# ANNEX 1 DETAILS OF PUBLIC CONSULTATION FOR GARISSA AND SEWERAGE COMPANY LTD (FOR THE PERIOD 2025/2026 – 2027/2028)

#### 1.0 Cost and Revenue Structure for the Tariff Period

|                           | Proposed Tariff for Garissa Water and Sewerage Co. Ltd. |                |                |                |                |                |  |  |  |  |  |
|---------------------------|---|----------------|----------------|----------------|----------------|----------------|--|--|--|--|--|
| Expenditure Item          | 2023/2024   | 2024/2025      | 2025/2026      | 2026/2027      | 2027/2028      | 2028/2029      |  |  |  |  |  |
| Operations                | 208,879,949.61  | 246,148,404.00 | 259,711,099.83 | 264,268,299.18 | 270,451,924.99 | 270,459,671.45 |  |  |  |  |  |
| Maintenance               | 24,904,695.84   | 24,801,886.00  | 63,343,296.50  | 69,022,844.83  | 75,237,608.92  | 75,237,608.92  |  |  |  |  |  |
| Regulatory Levy           | 10,208,966.40   | 12,303,499.00  | 14,743,882.98  | 17,684,074.08  | 21,211,444.85  | 21,242,430.70  |  |  |  |  |  |
| Total O&M Costs           | 243,993,611.85  | 283,253,789.00 | 337,798,279.31 | 350,975,218.09 | 366,900,978.75 | 366,939,711.06 |  |  |  |  |  |
| Investment Costs          | -   | -              | 9,520,000.00   | 29,136,632.00  | 48,564,604.00  | 64,103,472.00  |  |  |  |  |  |
| Debt Repayment            | -   | -              | -              | 20,078,971.84  | 40,961,102.55  | 66,890,993.40  |  |  |  |  |  |
| Total Costs               | 243,993,611.85  | 283,253,789.00 | 347,318,279.31 | 400,190,821.93 | 456,426,685.30 | 497,934,176.46 |  |  |  |  |  |
| Total Billing (KShs)      | 304,746,356   | 307,326,833    | 368,597,075    | 442,101,852    | 530,286,121    | 636,083,634    |  |  |  |  |  |
| Collection Efficiency (%) | 65%   | 70%            | 90%            | 95%            | 95%            | 95%            |  |  |  |  |  |
| Projected Revenue         | 198,822,512   | 215,128,783    | 331,737,367    | 419,996,759    | 503,771,815    | 604,279,452    |  |  |  |  |  |
| O&M Cost Coverage         | 81%   | 76%            | 98%            | 120%           | 137%           | 165%           |  |  |  |  |  |
| Total Cost Coverage       | 81%   | 76%            | 96%            | 105%           | 110%           | 121%           |  |  |  |  |  |

# 2.0 Proposed Change in Water Tariff Structure for the Period

#### 2.1 Water Tariff

|  | Proposed Tariff for Garissa Water and Sewerage Co. Ltd. |                |                   |                 |  |  |  |  |  |  |  |
|--|---|----------------|-------------------|-----------------|--|--|--|--|--|--|--|
| Consumor Catogories                        | Consumption Block                                       | Current Tariff | Consumption Block | Proposed Tariff |  |  |  |  |  |  |  |
| Consumer Categories                        | (m3)  | (KSh/M³)       | (m3)              | (KSh/M3)        |  |  |  |  |  |  |  |
|  | 0-6   | 54             | 1-6               | 80              |  |  |  |  |  |  |  |
|  | 7-20.   | 80             | 7-20              | 120             |  |  |  |  |  |  |  |
| Domostic/Bosidontial                       | 21-50   | 104            | 21-50             | 135             |  |  |  |  |  |  |  |
| Domestic/Residential                       | 51-100  | 128            | 51-100            | 160             |  |  |  |  |  |  |  |
|  | 101-300   | 160            | 101-300           | 180             |  |  |  |  |  |  |  |
|  | >300  | 208            | >300              | 220             |  |  |  |  |  |  |  |
| Multi-Dwelling Units                       |   | n/a            | Per M3            | 120             |  |  |  |  |  |  |  |
|  | 0-50  | 104            | 1-50              | 135             |  |  |  |  |  |  |  |
|  | 51-100  | 128            | 51-100            | 160             |  |  |  |  |  |  |  |
| Commercial/Industrial                      | 101-300   | 160            | 101-300           | 180             |  |  |  |  |  |  |  |
|  | >300  | 208            | >300              | 220             |  |  |  |  |  |  |  |
|  | 0-50  | 104            | 1-50              | 135             |  |  |  |  |  |  |  |
| Cavarana mt/lastitutions                   | 51-100  | 128            | 51-100            | 160             |  |  |  |  |  |  |  |
| Government/Institutions                    | 101-300   | 160            | 101-300           | 180             |  |  |  |  |  |  |  |
|  | >300  | 208            | >300              | 220             |  |  |  |  |  |  |  |
|  | 0-600   | 80             | 1-600             | 110             |  |  |  |  |  |  |  |
| Public Schools, Colleges, and Universities | 601-1200  | 90             | 601-1200          | 120             |  |  |  |  |  |  |  |
| and oniversines                            | >1200m3   | 100            | >1200m3           | 130             |  |  |  |  |  |  |  |
| Unique Consumer<br>Categories              | Water Kiosks  | 35             | Per M3            | 50              |  |  |  |  |  |  |  |

Customers with non-functional meters shall be billed based on the average of the last three months' bills

# 2.2 Sewerage Tariff Structure for the period 2025/2026 to 2027/2028

# a) Consumers with a Water Connection

Sewerage will be charged at 75% of the water volumes, billed at the tariff for water specified (in 2.1) above, for all customer categories

# b) Consumers without a Water Connection

Sewerage consumers without a water connection shall be charged as follows:

- Single dwelling Domestic unit: Ksh. 300 Per Month
- All other categories: 75% of the Volume of water consumed as per the metered source at the rates specified in 2.2 (a) above.

#### 3.0 Indexation

The utility's tariffs for water and sewerage shall be eligible for annual indexation as per the regulations of the Water Services Regulatory Board (WASREB). The inflation adjustment shall come into effect after a full year of implementation, on the 15th day of July every year, and shall remain in force until the 14th day of July the following year.

#### 4.0 Miscellaneous Charges

These shall be charged as per the approved miscellaneous charges approved by WASREB.

| Item/ Service  | Charge (Ksh.)   |
|--|---|
| Water Deposit  |   |
| Category of consumer   |   |
| Domestic   | 2500  |
| Retail shops less than 10m <sup>3</sup>                                    | 3000  |
| Retail shops with more than 10m <sup>3</sup>                               | 3,500   |
| Bar and restaurants with less than 15 m <sup>3</sup>                       | 4000  |
| Bar and restaurants more than 15 m <sup>3</sup>                            | 6,000   |
| Hotel class "A" and "B" with less than 150 m <sup>3</sup>                  | 12,000  |
| Hotel class "A" and "B" with more than 150 m <sup>3</sup>                  | 15000   |
| Hotel class "C" and 'D' less than 150 m <sup>3</sup>                       | 18000   |
| Hotel class "C" and 'D' more than 150 m <sup>3</sup>                       | 20,000  |
| Hospitals and Health centres with more than 150 m <sup>3</sup>             | 20,000  |
| Hospitals and Health centres with less than 150 m <sup>3</sup>             | 12,000  |
| Schools and other institutions have more than 200 m <sup>3</sup>           | 20,000  |
| Schools and other institutions with less than 200 m <sup>3</sup>           | 10,000  |
| Minor construction sites of more than 200 m <sup>3</sup>                   | 15,000  |
| Major construction sites with more than 300 m <sup>3</sup>                 | 50,000  |
| Light industries with less than 200 m <sup>3</sup>                         | 30,000  |
| Medium industries between 200 m <sup>3</sup> and 300 m <sup>3</sup>        | 50,000  |
| Heavy industries of more than 300 m <sup>3</sup>                           | 100,000   |
| Water Kiosks   | 5,000   |
| Customers with only a sewer connection are to be charged a deposit equival | ent to a water connection   |
| Other Charges  |   |
| Service  |   |
| New water connection fee – Connection size: ½ inch to 1 inch               | 2,500   |
| New water connection fee – Connection size: 1.5 inches to 3 inches         | 7,500   |
| New water connection fee – Connection size above 3inches                   | 15,000  |
| Water Reconnection fee – at meter point                                    | 1,000   |
| Water Reconnection fee – at mains  | 5,000 and double deposit  |
| Tanker – 8000 & 16,000 litres  | 2,500 & 5,000, respectively, per tanker within the WSP area for all |
|  | consumers   |
| Sale of water per M <sup>3</sup> at Browsing Point (own tanker)            | 120   |
| Replacement of stolen or damaged meters                                    | 100% of the market cost of the meter                                |
| Meter testing on request   | 500   |
| Special meter reading under customer's request                             | 500   |
| Sewer Connection- Residential/ Domestic                                    | 5,000   |
|  |   |

| Item/ Service   | Charge (Ksh.)   |
|---|---|
| Sewer Connection- Commercial, Government, Schools, Universities, and        | 7,500   |
| Colleges  |   |
| Sewer Connection- Industrial  | 15,000  |
| Private sewer unblocking  | 2,500   |
| Leak detection services   | 1,000   |
| Sewer Reconnection fee  | 15,000  |
| Printing of the customer's statement on their own request                   | 200   |
| For cutting off the supply at the request of the consumer                   | 200   |
| For turning on the supply otherwise than in respect of a first connection   | 200   |
| Exhauster Services (Company Exhauster)                                      | 5,000 for other customers and 4,000 for informal settlements          |
| Private Exhausters (Dumping into the company's sewer system)                | 15,000 per Truck per month  |
| Penalties   |   |
| Illegal water connection -Commercial, Industry, Construction (Fraud)        | 100,000 plus estimated consumption during the period of illegality    |
| Illegal water connection (Fraud) – Domestic                                 | 30,000 plus estimated consumption during the period of the illegality |
| Overcharging (fraud) at the water kiosk                                     | 15,000  |
| Illegal sewer connection- Commercial, Industry, Construction                | 100,000   |
| Illegal sewer connection- Domestic, Government, Schools, Universities &     | 30,000  |
| Self-reconnection after cut-off for non-payment                             | 5,000, and billing to be backdated from the date of the cut-off       |
| Surcharge for tampering with meters (this includes meter removal, reversing | 5,000   |
| Surcharge for direct suction of water from the supply line using a pump     | 10,000  |

#### 5.0 Service Delivery Conditions attached to the Tariff.

The conditions attached to this approval, which shall form part of the license conditions of Garissa Water and Sewerage Company Ltd, are:

| Target                            | 2024/2025                    | 2025/2026 | 2026/2027 | 2027/2028 |  |  |  |
|-----------------------------------|------------------------------|-----------|-----------|-----------|--|--|--|
| Water Coverage (%)                | 62%                          | 65%       | 66%       | 67%       |  |  |  |
| Water quality standards (%)       |                              | 10        | 0%        |           |  |  |  |
| Personnel Expenditure as % of O&M | 37%                          | 31%       | 31%       | 31%       |  |  |  |
| Non-Revenue Water                 | 32%                          | 29%       | 28%       | 27%       |  |  |  |
| Hours of Supply (Hrs.)            | 22                           | 22        | 22        | 22        |  |  |  |
| Staff per 1000 connections        | 10                           | 9         | 8         | 7         |  |  |  |
| Metering ratio (%)                | 64%                          | 80%       | 90%       | 100%      |  |  |  |
| Collection Efficiency (%)         | 65% 90% 95% 95%              |           |           |           |  |  |  |
| Resale at kiosk                   | Kshs. 5.00 per 201 jerry can |           |           |           |  |  |  |

#### **5.1 Other Conditions**

- i. Annual budgets: The utility shall adhere to the budgetary levels set in the tariff.
- ii. **Surpluses**: The surpluses projected to be realised shall be set aside to implement priority service delivery capital projects. GAWASCO shall be required at the end of every financial year to identify the priority project to be implemented and obtain approval from WASREB.
- iii. **Reporting:** The utility shall submit quarterly performance reports to WASREB in the prescribed format.
- iv. **Creation of distinct water and sewer cost centres:** GAWASCO shall create separate water and sewer cost centres and maintain a distinct record of operations of the two centres.
- v. **Metering:** GAWASCO shall progressively enhance the metering ratio to attain 100% as per condition (5.0) above
- vi. Investments: The utility shall undertake the investments as follows: -

|                       |   | 2026/2027   |                   |     |          |                     |               |
|-----------------------|---|---|-------------------|-----|----------|---------------------|---------------|
| ACTIVITY              | ITEM  |   | Financial<br>Year |     | Quantity | Unit Price<br>(Ksh) | AMOUNT (KSHS) |
|                       | Water Meters -New Connections + Fittings                                |   | 26/27             | No. | 109      | 7,128               | 776,952.00    |
| METERING              | Water Meters - The Existing Unmetered Connections+Fittings              |   | 26/27             | No. | 1,250    | 7,128               | 8,910,000.00  |
| METERING              | Water Meters -New Connections + Fittings                                |   | 26/27             | No. | 163      | 7,128               | 1,161,864.00  |
|                       | Water Meters - The Existing Unmetered Connections Fittings              |   | 26/27             | No. | 1,250    | 7,128               | 8,910,000.00  |
| SUB-TOTAL<br>METERING | SUB-TOTAL METERING  | SUB-TOTAL METERING  | 26/27             |     |          |                     | 19,758,816.00 |
|                       | Bulk/ Production Master Meters and Works                                |   | 26/27             |     |          |                     |               |
|                       | DN 400 Mechanical Water Meter   |   | 26/27             |     | 1        | 480,000.00          | 480,000.00    |
|                       | DN 300 Mechanical Water Meter   |   | 26/27             |     | 1        | 410,000.00          | 410,000.00    |
|                       | DN 250 Mechanical Water Meter   |   | 26/27             |     | 1        | 330,000.00          | 330,000.00    |
|                       | DN 200 Mechanical Water Meter/to consider changing the type(ultrasonic) |   | 26/27             |     | 2        | 300,000.00          | 600,000.00    |
|                       | DN 250 Mechanical Water Meter   |   | 26/27             |     | 1        | 330,000.00          | 330,000.00    |
|                       | DN 200 Mechanical Water Meter   |   | 26/27             |     | 2        | 300,000.00          | 600,000.00    |
| NRW<br>MANAGEMENT     | Construction of 4 bulk water meter chamber                              | Construction and installation of<br>series bulk meters and production<br>meter chambers (2 Chambers every<br>year)  | 26/27             |     |          |                     | 100,000.00    |
|                       | Construction of 4 bulk water meter chambers                             | Construction and installation of<br>series bulk meters and production<br>meter chambers ( 2 Chambers<br>every year) | 26/27             |     | 2        | 50,000.00           | 100,000.00    |
|                       | SUB-TOTAL-Bulk/ Production Master<br>Meters and Works                   |   | 26/27             |     |          |                     | 2,950,000.00  |
|                       | DMA Master Meters and Works   |   | 26/27             |     |          |                     |               |
|                       | DN 250 Electromagnetic Water Meter                                      | Township Zone (10" 3pcs),   | 26/27             |     | 1        |                     | 330,000.00    |
|                       | DN 200 Electromagnetic Water Meter                                      | Township Zone (8" 4pcs), Iftin<br>Zone(8" 2pcs )  | 26/27             |     | 2        |                     | 600,000.00    |
|                       | DN150 Single Jet AMR-Enabled Meter                                      | Township Zone (6" 2pcs), Galbet<br>Zone (6" 1pc), Waberi Zone (6"<br>2pcs), Iftin Zone(6" 9pcs)                     | 26/27             |     |          |                     | 1,250,000.00  |
|                       | DN100 Single Jet AMR-Enabled Meter                                      | Galbet Zone (4" 5pcs), Waberi Zone (4" 5pcs), Iftin Zone(4" 5pcs)   | 26/27             |     |          |                     | 550,000.00    |
| NRW<br>MANAGEMENT     | DN75 Single Jet AMR-Enabled Meter                                       | Galbet Zone (3" 3pcs), Waberi Zone (3" 2pcs), Township Zone (3" 1pc)  | 26/27             |     |          |                     | 340,000.00    |
|                       | DN63 Single Jet AMR Enabled Meter                                       |   | 26/27             |     |          |                     | 90,000.00     |

|            |  | 2026/2027   |                   |          |                     |               |
|------------|--|---|-------------------|----------|---------------------|---------------|
| ACTIVITY   | ITEM   |   | Financial<br>Year | Quantity | Unit Price<br>(Ksh) | AMOUNT (KSHS) |
|            | DN50 Single Jet AMR-Enabled Meter            |   | 26/27             |          |                     | 75,000.00     |
|            | Gate valves/ Sluice valves                   | 10 will be bought and installed per year  | 26/27             |          |                     | 400,000.00    |
|            | DMA creation and Isolation physical works    | 9 DMAs will be created for the<br>three years, with 3 DMAs being<br>created each year           | 26/27             |          |                     | 600,000.00    |
|            | Construction of DMA meter chambers           | Construction and installation of DMA Meter chambers   | 26/27             |          |                     | 680,000.00    |
|            | Construction of DMA valve chambers           | Construction and installation of DMA Valve chambers   | 26/27             |          |                     | 400,000.00    |
|            | DN 250 Electromagnetic Water Meter           | Township Zone (10" 3pcs),   | 26/27             | 3        | 330,000.00          | 330,000.00    |
|            | DN 200 Electromagnetic Water Meter           | Township Zone (8" 4pcs), Iftin<br>Zone(8" 2pcs )  | 26/27             | 2        | 300,000.00          | 600,000.00    |
|            | DN150 Single Jet AMR-Enabled Meter           | Township Zone (6" 2pcs), Galbet<br>Zone (6" 1pc), Waberi Zone (6"<br>2pcs), Iftin Zone(6" 9pcs) | 26/27             | 4        | 250,000.00          | 1,000,000.00  |
|            | DN100 Single Jet AMR-Enabled Meter           | Galbet Zone (4" 5pcs), Waberi Zone (4" 5pcs), Iftin Zone(4" 5pcs)                               | 26/27             | 5        | 110,000.00          | 550,000.00    |
|            | DN75 Single Jet AMR-Enabled Meter            | Galbet Zone (3" 3pcs), Waberi Zone (3" 2pcs), Township Zone (3" 1pc)                            | 26/27             | 2        | 170,000.00          | 340,000.00    |
|            | DN63 Single Jet AMR Enabled Meter            |   | 26/27             | 1        | 90,000.00           | 90,000.00     |
|            | DN50 Single Jet AMR-Enabled Meter            |   | 26/27             | 1        | 75,000.00           | 75,000.00     |
|            | DN25 Single Jet AMR-Enabled Meter            |   | 26/27             | 1        | 30,000.00           | 30,000.00     |
|            | Gate valves/ Sluice valves                   | 10 will be bought and installed per year  | 26/27             | 10       | 40,000.00           | 400,000.00    |
|            | DMA creation and Isolation physical works    | 9 DMAs will be created for the<br>three years, with 3 DMAs being<br>created each year           | 26/27             | 3        | 200,000.00          | 600,000.00    |
|            | Construction of DMA meter chambers           | Construction and installation of DMA Meter chambers   | 26/27             | 16       | 40,000.00           | 640,000.00    |
| NRW        | Construction of DMA valve chambers           | Construction and installation of DMA Valve chambers   | 26/27             | 10       | 40,000.00           | 400,000.00    |
| MANAGEMENT | SUB-TOTAL-DMA Master Meters and Works        |   | 26/27             |          |                     | 10,370,000.00 |
|            | DMA Consumer Cold water meters & Accessories |   |                   |          |                     |               |

|            |  | 2026/2027  |                   |          |                     |               |
|------------|--|--|-------------------|----------|---------------------|---------------|
| ACTIVITY   | ITEM   |  | Financial<br>Year | Quantity | Unit Price<br>(Ksh) | AMOUNT (KSHS) |
|            | DN 20mm AMR enabled Volumetric Cold-Water Meter -R200/R315 Composite body c/w accessories as per attached specifications (Replace stopped meters, faulty, damaged, aged, or stolen meters ). | 900 metes in a period of 3 years, which is 300 per year. This is important for the elimination of commercial losses due to stopped, aged, and faulty meters in the field, which record an inaccurate reading, leading to a loss of revenue per month that would have been collected. | 26/27             |          |                     | 1,800,000.00  |
|            | Portable Water Meter Test Kit  | It is compact, lightweight weight and accurate, which can provide you with the data for a water meter replacement program for the improvement of non-revenue management.   | 26/27             |          |                     | 45,000.00     |
|            | Water Meter Anti-Tampering Plastic Seals.  | Seal all high-consumer meters with tamper-proof seals  | 26/27             |          |                     | 150,000.00    |
|            | DN 20mm AMR enabled Volumetric Cold-Water Meter -R200/R315 Composite body c/w accessories as per attached specifications (Replace stopped meters, faulty, damaged, aged, or stolen meters ). | 900 metes in a period of 3 years, which is 300 per year. This is important for the elimination of commercial losses due to stopped, aged and faulty meters in the field, which record an inaccurate reading, leading to loss of revenue per month that would have been collected.    | 26/27             | 300      | 6,000               | 1,800,000.00  |
|            | Portable Water Meter Test Kit  | It is compact, lightweight weight<br>and accurate, which can provide<br>you with the data for a water meter<br>replacement program for the<br>improvement of non-revenue<br>management.  | 26/27             | 1        | 45,000              | 45,000.00     |
|            | Water Meter Anti-Tampering Plastic Seals.  | Seal all high-consumer meters with tamper-proof seals  | 26/27             | 400      | 500                 | 200,000.00    |
|            | SUB-TOTAL-DMA Consumer Cold water meters & Accessories   |  | 26/27             | _        |                     | 4,040,000.00  |
| NRW        | Pressure data loggers, Pressure<br>Gauges & Pressure Reducing Valves   |  | 26/27             |          |                     |               |
| MANAGEMENT | Pressure data loggers with 2 output channels (max pressure 10 bars)  | Currently, the utility does not have pressure loggers essential for defining supply pressure regimes where high pressures may be the cause of leakages. Pressure management is critical in NRW management.   | 26/27             | 3        |                     | 300,000.00    |

|                         |   | 2026/2027   |                   |     |          |                     |               |
|-------------------------|---|---|-------------------|-----|----------|---------------------|---------------|
| ACTIVITY                | ITEM  |   | Financial<br>Year |     | Quantity | Unit Price<br>(Ksh) | AMOUNT (KSHS) |
|                         | Pressure data loggers with 2 output channels (max pressure 20 bars)   |   | 26/27             |     | 3        |                     | 50,000.00     |
|                         | Veron Moris analogue calibrated Pressure<br>Gauges with up to 20Bars and have<br>plotter paper.                                   | Some pumping stations have no pressure gauges, which is essential for pump efficiency monitoring and data gathering.  | 26/27             |     | 2        |                     | 150,000.00    |
|                         | Install Water Pressure Gauges   | Installation and replacement of Water Pressure Gauges. A total of 120 in 4 years  | 26/27             |     | 120      |                     | 200,000.00    |
| NRW                     | Pressure data loggers with 2 output channels (max pressure 10 bars)   | Currently, the utility does not have pressure loggers, essential for defining supply pressure regimes where high pressures may be the cause of leakages. Pressure management is critical in NRW management. | 26/27             |     |          |                     | 200,000.00    |
| MANAGEMENT              | Pressure data loggers with 2 output channels (max pressure 20 bars)   |   | 26/27             |     |          |                     | 300,000.00    |
|                         | Veron Moris analogue calibrated Pressure<br>Gauges with up to 20Bars and has plotter<br>paper.                                    | Some pumping stations have no pressure gauges, which is essential for pump efficiency monitoring and data gathering.  | 26/27             |     |          |                     | 50,000.00     |
|                         | Install Water Pressure Gauges   | Installation and replacement of Water Pressure Gauges. A total of 120 in 4 years  | 26/27             |     |          |                     | 150,000.00    |
|                         | SUB-TOTAL-Pressure data loggers,<br>Pressure Gauges & Pressure Reducing<br>Valves   |   | 26/27             |     | -        | -                   | 1,400,000.00  |
|                         | NRW MANAGEMENT TOTAL  |   | 26/27             |     | -        | -                   | 18,760,000.00 |
| rehabilitation<br>Works | Rehabilitation of Boreholes (Flushing,<br>Flood proofing, Disinfecting the<br>borehole draw pipe, pump, and<br>motor replacement) | 3,967,740   | 26/27             | No. | 2        | 3,967,740           | 7,935,480.00  |
| abilitat<br>Works       | Pipe replacement of 3/4 " uPVC pipe   | 420   | 26/27             | m.  | 2,000    | 420                 | 840,000.00    |
| REHA<br>>               | Replacement Sewerage Manhole covers   | 15,000  | 26/27             | No. | 40       | 15,000              | 600,000.00    |
| <del>_</del>            | Inline dosing points for Chlorination   | 592,100   | 26/27             | No. | 2        | 592,100             | 1,184,200.00  |
|                         | Total   | 592,100.00  | 26/27             |     |          |                     | 10,559,680.00 |
| GRAND TOTAL             |   |   |                   |     | -        | -                   | 79,456,236.00 |

|                |  | 2027/2028  |                   |          |                     |               |
|----------------|--|--|-------------------|----------|---------------------|---------------|
|                | ITEM   |  | Financial<br>Year | Quantity | Unit Price<br>(Ksh) | AMOUNT (KSHS) |
|                | Bulk/ Production Master Meters and Works   |  |                   |          | ,                   |               |
|                | DN 200 Mechanical Water Meter  |  | 27/28             |          |                     | 300,000.00    |
|                | SUB-TOTAL  |  | 27/28             |          |                     | 300,000.00    |
|                | DMA Master Meters and Works  |  | 2728              |          |                     |               |
|                | DN 250 Electromagnetic Water Meter   | Township Zone (10" 3pcs),  | 27/28             |          |                     | 330,000.00    |
|                | DN 200 Electromagnetic Water Meter   | Township Zone (8" 4pcs), Iftin<br>Zone(8" 2pcs )   | 27/28             |          |                     | 600,000.00    |
|                | DN150 Single Jet AMR-Enabled Meter   | Township Zone (6" 2pcs),<br>Galbet Zone (6" 1pc), Waberi<br>Zone (6" 2pcs), Iftin Zone(6"<br>9pcs)   | 27/28             |          |                     | 1,250,000.00  |
|                | DN100 Single Jet AMR-Enabled Meter   | Galbet Zone (4" 5pcs), Waberi<br>Zone (4" 5pcs), Iftin Zone(4"<br>5pcs)  | 27/28             |          |                     | 550,000.00    |
|                | DN75 Single Jet AMR-Enabled Meter  | Galbet Zone (3" 3pcs), Waberi<br>Zone (3" 2pcs), Township Zone<br>(3" 1pc)   | 27/28             |          |                     | 340,000.00    |
|                | DN63 Single Jet AMR Enabled Meter  |  | 27/28             |          |                     | 90,000.00     |
| SEN<br>SEN     | DN50 Single Jet AMR-Enabled Meter  |  | 27/28             |          |                     | 75,000.00     |
| ANAC           | Gate valves/ Sluice valves   | 10 will be bought and installed per year   | 27/28             |          |                     | 400,000.00    |
| NRW MANAGEMENT | DMA creation and Isolation physical works  | 9 DMAs will be created for the<br>three years, with 3 DMAs<br>being created each year  | 27/28             |          |                     | 600,000.00    |
|                | Construction of DMA meter chambers   | Construction and installation of DMA Meter chambers  | 27/28             |          |                     | 680,000.00    |
|                | Construction of DMA valve chambers   | Construction and installation of DMA Valve chambers  | 27/28             |          |                     | 400,000.00    |
|                | SUB-TOTAL  |  | 27/28             |          |                     | 5,315,000.00  |
|                | DMA Consumer Cold water meters & Acc   |  | 2728              |          |                     |               |
|                | DN 20mm AMR enabled Volumetric Cold Water Meter -R200/R315 Composite body c/w accessories as per attached specifications (Replace stopped meters, faulty, damaged, aged, or stolen meters ). | 900 metes in a period of 3 years, which is 300 per year. This is important for the elimination of commercial losses due to stopped, aged, and faulty meters in the field, which record an inaccurate reading, leading to a loss of revenue per month that would have been collected. | 27/28             |          |                     | 1,800,000.00  |

|                         |   | 2027/2028  |                   |     |          |                     |               |
|-------------------------|---|--|-------------------|-----|----------|---------------------|---------------|
|                         | ITEM  |  | Financial<br>Year |     | Quantity | Unit Price<br>(Ksh) | AMOUNT (KSHS) |
|                         | Water Meter Anti-Tampering Plastic Seals.   | Seal all high-consumer meters with tamper-proof seals  | 27/28             |     |          |                     | 150,000.00    |
|                         | SUB-TOTAL   |  | 27/28             |     | _        | _                   | 1,950,000.00  |
|                         | Pressure data loggers, Pressure Gauges 8  | Pressure Reducing Valves   | 2728              |     |          |                     |               |
|                         | Pressure data loggers with 2 output channels (max pressure 10 bars)   | Currently, the utility does not have pressure loggers essential  | 27/28             |     |          |                     | 200,000.00    |
|                         | Pressure data loggers with 2 output channels (max pressure 20 bars)   | for defining supply pressure regimes where high pressures may be the cause of leakages. Pressure management is critical in NRW management. | 27/28             |     |          |                     | 300,000.00    |
|                         | Veron Moris analog calibrated Pressure<br>Gauges with up to 20Bars and has plotter<br>paper.                                      | Some pumping stations have no pressure gauges, which is essential for pump efficiency monitoring and data gathering.                       | 27/28             |     |          |                     | 50,000.00     |
|                         | Install Water Pressure Gauges   | Installation and replacement of<br>Water Pressure Gauges. A total<br>of 120 in 4 years   | 27/28             |     |          |                     | 150,000.00    |
|                         | SUB-TOTAL   |  | 27/28             |     | -        | -                   | 700,000.00    |
|                         |   |  | 27/28             |     |          |                     |               |
|                         | NRW MANAGEMENT TOTAL  |  | 27/28             |     | -        | -                   | 8,265,000.00  |
| METERING                | Water Meters -New Connections + Fittings  | 7,128  | 27/28             | No. | 541      | 7,128               | 3,856,248.00  |
| METERING                | Water Meters - The Existing Unmetered Connections Fittings  | 7,128  | 27/28             | No. | 1,478    | 7,128               | 10,535,184.00 |
| SUB-TOTAL<br>METERING   | SUB-TOTAL METERING  | SUB-TOTAL METERING   | 27/28             |     |          |                     | 14,391,432.00 |
|                         | Rehabilitation of Boreholes (Flushing,<br>Flood proofing, Disinfecting the<br>borehole draw pipe, pump, and motor<br>replacement) | 3,967,740  | 27/28             | No. | 2        | 3,967,740           | 7,935,480.00  |
|                         | Pipe replacement of 3/4 " uPVC pipe   | 420  | 27/28             | m.  | 2,000    | 420                 | 840,000.00    |
| REHABILITATION<br>WORKS | Replacement Sewerage Manhole<br>Covers  | 15,000   | 27/28             | No. | 40       | 15,000              | 600,000.00    |
|                         | Inline dosing points for Chlorination   | 592,100  | 27/28             | No. | 2        | 592,100             | 1,184,200.00  |
|                         | Rehabilitation of Boreholes (Flushing,<br>Flood proofing, Disinfecting the<br>borehole draw pipe, pump, and motor<br>replacement) |  | 27/28             | No. | 6        | 3,967,740           | 23,806,440.00 |
|                         | Pipe replacement of 3/4" uPVC pipe  |  | 27/28             | m.  | 3,000    | 420                 | 1,260,000.00  |

|  | 2027/2028                              |                                    |                   |     |          |                     |               |  |  |  |
|--|--|------------------------------------|-------------------|-----|----------|---------------------|---------------|--|--|--|
|  | ITEM                                   |                                    | Financial<br>Year |     | Quantity | Unit Price<br>(Ksh) | AMOUNT (KSHS) |  |  |  |
|  | Pipe replacement of 1" uPVC pipe       |                                    | 27/28             | m.  | 500      | 420                 | 210,000.00    |  |  |  |
|  | Pipe replacement of 1 1/2" uPVC pipe   |                                    | 27/28             | m.  | 500      | 840                 | 420,000.00    |  |  |  |
|  | Pipe replacement of 2" uPVC pipe       |                                    | 27/28             | m.  | 1,000    | 1,210               | 1,210,000.00  |  |  |  |
|  | Pipe replacement of 3" uPVC pipe       |                                    | 27/28             | m.  | 500      | 2,490               | 1,245,000.00  |  |  |  |
|  | Replacement Sewerage Manhole<br>Covers |                                    | 27/28             | No. | 30       | 15,000              | 450,000.00    |  |  |  |
|  | Inline dosing points for Chlorination  |                                    | 27/28             | No. | 3        | 592,100             | 1,776,300.00  |  |  |  |
| sub-total -<br>REHABILITATION<br>WORKS | sub-total -REHABILITATION WORKS        | sub-total -REHABILITATION<br>WORKS | 27/28             |     |          |                     | 40,937,420.00 |  |  |  |
| GRAND TOTAL                            |  |                                    | 27/28             |     |          |                     | 63,593,852.00 |  |  |  |

| 2028/2029      |  |  |                   |          |                     |               |  |
|----------------|--|--|-------------------|----------|---------------------|---------------|--|
|                | ITEM                                     |  | Financial<br>Year | Quantity | Unit Price<br>(Ksh) | AMOUNT (KSHS) |  |
|                | Bulk/ Production Master Meters and Works |  | 28/29             |          |                     |               |  |
|                | DN 200 Mechanical Water Meter            |  | 28/29             |          |                     | 300,000.00    |  |
|                | SUB-TOTAL                                |  | 28/29             |          |                     | 300,000.00    |  |
|                | DMA Master Meters and Works              |  | 28/29             |          |                     |               |  |
|                | DN 250 Electromagnetic Water Meter       | Township Zone (10" 3pcs),  | 28/29             |          |                     | 330,000.00    |  |
| NRW MANAGEMENT | DN 200 Electromagnetic Water Meter       | Township Zone (8" 4pcs),<br>Iftin Zone(8" 2pcs )   | 28/29             |          |                     | 600,000.00    |  |
|                | DN150 Single Jet AMR-Enabled Meter       | Township Zone (6" 2pcs),<br>Galbet Zone (6" 1pc),<br>Waberi Zone (6" 2pcs), Iftin<br>Zone(6" 9pcs) | 28/29             |          |                     | 1,250,000.00  |  |
|                | DN100 Single Jet AMR-Enabled Meter       | Galbet Zone (4" 5pcs),<br>Waberi Zone (4" 5pcs), Iftin<br>Zone(4" 5pcs)                            | 28/29             |          |                     | 550,000.00    |  |
|                | DN75 Single Jet AMR-Enabled Meter        | Galbet Zone (3" 3pcs),<br>Waberi Zone (3" 2pcs),<br>Township Zone (3" 1pc)                         | 28/29             |          |                     | 340,000.00    |  |
|                | DN63 Single Jet AMR Enabled Meter        |  | 28/29             |          |                     | 90,000.00     |  |
|                | DN50 Single Jet AMR-Enabled Meter        |  | 28/29             |          |                     | 75,000.00     |  |
|                | Gate valves/ Sluice valves               | 10 will be bought and installed per year   | 28/29             |          |                     | 400,000.00    |  |

| 2028/2029 |  |  |                   |          |                     |               |
|-----------|--|--|-------------------|----------|---------------------|---------------|
|           | ITEM   |  | Financial<br>Year | Quantity | Unit Price<br>(Ksh) | AMOUNT (KSHS) |
|           | DMA creation and Isolation physical works  | 9 DMAs will be created for<br>the three years, with 3<br>DMAs being created each<br>year   | 28/29             |          |                     | 600,000.00    |
|           | Construction of DMA meter chambers   | Construction and installation of DMA Meter chambers  | 28/29             |          |                     | 680,000.00    |
|           | Construction of DMA valve chambers   | Construction and installation of DMA Valve chambers  | 28/29             |          |                     | 400,000.00    |
|           | SUB-TOTAL  |  | 28/29             |          |                     | 5,315,000.00  |
|           | DMA Consumer Cold water meters & Acces   | ssories  | 2829              |          |                     |               |
|           | DN 20mm AMR enabled Volumetric Cold Water Meter -R200/R315 Composite body c/w accessories as per attached specifications (Replace stopped meters, faulty, damaged, aged, or stolen meters ). | 900 metes in a period of 3 years, which is 300 per year. This is important for the elimination of commercial losses due to stopped, aged, and faulty meters in the field, which record an inaccurate reading, leading to a loss of revenue per month that would have been collected. | 28/29             |          |                     | 1,800,000.00  |
|           | Water Meter Anti-Tampering Plastic Seals.  | Seal all high-consumer<br>meters with tamper-proof<br>seals  | 28/29             |          |                     | 150,000.00    |
|           | SUB-TOTAL  |  | 28/29             | -        | -                   | 1,950,000.00  |
|           | Pressure data loggers, Pressure Gauges & Pr  | Pressure data loggers, Pressure Gauges & Pressure Reducing Valves  |                   |          |                     |               |
|           | Pressure data loggers with 2 output channels (max pressure 10 bars)  | Currently, the utility does not have pressure loggers  | 28/29             |          |                     | 200,000.00    |
|           | Pressure data loggers with 2 output channels (max pressure 20 bars)  | essential for defining supply<br>pressure regimes where<br>high pressures may be the<br>cause of leakages. Pressure<br>management is critical in<br>NRW management.  | 28/29             |          |                     | 300,000.00    |
|           | Veron Moris analog calibrated Pressure<br>Gauges with up to 20Bars and has plotter<br>paper.   | Some pumping stations have no pressure gauges, which is essential for pump efficiency monitoring and data gathering.   | 28/29             |          |                     | 50,000.00     |

| 2028/2029                              |  |  |                   |     |          |                     |               |
|--|--|--|-------------------|-----|----------|---------------------|---------------|
|  | ITEM   |  | Financial<br>Year |     | Quantity | Unit Price<br>(Ksh) | AMOUNT (KSHS) |
|  | Install Water Pressure Gauges  | Installation and replacement of Water Pressure Gauges. A total of 120 in 4 years | 28/29             |     |          |                     | 150,000.00    |
|  | SUB-TOTAL  |  | 28/29             |     | -        | -                   | 700,000.00    |
|  | NRW MANAGEMENT TOTAL   |  | 28/29             |     | _        | -                   | 8,265,000.00  |
| METERING                               | Water Meters -New Connections + Fittings   | 7,128  | 28/29             | No. | 541      | 7,128               | 3,856,248.00  |
| METERING                               | Water Meters - The Existing Unmetered Connections Fittings   | 7,128  | 28/29             | No. | 1,478    | 7,128               | 10,535,184.00 |
| SUB-TOTAL<br>METERING                  | SUB-TOTAL METERING   | SUB-TOTAL METERING   | 28/29             |     |          |                     | 14,391,432.00 |
|  | Rehabilitation of Boreholes (Flushing, Flood<br>proofing, Disinfecting the borehole draw<br>pipe, pump, and motor replacement) | 3,967,740  | 28/29             | No. | 2        | 3,967,740           | 7,935,480.00  |
|  | Pipe replacement of 3/4 "uPVC pipe   | 420  | 28/29             | m.  | 2,000    | 420                 | 840,000.00    |
|  | Replacement Sewerage Manhole Covers  | 15,000   | 28/29             | No. | 40       | 15,000              | 600,000.00    |
|  | Inline dosing points for Chlorination  | 592,100  | 28/29             | No. | 2        | 592,100             | 1,184,200.00  |
| REHABILITATION                         | Rehabilitation of Boreholes (Flushing, Flood proofing, Disinfecting the borehole draw pipe, pump, and motor replacement)       |  | 28/29             | No. | 6        | 3,967,740           | 23,806,440.00 |
| WORKS                                  | Pipe replacement of 3/4" uPVC pipe   |  | 28/29             | m.  | 3,000    | 420                 | 1,260,000.00  |
|  | Pipe replacement of 1" uPVC pipe   |  | 28/29             | m.  | 500      | 420                 | 210,000.00    |
|  | Pipe replacement of 1 1/2" uPVC pipe   |  | 28/29             | m.  | 500      | 840                 | 420,000.00    |
|  | Pipe replacement of 2" uPVC pipe   |  | 28/29             | m.  | 1,000    | 1,210               | 1,210,000.00  |
|  | Pipe replacement of 3" uPVC pipe   |  | 28/29             | m.  | 500      | 2,490               | 1,245,000.00  |
|  | Replacement Sewerage Manhole Covers  |  | 28/29             | No. | 30       | 15,000              | 450,000.00    |
|  | Inline dosing points for Chlorination  |  | 28/29             | No. | 3        | 592,100             | 1,776,300.00  |
| sub-total -<br>REHABILITATION<br>WORKS | sub-total -REHABILITATION WORKS  | sub-total -<br>REHABILITATION WORKS  | 28/29             |     |          |                     | 40,937,420.00 |
| GRAND TOTAL                            |  |  |                   |     |          |                     | 63,593,852.00 |