 22 080 560.24</b>	<b>R 45 454 648.93</b>	<b>R 67 535 209.17</b>

## 8. IMPLEMENTATION PROGRAM

Milestone Identified	Date Started
PSC Established	October 2020
Engineering and ISD Consultant Appointed	Existing Consultants
Business Plan Submitted	Feb 2013 / October 2020
Expected Business Plan Approval	November 2020
Design : Phase 1	Complete
Design: Phase 2	95% Complete
Construction : Phase 1	March 2022
Commissioning : Phase 1	March 2022
Mentorship Period : Phase 1	March 2022

## 9. CONCLUSION

The project is to meet the social and practical mandates for all settlements that benefit from project. MIG will be responsible for financing the project from project identification to transfer, for the amount of **R67 525 209.17** VAT inclusive. uMgungundlovu District Municipality will be responsible for the Operation and Maintenance costs which are funded by the WSA

## 10. RECOMMENDATION

It is recommended by the uMgungundlovu District Municipality that the project be approved by DWAF and MIG.

The total project estimate as at October 2020 is R 67 535 209.17

**Funding required for the first phase amounts to R 22 080 560.24**

**11. APPROVALS**

\_\_\_\_\_  
**Approved By: HOD Infrastructure**  
For and on behalf of uMgungundlovu District Municipality

\_\_\_\_\_  
Date

\_\_\_\_\_  
**Approved By: Municipal Manager**  
For and on behalf of uMgungundlovu District Municipality

\_\_\_\_\_  
Date

**ANNEXURE A :  
SUMMARY COST BREAKDOWN**

SUMMARY OF SECTIONS		BP ALLOWABLE: TRUSTFEED PHASES 1 AND 2 FOR AN ULTIMATE No. OF 938 SITES	BP ALLOWABLE INCL ESCALATION ALLOWED: TRUSTFEED PHASES 1 AND 2 FOR AN ULTIMATE No. OF 938 SITES
		FEB 2013	FEB 2015
SECTION	DESCRIPTION	AMOUNT R	AMOUNT R
<b>BP COST</b>			
1	SECTION 1: PRELIMINARY AND GENERAL	2 118 850.00	2 425 871.37
2	SECTION 2: EARTHWORKS (PIPE TRENCHES)	2 824 610.00	3 233 895.99
3	SECTION 3: MEDIUM PRESSURE PIPELINES	7 081 497.07	8 107 606.00
4	SECTION 4: BEDDING (Pipes)	704 243.20	806 288.04
5	SECTION 5: GABIONS AND PITCHING	20 800.00	23 813.92
6	SECTION 6: RESERVOIRS REINFORCED CONCRETE		0.00
7	SECTION 7: RESERVOIR PIPEWORK		0.00
<b>SUBTOTAL, EXCLUDING VAT</b>		<b>12 750 000.27</b>	<b>14 597 475.32</b>
6	SECTION 6: RESERVOIRS REINFORCED CONCRETE	PREVIOUSLY NOT ALLOWED FOR	PREVIOUSLY NOT ALLOWED FOR
7	SECTION 7: RESERVOIR PIPEWORK	PREVIOUSLY NOT ALLOWED FOR	PREVIOUSLY NOT ALLOWED FOR
<b>SUBTOTAL, EXCLUDING VAT</b>		<b>12 750 000.27</b>	<b>14 597 475.32</b>
	10% Contingencies	1 275 000.03	1 459 747.53
<b>TOTAL CONSTRUCTION COST EXCLUDING VAT</b>		<b>14 025 000.30</b>	<b>16 057 222.85</b>

BP ALLOWABLE: TRUSTFEED PHASES 1 AND 2 (ESCALATED AT 8% P.A. FOR 7.67 YEARS TO TODAY)	ADDITIONAL SCOPE OF WORKS : 1200 VERSUS 938 ULTIMATE No. OF SITES	BP ALLOWABLE: TRUSTFEED PHASES 1 AND 2 TOTAL FOR 1200 VERSUS 938 ULTIMATE SITES
ESCALATED TO OCT 2020	ESCALATED TO OCT 2020	ESCALATED TO OCT 2020
AMOUNT R	AMOUNT R	AMOUNT R
<b>BP COST ESCALATED TO TODAY PLUS ADDITIONAL WORKS</b>		
3 823 464.83	1 070 570.15	4 894 034.98
5 097 008.75	1 427 162.45	6 524 171.20
12 778 561.46	3 577 997.21	16 356 558.67
1 270 806.85	355 825.92	1 626 632.77
37 533.60	10 509.41	48 043.01
<b>23 007 375.49</b>	<b>6 442 065.14</b>	<b>29 449 440.63</b>
PREVIOUSLY NOT ALLOWED FOR	1 812 541.00	1 812 541.00
PREVIOUSLY NOT ALLOWED FOR	310 782.00	310 782.00
<b>23 007 375.49</b>	<b>8 565 388.14</b>	<b>31 572 763.63</b>
2 300 737.55	856 538.81	3 157 276.36
<b>25 308 113.04</b>	<b>9 421 926.95</b>	<b>34 730 039.99</b>

PHASE 1: TOTAL CURRENT DAY COSTS EXCLUDING ABNORMAL INCREASES	PHASE 2: TOTAL CURRENT DAY COSTS EXCLUDING ABNORMAL INCREASES	TOTAL CURRENT DAY COSTS EXCLUDING ADDITIONAL INCREASES	TOTAL ESTIMATED PERCENTAGE : ACCOUNTS FOR OTHER ADDITIONAL PRICE HIKES
OCT 2020	OCT 2020	OCT 2020	FEB 2015 TO OCT 2020
AMOUNT R	AMOUNT R	AMOUNT R	%
<b>ACTUAL CURRENT DAY COSTS</b>			
2 513 490.04	3 173 625.64	5 687 115.68	16.21%
2 606 918.00	3 359 904.75	5 966 822.75	-8.54%
8 946 021.00	10 520 814.26	19 466 835.26	19.02%
1 027 550.00	1 245 405.89	2 272 955.89	39.73%
37 445.00	49 222.31	86 667.31	80.40%
<b>15 131 424.04</b>	<b>18 348 972.85</b>	<b>33 480 396.89</b>	<b>13.69%</b>
1 812 541.00	0.00	1 812 541.00	
310 782.00	0.00	310 782.00	
<b>17 254 747.04</b>	<b>18 348 972.85</b>	<b>35 603 719.89</b>	<b>12.77%</b>
1 725 474.70	1 834 897.29	3 560 371.99	12.77%
<b>18 980 221.74</b>	<b>20 183 870.14</b>	<b>39 164 091.88</b>	<b>12.77%</b>

ESTIMATED PERCENTAGE INCREASE : NORMAL ESCALATION SINCE BP STAGE	ESTIMATED PERCENTAGE INCREASE : ADDITIONAL WORKS	ESTIMATED PERCENTAGE INCREASE : ADDITIONAL PRICE HIKES SINCE BP STAGE	TOTAL ESTIMATED PERCENTAGE : SINCE BP STAGE
FEB 2015 TO OCT 2020	FEB 2015 TO OCT 2020	FEB 2015 TO OCT 2020	FEB 2015 TO OCT 2020
%	%	%	%
80.45%	28.00%	16.21%	134.44%
80.45%	28.00%	-8.54%	84.51%
80.45%	28.00%	19.02%	140.11%
80.45%	28.00%	39.73%	181.90%
80.45%	28.00%	80.40%	263.94%
80.45%	28.00%	13.69%	129.36%
80.45%	37.23%	12.77%	143.90%
80.45%	37.23%	12.77%	143.90%
80.45%	37.23%	12.77%	143.90%

<b>SUB TOTAL: Professional Fees</b>	<b>2 594 810.00</b>	<b>2 970 797.97</b>
<b>Sub Total</b>	<b>16 619 810.30</b>	<b>19 028 020.82</b>
Escalation (7% p.a. )		
Escalation (7% p.a. ) : 2 YEARS	2 408 210.47	0.00
<b>Sub Total Exclndg VAT</b>	<b>19 028 020.77</b>	<b>19 028 020.82</b>
14% VAT	2 663 922.91	2 663 922.91
<b>TOTAL ESTIMATED BUDGET (INCL. VAT)</b>	<b>21 691 943.68</b>	<b>21 691 943.73</b>

4 682 000.91	1 743 056.49	6 425 057.40
29 990 113.95	11 164 983.44	41 155 097.39
29 990 113.95	11 164 983.44	41 155 097.39
4 498 517.09	1 674 747.52	6 173 264.61
<b>34 488 631.04</b>	<b>12 839 730.96</b>	<b>47 328 362.00</b>

3 382 882.38	3 596 765.66	6 979 648.04	
22 363 104.12	23 780 635.80	46 143 739.92	12.12%
22 363 104.12	23 780 635.80	46 143 739.92	12.12%
3 354 465.62	3 567 095.37	6 921 560.99	12.12%
<b>25 717 569.74</b>	<b>27 347 731.17</b>	<b>53 065 300.91</b>	<b>12.12%</b>

80.45%	37.23%	137.05%	177.64%
57.61%	37.23%	121.54%	142.50%
68.87%		137.37%	159.83%
58.99%	37.23%	123.49%	144.63%

SUMMARY OF SECTIONS		PHASE 1: BASE COST	TOTAL TRUSTFEED PHASE 1 ADDITIONAL ABNORMAL INCREASES	TOTAL TRUSTFEED PHASE 1 PROJECTED FINAL COST	PHASE 2: ESTIMATED BASE COST	TOTAL TRUSTFEED PHASE 2 ADDITIONAL ABNORMAL INCREASES	TOTAL TRUSTFEED PHASE 2 PROJECTED FINAL COST	TOTAL TRUSTFEED PROJECTED FINAL COST	TOTAL ESTIMATED OVERALL INCREASE (COMPARED TO BP ESCALATED AND ADDITIONAL COSTS)	
		OCT 2020	OCT 2020	OCT 2020	OCT 2020	OCT 2020	OCT 2020	OCT 2020		
SECTION	DESCRIPTION	AMOUNT R	AMOUNT R	AMOUNT R	AMOUNT R	AMOUNT R	AMOUNT R	AMOUNT R	%	
REVISED CURRENT DAY COSTS				REVISED CURRENT DAY COSTS				REVISED CURRENT DAY COSTS		
1	SECTION 1: PRELIMINARY AND GENERAL	2 513 490.04	1 484 293.81	3 997 783.85	3 173 625.64	1 874 124.36	5 047 750.00	9 045 533.85	184.83%	
2	SECTION 2: EARTHWORKS (PIPE TRENCHES)	2 606 918.00	1 276 114.00	3 883 032.00	3 359 904.75	1 644 709.00	5 004 613.75	8 887 645.75	136.23%	
3	SECTION 3: MEDIUM PRESSURE PIPELINES	8 946 021.00	1 897 066.15	10 843 087.15	10 520 814.26	2 231 012.04	12 751 826.30	23 594 913.45	144.25%	
4	SECTION 4: BEDDING (Pipes)	1 027 550.00	138 005.00	1 165 555.00	1 245 405.89	167 264.11	1 412 670.00	2 578 225.00	158.50%	
5	SECTION 5: GABIONS AND PITCHING	37 445.00	13 041.00	50 486.00	49 222.31	17 142.69	66 365.00	116 851.00	243.22%	
6	SECTION 6: RESERVOIRS REINFORCED CONCRETE									
7	SECTION 7: RESERVOIR PIPEWORK									
<b>SUBTOTAL, EXCLUDING VAT</b>		<b>15 131 424.04</b>	<b>4 808 519.96</b>	<b>19 939 944.00</b>	<b>18 348 972.85</b>	<b>5 934 252.20</b>	<b>24 283 225.05</b>	<b>44 223 169.05</b>	<b>150.17%</b>	
6	SECTION 6: RESERVOIRS REINFORCED CONCRETE	1 812 541.00	509 323.30	2 321 864.30				2 321 864.30	128.10%	
7	SECTION 7: RESERVOIR PIPEWORK	310 782.00	73 512.90	384 294.90				384 294.90	123.65%	
<b>SUBTOTAL, EXCLUDING VAT</b>		<b>17 254 747.04</b>	<b>5 391 356.16</b>	<b>22 646 103.20</b>	<b>18 348 972.85</b>	<b>5 934 252.20</b>	<b>24 283 225.05</b>	<b>46 929 328.25</b>	<b>148.64%</b>	
	10% Contingencies	1 725 474.70	539 135.62	2 264 610.32	1 834 897.29	593 425.22	2 428 322.51	4 692 932.83	148.64%	
<b>TOTAL CONSTRUCTION COST EXCLUDING VAT</b>		<b>18 980 221.74</b>	<b>5 930 491.78</b>	<b>24 910 713.52</b>	<b>20 183 870.14</b>	<b>6 527 677.42</b>	<b>26 711 547.56</b>	<b>51 622 261.08</b>	<b>148.64%</b>	

<b>SUB TOTAL:</b>									
Professional Fees			5 637 438.75			5 553 264.11		11 190 702.86	
<b>Sub Total</b>			<b>30 548 152.27</b>			<b>32 264 811.67</b>		<b>62 812 963.94</b>	<b>152.62%</b>
CONTRACT PRICE ADJUSTMENT			3 263 049.95					3 263 049.95	
ESCALATION TO COMMENCEMENT AND CONTRACT PRICE ADJUSTMENT						7 260 970.01		7 260 970.01	
<b>Sub Total Exclding VAT</b>			<b>33 811 202.22</b>			<b>39 525 781.68</b>		<b>73 336 983.90</b>	<b>178.20%</b>
14% VAT			5 071 680.33			5 928 867.25		11 000 547.58	
<b>TOTAL ESTIMATED BUDGET (INCL. VAT)</b>			<b>38 882 882.55</b>			<b>45 454 648.93</b>		<b>84 337 531.48</b>	<b>178.20%</b>

PHASE 1: AWARDED TENDER AMOUNT	INCREASE IN COST DUE TO LABOUR WAGE RATE INCREASE	INCREASE IN COST FOR ADHERANCE TO COVID LEGISLATION	INCREASED QUANTITIES AND AMOUNTS	TOTAL PHASE 1 INCREASE IN AMOUNT	TOTAL PHASE 1 PROJECTED FINAL COST	TOTAL ESTIMATED PERCENTAGE INCREASE SINCE TENDER	TOTAL ESTIMATED PERCENTAGE INCREASE SINCE BP
MAY 2020	OCT 2020	OCT 2020	OCT 2020	OCT 2020	OCT 2020		
AMOUNT R	AMOUNT R	AMOUNT R	AMOUNT R	AMOUNT R	AMOUNT R	%	%
<b>CONSTRUCTION COST</b>							
2 513 490.04	205 088.00	723 005.81	556 200.00	1 484 293.81	3 997 783.85	59.05%	88.68%
2 606 918.00	1 058 574.00		217 540.00	1 276 114.00	3 883 032.00	48.95%	37.47%
8 946 021.00	1 503 052.15		394 014.00	1 897 066.15	10 843 087.15	21.21%	53.12%
1 027 550.00	105 005.00		33 000.00	138 005.00	1 165 555.00	13.43%	65.50%
37 445.00	13 041.00			13 041.00	50 486.00	34.83%	142.72%
15 131 424.04	2 884 760.15	723 005.81	1 200 754.00	4 808 519.96	19 939 944.00	31.78%	56.39%
1 812 541.00	509 323.30			509 323.30	2 321 864.30	28.10%	PREV NOT ALLOWED
310 782.00	73 512.90			73 512.90	384 294.90	23.65%	PREV NOT ALLOWED
17 254 747.04	3 467 596.35	723 005.81	1 200 754.00	5 391 356.16	22 646 103.20	31.25%	77.62%
1 725 474.70	346 759.64	72 300.58	120 075.40	539 135.62	2 264 610.32	31.25%	77.62%
18 980 221.74	3 814 355.99	795 306.39	1 320 829.40	5 930 491.78	24 910 713.52	31.25%	77.62%

PHASE 2: ESTIMATED AMOUNT	TOTAL TRUSTFEED PROJECTED FINAL COST	TOTAL ESTIMATED PERCENTAGE INCREASE SINCE BP
OCT 2020	OCT 2020	
AMOUNT R	AMOUNT R	%
5 047 750.00	9 045 533.85	326.91%
5 004 613.75	8 887 645.75	214.65%
12 751 826.30	23 594 913.45	233.19%
1 412 670.00	2 578 225.00	266.10%
66 365.00	116 851.00	461.78%
24 283 225.05	44 223 169.05	246.85%
	2 321 864.30	PREV NOT ALLOWED
	384 294.90	PREV NOT ALLOWED
24 283 225.05	46 929 328.25	268.07%
2 428 322.51	4 692 932.83	268.07%
26 711 547.56	51 622 261.08	268.07%



**ANNEXURE B :**  
**ADDITONAL COSTS (INCLUDING THOSE DUE TO RECENT LEGISLATION)**

**PHASE 1 ONLY**

**PHASE 1 AS TENDERED**

**ADDITIONAL COSTS DUE TO LABOUR WAGE RATE INCREASE**

**ADDITIONAL COSTS DUE TO COVID LEGISLATION**

**OTHER INCREASES**

SECTION 1: PRELIMINARY AND GENERAL

SECTION 1: PRELIMINARY AND GENERAL

SECTION 1: PRELIMINARY AND GENERAL

SECTION 1: PRELIMINARY AND GENERAL

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	ADDITIONAL COSTS DUE TO LABOUR WAGE RATE INCREASE				ADDITIONAL COSTS DUE TO COVID LEGISLATION			OTHER INCREASES							
								TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE				
<b>SECTION 1 PRELIMINARY AND GENERAL</b>																						
	PSA PSAB		SCHEDULED FIXED CHARGE AND VALUE RELATED ITEMS																			
	PSA 8.3; PSA 8.3.3		Fixed Charges																			
1.1	8.3.1		Contractual Requirements	Sum	1	300 000.00	300 000.00		300 000.00	0.00												
	8.3.2.1		Facilities required by Engineer																			
1.2	PSAB 3.2		a) Furnished office	Sum	1	25 000.00	25 000.00		25 000.00	0.00												
1.3	PSAB 5.4		b) Telephone and Facsimile	Sum	1	5 000.00	5 000.00		5 000.00	0.00												
1.4	PSAB 3.1		c) Contract Nameboards	No	2	6 500.00	13 000.00		13 000.00	0.00												
1.5	8.3.2.2		Facilities required by Contractor	Sum	1	40 000.00	40 000.00		40 000.00	0.00												
1.6	8.3.3 PSA 8.3.3		General responsibilities and other fixed-charge obligations	Sum	1	30 000.00	30 000.00		30 000.00	0.00												
1.7	8.3.4		Removal of Site establishment on completion	Sum	1	10 000.00	10 000.00		10 000.00	0.00												
	PSA 8.4 PSA 8.4.1		Time-related charges (for duration of contract unless otherwise stated)																			
	8.4.2.1		Facilities required by Engineer																			
1.8	PSAB 3.2		Furnished office	Sum	1	2 000.00	2 000.00		2 000.00	0.00												
1.9	PSAB 5.4		Telephone, electricity	Sum	1	24 000.00	24 000.00		24 000.00	0.00												
1.10	PSAB 3.3; PSAB 5.5		Survey assistant and equipment	Sum	1	12 000.00	12 000.00		12 000.00	0.00												
			Facilities required by Contractor																			
1.11	8.4.1		Contractual requirements	Sum	1	50 000.00	50 000.00		50 000.00	0.00												
1.12			Offices and storage	Sum	1	12 000.00	12 000.00		12 000.00	0.00												
1.13			Surveyor	Sum	1	75 000.00	75 000.00		75 000.00	0.00												
1.14			Security	Sum	1	60 000.00	60 000.00		60 000.00	0.00												
1.15			Safety equipment	Sum	1	60 000.00	60 000.00		60 000.00	0.00												
1.16			Supervision and salaries	Sum	1	1 233 990.04	1 233 990.04		1 233 990.04	0.00												
1.17	PSA 8.5.1		Compliance with OHS Act	Sum	1	120 000.00	120 000.00		120 000.00	0.00	0.5007	723 005.81	50.1%									
1.18	PSA 8.5.2		Compliance with Environmental Management Plan (EMPr)	Sum	1	30 000.00	30 000.00		30 000.00	0.00												
	8.5		Provisional Sums																			
1.19			(a) Testing of materials, as directed by the Engineer	Prov Sum	1	20 000.00	20 000.00		20 000.00	0.00												
1.20			(b) Contractor's % mark-up on item 1.19	%	20000	8.00%	1 600.00		1 600.00	0.00												
<b>Total Carried Forward</b>							<b>2 123 590.04</b>		<b>2 123 590.04</b>	<b>0.00</b>												<b>0.0%</b>

SECTION 1: PRELIMINARY AND GENERAL

SECTION 1: PRELIMINARY AND GENERAL

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SECTION 1: PRELIMINARY AND GENERAL

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
<b>Brought Forward</b>							<b>2 123 590.04</b>		<b>2 123 590.04</b>	<b>0.00</b>	<b>0.0%</b>		<b>723 005.81</b>	<b>34.0%</b>			<b>0.00</b>	<b>0.0%</b>
1.21			(c) Liaison Officer and TMC	Prov Sum	1	40 000.00	40 000.00	<b>183 600.00</b>	<b>183 600.00</b>	<b>143 600.00</b>	<b>359.0%</b>							
1.22			(d) Contractor's % mark-up on item 1.21	%	40000	8.00%	3 200.00	<b>183 600.00</b>	<b>14 688.00</b>	<b>11 488.00</b>	<b>359.0%</b>							
1.23			(e) Provision for accredited training	Prov Sum	1	50 000.00	50 000.00		<b>50 000.00</b>	<b>0.00</b>					<b>1</b>	<b>250 000.00</b>	<b>200 000.00</b>	<b>400.0%</b>
1.24			(f) Contractor's % mark-up on item 1.23	%	50000	8.00%	4 000.00		<b>4 000.00</b>	<b>0.00</b>					<b>1</b>	<b>250 000.00</b>	<b>16 000.00</b>	<b>400.0%</b>
1.25			(g) Surveyor nominated by Engineer	Prov Sum	1	10 000.00	10 000.00		<b>10 000.00</b>	<b>0.00</b>								
1.26			(h) Contractor's mark-up on item 1.25	%	10000	8.00%	800.00		<b>800.00</b>	<b>0.00</b>								
1.27			(k) External Safety Audits	Prov Sum	1	90 000.00	90 000.00		<b>90 000.00</b>	<b>0.00</b>					<b>1</b>	<b>300 000.00</b>	<b>210 000.00</b>	<b>233.3%</b>
1.28			(l) Contractor's mark-up on item 1.27	%	90000	8.00%	7 200.00		<b>7 200.00</b>	<b>0.00</b>					<b>1</b>	<b>300 000.00</b>	<b>16 800.00</b>	<b>233.3%</b>
1.29			(m) Environmental Audits	Prov Sum	1	90 000.00	90 000.00		<b>90 000.00</b>	<b>0.00</b>					<b>1</b>	<b>195 000.00</b>	<b>105 000.00</b>	<b>116.7%</b>
1.30			(n) Contractor's mark-up on item 1.29	%	90000	8.00%	7 200.00		<b>7 200.00</b>	<b>0.00</b>					<b>1</b>	<b>195 000.00</b>	<b>8 400.00</b>	<b>116.7%</b>
1.31	8.8.2		Dealing with traffic	Sum	1	62 500.00	62 500.00		<b>62 500.00</b>	<b>0.00</b>								
1.32	8.7		i) Dayworks	Prov Sum	1	25 000.00	25 000.00		<b>75 000.00</b>	<b>50 000.00</b>	<b>200.0%</b>							
<b>Total Carried Forward To Summary</b>							<b>2 513 490.04</b>		<b>2 718 578.04</b>	<b>205 088.00</b>	<b>8.2%</b>		<b>723 005.81</b>	<b>28.8%</b>			<b>556 200.00</b>	<b>22.1%</b>

PHASE 1 AS TENDERED							ADDITIONAL COSTS DUE TO LABOUR WAGE RATE INCREASE				ADDITIONAL COSTS DUE TO COVID LEGISLATION			OTHER					
SECTION 2: EARTHWORKS (PIPE TRENCHES)							SECTION 2: EARTHWORKS (PIPE TRENCHES)				SECTION 2: EARTHWORKS (PIPE TRENCHES)			SECTION 2: EARTHWORKS (PIPE TRENCHES)					
ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE	
<b>SECTION 2: EARTHWORKS (PIPE TRENCHES)</b>																			
	SANS 1200C, PSC		SITE CLEARANCE																
2.1	PSC 8.2.5	LI	Remove existing fences along pipeline and reinsate after construction	m	1750	65.00	113 750.00	84.50	147 875.00	34 125.00	30.0%								
2.2	SANS 1200D 8.3.1.2		Remove topsoil to a nominal depth of 150mm, stockpile and maintain for 1.0m wide trenches	m	7200	8.00	57 600.00	11.20	80 640.00	23 040.00	40.0%				7 450.00	11.20	83 440.00	103.5%	
<b>SANS 1200DB, PSD, PSDB</b>																			
<b>EXCAVATION</b>																			
<b>PSDB 8.3.2(d) 8.3.2</b>																			
(a) Excavate by hand, in soft materials for single pipe trenches, backfill, compact to 90% Mod AASHTO, and remove excess material to spoil, for all pipe diameters																			
2.3		LI	exceeding 0.0m but not exceeding 1.5m	m³	150	248.00	37 200.00	471.20	70 680.00	33 480.00	90.0%								
<b>PSDB 8.3.2(d) 8.3.2</b>																			
(a) Excavate by hand, in soft materials for trenches where there are two or three pipes in one trench, backfill, compact to 90% Mod AASHTO, and remove excess material to spoil, for all pipe diameters																			
2.4		LI	exceeding 0.0m but not exceeding 1.5m	m³	1600	248.00	396 800.00	471.20	753 920.00	357 120.00	90.0%								
<b>ERF CONNECTIONS</b>																			
Excavate by hand in soft materials for trenches, backfill, compact to 90% Mod AASHTO and dispose of surplus material for pipe sizes less than 40mm dia. for erf connection to depths:																			
2.5		LI	450mm wide, 600mm deep	m³	200	248.00	49 600.00	471.20	94 240.00	44 640.00	90.0%								
2.6		LI	450mm wide, 800 mm deep	m³	300	248.00	74 400.00	471.20	141 360.00	66 960.00	90.0%								
Extra over items 2.5 and 2.6 incl. for (Prov):																			
2.7		LI	Road Crossings 450mm wide, 800mm deep	m³	100	88.00	8 800.00	167.20	16 720.00	7 920.00	90.0%								
Extra over items 2.6 and 2.7 for:																			
2.8		LI	(i) Firm excavation	m³	30	125.00	3 750.00	237.50	7 125.00	3 375.00	90.0%								
2.9	8.3.2(a)		Excavate by machine in all materials for all widths and for all depths for trenches, backfill, compact to 90% Mod AASHTO, and remove excess material to spoil	m³	11700	89.94	1 052 298.00	107.93	1 262 781.00	210 483.00	20.0%								
Extra over item 2.9 for:																			
2.10	8.3.2		(i) hard rock	m³	800	320.00	256 000.00	384.00	307 200.00	51 200.00	20.0%								
2.11	PSDB 8.3.4 (c)		(iii) Road Crossings	m³	150	100.00	15 000.00	120.00	18 000.00	3 000.00	20.0%								
Extra over items 2.6, 2.7 and 2.9 for:																			
<b>Total Carried Forward</b>																			
								2 900 541.00			40.4%						83 440.00	2.9%	

SECTION 2: EARTHWORKS (PIPE TRENCHES)

SECTION 2: EARTHWORKS (PIPE TRENCHES)

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SECTION 2: EARTHWORKS (PIPE TRENCHES)

ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
<b>Brought Forward</b>							<b>2 065 198.00</b>		<b>2 900 541.00</b>		<b>40.4%</b>						<b>83 440.00</b>	<b>2.9%</b>
2.12	8.3.2(c)		Excavate unsuitable material from trench bottom (Prov)	m³	100	125.00	12 500.00	150.00	15 000.00	2 500.00	20.0%							
2.13	PSD 8.3.2 (b) (3)		Transporting, placing and compacting, to 90% Mod AASHTO, unsuitable and surplus material at designated spoil sites (Rate to include 5km freehaul distance) (Prov)	m³	250	150.00	37 500.00	210.00	52 500.00	15 000.00	40.0%							
	8.3.3.4		Overhaul															
2.14			Disposal of material to spoil sites in excess of freehaul distance of 5km (Prov)	m³.km	2500	9.00	22 500.00	10.80	27 000.00	4 500.00	20.0%							
2.15	PSDB 8.3.2(e) (i)	LI	Backfill stabilised with 5% cement where directed by the Engineer	m³	5	350.00	1 750.00	420.00	2 100.00	350.00	20.0%							
			Excavation Ancillaries															
2.16	8.3.5 (a)	LI	(a) Services that intersect a trench (Prov)	No	140	219.00	30 660.00	394.20	55 188.00	24 528.00	80.0%							
2.17	8.3.5 (b)	LI	(b) Services that adjoin a trench (Prov.)	m	600	25.00	15 000.00	45.00	27 000.00	12 000.00	80.0%							
	8.3.3.1		Make up deficiency in backfill material (Prov)															
2.18			(a) from other necessary excavations on site	m³	50	75.00	3 750.00	97.50	4 875.00	1 125.00	30.0%							
2.19			(b) by importation from designated borrow pits	m³	50	125.00	6 250.00	162.50	8 125.00	1 875.00	30.0%							
2.20	8.3.3.3	LI	Compaction in road reserves. Trench backfill to be compacted to a minimum of 95% Mod AASHTO	m²	320	88.00	28 160.00	114.40	36 608.00	8 448.00	30.0%							
2.21		LI	Excavate by hand to detect and expose existing services	m³	150	250.00	37 500.00	500.00	75 000.00	37 500.00	100.0%							
	8.3.6		FINISHINGS															
2.22	PSC 8.3		Topsiiling and reinstatement of vegetation for trenches up to a maximum of 1.0m wide	m	7200	10.00	72 000.00	18.00	129 600.00	57 600.00	80.0%				7 450.00	18.00	134 100.00	103.5%
	8.3.6.1		Reinstate road surfaces complete with all courses (Road Crossings)															
2.23			(a) Gravel road surface using G5 material from commercial or other source	m²	300	163.00	48 900.00	195.60	58 680.00	9 780.00	20.0%							
2.24			(b) Asphalt road surface including all layers	m²	180	550.00	99 000.00	605.00	108 900.00	9 900.00	10.0%							
2.25			Installation of earth berms to steep slopes	m³	10	125.00	1 250.00	187.50	1 875.00	625.00	50.0%							
2.26	PSDB 8.3.4 (b)	LI	Excavate, maintain, backfill and reinstate well points adjacent to trenches to 1,0m below trench invert level, including providing, operating, maintaining and removal of pumping equipment where instructed by the Engineer in wetlands only	No	5	25 000.00	125 000.00	32 500.00	162 500.00	37 500.00	30.0%							
<b>Total Carried Forward To Summary</b>							<b>2 606 918.00</b>		<b>3 665 492.00</b>		<b>40.6%</b>						<b>217 540.00</b>	<b>5.9%</b>

PHASE 1 AS TENDERED							ADDITIONAL COSTS DUE TO LABOUR WAGE RATE INCREASE				ADDITIONAL COSTS DUE TO COVID LEGISLATION			OTHER				
SECTION 3: MEDIUM PRESSURE PIPELINES							SECTION 3: MEDIUM PRESSURE PIPELINES				SECTION 3: MEDIUM PRESSURE PIPELINES			SECTION 3: MEDIUM PRESSURE PIPELINES				
ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
	SANS 1200L, PSL		<b>SECTION 3: MEDIUM PRESSURE PIPELINES</b>															
			PIPELINE															
	PSL 8.2.1		Supply, handle, lay, bed on bedding for flexible pipes, join, test and disinfect, as detailed on the drawings. uPVC potable water pipeline, complete with rubber seals and sockets according to SABS 966.															
			uPVC Class 9			HIGH												
3.1		LI	250mm dia.	m	2820	430.00	1 212 600.00	559.00	1 576 380.00	363 780.00	30.0%				0.00	559.00	0.00	
3.2		LI	200mm dia.	m	680	295.00	200 600.00	383.50	260 780.00	60 180.00	30.0%				50.00	383.50	19 175.00	
3.3		LI	160mm dia.	m	1350	186.00	251 100.00	237.15	320 152.50	69 052.50	27.5%				440.00	237.15	104 346.00	
3.4		LI	110mm dia.	m	1280	103.00	131 840.00	128.75	164 800.00	32 960.00	25.0%				1 180.00	128.75	151 925.00	
3.5		LI	75mm dia.	m	3450	67.00	231 150.00	83.75	288 937.50	57 787.50	25.0%				-2 400.00	83.75	-201 000.00	
	PSL 8.2.1		Supply, handle, lay, bed on bedding for flexible pipes, join, test and disinfect, HDPE PE 100 potable water pipeline, complete with Plasson or Magnum Couplings, according to SABS ISO 4427															
			HDPE Class 16															
3.6		LI	50mm dia.	m	8000	40.00	320 000.00	48.92	391 360.00	71 360.00	22.3%				400.00	48.92	19 568.00	
	PSL 8.2.1		Supply, handle, lay, bed, join, test and disinfect on pedestals and through sleeve pipes (for road and railway crossings), galvanised steel potable water pipelines, roll or cut grooved ends complete with associated couplings													3 096 424.00		
			Galvanised Steel															
3.7		LI	250mm dia Class 0-21 (4.5mm wall thickness) roll grooved pipe with Couplings rated to Class 21	m	24	2 923.00	70 152.00	3 799.90	91 197.60	21 045.60	30.0%							
3.8		LI	200mm dia Class 0-25 (4.5mm wall thickness) cut grooved pipe with Couplings rated to Class 25	m	12	2 108.00	25 296.00	2 740.40	32 884.80	7 588.80	30.0%							
3.9		LI	150mm dia Class 0-25 (3.3mm wall thickness) roll grooved pipe with Couplings rated to Class 25	m	12	1 338.00	16 056.00	1 705.95	20 471.40	4 415.40	27.5%							
3.10		LI	100mm dia Class 0-25 (3.3mm wall thickness) roll grooved pipe with Couplings rated to Class 25	m	12	1 290.00	15 480.00	1 612.50	19 350.00	3 870.00	25.0%							
			Sleeve Pipes															
	PSL 8.2.1		Supply, handle, lay, bed, join and test on bedding, as detailed on the drawings. The following sleeve pipes:															
3.11		LI	200mm dia uPVC Class 12	m	50	367.00	18 350.00	477.10	23 855.00	5 505.00	30.0%							
<b>Total Carried Forward</b>								<b>2 492 624.00</b>		<b>3 190 168.80</b>		<b>28.0%</b>					<b>94 014.00</b>	<b>2.9%</b>

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
<b>Brought Forward</b>							<b>2 492 624.00</b>		<b>3 190 168.80</b>		<b>28.0%</b>						<b>94 014.00</b>	<b>2.9%</b>
3.12			450 ND Concrete interlocking joint pipes Class 100D	m	24	656.00	15 744.00	852.80	20 467.20	4 723.20	30.0%							
3.13			600 ND Concrete interlocking joint pipes class 100D	m	12	875.00	10 500.00	1 137.50	13 650.00	3 150.00	30.0%							
3.14			750 ND Concrete interlocking joint pipes class 100D	m	24	1 312.00	31 488.00	1 705.60	40 934.40	9 446.40	30.0%							
			SPECIALS AND FITTINGS FOR PIPELINE															
	8.2.2 PSL 8.1		Supply, lay, bed, join, incl. cut pipes to length where required, test and disinfect:															
			uPVC Bends, Class 16															
3.15			250mm dia. - 90°	No	4	2 113.00	8 452.00	2 746.90	10 987.60	2 535.60	30.0%							
3.16			250 mmdia. - 45°	No	4	2 113.00	8 452.00	2 746.90	10 987.60	2 535.60	30.0%							
3.17			250mm dia. - 22½°	No	8	1 668.00	13 344.00	2 168.40	17 347.20	4 003.20	30.0%							
3.18			250 mm dia. - 11¼°	No	8	1 668.00	13 344.00	2 168.40	17 347.20	4 003.20	30.0%							
			uPVC Bends, Class 16															
3.19			200mm dia. - 90°	No	1	1 232.00	1 232.00	1 601.60	1 601.60	369.60	30.0%							
3.20			200 mmdia. - 45°	No	1	1 232.00	1 232.00	1 601.60	1 601.60	369.60	30.0%							
3.21			200mm dia. - 22½°	No	2	1 081.00	2 162.00	1 405.30	2 810.60	648.60	30.0%							
3.22			200 mm dia. - 11¼°	No	2	1 081.00	2 162.00	1 405.30	2 810.60	648.60	30.0%							
			uPVC Bends, Class 16															
3.23			160mm dia. - 90°	No	2	737.00	1 474.00	921.25	1 842.50	368.50	25.0%							
3.24			160 mmdia. - 45°	No	2	737.00	1 474.00	921.25	1 842.50	368.50	25.0%							
3.25			160mm dia. - 22½°	No	3	655.00	1 965.00	818.75	2 456.25	491.25	25.0%							
3.26			160 mm dia. - 11¼°	No	4	655.00	2 620.00	818.75	3 275.00	655.00	25.0%							
			uPVC Bends, Class 16															
3.27			110mm dia. - 90°	No	5	348.00	1 740.00	435.00	2 175.00	435.00	25.0%							
3.28			110 mmdia. - 45°	No	6	348.00	2 088.00	435.00	2 610.00	522.00	25.0%							
3.29			110mm dia. - 22½°	No	26	294.00	7 644.00	367.50	9 555.00	1 911.00	25.0%							
3.30			110 mm dia. - 11¼°	No	26	294.00	7 644.00	367.50	9 555.00	1 911.00	25.0%							
			uPVC Bends, Class 16															
3.31			75mm dia. - 90°	No	12	258.00	3 096.00	322.50	3 870.00	774.00	25.0%							
3.32			75 mmdia. - 45°	No	12	258.00	3 096.00	322.50	3 870.00	774.00	25.0%							
3.33			75mm dia. - 22½°	No	16	229.00	3 664.00	286.25	4 580.00	916.00	25.0%							
3.34			75mm dia. - 11¼°	No	24	229.00	5 496.00	286.25	6 870.00	1 374.00	25.0%							
<b>Total Carried Forward</b>							<b>2 642 737.00</b>		<b>3 383 215.65</b>		<b>28.0%</b>						<b>94 014.00</b>	<b>2.8%</b>

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
<b>Brought Forward</b>							<b>2 642 737.00</b>		<b>3 383 215.65</b>		<b>28.0%</b>						<b>94 014.00</b>	<b>2.8%</b>
8.2.2 PSL 8.1			Galvanised Steel Bends Klambon Type Class 0-25 with cast SP couplings															
3.35			250mm dia. - 22½°	No	2	4 476.00	8 952.00	5 371.20	10 742.40	1 790.40	20.0%							
3.36			250 mm dia. - 11¼°	No	2	4 476.00	8 952.00	5 371.20	10 742.40	1 790.40	20.0%							
3.37			250 mm dia. - 5° (PROV)	No	2	4 476.00	8 952.00	5 371.20	10 742.40	1 790.40	20.0%							
3.38			200mm dia. - 22½°	No	2	2 422.00	4 844.00	2 906.40	5 812.80	968.80	20.0%							
3.39			200 mm dia. - 11¼°	No	2	2 422.00	4 844.00	2 906.40	5 812.80	968.80	20.0%							
3.40			200 mm dia. - 5° (PROV)	No	2	2 422.00	4 844.00	2 906.40	5 812.80	968.80	20.0%							
3.41			150mm dia. - 22½°	No	2	1 600.00	3 200.00	1 920.00	3 840.00	640.00	20.0%							
3.42			150 mm dia. - 11¼°	No	2	1 600.00	3 200.00	1 920.00	3 840.00	640.00	20.0%							
3.43			150 mm dia. - 5° (PROV)	No	1	1 088.00	1 088.00	1 305.60	1 305.60	217.60	20.0%							
8.2.2 PSL 8.1			Galvanised Flange Adaptors for Klambon Pipe Class 0-25 with associated Class 25 Couplings (Drilling Table 2500)															
3.44			250mm dia	No	2	3 468.00	6 936.00	4 161.60	8 323.20	1 387.20	20.0%							
3.45			200mm dia	No	2	2 703.00	5 406.00	3 243.60	6 487.20	1 081.20	20.0%							
3.46			150mm dia	No	2	1 689.00	3 378.00	2 026.80	4 053.60	675.60	20.0%							
3.47			100mm dia	No	2	1 101.00	2 202.00	1 321.20	2 642.40	440.40	20.0%							
8.2.2 PSL 8.1			DI Flange Adaptor for PVC-U (Drilling Table 1600)															
3.48			250mm dia	No	30	1 045.00	31 350.00	1 254.00	37 620.00	6 270.00	20.0%							
3.49			200mm dia	No	9	703.00	6 327.00	843.60	7 592.40	1 265.40	20.0%							
3.50			160mm dia	No	27	647.00	17 469.00	776.40	20 962.80	3 493.80	20.0%							
3.51			110mm dia	No	34	406.00	13 804.00	487.20	16 564.80	2 760.80	20.0%							
3.52			75mm dia	No	79	512.00	40 448.00	614.40	48 537.60	8 089.60	20.0%							
8.2.2 PSL 8.1			Flange Adaptor - Plasson (or similar approved) for HDPE: including metal backing flange (Class 16)															
3.53			50 mm dia. (DN50) x 2"	No	61	226.00	13 786.00	271.20	16 543.20	2 757.20	20.0%							
8.2.2 PSL 8.1			GMS Flanged puddle pipe at change over from uPVC/HDPE to Steel pipe, as detailed on drawing 25138PA/1/W3 for:															
3.54			250 mm dia	No	2	4 345.00	8 690.00	5 214.00	10 428.00	1 738.00	20.0%							
3.55			200 mm dia	No	2	3 118.00	6 236.00	3 741.60	7 483.20	1 247.20	20.0%							
3.56			150 mm dia	No	2	2 187.00	4 374.00	2 624.40	5 248.80	874.80	20.0%							
3.57			100 mm dia	No	2	1 347.00	2 694.00	1 616.40	3 232.80	538.80	20.0%							
3.58			80 mm dia	No	2	1 100.00	2 200.00	1 320.00	2 640.00	440.00	20.0%							
<b>Total Carried Forward</b>							<b>2 856 913.00</b>		<b>3 640 226.85</b>		<b>27.4%</b>						<b>94 014.00</b>	<b>2.6%</b>



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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE		
<b>Brought Forward</b>							<b>2 856 913.00</b>		<b>3 640 226.85</b>		<b>27.4%</b>						<b>94 014.00</b>		<b>2.6%</b>	
			Flanged GMS Tees Class 16 (Drilling Table 1600)																	
3.59			250 x 250	No	1	4 304.00	4 304.00	5 164.80	5 164.80	860.80	20.0%									
3.60			250 x 200	No	2	4 207.00	8 414.00	5 048.40	10 096.80	1 682.80	20.0%									
3.61			250 x 150	No	3	4 007.00	12 021.00	4 808.40	14 425.20	2 404.20	20.0%									
3.62			250 x 100	No	5	3 720.00	18 600.00	4 464.00	22 320.00	3 720.00	20.0%									
3.63			250 x 80	No	2	3 461.00	6 922.00	4 153.20	8 306.40	1 384.40	20.0%									
3.64			200 x 100	No	2	2 478.00	4 956.00	2 973.60	5 947.20	991.20	20.0%									
3.65			200 x 50	No	1	2 106.00	2 106.00	2 527.20	2 527.20	421.20	20.0%									
3.66			150 x 150	No	5	2 106.00	10 530.00	2 527.20	12 636.00	2 106.00	20.0%									
3.67			150 x 100	No	1	1 866.00	1 866.00	2 239.20	2 239.20	373.20	20.0%									
3.68			150 x 80	No	3	1 354.00	4 062.00	1 624.80	4 874.40	812.40	20.0%									
3.69			150 x 50	No	5	1 485.00	7 425.00	1 782.00	8 910.00	1 485.00	20.0%									
3.70			100 x 100	No	1	1 242.00	1 242.00	1 490.40	1 490.40	248.40	20.0%									
3.71			100 x 80	No	2	1 200.00	2 400.00	1 440.00	2 880.00	480.00	20.0%									
3.72			100 x 50	No	7	1 101.00	7 707.00	1 321.20	9 248.40	1 541.40	20.0%									
3.73			80 x 80	No	3	1 481.00	4 443.00	1 777.20	5 331.60	888.60	20.0%									
3.74			80 x 50	No	32	809.00	25 888.00	970.80	31 065.60	5 177.60	20.0%									
			Flanged GMS Reducers Class 16 (Drilling Table 1600)																	
3.75			250 x 200	No	2	2 204.00	4 408.00	2 644.80	5 289.60	881.60	20.0%									
3.76			250 x 150	No	2	2 007.00	4 014.00	2 408.40	4 816.80	802.80	20.0%									
3.77			150 x 100	No	2	1 200.00	2 400.00	1 440.00	2 880.00	480.00	20.0%									
3.78			150 x 80	No	6	1 164.00	6 984.00	1 396.80	8 380.80	1 396.80	20.0%									
3.79			100 x 80	No	4	834.00	3 336.00	1 000.80	4 003.20	667.20	20.0%									
3.80			100 x 50	No	1	715.00	715.00	858.00	858.00	143.00	20.0%									
3.81			80 x 50	No	15	680.00	10 200.00	816.00	12 240.00	2 040.00	20.0%									
			DI End Cap for PVC-U (Drilling Table 1600)																	
3.82			DN 200	No	1	610.00	610.00	732.00	732.00	122.00	20.0%									
3.82			DN 160	No	1	391.00	391.00	469.20	469.20	78.20	20.0%									
3.82			DN 110	No	5	216.00	1 080.00	259.20	1 296.00	216.00	20.0%									
3.82			DN 75	No	10	141.00	1 410.00	169.20	1 692.00	282.00	20.0%									
			Compression End Cap, Class 16: PROV																	
3.82			DN 50	No	40	61.00	2 440.00	73.20	2 928.00	488.00	20.0%									
<b>Total Carried Forward</b>							<b>3 017 787.00</b>		<b>3 833 275.65</b>		<b>27.0%</b>						<b>94 014.00</b>		<b>2.5%</b>	

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
<b>Brought Forward</b>							<b>3 017 787.00</b>		<b>3 833 275.65</b>		<b>27.0%</b>						<b>94 014.00</b>	<b>2.5%</b>
3.83			Compression Tee, Class 16 DN 50 x 50	No	30	125.00	3 750.00	125.00	3 750.00	0.00	0.0%							
			ISOLATING VALVES															
	8.2.3 PSL 8.1		Supply and install, joint, incl. cut pipes where necessary, test, flanged Resilient Seal Gate valves to SABS 664, Class 16 (Drilling to Table 1600 SANS 1123/1977)															
3.84			DN 250	No	5	10 140.00	50 700.00	12 168.00	60 840.00	10 140.00	20.0%							
3.85			DN 200	No	3	7 376.00	22 128.00	8 851.20	26 553.60	4 425.60	20.0%							
3.86			DN 150	No	8	4 412.00	35 296.00	5 294.40	42 355.20	7 059.20	20.0%							
3.87			DN 100	No	10	2 588.00	25 880.00	3 105.60	31 056.00	5 176.00	20.0%							
3.88			DN 80	No	17	2 059.00	35 003.00	2 470.80	42 003.60	7 000.60	20.0%							
3.89			DN 50	No	7	1 495.00	10 465.00	1 794.00	12 558.00	2 093.00	20.0%							
	8.2.2 8.2.3 PSL8.1		SPECIALS AND FITTINGS FOR AIR VALVE CHAMBERS Flange Adaptors: Galvanised Flange Adaptors for Klambon Pipe to suite pipe coupling class for: DI Flange Adaptor for PVC-U (Drilling Table 1600)															
3.90			250mm dia. Class 16 (Drilling Table 1600)	No	10	1 207.00	12 070.00	1 448.40	14 484.00	2 414.00	20.0%							
3.91			200 mm dia. Class 16 (Drilling Table 1600)	No	2	858.00	1 716.00	1 029.60	2 059.20	343.20	20.0%							
3.92			160mm dia. Class 16 (drilling Table 1600)	No	2	562.00	1 124.00	674.40	1 348.80	224.80	20.0%							
3.93			110mm dia. Class 16 (drilling Table 1600)	No	2	282.00	564.00	338.40	676.80	112.80	20.0%							
3.94			75mm dia. Class 16 (drilling Table 1600)	No	2	221.00	442.00	265.20	530.40	88.40	20.0%							
			Flange Adaptor - Plasson (or similar approved) for HDPE: including metal backing flange (Class 16)															
3.95			50 mm dia. (DN50) x 2" Flanged GMS Tees Class 25 (Drilling Table 2500) Flanged GMS Tees Class 16 (Drilling Table 1600)	No	0	177.00	0.00	212.40	0.00	0.00	20.0%							
3.96			250 x 250	No	5	4 625.00	23 125.00	5 550.00	27 750.00	4 625.00	20.0%							
3.97			200 x 200	No	1	2 994.00	2 994.00	3 592.80	3 592.80	598.80	20.0%							
3.98			150 x 150	No	1	2 725.00	2 725.00	3 270.00	3 270.00	545.00	20.0%							
3.99			100 x 100	No	1	1 500.00	1 500.00	1 800.00	1 800.00	300.00	20.0%							
3.100			80 x 80	No	1	950.00	950.00	1 140.00	1 140.00	190.00	20.0%							
<b>Total Carried Forward</b>							<b>3 248 219.00</b>		<b>4 109 044.05</b>		<b>26.5%</b>						<b>94 014.00</b>	<b>2.3%</b>

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE		
<b>Brought Forward</b>							<b>3 248 219.00</b>		<b>4 109 044.05</b>		<b>26.5%</b>						<b>94 014.00</b>		<b>2.3%</b>	
3.101	8.2.2 8.2.3 PSL 8.1		Air valve assembly complete, incl. fittings, isolating valve and double Acting Air Valve, Vent-O-Mat type RBX Anti Shock, or similar approved, as detailed on drawing 25186PA/1/W13, excluding flanged tee and flange adaptors. Manhole measured separately for:  50mm dia Air valve assembly complete, class 16, for 250mm dia tee	No	5	4 160.00	20 800.00	4 992.00	24 960.00	4 160.00	20.0%									
3.102			50mm dia Air valve assembly complete, class 16, for 200mm dia tee	No	1	4 160.00	4 160.00	4 992.00	4 992.00	832.00	20.0%									
3.103			25mm dia Air valve assembly complete, class 16, for 150mm dia tee	No	1	2 668.00	2 668.00	3 201.60	3 201.60	533.60	20.0%									
3.104			25mm dia Air valve assembly complete, class 16, for 100mm dia tee	No	1	2 668.00	2 668.00	3 201.60	3 201.60	533.60	20.0%									
3.105			25mm dia Air valve assembly complete, class 16, for 80mm dia tee	No	1	2 668.00	2 668.00	3 201.60	3 201.60	533.60	20.0%									
3.106			Extra Over Items 3.101 to 3.102 for: Additional 100mm length	No	6	825.00	4 950.00	990.00	5 940.00	990.00	20.0%									
3.107			Extra Over Items 3.103 to 3.105 for: Additional 100mm length	No	3	825.00	2 475.00	990.00	2 970.00	495.00	20.0%									
3.108	8.2.2 8.2.3 PSL 8.1		SPECIALS AND FITTINGS FOR SCOUR VALVE CHAMBERS  Flange Adaptors  DI Flange Adaptor for PVC-U (Drilling Table 1600)  250mm dia. Class 16 (Drilling Table 1600)	No	2	1 238.00	2 476.00	1 485.60	2 971.20	495.20	20.0%									
3.109			Flanged GMS Scour Tees, Class 25 (Drilling Table 1600)  250 x 100mm dia.	No	1	1 900.00	1 900.00	2 280.00	2 280.00	380.00	20.0%									
3.110	8.2.2 8.2.3 PSL 8.1		Scour valve assembly complete, including Wedge Gate Scour Valves, as detailed on drawing 25186PA/1/W14, excluding flanged tee and flange adaptors. Manhole measured separately for:  100 mm dia. Scour valve assembly, Class 16	No	1	3 680.00	3 680.00	4 416.00	4 416.00	736.00	20.0%									
3.111	8.2.2 8.2.3 PSL 8.1		SPECIALS AND FITTINGS FOR PRV, METER AND FLOW CONTROL CHAMBERS (DRAWING No. 25138PA/1/W5 TO W9)  Flange Adaptors - Plasson (or similar approved) for HDPE pipe - including metal backing flange  DI Flange Adaptor for uPVC (Drilling Table 1600)  250mm dia. Class 16 (Drilling Table 1600)	No	6	1 238.00	7 428.00	1 485.60	8 913.60	1 485.60	20.0%									
<b>Total Carried Forward</b>							<b>3 304 092.00</b>		<b>4 176 091.65</b>		<b>246.5%</b>							<b>94 014.00</b>		<b>2.3%</b>

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
<b>Brought Forward</b>							<b>3 304 092.00</b>		<b>4 176 091.65</b>		<b>26.4%</b>						<b>94 014.00</b>	<b>2.3%</b>
3.112			200mm dia. Class 16 (Drilling Table 1600)	No	4	858.00	3 432.00	1 029.60	4 118.40	686.40	20.0%							
3.113			160mm dia. Class 16 (Drilling Table 1600)	No	4	562.00	2 248.00	674.40	2 697.60	449.60	20.0%							
			Flanged GMS Reducer Class 16 (Drilling Table 1600) for:															
3.114			250 mm dia. x 100mm dia.	No	6	3 250.00	19 500.00	3 900.00	23 400.00	3 900.00	20.0%							
3.115			200mm dia x 100mm dia	No	2	2 380.00	4 760.00	2 856.00	5 712.00	952.00	20.0%							
3.116			200mm dia x 80mm dia	No	2	2 250.00	4 500.00	2 700.00	5 400.00	900.00	20.0%							
3.117			150mm dia x 50mm dia	No	4	1 683.00	6 732.00	2 019.60	8 078.40	1 346.40	20.0%							
3.118			100 mm dia. flanged puddle pipe, 600mm long with central puddle flange (Drilling Table 1600)	No	8	1 350.00	10 800.00	1 620.00	12 960.00	2 160.00	20.0%							
3.119			80mm dia flanged puddle pipe, 600mm long with central puddle flange (Drilling Table 1600)	No	2	1 138.00	2 276.00	1 365.60	2 731.20	455.20	20.0%							
3.120			50mm dia flanged puddle pipe, 600mm long with central puddle flange (Drilling Table 1600)	No	4	875.00	3 500.00	1 050.00	4 200.00	700.00	20.0%							
			Flanged Resilient Seal Gate Valve Class 16 (Drilling Table 1600) (F/F = 216mm)															
3.121			100 mm dia.	No	3	2 588.00	7 764.00	3 105.60	9 316.80	1 552.80	20.0%							
3.122			80 mm dia.	No	1	2 122.00	2 122.00	2 546.40	2 546.40	424.40	20.0%							
3.123			50 mm dia.	No	2	1 495.00	2 990.00	1 794.00	3 588.00	598.00	20.0%							
			Aqua Dirt Trap (as supplied by Durban Instrument Specialists, or similar approved) (Flanges drilled to Table 1600) (F/F = 370mm)															
3.124			100 mm dia.	No	3	11 000.00	33 000.00	13 200.00	39 600.00	6 600.00	20.0%							
3.125			80mm dia	No	1	6 250.00	6 250.00	7 500.00	7 500.00	1 250.00	20.0%							
3.126			50mm dia	No	2	5 625.00	11 250.00	6 750.00	13 500.00	2 250.00	20.0%							
			Sensus MeiStream WP Flowmeter, Class 16 (or similar approved)															
3.127			100mm dia.	No	2	6 736.00	13 472.00	8 083.20	16 166.40	2 694.40	20.0%							
3.128			80mm dia.	No	1	6 217.00	6 217.00	7 460.40	7 460.40	1 243.40	20.0%							
3.129			50mm dia.	No	1	5 534.00	5 534.00	6 640.80	6 640.80	1 106.80	20.0%							
			VJ Flange Adaptors, Class 16															
3.130			100mm dia to suit 100mm GMS pipe	No	5	1 173.00	5 865.00	1 407.60	7 038.00	1 173.00	20.0%							
3.131			80mm dia, to suit 80mm dia GMS pipe	No	1	1 146.00	1 146.00	1 375.20	1 375.20	229.20	20.0%							
3.132			50mm dia, to suit 50mm dia GMS pipe	No	2	907.00	1 814.00	1 088.40	2 176.80	362.80	20.0%							
			GMS Spool Pieces															
<b>Total Carried Forward</b>							<b>3 459 264.00</b>		<b>4 362 298.05</b>		<b>26.1%</b>						<b>94 014.00</b>	<b>2.2%</b>

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
<b>Brought Forward</b>							<b>3 459 264.00</b>		<b>4 362 298.05</b>		<b>26.1%</b>						<b>94 014.00</b>	<b>2.2%</b>
3.133			100mm dia. GMS spool piece flanged one end approximately 740, 670 and 290mm long cut on site to allow for a maximum gap of 15mm at the VJ Coupling, Class 16	No	5	867.00	4 335.00	1 040.40	5 202.00	867.00	20.0%							
3.134			80mm dia GMS spool piece flanged one end approx 800mm long cut on site to allow for a maximum gap of 15mm at the VJ coupling, Class 16	No	1	710.00	710.00	852.00	852.00	142.00	20.0%							
3.135			50mm dia GMS spool piece flanged one end approx 820mm and 400mm long cut on site to allow for a maximum gap of 15mm at the VJ coupling, Class 16	No	2	395.00	790.00	474.00	948.00	158.00	20.0%							
3.136			100mm dia flanged GMS spool piece approx 1100mm long, Class 16	No	1	1 460.00	1 460.00	1 752.00	1 752.00	292.00	20.0%							
3.137			100mm dia flanged GMS spool piece approx 400mm long, Class 16	No	2	1 103.00	2 206.00	1 323.60	2 647.20	441.20	20.0%							
3.138			50mm dia. flanged GMS spool piece approximately 1100 mm long, Class 16	No	1	819.00	819.00	982.80	982.80	163.80	20.0%							
3.139			50mm dia. flanged GMS spool piece approximately 400 mm long, Class 16	No	3	667.00	2 001.00	800.40	2 401.20	400.20	20.0%							
			GMS Tees, Class 16															
3.140			100 mm Flanged GMS Equal Tee (C/F 230mm) Class 16	No	2	3 004.00	6 008.00	3 604.80	7 209.60	1 201.60	20.0%							
3.141			50 mm Flanged GMS Equal Tee (C/F 130mm) Class 16	No	2	1 888.00	3 776.00	2 265.60	4 531.20	755.20	20.0%							
			GMS Elbows, Class 16															
3.142			100 mm Flanged GMS 90 degree Elbow (C/F 230mm)	No	1	3 307.00	3 307.00	3 968.40	3 968.40	661.40	20.0%							
3.143			50 mm Flanged GMS 90 degree Elbow (C/F 130mm)	No	1	2 021.00	2 021.00	2 425.20	2 425.20	404.20	20.0%							
			GMS Spool Pieces, Class 16															
3.144			100 mm Flanged Spool Piece, 1100mm long, Class 16	No	1	1 459.00	1 459.00	1 750.80	1 750.80	291.80	20.0%							
			GMS Specials, Class 16															
3.145			100mm GMS Special U Bend, Flanged one end (C/F of flanged end is 630mm; C/F of plain end is 430mm), Class 16	No	1	3 559.00	3 559.00	4 270.80	4 270.80	711.80	20.0%							
3.146			50mm GMS Special U Bend, Flanged one end (C/F of flanged end is 630mm; C/F of plain end is 330mm), Class 16	No	1	2 113.00	2 113.00	2 535.60	2 535.60	422.60	20.0%							
3.147			Flow Control Valves , Bermad Type Model WW 4" 770 00 Y C 16 EB - PB UI (F/F = 320mm)	No	1	62 000.00	62 000.00	74 400.00	74 400.00	12 400.00	20.0%							
3.148			Flow Control Valves , Bermad Type Model WW 2" 770 00 Y C 16 EB - PB UI (F/F = 210mm)	No	1	41 363.00	41 363.00	49 635.60	49 635.60	8 272.60	20.0%							
<b>Total Carried Forward</b>							<b>3 597 191.00</b>		<b>4 527 810.45</b>		<b>25.9%</b>						<b>94 014.00</b>	<b>2.1%</b>

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE	
<b>Brought Forward</b>							<b>3 597 191.00</b>		<b>4 527 810.45</b>		<b>25.9%</b>						<b>94 014.00</b>		<b>2.1%</b>
3.149			Pressure Reducing Valves, Bermad Type Model WW 720 20 Y C 16 EB PB VI 6, Class 16 100mm dia. (F/F 320mm)	No	1	27 863.00	27 863.00	33 435.60	33 435.60	5 572.60	20.0%								
3.150			Pressure Reducing and Sustaining Valves, Bermad Type Model WW 723 00 Y C 16 EB-PB VI 6, Class 16 50mm dia.	No	1	36 260.00	36 260.00	43 512.00	43 512.00	7 252.00	20.0%								
3.151			Pressure Relief Valves, Bermad Type Model WW 730 00 Y C 16 EB-PB VI 6, Class 16 100mm dia. (F/F = 320mm)	No	1	44 814.00	44 814.00	53 776.80	53 776.80	8 962.80	20.0%								
3.152			Pressure Relief Valves, Bermad Type Model WW 730 00 Y C 16 EB-PB VI 6, Class 16 50mm dia. (F/F = 210mm)	No	1	30 367.00	30 367.00	36 440.40	36 440.40	6 073.40	20.0%								
3.153			Pressure Sustaining Valves, Bermad Type Model WW 730 20 Y C 16 EB-PB VI 6, Class 16 100mm dia. (F/F 320mm)	No	1	48 678.00	48 678.00	58 413.60	58 413.60	9 735.60	20.0%								
8.2.2 8.2.3 PSL 8.1			Air valve assembly complete, incl. Blank Flange with 25mm dia. hole drilled, GMS threaded 25mm dia. riser pipe, 25mm dia. isolating ball valve and double Acting Air Valve, Vent-O-Mat, type RBX Anti Shock, or similar approved, as detailed on drawing 25138PA/1/W5 and W9																
3.154			25mm dia Air valve assembly complete, class 16, for 100mm dia tee	No	1	3 375.00	3 375.00	4 050.00	4 050.00	675.00	20.0%								
3.155			25mm dia Air valve assembly complete, class 16, for 50mm dia tee	No	1	3 000.00	3 000.00	3 600.00	3 600.00	600.00	20.0%								
8.2.11			ANCILLARIES Anchor/Thrust Blocks Class 25/19 concrete for:																
3.156			Tees, bends and reducers as detailed on the drawing 25138PA/1/W2	m³	100	2 158.00	215 800.00	2 805.40	280 540.00	64 740.00	30.0%								
8.2.13			Valve Chambers and Manholes Construct gate valve chamber complete as detailed on the drawing 25138PA/1/W15, including all manhole rings, cover slab and concrete reinforced strip footing and concrete support. (Rate to include for all materials, plant and labour) for depths:																
3.157			0,0m to 1,5m	No	26	3 593.00	93 418.00	4 670.90	121 443.40	28 025.40	30.0%								
3.158			1,5m to 2,0m	No	24	3 977.00	95 448.00	5 170.10	124 082.40	28 634.40	30.0%								
3.159			Extra over Items 3.190 & 3.191 for supply and installation of locking bar mechanism including cover box and temporary padlock, as detailed on drg 25138PA/1/W15	No	50	1 680.00	84 000.00	2 184.00	109 200.00	25 200.00	30.0%								
<b>Total Carried Forward</b>							<b>4 280 214.00</b>		<b>5 396 304.65</b>		<b>26.1%</b>						<b>94 014.00</b>		<b>1.7%</b>

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<b>Brought Forward</b>							<b>4 280 214.00</b>		<b>5 396 304.65</b>		<b>26.1%</b>						<b>94 014.00</b>	<b>1.7%</b>
3.160			Construct scour valve chamber complete as detailed on the drawing 25138PA/1/W14, including manhole rings, concrete reinforced base slabs and brickwork and cover slab. (Rate to include for all materials, plant and labour) for depths:	No	1	9 650.00	9 650.00	12 545.00	12 545.00	2 895.00	30.0%							
3.161			Extra over Items 3.193 & 3.194 for supply and installation of locking bar mechanism including cover box and temporary padlock, as detailed on drg 25138PA/1/W14	No	1	1 680.00	1 680.00	1 848.00	1 848.00	168.00	10.0%							
3.162			Construct air valve chamber complete as detailed on the drawing 25138PA/1/W13, including manhole rings, concrete reinforced base slabs and brickwork, cover slab, lockong bar and padlock. (Rate to include for all materials, plant and labour) for depths:	No	5	6 740.00	33 700.00	8 762.00	43 810.00	10 110.00	30.0%							
3.163			0,0m to 1,5m	No	4	7 910.00	31 640.00	10 283.00	41 132.00	9 492.00	30.0%							
3.164			Construct combined pressure reducing valve/meter / flow control / pressure sustaining valve chambers complete as detailed on the drawings 25138pa/1/w5 to W9, including manhole cover and frame, vent pipes, concrete and reinforcing works and brickwork etc. (rate to include for all materials, plant and labour). Note that pipework fittings are scheduled elsewhere.	No	2	34 415.00	68 830.00	44 739.50	89 479.00	20 649.00	30.0%							
3.165			2670 x 1500 x 1750 mm high (internal dimensions)	No	1	35 191.00	35 191.00	45 748.30	45 748.30	10 557.30	30.0%							
3.166			3070 x 1500 x 1750 mm high (internal dimensions)	No	4	33 650.00	134 600.00	43 745.00	174 980.00	40 380.00	30.0%							
3.167	PSA 8.6		Construct headwalls at the meter chambers as detailed on drawing 25138PA/1/W16	No	7	7 500.00	52 500.00	9 750.00	68 250.00	15 750.00	30.0%							
3.168	PSA 8.6		Marking of chambers and reservoirs with stensils complete ad detailed on drawing 25138PA/1/W15, per description for:															
3.168			AV Chambers - 100mm high test	No	9	820.00	7 380.00	1 230.00	11 070.00	3 690.00	50.0%							
3.169			SV Chambers - 100mm high test	No	1	820.00	820.00	1 230.00	1 230.00	410.00	50.0%							
3.170			Meter, PRV, Flow Control Chambers - 100mm high test	No	7	820.00	5 740.00	1 230.00	8 610.00	2 870.00	50.0%							
3.171	SANS 1200A 8.5		Pipeline markers as detailed on drawing 25138PA/1/W2	No	400	698.00	279 200.00	907.40	362 960.00	83 760.00	30.0%							
			Pedestals															
<b>Total Carried Forward</b>							<b>4 941 145.00</b>		<b>6 257 966.95</b>		<b>26.7%</b>						<b>94 014.00</b>	<b>1.5%</b>

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<b>Brought Forward</b>							<b>4 941 145.00</b>		<b>6 257 966.95</b>		<b>26.7%</b>						<b>94 014.00</b>	<b>1.5%</b>
3.172			Manufacture, supply and install galvanised pipe support brackets, inside Concrete sleeve pipes, as detailed on drawing 25138PA/1/W3 for pipes 110mm - 250mm dia.	No	8	878.00	7 024.00	1 053.60	8 428.80	1 404.80	20.0%							
3.173	PSA 8.6		Cut-into existing pipeline and complete the connections (fittings measured separately)	No	4	3 500.00	14 000.00	6 650.00	26 600.00	12 600.00	90.0%							
			SPECIALS AND FITTINGS FOR YARD AND															
			ERF CONNECTIONS (REFER TO DRAWING No. 25138PA/1/W4)															
			Supply, handle, lay, bed on bedding for flexible pipes, join, test and disinfect, HDPE PE 100 potable water pipeline, complete with Plasson or Magnum Couplings, according to SABS ISO 4427															
			HDPE Class 12															
3.174			32 mm dia.	m	2700	16.00	43 200.00	19.20	51 840.00	8 640.00	20.0%							
3.175			25 mm dia.	m	1750	13.00	22 750.00	15.60	27 300.00	4 550.00	20.0%							
			Reinforced Saddle, Class 16															
3.176			160 mm dia. x 1 1/4"	No	1	391.00	391.00	469.20	469.20	78.20	20.0%							
3.177			110 mm dia. x 1 1/4"	No	11	114.00	1 254.00	136.80	1 504.80	250.80	20.0%							
3.178			75 mm dia. x 1 1/4"	No	21	99.00	2 079.00	118.80	2 494.80	415.80	20.0%							
3.179			50mm dia. x 1 1/4"	No	82	64.00	5 248.00	76.80	6 297.60	1 049.60	20.0%							
			Nipples, Class 16															
3.18			1" 1/4	No	115	18.00	2 070.00	21.60	2 484.00	414.00	20.0%							
			Plasson Male Adaptors															
3.181			32mm dia. x 1 1/4"	No	115	40.00	4 600.00	48.00	5 520.00	920.00	20.0%							
3.182			32mm dia. x 3/4"	No	115	40.00	4 600.00	48.00	5 520.00	920.00	20.0%							
3.183			25mm dia. x 3/4"	No	460	25.00	11 500.00	30.00	13 800.00	2 300.00	20.0%							
			Supply and install joint, incl. cut pipes where necessary, test, full bore lever ball valves, female ended, Class 16															
			Stainless Steel Full Bore Ball Valve, female ended, Class 16															
3.184			1 1/4"	No	115	450.00	51 750.00	540.00	62 100.00	10 350.00	20.0%							
			Supply and install, joint, incl. cut pipes where necessary, test, full bore stopcock, female ended, Class 16															
			Stainless Steel Stopcock, female ended, Class 16															
3.185			3/4"	No	115	360.00	41 400.00	432.00	49 680.00	8 280.00	20.0%							
<b>Total Carried Forward</b>							<b>5 153 011.00</b>		<b>6 522 006.15</b>		<b>26.6%</b>						<b>94 014.00</b>	<b>1.4%</b>



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<b>Brought Forward</b>							5 153 011.00		6 522 006.15		26.6%	0.00	0.00	0.0%			94 014.00	1.4%
3.186			Pipe cap and cover slab to ball valve at Erf Connection															
			160mm dia. Class 34 Sewer Pipe 500mm long	No	115	130.00	14 950.00	156.00	17 940.00		20.0%							
3.187			160mm Lug End Cap	No	115	67.00	7 705.00	80.40	9 246.00		20.0%							
			Domestic Meters															
3.188			15mm Sensus XNP Multijet type flow meter, housed in above-ground AGB 800 meter box with flow limiting disk, pressure tested to 24 bar	No	115	1 007.00	115 805.00	1 208.40	138 966.00		20.0%							
3.189			Supply and install Yard Taps, complete as detailed on the drawings	No.	115	380.00	43 700.00	494.00	56 810.00		30.0%							
			Hydrants															
			Supply and install, joint incl. cut pipes where necessary and test the fire hydrant, inclusive of off-take tee piece, wedge gate sluice valve, valve box and all other fittings complete as detailed on Drawing No. 25138PA/1/W2 off the following watermains:															
3.19			250mm dia. uPVC	No.	9	16 500.00	148 500.00	21 450.00	193 050.00		30.0%							
3.191			200mm dia. uPVC	No.	3	14 650.00	43 950.00	19 045.00	57 135.00		30.0%							
3.192			160mm dia. uPVC	No.	6	12 500.00	75 000.00	16 250.00	97 500.00		30.0%							
3.193			110mm dia. uPVC	No.	3	10 850.00	32 550.00	14 105.00	42 315.00		30.0%							
3.194			75mm dia. uPVC	No.	1	10 850.00	10 850.00	14 105.00	14 105.00		30.0%							
3.195			Provisional Sum for local sub contracting requirements	Prov Sum	1	3 000 000	3 000 000.00		3 000 000.00									
3.196			Contractors markup on item 3.189	%	3000000	10.00%	300 000.00		300 000.00									
3.195			Provisional Sum for additional taps	Prov Sum	0										1.00	300 000.00	300 000.00	
<b>Total Carried Forward To Summary</b>							8 946 021.00		10 449 073.15		16.8%						394 014.00	3.8%

PHASE 1 AS TENDERED							ADDITIONAL COSTS DUE TO LABOUR WAGE RATE INCREASE				ADDITIONAL COSTS DUE TO COVID LEGISLATION			OTHER					
ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	SECTION 4: BEDDING		SECTION 4: BEDDING				SECTION 4: BEDDING			SECTION 4: BEDDING				
						RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE	
	SANS 1200 LB PSLB		SECTION 4: BEDDING (Pipes)																
	8.2.1 PSLB8.1.3 PSLB8.1.6		Provision of bedding from trench excavation within 5km freehaul distance of excavation (rate to include for selection, staging, stockpiling and handling etc.)																
4.1			b) Selected granular material to bedding cradle	m³	1600	60.00	96 000.00	66.00	105 600.00	9 600.00	10.0%				250.00	66.00	16 500.00	15.6%	
4.2			b) Selected fill material to fill blanket	m³	1050	60.00	63 000.00	66.00	69 300.00	6 300.00	10.0%				250.00	66.00	16 500.00	23.8%	
	8.2.2.2 PSLB 8.1.3 PSLB 8.1.6		Provision of bedding from designated borrow pits (Prov) (Rate to include for 5km freehaul)																
	8.2.2.3 PSLB 8.1.3		Provision of bedding from commercial (Provisional)																
4.3			a) Selected granular fill	m³	1600	320.00	512 000.00	352.00	563 200.00	51 200.00	10.0%				0.00	352.00	0.00	0.0%	
4.4			b) Selected fill material	m³	1050	320.00	336 000.00	352.00	369 600.00	33 600.00	10.0%				0.00	352.00	0.00	0.0%	
4.5	PSA 8.6		Free draining stone blanket	m³	10	750.00	7 500.00	825.00	8 250.00	750.00	10.0%								
4.6	PSA 8.6		Supply and install geofabric "Bidim" A4 (or similar approved) to free draining stone blanket	m³	90	20.00	1 800.00	22.00	1 980.00	180.00	10.0%								
	8.2.4		Encasing of pipes in Class 25/19 concrete river crossing or elsewhere directed by the Engineer, as detailed on the drawings																
			Steel Pipes																
4.7			200mm dia.	m³	1	2 250.00	2 250.00	2 925.00	2 925.00	675.00	30.0%								
4.8			100mm dia.	m³	1	2 250.00	2 250.00	2 925.00	2 925.00	675.00	30.0%								
4.9			80 mm dia.	m³	1	2 250.00	2 250.00	2 925.00	2 925.00	675.00	30.0%								
	8.2.4		Encasing of steel pipes in Class 25/19 on rock as detailed on the drawings, including Y16 dowel bars																
4.10			200 mm dia.	m³	1	2 250.00	2 250.00	2 925.00	2 925.00	675.00	30.0%								
4.11			100 mm dia.	m³	1	2 250.00	2 250.00	2 925.00	2 925.00	675.00	30.0%								
<b>Total Carried Forward To Summary</b>								<b>1 027 550.00</b>		<b>1 132 555.00</b>		<b>10.2%</b>					<b>33 000.00</b>		<b>2.9%</b>

PHASE 1 AS TENDERED							ADDITIONAL COSTS DUE TO LABOUR WAGE RATE INCREASE				ADDITIONAL COSTS DUE TO COVID LEGISLATION			OTHER				
SECTION 5: GABIONS AND PITCHING							SECTION 5: GABIONS AND PITCHING				SECTION 5: GABIONS AND PITCHING			SECTION 5: GABIONS AND PITCHING				
ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
	SANS 1200 DK		SECTION 5: GABIONS AND PITCHING															
			GABIONS															
5.1	8.2.1	LI	Surface preparation for bedding of reno mattresses, gabion baskets and rock pack, including trimming to a level surface and compacting insitu material to 90% Mod AASHTO	m <sup>2</sup>	30	20.00	600.00	40.00	1 200.00		100.0%							
5.2	8.2.2	LI	Supply, place and fill 2.0m x 1.0m x 1.0m gabion baskets of 60mm x 80mm mesh 2.0mm dia. galvanised wire	m <sup>3</sup>	8	1 680.00	13 440.00	2 184.00	17 472.00		30.0%							
5.3	8.2.2	LI	Supply, place and fill 6.0m x 2.0m x 0.23m reno mattress of 60mm x 80mm mesh 2.0mm dia. galvanised wire	m <sup>3</sup>	6	1 920.00	11 520.00	2 496.00	14 976.00		30.0%							
5.4	8.2.4	LI	Geotextile ("Bidim A4" or similar approved) placed under gabions or reno mattresses, where instructed by the Engineer.	m <sup>2</sup>	35	25.00	875.00	30.00	1 050.00		20.0%							
5.5	PSA 8.6	LI	Rock pack above concrete encased pipe up to the invert of the gabion mattress as detailed	m <sup>3</sup>	2	750.00	1 500.00	975.00	1 950.00		30.0%							
			PITCHING															
5.6	8.2.5	LI	Grouted pitching, of thickness at least 300mm on slope of bank inclusive of all surface preparation, using selected stone from rivers or commercial sources	m <sup>3</sup>	3	2 500.00	7 500.00	3 750.00	11 250.00		50.0%							
5.7	PSA 8.6	LI	Rock pack to toe of earth embankment, where directed on site	m <sup>3</sup>	2	880.00	1 760.00	1 144.00	2 288.00		30.0%							
5.8	8.2.4		Geotextile "Bidim A5" or similar approved, placed over rock pack, where instructed by the Engineer	m <sup>2</sup>	5	50.00	250.00	60.00	300.00		20.0%							
<b>Total Carried Forward To Summary</b>							<b>37 445.00</b>	<b>50 486.00</b>		<b>34.8%</b>								

PHASE 1 AS TENDERED							ADDITIONAL COSTS DUE TO LABOUR WAGE RATE INCREASE				ADDITIONAL COSTS DUE TO COVID LEGISLATION			OTHER				
SECTION 6: RESERVOIRS REINFORCED CONCRETE							SECTION 6: RESERVOIRS REINFORCED CONCRETE				SECTION 6: RESERVOIRS REINFORCED CONCRETE			SECTION 6: RESERVOIRS REINFORCED CONCRETE				
ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
			SECTION 6: RESERVOIRS REINFORCED CONCRETE															
	SANS 1200C		CLEAR SITE															
6.1	8.2.1		Clear and grub at reservoir and break pressure tank sites	m <sup>2</sup>	600	10.00	6 000.00	12.00	7 200.00		20.0%							
6.2	8.2.2		Remove trees over 1m and up to 2m	No	1	1 000.00	1 000.00	1 200.00	1 200.00		20.0%							
6.3	8.2.10		Remove topsoil to 150mm depth and stockpile and maintain	m <sup>3</sup>	90	55.00	4 950.00	110.00	9 900.00		100.0%							
	SANS 1200 DA		EARTHWORKS (SMALL WORKS)															
	8.3.2		Bulk Excavation, all materials															
6.4			(a) Cut to STOCKPILE soft and intermediate material at reservoir sites, compact to 90% mod AASHTO and dispose of surplus / unsuitable material	m <sup>3</sup>	700	98.00	68 600.00	117.60	82 320.00		20.0%							
6.5			(b) Cut to fill soft and intermediate material at reservoir sites, compact to 90% mod AASHTO and dispose of surplus / unsuitable material	m <sup>3</sup>	100	120.00	12 000.00	144.00	14 400.00		20.0%							
6.6			(c) Backfill from stockpile and landscape at reservoir sites including shaping V Drains where directed by the Engineer (To drain Res Site adequately) soft and intermediate material at reservoir sites, compact to 90% mod AASHTO and dispose of surplus / uns	m <sup>3</sup>	400	88.00	35 200.00	114.40	45 760.00		30.0%							
	8.3.3		Restricted excavation, all materials															
6.7			Excavation for floor slab and unsuitable material	m <sup>3</sup>	230	150.00	34 500.00	240.00	55 200.00		60.0%							
6.8			Excavate for all inlet, outlet, overflow and scour pipework AND SUBSOIL DRAINS	m <sup>3</sup>	10	150.00	1 500.00	240.00	2 400.00		60.0%							
6.9			Rip and recompact insitu material to 90% MOD AASHTO	m <sup>3</sup>	30	65.00	1 950.00	84.50	2 535.00		30.0%							
6.10			(d) Imported G7 material compacted to 93% Mod AASHTO in max. 150mm layers to reservoirs	m <sup>3</sup>	170	625.00	106 250.00	812.50	138 125.00		30.0%							
6.11			Catch water channel, form channel and bank to details shown on dwg.	m <sup>3</sup>	100	100.00	10 000.00	130.00	13 000.00		30.0%							
6.12	8.3.6	LI	Topsailing from stockpile provided under item 6.3	m <sup>3</sup>	90	80.00	7 200.00	160.00	14 400.00		100.0%							
6.13	8.3.7	LI	Grassing per site	Prov Sum	1	37 500.00	37 500.00		37 500.00		-100.0%							
	SANS 1200G PSG 8.1.3		Concrete															
			Grade 20 MPa/20 mm concrete:															
6.14	8.4.2		Solid blinding layers 50 mm thick	m <sup>2</sup>	115	107.00	12 305.00	128.40	14 766.00		20.0%							
<b>Total Carried Forward</b>																		
								<b>438 706.00</b>			<b>29.4%</b>							

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
<b>Brought Forward</b>							<b>338 955.00</b>		<b>438 706.00</b>		<b>29.4%</b>							
6.15	8.1.3.1(b)		Mass concrete filling, encasing, anchor blocks, etc. in Grade 20MPa/20 mm concrete	m³	5	2 158.00	10 790.00	2 589.60	12 948.00		20.0%							
	8.4.3 PSG 8.4.3		Strength concrete: 35 MPa/20 mm to:															
6.16			Floor including forming scour sump and pipe encasements	m³	23	2 326.00	53 498.00	3 023.80	69 547.40		30.0%							
6.17			Wall Footing	m³	22	2 326.00	51 172.00	3 023.80	66 523.60		30.0%							
6.18			Wall	m³	44	2 451.00	107 844.00	3 186.30	140 197.20		30.0%							
6.19			Columns	m³	2	2 451.00	4 902.00	3 186.30	6 372.60		30.0%							
6.20			Roof	m³	33	2 451.00	80 883.00	3 186.30	105 147.90		30.0%							
	8.1.1 PSG 8.1.1		Formwork															
	8.2.1		Rough:															
6.21		LI	Vertical circular to outside of Wall footing	m²	35	650.00	22 750.00	845.00	29 575.00		30.0%							
6.22		LI	Vertical plain to encased pipework	m²	12	650.00	7 800.00	845.00	10 140.00		30.0%							
	8.2.2		Smooth:															
6.23		LI	Vertical circular to inside of wall footing	m²	35	650.00	22 750.00	845.00	29 575.00		30.0%							
6.24		LI	Circular vertical to internal and external faces of reservoir walls	m²	345	650.00	224 250.00	845.00	291 525.00		30.0%							
6.25		LI	Vertical plain to columns	m²	20	650.00	13 000.00	845.00	16 900.00		30.0%							
6.26		LI	Horizontal to reservoir roof soffit	m²	135	1 150.00	155 250.00	1 495.00	201 825.00		30.0%							
6.27	8.2.5	LI	Vertical circular to outer edge of reservoir roof slab - 175 mm wide	m	6	100.00	600.00	130.00	780.00		30.0%							
6.28	8.2.5		Vertical circular to outer edge of reservoir roof slab - 225 mm wide	m	43	100.00	4 300.00	130.00	5 590.00		30.0%							
6.29	8.2.5	LI	Vertical circular to outer edge of reservoir roof slab - 400 mm wide	m	4	160.00	672.00	208.00	873.60		30.0%							
6.30			Vertical plain to narrow widths less than 200mm	m	5	100.00	500.00	130.00	650.00		30.0%							
6.31			Vertical plain to inside and outside faces of openings in roof slab	m	10	150.00	1 500.00	195.00	1 950.00		30.0%							
	8.4.4 PSG 8.1.3		Unformed surface finishes															
			Wood float finish to:															
6.32			Outer part of wall footing	m²	17	35.00	595.00	49.00	833.00		40.0%							
			Steel float finish to:															
6.33			Blinding	m²	115	40.00	4 600.00	56.00	6 440.00		40.0%							
6.34			Reservoir floor panels	m²	136	40.00	5 440.00	56.00	7 616.00		40.0%							
<b>Total Carried Forward</b>							<b>1 112 051.00</b>		<b>1 443 715.30</b>		<b>29.8%</b>							

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
<b>Brought Forward</b>							<b>1 112 051.00</b>		<b>1 443 715.30</b>		<b>29.8%</b>							
6.35			Reservoir roof slab to falls	m <sup>2</sup>	146	40.00	5 840.00	56.00	8 176.00		40.0%							
6.36			Top of reservoir wall	m <sup>2</sup>	11	40.00	440.00	56.00	616.00		40.0%							
	PSG 8.1.2		Reinforcement															
6.37	8.3.1		Mild steel bars: All sizes	t	3	15 650.00	46 950.00	20 345.00	61 035.00		30.0%							
	8.3.1		High tensile steel bars:															
6.38			Basic price for 25 mm dia bars	t	15	15 650.00	234 750.00	20 345.00	305 175.00		30.0%							
	8.3.2		High tensile welded mesh No. 617:															
6.39			To reservoir floor	m <sup>2</sup>	110	155.00	17 050.00	201.50	22 165.00		30.0%							
	8.5 PSG 8.5		Joints															
			Form concrete joints complete as detailed including all water-stops, joint fillers, sealants,															
			500kl and 300kl Reservoirs															
6.40			Floor Isolation Joint circumference - Detail 5 and Detail 2	m	42	750.00	31 500.00	975.00	40 950.00		30.0%							
6.41			Floor Movement Joint - Detail 1	m	42	750.00	31 500.00	975.00	40 950.00		30.0%							
6.42			Wall construct joint - Detail 4	m	40	550.00	22 000.00	715.00	28 600.00		30.0%							
6.43			Roof/wall construction joint- Detail 3	m	45	550.00	24 750.00	715.00	32 175.00		30.0%							
			Miscellaneous:															
6.44			3 Layers of plastic membrane (250 micron) to wall/roof sliding interface	m <sup>2</sup>	42	75.00	3 150.00	97.50	4 095.00		30.0%							
6.45			1mm thick LLD Polyethylene sheeting to underside of floor slab	m <sup>2</sup>	170	100.00	17 000.00	130.00	22 100.00		30.0%							
6.46			Limitless bearing strip	m	45	1 000.00	45 000.00	1 300.00	58 500.00		30.0%							
6.47			50mm x 2mm Stainless Steel Strip	m	40	985.00	39 400.00	1 280.50	51 220.00		30.0%							
	8.8		Miscellaneous Metalwork															
	PSG 8.8		Supply and install (all items to be heavy duty hot dip galvanised):															
			Ladders (as per drawings):															
6.48			Internal (length 1660 mm)	No	1	12 500.00	12 500.00	15 000.00	15 000.00		20.0%							
6.49			Internal (length 3330 mm)	No	1	22 600.00	22 600.00	27 120.00	27 120.00		20.0%							
6.50			External (length 3260 mm)	No	1	14 000.00	14 000.00	16 800.00	16 800.00		20.0%							
			Pipe support brackets for:															
6.51			Inlet pipe (250 mm dia)	No	1	850.00	850.00	1 020.00	1 020.00		20.0%							
6.52			Inlet pipe (200 mm dia)	No	1	850.00	850.00	1 020.00	1 020.00		20.0%							
6.53			Overflow pipe (200 mm dia)	No	1	850.00	850.00	1 020.00	1 020.00		20.0%							
<b>Total Carried Forward</b>							<b>1 683 031.00</b>		<b>2 181 452.30</b>		<b>29.6%</b>							

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	TOTAL ADJUSTED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
<b>Brought Forward</b>							<b>1 683 031.00</b>		<b>2 181 452.30</b>		<b>29.6%</b>							
6.54			Overflow pipe (150 mm dia)	No	1	850.00	850.00	1 020.00	1 020.00		20.0%							
6.55			Roof ventilators - cast into roof slab	No	4	5 620.00	22 480.00	6 744.00	26 976.00		20.0%							
6.56			1200mm x 900 mm Hinged GMS manhole cover and frame to reservoir roof complete with padlock	No	1	6 500.00	6 500.00	7 800.00	7 800.00		20.0%							
6.57			Stainless Steel Platform	No	1	24 680.00	24 680.00	29 616.00	29 616.00		20.0%							
6.58			Roof mounted water level indicator complete to the details shown on the drawings.	Prov Sum	1	25 000.00	25 000.00	25 000.00	25 000.00									
			Miscellaneous:															
6.59	PSG 8.11		Clean and sterilize ALL reservoirs and all pipes	Sum	1	10 000.00	10 000.00		10 000.00									
6.60	PSG 8.12		Test ALL reservoirs for watertightness	Sum	1	15 000.00	15 000.00		15 000.00									
6.61			Testing by a commercial laboratory	Prov Sum	1	25 000.00	25 000.00		25 000.00									
<b>Total Carried Forward To Summary</b>							<b>1 812 541.00</b>		<b>2 321 864.30</b>		<b>109.6%</b>							

<b>PHASE 1 AS TENDERED</b>	<b>ADDITIONAL COSTS DUE TO LABOUR WAGE RATE INCREASE</b>	<b>ADDITIONAL COSTS DUE TO COVID LEGISLATION</b>	<b>OTHER</b>
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SECTION 7: RESERVOIR PIPEWORK	SECTION 7: RESERVOIR PIPEWORK	SECTION 7: RESERVOIR PIPEWORK	SECTION 7: RESERVOIR PIPEWORK
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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	SECTION 7: RESERVOIR PIPEWORK		SECTION 7: RESERVOIR PIPEWORK		SECTION 7: RESERVOIR PIPEWORK		SECTION 7: RESERVOIR PIPEWORK		
								TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT
	SANS 1200 C		SECTION 7: RESERVOIR PIPEWORK Reservoir Pipework encased in concrete:													
8.2.7			Supply, install and test factory coated solvent-free two-pack glassflake surface tolerant epoxy paint (DENSO S.T. 100 or similar approved) coated and lined steel pipes and specials for (incl. all jointing material). All pipework encased in concrete to be													
			Inlet													
7.1			DN 250 90 degree bend special cast into floor slab with flanged vertical (c/f 600mm) and plain other end (c/f 2800mm) with puddle pipe 1300mm from plain end	No	1	13 350.00	13 350.00	17 355.00	17 355.00	4 005.00	30.0%					
			Outlet No. 1													
7.2			DN 250 90 degree bend special with bell mouth welded to one end cast into floor slab & upstand (c/f of bellmouth 700mm) and plain other end (c/f 2850mm) with puddle pipe 1300mm from plain end	No	1	14 550.00	14 550.00	18 915.00	18 915.00	4 365.00	30.0%					
7.3			DN 200 900 bend with bell mouth welded to one end cast into floor slab & upstand (c/f of bellmouth 650mm) and plain other end (c/f 2800mm) with puddle pipe 1300mm from plain end	No	1	10 875.00	10 875.00	14 137.50	14 137.50	3 262.50	30.0%					
			Outlet No. 2													
7.4			DN 200 900 bend with bell mouth welded to one end cast into floor slab & upstand (c/f of bellmouth 650mm) and plain other end (c/f	No	1	10 875.00	10 875.00	14 137.50	14 137.50	3 262.50	30.0%					
			Scour													
7.5			DN 200 900 bend with bell mouth welded to one end cast into floor slab sump (c/f of bellmouth 500mm) and plain other end (c/f	No	1	10 650.00	10 650.00	13 845.00	13 845.00	3 195.00	30.0%					
			Overflow													
7.6			DN 250 90 degree bend with bell mouth welded to one end cast into floor slab sump (c/f of bellmouth 650mm) and plain other end (c/f 2800mm) with puddle pipe 1300mm from plain end	No	1	10 875.00	10 875.00	14 137.50	14 137.50	3 262.50	30.0%					
			Reservoir Pipework not encased in concrete:													
			Inlets													
7.7			DN 150 Model 150 LAFR 1601" Leveldex Level Control Valve with short deadband and remote mounted two level magnetic latch pilot Model LR 2500."	No	1	6 500.00	6 500.00	7 800.00	7 800.00	1 300.00	20.0%					
<b>Total Carried Forward</b>							<b>77 675.00</b>	<b>100 327.50</b>	<b>29.2%</b>							



SECTION 7: RESERVOIR PIPEWORK

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	INCREASE IN AMOUNT	PERCENTAGE INCREASE
<b>Brought Forward</b>							<b>77 675.00</b>		<b>100 327.50</b>		<b>29.2%</b>							
7.8			DN 250 x 150 Flanged Reducer	No	1	2 796.00	2 796.00	3 355.20	3 355.20	559.20	20.0%							
7.9			DN 250 riser pipe 4110 mm long flanged both ends and supported by pipe brackets cast into wall (brackets scheduled elsewhere)	No	1	9 962.00	9 962.00	11 954.40	11 954.40	1 992.40	20.0%							
7.10			DN 250 90° Flanged bend (c/f 280mm)	No	1	6 540.00	6 540.00	7 848.00	7 848.00	1 308.00	20.0%							
7.11			DN 250 VJ flange adaptor	No	1	1 562.00	1 562.00	1 874.40	1 874.40	312.40	20.0%							
7.12			DN 250 FBE coated Flange Adapter (for PVC-U pipe)	No	1	1 158.00	1 158.00	1 389.60	1 389.60	231.60	20.0%							
7.13			DN 250 Class 16 Flanged Resilient Seal Gate Valve	No	1	30 881.00	30 881.00	37 057.20	37 057.20	6 176.20	20.0%							
			Overflow															
7.14			DN 250 riser pipe with bell mouth welded to one end and flanged one end (c/f 4300mm)	No	1	12 625.00	12 625.00	15 150.00	15 150.00	2 525.00	20.0%							
7.15			DN 250 VJ flange adaptor	No	1	1 562.00	1 562.00	1 874.40	1 874.40	312.40	20.0%							
7.16			DN 250 FBE coated Flange Adapter (for PVC-U pipe)	No	1	1 182.00	1 182.00	1 418.40	1 418.40	236.40	20.0%							
			Scour (All lengths to be confirmed on site):															
7.17			DN 200 VJ flange adaptor	No	1	828.00	828.00	993.60	993.60	165.60	20.0%							
7.18			DN200 Class 16 Resilient Seal Gate Valve	No	1	7 376.00	7 376.00	8 851.20	8 851.20	1 475.20	20.0%							
7.19			DN 200 FBE coated Flange Adapter (for PVC-U pipe)	No	1	703.00	703.00	843.60	843.60	140.60	20.0%							
			Outlets															
7.20			DN 250 VJ flange adaptor	No	1	2 650.00	2 650.00	3 180.00	3 180.00	530.00	20.0%							
7.21			DN 250 Class 16 Resilient Seal Gate Valve	No	1	10 190.00	10 190.00	12 228.00	12 228.00	2 038.00	20.0%							
7.22			DN 250 FBE coated Flange Adapter (for PVC-U pipe)	No	1	1 795.00	1 795.00	2 154.00	2 154.00	359.00	20.0%							
7.23			DN 200 VJ flange adaptor	No	1	828.00	828.00	993.60	993.60	165.60	20.0%							
7.24			DN 200 Class 16 Resilient Seal Gate Valve	No	1	7 376.00	7 376.00	8 851.20	8 851.20	1 475.20	20.0%							
7.25			DN 200 FBE coated Flange Adapter (for PVC-U pipe)	No	1	703.00	703.00	843.60	843.60	140.60	20.0%							
			Interconnecting Pipework: Existing and Proposed reservoirs															
7.26			Res	Prov Sum	1	30 000.00	30 000.00		30 000.00	0.00								
			ACCESSORIES / ASSOCIATED WORKS OVERFLOW AND SCOUR PIPEWORK															
<b>Total Carried Forward</b>							<b>208 392.00</b>		<b>251 187.90</b>		<b>20.5%</b>							

SECTION 7: RESERVOIR PIPEWORK

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ITEM NO	PAYMENT	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R	TOTAL ADJUSTED RATE	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	PERCENTAGE INCREASE	ADDITIONAL QTY	INCREASE IN AMOUNT	INCREASE IN AMOUNT	PERCENTAGE INCREASE
<b>Brought Forward</b>							<b>208 392.00</b>		<b>251 187.90</b>		<b>20.5%</b>							
	8.2.1		Supply, handle, lay, bed, join and disinfect on bedding, as detailed on the drawings, PVC-U potable water pipeline, complete with rubber seals and sockets according to SABS 966															
			To Scour and Overflow Pipework															
			uPVC Class 9															
7.27			DN 250	m	60	440.00	26 400.00	572.00	34 320.00	7 920.00	30.0%							
7.28			DN 200	m	60	295.00	17 700.00	383.50	23 010.00	5 310.00	30.0%							
			Drainage:															
7.29			Circumferential drain slotted 110 mm dia HDPE ribbed drainage pipe, including stone and geofabric wrap	m	40	376.00	15 040.00	488.80	19 552.00	4 512.00	30.0%							
7.30			110mm dia PVC-u Class 6 drain pipe	m	40	70.00	2 800.00	91.00	3 640.00	840.00	30.0%							
			Miscellaneous															
7.31			Headwall to scour and overflow pipework	No	1	7 650.00	7 650.00	9 945.00	9 945.00	2 295.00	30.0%							
7.32			Headwall to chamber sumps at reservoir sites	No	2	7 650.00	15 300.00	9 945.00	19 890.00	4 590.00	30.0%							
			VALVE CHAMBERS AND MANHOLES															
7.33	8.2.3 PSL 3.10		Supply & install isolating valve chamber for Reservoir Isolating Valves, complete as detailed on the drawings (rate to incl. for all materials, i.e. concrete cradle, pipe cap, valve box, concrete surround etc.) (Refer to Drawing No. 25153PA/500-2)	No	5	3 500.00	17 500.00	4 550.00	22 750.00	5 250.00	30.0%							
<b>Total Carried Forward To Summary</b>							<b>310 782.00</b>		<b>384 294.90</b>		<b>23.7%</b>							

SECTION	DESCRIPTION	PHASE 1 AS TENDERED	ADDITIONAL COSTS DUE TO LABOUR WAGE RATE INCREASE			ADDITIONAL COSTS DUE TO COVID LEGISLATION		OTHER INCREASES IN STATUTORY REQUIREMENTS AND ADDITIONAL QUANTITIES		
		AMOUNT R	AMOUNT R	INCREASE IN AMOUNT	PERCENTAGE INCREASE TO ORIGINAL TENDER	INCREASE IN AMOUNT	PERCENTAGE INCREASE	INCREASE IN AMOUNT DUE TO ADDITIONAL QTY / INCREASED RATE	INCREASE IN AMOUNT	PERCENTAGE INCREASE
1	SECTION 1: PRELIMINARY AND GENERAL	2 513 490.04	2 718 578.04	205 088.00	8.2%	723 005.81	26.6%		556 200.00	20.5%
2	SECTION 2: EARTHWORKS (PIPE TRENCHES)	2 606 918.00	3 665 492.00	1 058 574.00	40.6%	0.00			217 540.00	5.9%
3	SECTION 3: MEDIUM PRESSURE PIPELINES	8 946 021.00	10 449 073.15	1 503 052.15	16.8%	0.00			394 014.00	3.8%
4	SECTION 4: BEDDING (Pipes)	1 027 550.00	1 132 555.00	105 005.00	10.2%	0.00			33 000.00	2.9%
5	SECTION 5: GABIONS AND PITCHING	37 445.00	50 486.00	13 041.00	34.8%	0.00				
6	SECTION 6: RESERVOIRS REINFORCED CONCRETE	1 812 541.00	2 321 864.30	509 323.30	28.1%	0.00				
7	SECTION 7: RESERVOIR PIPEWORK	310 782.00	384 294.90	73 512.90	23.7%	0.00				
	<b>SUBTOTAL</b>	<b>17 254 747.04</b>	<b>20 722 343.39</b>	<b>3 467 596.35</b>	<b>20.1%</b>	<b>723 005.81</b>	<b>3.5%</b>		<b>1 200 754.00</b>	<b>5.8%</b>
	10% Contingencies	1 725 474.70	2 072 234.34	346 759.64	20.1%	72 300.58	3.5%		120 075.40	5.8%
	<b>SUBTOTAL</b>	<b>18 980 221.74</b>	<b>22 794 577.73</b>	<b>3 814 355.99</b>	<b>20.1%</b>	<b>795 306.39</b>	<b>3.5%</b>		<b>1 320 829.40</b>	<b>5.8%</b>
	Add 15% VAT	2 847 033.26	3 419 186.66	572 153.40	20.1%	119 295.96	3.5%		198 124.41	5.8%
	<b>TOTAL</b>	<b>21 827 255.00</b>	<b>26 213 764.39</b>	<b>4 386 509.39</b>	<b>20.1%</b>	<b>914 602.35</b>	<b>3.5%</b>		<b>1 518 953.81</b>	<b>5.8%</b>
	<b>SUB TOTAL, EXCLUDING VAT</b>	<b>17 254 747.04</b>	<b>20 722 343.39</b>	<b>3 467 596.35</b>	<b>20.1%</b>	<b>723 005.81</b>	<b>3.5%</b>		<b>1 200 754.00</b>	<b>5.8%</b>
	<b>SUB TOTAL, EXCLUDING VAT</b>	<b>17 254 747.04</b>		<b>20 722 343.39</b>	<b>20.1%</b>	<b>21 445 349.20</b>	<b>24.3%</b>		<b>22 646 103.20</b>	<b>31.2%</b>

**ANNEXURE C :**  
**BREAKDOWN OF FUNDING ALLOWANCE AND EXPENDITURE:**  
**CAMELHOEK AND TRUSTFEED**

