## THE UNITED REPUBLIC OF TANZANIA MINISTRY OF WATER



MOROGORO WATER SUPPLY AND SANITATION AUTHORITY P.O. Box 5476, Morogoro, Telephone: +255 23 2614182/4214 Email: info@moruwasa.go.tz, md@moruwasa.go.tz



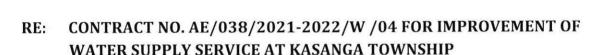
**MORUWASA** 

In reply please quote: -

Ref. No. UWSSA-MG-CB.16/64/30/34

15<sup>th</sup> March, 2022

Permanent Secretary, Ministry of Water, Water Street, P.O Box 456 **Dodoma.** 



Sub: Request of Payment to the Tune of Tshs 311,094,913 VAT Exclusive

Reference is made to the heading above.

**2.** MORUWASA is proceeding with the execution of project on Improvement of water supply services at Kasanga under the Covid-19 program. The works performed under the stated contract are general and preliminaries and construction of rising main (GS pipes DN 110) at a distance of 3,847m.

3. In this regard, we are requesting for the payments amounting to Tanzania shillings Three Hundred Eleven Million, Ninety-Four Thousand Nine Hundred Thirteen only (311,094,913) VAT Exclusive to be paid to SERENGETI LIMITED.

4. Attached to this letter is interim certificate (IPC 1) claim from the contractor and verification report.

5. Thanks for the cooperation,

ACTING MANAGING DIRECTOR.

MOROGORO URBAN WATE MOROGORO URBAN WATE AND SANITATION AUTI P.O. Box 5476 MOROGORO

#### MOROGORO URBAN WATER SUPPLY AND SANITATION AUTHORITY. CERTIFICATE NO 1

QUATATION NUMBER:

AE/038/2021-2022/W/04

CONTRACT NAME: IMPROVEMENT OF WATER SUPPLY SERVICES AT KASANGA

M/S. SERENGETI LIMITED

CONTRACT AMOUNT: DATE OF COMMECEMENT: 22 NOVEMBER, 2021.

Tshs 616,237,114/= (VAT EXCLUSIVE)

COMPLETION DATE:

28 MARCH, 2022

| DESCRIPTION DATE: 28 MARCH, 202               | 2                |     |                |      |
|---|------------------|-----|----------------|------|
|   | THIS CERTIFICATE |     | CHARACTER      |      |
| Value of Works Executed                       | TSHS             | CTS | CUMMULATIVE AM | TNUO |
| Advance Payment                               | 388,868,640.68   |     | TSHS           | CTS  |
| DEDUCTION                                     | 123,327,422.80   |     | 388,868,641    |      |
| Advance Payment Recovery 20%                  |                  |     |                |      |
| Retention Fund 5% limit of the contract curry | 77,773,728       | 0   | 77 772 772     | (    |
| inquiracted Demage 0.15%                      | 30,811,856       | 0   | 77,773,728     |      |
| Previous Payment on Account                   | 0                | 0   | 30,811,856     |      |
| TOTAL DEDUCTION                               | 0                | 0   |                | 0    |
| Amount Due after Deduction                    | 108,585,584      | 0   | 100 000        | 0    |
|   | 280,283,057      | 0   | 108,585,584    | 0    |
| ADDITION                                      |                  | - 0 | 280,283,057    | 0    |
| Release 100% Total Retention Fund             |                  |     |                |      |
| Amount due                                    | 0                | 0   |                |      |
| ayment this certificate                       | 311,094,913      | 0   | 0              | 0    |
|   |                  | -   | 311,094,913    | 0    |
|   | 311,094,913      | 0   | 311.094.913    | 0    |

| Sgnature of the                             | 311,094,913 0 311,094,913                   |  |
|---|---|--|
| contractor Hillinging Name Date 14 03 12022 | Prepared by FHDA MAINT Sign Date 13(03/2012 |  |
|   | Certified by Sign Date Sign                 |  |
|   | Approved by Besfam B Minde                  |  |
|   | Date 14/3/2012                              |  |

#### IMPROVEMENT OF WATER SUPPLY SERVICES AT KASANGA

PROJECT NAME: IMPROVEMENT OF WATER SUPPLY SERVICES AT KASANGA

CONTRACTOR:M/S. SERENGETI LIMITED

CLIENT: MOROGORO URBAN WATER SUPPLY AND SANITATION AUTHORITY (MORUWASA)

QUATATION NO; AE/038/2021-2022/W/04 FOR IPC NO.1

| QUATA   | ATION NO; AE/038/2021-2022/W/04 FOR IPC NO.1  |      |       | Original Co  | ntract        | This Co     | ertificate(IPC 1) |
|---------|---|------|-------|--------------|---------------|-------------|-------------------|
| S/No    | Item Description  | Unit | 0:    |              |               |             |                   |
|         |   |      | Qty   | Rate (Tshs)  | Amount (Tshs) | Qty         | Amount (Tshs)     |
|         | BILL A: GENERAL AND PRELIMINARIES   |      |       |              |               |             |                   |
| 1       | Mobilization and Demobilization of Major items and equipment  | sum  | 1     | 10,000,000   | 10,000,000    | 0.8         | 8,000,000         |
| 2       | Site accomodation and Storage   | sum  | 1     | 5,000,000    | 5,000,000     | 1           | 5,000,000         |
| 3       | Allow for watch and ward  | sum  | 1     | 1,000,000    | 1,000,000     | 1           | 1,000,000         |
| 4       | Provide sign for Security   | sum  | 1     | 500,000      | 500,000       | 1           | 500,000           |
| 5       | System testing and disinfection   | sum  | 1     | 2,000,000    | 2,000,000     | 0           | 0                 |
| 6       | Provision of project sign board   | sum  | 1     | 1,500,000    | 1,500,000     | 1           | 1,500,000         |
| 7       | Insurance of works, third part liability, accident or injury oto workman, Contractors equipment, material intransit to site and Vehicles  | sum  | 1     | 2,000,000    | 2,000,000     | 1           | 2,000,000         |
| 8       | Progress Photographs  | sum  | 1     | 1,500,000    | 1,500,000     | 0           | 0                 |
| 9       | As Built drawings as specified by Engineer  | sum  | 1     | 2,000,000    | 2,000,000     | 0           | 0                 |
|         | 0 1 7 0   |      |       | SUB- TOTAL A | 25,500,000    |             | 18,000,000        |
|         |   |      |       |              |               | J           |                   |
| (200) B | BILL B: Supply and Installation of Submersible Pump   |      |       |              |               | (A) (A) (A) |                   |
|         | Submersible Pumps   |      |       |              |               |             |                   |
|         | Rate shall include supply of all cable trays and cabling between instruments and the panel .and modification at borehole cap and locking arrangements   |      |       |              |               |             |                   |
|         | Supply and installation of electric submersible pump set complete with motor and cooling jacket width Hydraulic efficiency above 70%, Control pannel,starter, sensor, 63 A rated Power cable, Signal cables rising main,(3" PVC pipes), valve system, gauges, clamps and all necessary accessories as per specifications and Drawing; capacity = 20m3/h, Total head=280m,Pump setting depth = 7m. The panel should be equipped with motor, starter, draw down sensor, 50Hz, 415V, 63A | Nr   | 1     | 65,413,000   | 65,413,000    | 0           | 0                 |
|         |   |      |       | SUB- TOTAL B | 65,413,000    |             | 0                 |
|         | BILL C: Pipe work Installation and related structure  |      |       |              |               |             | 8.018.046.2       |
| 1       | Earth Work  |      |       |              |               |             |                   |
| 1.1     | Excavation and backfilling for pipe trenches for rising main and Distribution Network in any material other than rock with 0.6m wide and a maximum depth of 1.20m   | m    | 9,763 | 4,000        | 39,052,000    | 3,707       | 14,828,000        |
| 1.2     | Extra over for Excavation and backfilling for pipe trenches for rising main and Distribution Network in rock material with 0.6m wide and a maximum depth of 1.20m. Rate shall include bedding with selected suitable material as per engineer instruction   | m    | 500   | 8,000        | 4,000,000     | 0           | 0                 |
| 2.0     | Supply and Installation of Pipes and Fitting for<br>Rising main and Distriburion Network  |      |       |              |               |             |                   |

| 4      | 1   |      | Original Contract |                  |                   |       | ertificate(IPC 1) |
|--------|---|------|-------------------|------------------|-------------------|-------|-------------------|
| S/No   | Item Description  | Unit | Qty               | Rate (Tshs)      | Amount (Tshs)     | Qty   | Amount (Tshs)     |
|        | Rate shall include for local transportation within the  |      |                   |                  |                   |       |                   |
|        | site, handling, welding, fusion of HDPE PIPE, fabrication   |      |                   | 1                |                   |       |                   |
|        | of special pipe fittings, Laying and Jointing or Fixing of  |      |                   |                  |                   |       |                   |
|        | pipes and Valves in Open Trench and all other associated works required for complete installation.The |      |                   |                  |                   |       |                   |
|        | pipes shall be installed in accordance with the   |      |                   |                  |                   |       |                   |
|        | manufacturer's instructions   |      |                   |                  |                   |       |                   |
| 2.1    | Pipes   |      |                   |                  |                   |       |                   |
| 2.1.1  | GS PIPE DN 110 Class M (6m) Threaded both end   | m    | 3,944             | 82,400           | 324,985,600       | 3,847 | 329,229,200       |
| 2.1.2  | DN 160mm HDPE PN10 PE 100   | m    | 827               | 48,100           | 39,778,700        | 0     | 0                 |
| 2.1.3  | DN 110mm HDPE PN10 PE 100   | m    | 693               | 23,000           | 15,939,000        | 0     | 0                 |
| 2.1.4  | DN 63mm HDPE PN10 PE 100  | m    | 2,200             | 7,700            | 16,940,000        | 0     | 0                 |
| 2.1.5  | DN 50mm HDPE PN10 PE 100  | m    | 2,000             | 4,800            | 9,600,000         | 0     | 0                 |
| 2.1.6  | GS Pipe DN150 Class M including its fittings  | m    | 100               | 147,500          | 14,750,000        | 0     | 0                 |
| 2.2    | Fittings For Distribution and Rising Main (all of   |      |                   |                  |                   |       | 0                 |
|        | PN16)   |      |                   |                  |                   |       | 8000              |
|        | GS Pipe 0.6m legth Flanged both sides with coller   | рс   | 1                 | 254,237          | 254,237           | 0     | 0                 |
|        | DN150 HDPE Stub   | рс   | 2                 | 237,288          | 474,576           | 0     | 0                 |
|        | DN110 HDPE Stub   | pc   | 3                 | 186,441          | 559,322           | 0     | 0                 |
|        | DN150 900 Steel Bend Flanged PN16   | рс   | 2                 | 237,288          | 474,576           | 0     | 0                 |
|        | Clamp Saddle DN150 X DN 32 PN16   | рс   | 1                 | 46,610           | 46,610            | 0     | 0                 |
|        | Clamp Saddle DN150 X DN 63 PN16   | pc   | 2                 | 46,610           | 93,220            | 0     | 0                 |
|        | Clamp Saddle DN110 X DN 63 PN16   | pc   | 2                 | 21,186           | 42,373            | 0     | 0                 |
|        | Clamp Saddle DN63 X DN 50 PN16  | pc   | 7                 | 12,712           | 88,983            | 0     | 0                 |
|        | Clamp Saddle DN110 X DN 32 PN16   | pc   | 1                 | 21,186           | 21,186            | 0     | 0                 |
|        | Clamp Saddle DN63 X DN 32 PN16  | pc   | 2                 | 12,712           | 25,424            | 0     | 0                 |
|        | DN 63 Stright Coupling PN16   | pc   | 20                | 21,186           | 423,729           | 0     | 0                 |
|        | DN 50 Stright Coupling PN16   | рс   | 17                | 16,949           | 288,136           | 0     | 0                 |
|        | DN 63 x DN 50 Coupling Reducer PN16   | pc   | 3                 | 23,729           | 71,186            | 0     | 0                 |
|        | DN 63 GS Nipple PN16  | pc   | 4                 | 15,254           | 61,017            | 0     | 0                 |
|        | DN 50 GS Nipple PN16  | рс   | 2                 | 12,712           | 25,424            | 0     | 0                 |
|        | DN 32 GS Nipple PN16  | pc   | 8                 | 8,475            | 67,797            | 0     | 0                 |
|        | DN63 Gate Valve PN16  | pc   | 2                 | 59,322<br>42,373 | 237,288<br>84,746 | 0     | 0                 |
|        | DN50 Gate Valve PN16<br>DN32 Gate Valve PN16  | pc   | 4                 | 21,186           | 84,746            | 0     | 0                 |
|        | DN 63 Male Connector PN16   | pc   | 4                 | 15,254           | 61,017            | 0     | 0                 |
|        | DN 50 Male Connector PN16   | pc   | 9                 | 12,712           | 114,407           | 0     | 0                 |
|        | DN 63 GS Socket PN16  | рс   | 4                 | 15,254           | 61,017            | 0     | 0                 |
|        | DN 50 GS Socket PN16  | рс   | 7                 | 12,712           | 88,983            | 0     | 0                 |
|        | DN 63 GS Plug PN16  | рс   | 4                 | 12,712           | 50,847            | 0     | 0                 |
|        | DN 50 GS Plug PN16  | рс   | 7                 | 11,864           | 83,051            | 0     | 0                 |
|        | DN110 Comb Flange PN16  | рс   | 4                 | 169,492          | 677,966           | 0     | 0                 |
|        | DN150 Rubbber Gasket PN16   | рс   | 15                | 12,712           | 190,678           | 0     | 0                 |
|        | DN110 Rubbber Gasket PN16   | рс   | 85                | 8,475            | 720,339           | 0     | 0                 |
|        | DN63 Rubbber Gasket PN16  | рс   | 4                 | 4,237            | 16,949            | 0     | 0                 |
|        | DN150 GS Socket PN16  | рс   | 18                | 93,220           | 1,677,966         | 0     | 0                 |
|        | DN150 Hex Union PN16  | рс   | 5                 | 152,542          | 762,712           | 5     | 762,712           |
|        | DN110 Hex Union PN16  | рс   | 70                | 67,797           | 4,745,763         | 70    | 4,745,763         |
|        | DN110 GS Socket PN16  | рс   | 540               | 31,356           | 16,932,203        | 540   | 16,932,203        |
|        | DN110 GS Flange PN16  | рс   | 145               | 39,831           | 5,775,424         | 20    | 3,286,017         |
|        | DN 150 GS Flange PN16   | рс   | 10                | 76,271           | 762,712           | 0     | 0                 |
|        | DN150 Sluice Valve PN16   | рс   | 1                 | 423,729          | 423,729           | 0     | 0                 |
|        | DN110 Sluice Valve PN16   | рс   | 2                 | 271,186          | 542,373           | 0     | 0                 |
|        | DN63 Sluice Valve PN16  | рс   | 4                 | 194,915          | 779,661           | 0     | 0                 |
| 2.2.39 | Bolt, Nuts and Washel 16mm x 75mm   | рс   | 680               | 3,814            | 2,593,220         | 0     | 0                 |
| 2.2.40 | DN 32 Air Valve PN16  | рс   | 4                 | 84,746           | 338,983           | 0     | 0                 |
|        | DN 150 x DN 110 Taper reducer PN16  | рс   | 1                 | 169,492          | 169,492           | 0     | 0                 |
| 2.2.42 | Tee Equal DN110 x DN63 Steel flanged PN16   | рс   | 4                 | 271,186          | 1,084,746         | 4     | 1,084,746         |
|        |   |      |                   | SUB- TOTAL C     | 507,124,114       |       | 370,868,641       |

|        | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \   |      |         | Original Co    | ntract        | This C | ertificate(IPC 1) |
|--------|---|------|---------|----------------|---------------|--------|-------------------|
| S/No   | Item Description  | Unit | Qty     | Rate (Tshs)    | Amount (Tshs) | Qty    | Amount (Tshs)     |
|        | BILL D: Civil Works   |      |         |                |               |        |                   |
| 1      | Crossings   |      |         |                |               |        |                   |
| 1.1    | Construction of Class C25 Reinforced concrete support<br>pier at Stream/River crossing, Gullies crossing and the<br>like  | No   | 15      | 500,000        | 7,500,000     | 0      | 0                 |
| 2      | Anchorage Blocks  |      |         |                |               |        |                   |
| 2.1    | Construction of Class C25 concrete thrust and anchor<br>blocks at Bend, Tee and slopes greater than 10%   | No.  | 10      | 300,000        | 3,000,000     | 0      | 0                 |
| 3      | Valve Chambers  |      |         |                |               |        |                   |
| 3.1    | Construction of valve chamber with Cement Sand<br>Blocks and its top cover as depicted in drawings. Rate<br>shall be included installation of installation of Valves. | No.  | 10      | 700,000        | 7,000,000     | 0      | 0                 |
| 4      | Other Pipework ancilliaries   |      |         |                |               |        |                   |
| 4.1    | Precast Concrete Marker Post for Gate Valves, Air<br>Valves, Washout and pipeline in accordance with<br>standard drawings   | No.  | 20      | 35,000         | 700,000       | 0      | 0                 |
|        |   |      |         | SUB- TOTAL D   | 18,200,000    |        | 0                 |
|        | GENERAL SUMMARY   |      |         |                | CONTRACT      |        | IPC 1             |
| BILL A | : PRELIMINARY AND GENERAL   |      |         |                | 25,500,000    |        | 18,000,000        |
| BILL B | S: SUPPLY AND INSTALLATION OF SUBMERSIBLE PUM   | IP   |         |                | 65,413,000    |        | 0                 |
| BILL C | : PIPE WORK INSTALLATION  |      |         |                | 507,124,114   |        | 370,868,641       |
| BILL D | D: CIVIL WORKS  |      |         |                | 18,200,000    |        | 0                 |
|        |   |      | Total ( | VAT Exclusive) | 616,237,114   |        | 388,868,641       |

Less: 20% Advance Paymnet Recovery

77,773,728

Less: 5% Limit of Retention Money

30,811,856

Amount Payable to Contractor in This Certificate 280,283,057



### MOROGORO WATER SUPPLY AND SANITATION AUTHORITY

Contract

#### IMPROVEMENT OF WATER SUPPLY SERVICES AT KASANGA

Contract No. AE/038/2021-2022/W/04

Contractor M/s Serengeti LTD, P. O. Box 72,374, Dar es Salaam.

Location of Works: Kasanga

#### MEASUREMENTS CALCULATION SHEET FOR IPC # 01

| BoQ Item              | Description   | Calculations/<br>Sketches | Unit | Quantity |
|-----------------------|---|---------------------------|------|----------|
| Bill C :1 ,1.1        | Excavation and backfilling for pipe trenches for rising main and Distribution Network in any material other than rock with 0.6m wide and a maximum depth of 1.20m   | Overches                  | m    | 3, 707   |
| Bill C :1 :1 2        | Extra over for Excavation and backfilling for pipe trenches for rising main and Distribution Network in rock material with 0.6m wide and a maximum depth of 1.20m. Rate shall include bedding with selected suitable material as per engineer instruction |                           |      |          |
| Bill<br>C :2.1 ;2.1.1 | GS PIPE DN 110 Class M (6m) Threaded both end   |                           | M    | 3,847    |
| Bill<br>C 22:31       | DN150 Hex Union PN16  |                           | PC   | 05       |
| Bill<br>C .2.2 ,32    | DN110 Hex Union PN16  |                           | PL   | 20       |
| Bill<br>C 2 2 33      | DN110 GS Socket PN16  |                           | PC   | 520      |
| Bill<br>C 2.2:34      | DN110 GS Flange PN16  |                           | pc   | 20       |
| Confirmed:            | 1. mujoda   |                           | İ    |          |

For Contractor: Date: 14/03/2022 Confirmed: Name: NASIM. I. KASSINGE Designation: POWER OF ASTERNEY

For Employer: Date: 05/02/2022 Name: BA: FRIDA MBILIMI

Designation: Supply 1468



Date: 20th February, 2022 Ref. No: S/M/KAS/2022/003

Attach: 0

To: Managing Dierctor,

Morogoro Urban Water Supply and Sanitation Authority (MORUWASA),

P.O.Box 5476,

MOROGORO.

Attn, Eng. Frida Mbilinyi

**Project Manager** 

REF: IMPROVEMENT OF WATER SUPPLY SERVICE AT KASANGA - MOROGORO;

CONTRACT NO.AE/038/2021 2022/W/04

Sub: Claim for Interim Payment Certificate, IPC No.1.

Kindly refer to the above mentioned subject.

We are writing to present our Claims for Interim Payment certificate, IPC No.1 for your review, certification and approval for payment pursuant to relevant clauses of the contract.

Our Claims stands at a tune of TZS 345,699,611.00 after deduction of retention and advance payment recovery as per attached breakdown in excel and pdf format to facilitate your evaluation.

Hoping your continued cooperation.

Yours sincerely

Najim Kassange Power Of Attorney

# Improvement of Water Supply Services at Kasanga Township, Morogoro Municipality:Contract No: AE/038/2021-2022/W/04 Breakdown for Interim Payment Certificate, IPC No.1

|      | h. D   | 1136 |     | Contra       | ct            | Th                                       | his Certificate |  |
|------|--|------|-----|--------------|---------------|--|-----------------|--|
| S/No | Item Description   | Unit | Qty | Rate (Tshs)  | Amount (Tshs) | Qty                                      | Amount (Tshs)   |  |
|      | BILL A: GENERAL AND PRELIMINARIES  |      |     |              | *             |  |                 |  |
| 1    | Mobilization and Demobilization of Major items and equipment   | sum  | 1   | 10,000,000   | 10,000,000    | 0.8                                      | 8,000,000       |  |
| 2    | Site accomodation and Storage  | sum  | 1   | 5,000,000    | 5,000,000     | 1  | 5,000,000       |  |
| 3    | Allow for watch and ward   | sum  | 1   | 1,000,000    | 1,000,000     | 1  | 1,000,000       |  |
| 4    | Provide sign for Security  | sum  | 1   | 500,000      | 500,000       | 1  | 500,000         |  |
| 5    | System testing and disinfection  | sum  | 1   | 2,000,000    | 2,000,000     | 0  | 0               |  |
| 6    | Provision of project sign board  | sum  | 1   | 1,500,000    | 1,500,000     | 1  | 1,500,000       |  |
| 7    | Insurance of works, third part liability, accident or injury oto workman, Contractors equipment, material intransit to site and Vehicles | sum  | 1   | 2,000,000    | 2,000,000     | 1  | 2,000,000       |  |
| 8    | Progress Photographs   | sum  | 1   | 1,500,000    | 1,500,000     | 0.5                                      | 750,000         |  |
| 9    | As Built drawings as spercified by Engineer  | sum  | 1   | 2,000,000    | 2,000,000     | 0  | 0               |  |
|      |  |      | 5   | SUB- TOTAL A | 25,500,000    | -10-11-11-11-11-11-11-11-11-11-11-11-11- | 18,750,000      |  |

| CIN  | Nove Description  | Umit |     | Contra       | ct            | Th  | is Certificate |
|------|---|------|-----|--------------|---------------|-----|----------------|
| S/No | Item Description  | Unit | Qty | Rate (Tshs)  | Amount (Tshs) | Qty | Amount (Tshs)  |
|      | BILL B: Supply and Installation of Submersible Pump   |      |     |              |               |     |                |
|      | Submersible Pumps   |      |     |              |               |     |                |
|      | Rate shall include supply of all cable trays and cabling between instruments and the panel and modification at borehole cap and locking arrangements  |      |     |              |               |     |                |
|      | Supply and installation of electric submersible pump set complete with motor and cooling jacket width Hydraulic efficiency above 70%, Control pannel, starter, sensor, 63 A rated Power cable, Signal cables rising main,(3" PVC pipes), valve system, gauges, clamps and all necessary accessories as per specifications and Drawing; capacity = 20m3/h, Total head=280m, Pump setting depth = 7m. The panel should be equipped with motor, starter, draw down sensor, 50Hz, 415V, 63A | Nr   | 1   | 65,413,000   | 65,413,000    | 0   | 0              |
|      |   |      |     | SUB- TOTAL B | 65,413,000    |     | 0              |

|        |   |                          |                           | Contra                             | ct                                 | Th    | This Certificate |  |  |
|--------|---|--------------------------|---------------------------|------------------------------------|------------------------------------|-------|------------------|--|--|
| S/No   | Item Description  | Unit                     | Qty                       | Rate (Tshs)                        | Amount (Tshs)                      | Qty   | Amount (Tshs     |  |  |
| 1      | Earth Work  |                          |                           |                                    |                                    |       |                  |  |  |
| 1.1    | Excavation and backfilling for pipe trenches for rising main and Distribution Network in any material other than rock with 0.6m wide and a maximum depth of 1.20m   | m                        | 9,763                     | 4,000                              | 39,052,000                         | 9,763 | 39,052,000       |  |  |
| 1.2    | Extra over for Excavation and backfilling for pipe trenches for rising main and Distribution Network in rock material with 0.6m wide and a maximum depth of 1.20m. Rate shall include bedding with selected suitable material as per engineer instruction | m                        | 500                       | 8,000                              | 4,000,000                          | 500   | 4.000,000        |  |  |
| 2.0    | Supply and Installation of Pipes and Fitting for Rising main and Distriburion<br>Network  |                          |                           |                                    |                                    |       |                  |  |  |
|        | Rate shall include for local transportation within the site, handling, welding, fusion of Laying and Jointing or Fixing of pipes and Valves in Open Trench and all other associates shall be installed in accordance with the manufacturer's instructions | f HDPE PII<br>ciated wor | PE, fabrica<br>ks require | ation of special<br>d for complete | pipe fittings,<br>installation.The |       |                  |  |  |
| 2.1    | Pipes   |                          |                           |                                    |                                    |       |                  |  |  |
| 2.1.1  | GS PIPE DN 110 Class M (6m) Threaded both end   | m                        | 3,944                     | 82,400                             | 324,985,600                        | 3,944 | 324,985,600      |  |  |
| 2.1.2  | DN 160mm HDPE PN10 PE 100   | m                        | 827                       | 48,100                             | 39,778,700                         | 0     | 0                |  |  |
| 2.1.3  | DN 110mm HDPE PN10 PE 100   | m                        | 693                       | 23,000                             | 15,939,000                         | 0     | 0                |  |  |
| 2.1.4  | DN 63mm HDPE PN10 PE 100  | m                        | 2,200                     | 7,700                              | 16,940,000                         | 0     | 0                |  |  |
| 2.1.5  | DN 50mm HDPE PN10 PE 100  | m m                      | 2,000                     | 4,800                              | 9,600,000                          | Û     | 0 -              |  |  |
| 2.1.6  | GS Pipe DN150 Class M including its fittings  | m                        | 100                       | 147,500                            | 14,750,000                         | 0     | 0                |  |  |
| 2.2    | Fittings For Distribution and Rising Main (all of PN16)   |                          |                           |                                    |                                    |       | 0                |  |  |
| 2.2.1  | GS Pipe 0.6m legth Flanged both sides with coller   | рс                       | 1                         | 254,237                            | 254,237                            | 0     | 0                |  |  |
| 2.2.2  | DN150 HDPE Stub   | рс                       | 2                         | 237,288                            | 474,576                            | 0     | 0                |  |  |
| 2.2.3  | DN110 HDPE Stub   | рс                       | 3                         | 186,441                            | 559,322                            | 0     | 0                |  |  |
| 2.2.4  | DN150 900 Steel Bend Flanged PN16   | рс                       | 2                         | 237,288                            | 474,576                            | 0     | С                |  |  |
| 2.2.5  | Clamp Saddle DN150 X DN 32 PN16   | рс                       | 1                         | 46,610                             | 46,610                             | 0     | 0                |  |  |
| 2.2.6  | Clamp Saddle DN150 X DN 63 PN16   | рс                       | 2                         | 46,610                             | 93,220                             | 0     | 0                |  |  |
| 2.2.7  | Clamp Saddle DN110 X DN 63 PN16   | рс                       | 2                         | 21,186                             | 42,373                             | 0     | 0                |  |  |
| 2.2.8  | Clamp Saddle DN63 X DN 50 PN16  | рс                       | 7                         | 12,712                             | 88,983                             | 0     | 0                |  |  |
| 2.2.9  | Clamp Saddle DN110 X DN 32 PN16   | рс                       | 1                         | 21,186                             | 21,186                             | 0     | 0                |  |  |
| 2.2.10 | Clamp Saddle DN63 X DN 32 PN16  | рс                       | 2                         | 12,712                             | 25,424                             | 0     | 0                |  |  |
| 2.2.11 | DN 63 Stright Coupling PN16   | рс                       | 20                        | 21,186                             | 423,729                            | 0     | 0                |  |  |

| 2.2.12 | DN 50 Stright Coupling PN 16              | pc | 17  | 16,949      | 288,130     | Ú   | U           |
|--------|---|----|-----|-------------|-------------|-----|-------------|
| 2.2.13 | DN 63 x DN 50 Coupling Reducer PN16       | pc | 3   | 23,729      | 71,186      | 0   | 0           |
| 2.2.14 | DN 63 GS Nipple PN16                      | рс | 4   | 15,254      | 61,017      | 0   | 0           |
| 2.2.15 | DN 50 GS Nipple PN16                      | рс | 2   | 12,712      | 25,424      | 0   | 0           |
| 2.2.16 | DN 32 GS Nipple PN16                      | рс | 8   | 8,475       | 67,797      | 0   | 0           |
| 2.2.17 | DN63 Gate Valve PN16                      | рс | 4   | 59,322      | 237,288     | 0   | 0           |
| 2.2.18 | DN50 Gate Valve PN16                      | рс | 2   | 42,373      | 84,746      | 0   | 0           |
| 2.2.19 | DN32 Gate Valve PN16                      | рс | 4   | 21,186      | 84,746      | 0   | 0           |
| 2.2.20 | DN 63 Male Connector PN16                 | рс | 4   | 15,254      | 61,017      | 0   | 0           |
| 2.2.21 | DN 50 Male Connector PN16                 | рс | 9   | 12,712      | 114,407     | 0   | 0           |
| 2.2.22 | DN 63 GS Socket PN16                      | pc | 4   | 15,254      | 61,017      | 0   | 0           |
| 2.2.23 | DN 50 GS Socket PN16                      | рс | 7   | 12,712      | 88,983      | 0   | 0           |
| 2.2.24 | DN 63 GS Plug PN16                        | рс | 4   | 12,712      | 50,847      | 0   | 0           |
| 2.2.25 | DN 50 GS Plug PN16                        | рс | 7   | 11,864      | 83,051      | 0   | 0           |
| 2.2.26 | DN110 Comb Flange PN16                    | pc | 4   | 169,492     | 677,966     | 0   | - 0         |
| 2.2.27 | DN150 Rubbber Gasket PN16                 | рс | 15  | 12,712      | 190,678     | 0   | 0           |
| 2.2.28 | DN110 Rubbber Gasket PN16                 | рс | 85  | 8,475       | 720,339     | 0   | 0           |
| 2.2.29 | DN63 Rubbber Gasket PN16                  | рс | 4   | 4,237       | 16,949      | 0   | 0           |
| 2.2.30 | DN150 GS Socket PN16                      | рс | 18  | 93,220      | 1,677,966   | 0   | 0           |
| 2.2.31 | DN150 Hex Union PN16                      | рс | 5   | 152,542     | 762,712     | 5   | 762,712     |
| 2.2.32 | DN110 Hex Union PN16                      | рс | 70  | 67,797      | 4,745,763   | 70  | 4,745,763   |
| 2.2.33 | DN110 GS Socket PN16                      | рс | 540 | 31,356      | 16,932,203  | 612 | 19,189,831  |
| 2.2.34 | DN110 GS Flange PN16                      | рс | 145 | 39,831      | 5,775,424   | 145 | 5,775,424   |
| 2.2.35 | DN 150 GS Flange PN16                     | рс | 10  | 76,271      | 762,712     | 0   | 0           |
| 2.2.36 | DN150 Sluice Valve PN16                   | рс | 1   | 423,729     | 423,729     | 0   | 0           |
| 2.2.37 | DN110 Sluice Valve PN16                   | рс | 2   | 271,186     | 542,373     | 0   | 0           |
| 2.2.38 | DN63 Sluice Valve PN16                    | pc | 4   | 194,915     | 779,661     | 0   | 0           |
| 2.2.39 | Bolt, Nuts and Washel 16mm x 75mm         | рс | 680 | 3,814       | 2,593,220   | 0   | 0           |
| 2.2.40 | DN 32 Air Valve PN16                      | рс | 4   | 84,746      | 338,983     | 0   | 0           |
| 2.2.41 | DN 150 x DN 110 Taper reducer PN16        | рс | 1   | 169,492     | 169,492     | 0   | 0           |
| 2.2.42 | Tee Equal DN110 x DN63 Steel flanged PN16 | pc | 4   | 271,186     | 1,084,746   | 4   | 1,084,746   |
|        |   |    | S   | UB- TOTAL C | 507,124,114 |     | 399,596,075 |

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|      |   |      |     | Contra       | ct            | This Certificate |               |  |
|------|---|------|-----|--------------|---------------|------------------|---------------|--|
| S/No | Item Description  | Unit | Qty | Rate (Tshs)  | Amount (Tshs) | Qty              | Amount (Tshs) |  |
| 1    | Crossings   |      |     |              |               |                  |               |  |
| 1.1  | Construction of Class C25 Reinforced concrete support pier at Stream/River crossing, Gullies crossing and the like  | No   | 15  | 500,000      | 7,500,000     | 0                | 0             |  |
| 2    | Anchorage Blocks  |      |     |              |               |                  |               |  |
| 2.1  | Construction of Class C25 concrete thrust and anchor blocks at Bend, Tee and slopes greater than 10%  | No.  | 10  | 300,000      | 3,000,000     | 0                | 0             |  |
| 3    | Valve Chambers  |      |     |              |               |                  |               |  |
| 3.1  | Construction of valve chamber with Cement Sand Blocks and its top cover as depicted in drawings. Rate shall be included installation of installation of Valves. | No.  | 10  | 700,000      | 7,000,000     | 0                | 0             |  |
| 4    | Other Pipework ancilliaries   |      |     |              |               |                  |               |  |
| 4.1  | Precast Concrete Marker Post for Gate Valves, Air Valves, Washout and pipeline in accordance with standard drawings   | No.  | 20  | 35,000       | 700,000       | 0                | 0             |  |
|      |   |      |     | SUB- TOTAL D | 18,200,000    |                  | 0             |  |

| GENERAL SUMMARY                                     | CONTRACT                          |
|---|-----------------------------------|
| BILL A: PRELIMINARY AND GENERAL                     | 25,500,000                        |
| BILL B: SUPPLY AND INSTALLATION OF SUBMERSIBLE PUMP | 65,413,000                        |
| BILL C: PIPE WORK INSTALLATION                      | 507,124,114                       |
| BILL D: CIVIL WORKS                                 | 18,200,000                        |
|   | Total (VAT Exclusive) 616,237,114 |

| THIS CERTIFICATE |
|------------------|
| 18,750,000       |
| 0                |
| 399,596,075      |
| 0                |
| 418,346,075      |

Less: 10% Advance Paymnet Recovery

Less: 5% Limit of Retention Money

41,834,607 30,811,856

Amount Payable to Contractor in This Certificate

345,699,611