IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Preamble

1 The Price Schedules shall be read in conjunction with the other documents forming part of this Contract in particular with the priced Activity Schedule prepared by the Bidder. The Price Schedules shall be submitted also on electronic format.

2 The total amount of the Price Schedules shall be carried to the Letter of Bid.

3 Notwithstanding any limits which may be implied by the wording of the individual activities and/or the explanations in this Preamble, it is to be clearly understood that the amounts entered in the Price Schedules are to be for the work finished, complete in every respect; and will be deemed to have taken full account of all requirements and obligations, whether expressed or implied, covered by all parts of this Contract and to have priced the activities herein accordingly. The amounts must therefore include for temporary works, all incidental and contingent expenses and risks of every kind necessary to design, construct, complete and maintain the whole of the Works in accordance with the Contract. Unless separate items are provided in the Price Schedules, full allowance shall be made in the sums stated for all works and costs involved. The prices shown in the price schedules will include all taxes and customs, import duties, levies but exclusive of VAT for a proper evaluation. However, the bidder to clearly indicate the VAT amounts in the summary.

4 It will be assumed that any activity or item left without a price entered against it, has the price of that activity or item included elsewhere in the Price Schedules. After the award of contract no alteration will be made to the Price Schedules to rectify any "un-priced" activities or items.

5 The following abbreviations are used:

hr= Hour
L.S = Lump Sum
P.S. = Provisional Sum
T = tonne
Kg = Kilogramme
kWh = Kilowatt Hour
L=Litres
mg = milligram
mm = millimetre
Nr. = Number
Nm^3=Normal Cubic Meter
h or hr = hour
m^3 = cubic metre
m^2 = square metre
d or day = day
Nm3 = Normal cubic meter

6 The prices stated in the Price Schedules shall exclude VAT and shall include all customs duties, import taxes, business taxes, income and other taxes that may be levied on Goods and services according to the laws and regulations being in force in Kenya on the date 28 days prior to the date of submission of the Bids.

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 1: Preliminary Items

Item	Description	Unit	Specify Currency [1]		Price (excluding VAT)	
			Local Currency	Foreign Currency	Local Currency	Foreign Currency
1	2	3	4	5	6	7
1.1	Mobilisation cost including site preparation	L.S				
1.2	Establishment and maintenance of Contractor's office and accommodation	L.S				
1.3	Establishment and maintenance of fully furnished and equiped Offices for the Engineer including provision of all utilities.	L.S				
1.4	Engineer's Support Staff including including basic pay, overtime, house allowance, per diems and other allowances.	L.S				
1.5	Guarantees	L.S				
1.6	Insurances	L.S				
1.7	Topographical survey	L.S				
1.8	Geotechnical investigations including additional studies for soil native characteristics	L.S				
1.9	Obtaining of approvals and permissions prior to the commencement of construction.	L.S				
1.10	Design of All the Project Works (includes the conditional part)	L.S				
1.11	Preparation and submission of “As-built” Drawings	L.S				
1.12	Preparation of Quality Assurance and Quality Control Plan and compliance with the QC/QA requirements	L.S				
1.13	Preparation and submission of Operation and Maintenance documents and manuals	L.S				
1.14	Pre-commissioning tests	L.S				
1.15	Commissioning Tests	L.S				
1.16	Tests on completion	L.S				
1.17	Demobilisation and removal of Contractor’s Camps	L.S				
	Provisional Sums					
1.18	Provisional Sums (fixed price) - Refer to **Schedule No. 10**					
1.19	Any other items not described above, but deemed necessary for the satisfactory completion of the works.					
	Tenderer to detail:					
	a)	L.S				
	b)	L.S				
TOTAL CARRIED FORWARD TO THE GRAND SUMMARY (SCHEDULE No. 9)						

[1] Specify currency in accordance with ITB 18.1 of the BDS.

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 2: Equipment, Materials, Tools and Mandatory Spare Parts Supplied From Abroad

Item	Description	Country of Origin	Unit	Foreign Currency [1]	CIP Price	Custom Duties & Levies	Total Price (Excl. VAT)
1	2	3	4	5	6	7	8
1.1	**Mechanical Works**						
1.1.1	**Raw Water Pumping Station**						
1.1.1.1	*Pumps*		*L.S*				
1.1.1.2	*Valves and Accessories*		*L.S*				
1.1.1.3	*Pipes and Fittings*		*L.S*				
1.1.1.4	*Any other necessary items required to complete the works (to detail)*		*L.S*				
1.1.2	**Raw Water Pumping Mains**						
1.1.2.1	Pipes and Fittings		L.S				
1.1.2.2	Valves and Accessories		L.S				
1.1.2.3	*Any other necessary items required to complete the works (to detail)*		L.S				
1.1.3	**Water Treatment Plant**						
1.1.3.1	*Pre-treatment (if necessary)*		*L.S*				
1.1.3.2	*Aeration, pre-oxidation, shock chlorination, pH Adjustment*		*L.S*				
1.1.3.3	*Coagulation, Flocculation, Clarification*		*L.S*				
1.1.3.4	*Filtration*		*L.S*				
1.1.3.5	*Calco-carbonic balance and final disinfection*		*L.S*				
1.1.3.6	*Treated Water Tank*		*L.S*				
1.1.3.7	*Backwash Tank*		*L.S*				
1.1.3.8	*Sludge thickening and recycling system*		*L.S*				
1.1.3.9	*Chemical storage, preparation and dosing*		*L.S*				
1.1.3.10	*Conveying system*		*L.S*				
1.1.3.11	*Auxiliary standby diesel engine generator to serve both the WTP and RWPS*		*L.S*				
1.1.3.12	*All other necessary items required to complete the works (to detail)*		*L.S*				
1.1.3	**Ancillary Buildings within the WTP (Administration Building, Workshop, Laboratory, Gatehouse etc.)**		L.S				
1.2	**Electrical Works**						
1.2.1	**Raw Water Pumping Station**						
1.2.1.1	*Main power supply (high voltage or Medium Voltage) and transformers*		*L.S*				
1.2.1.2	*Electrical room, main low voltage board, LV boards*		*L.S*				
1.2.1.3	*LV equipment connection*		*L.S*				
1.2.2	**Water Treatment Plant**						
1.2.2.1	*Fine screening*		*L.S*				
1.2.2.2	*Aeration, pre-oxidation, shock chlorination, pH Adjustment*		*L.S*				
1.2.2.3	*Coagulation, Flocculation, Clarification*		*L.S*				
1.2.2.4	*Filtration*		*L.S*				
1.2.2.5	*Calco-carbonic balance and final disinfection*		*L.S*				
1.2.2.6	*Treated Water Tank*		*L.S*				
1.2.2.7	*Backwash Tank*		*L.S*				
1.2.2.8	*Sludge thickening and recycling system*		*L.S*				
1.2.2.9	*Chemical storage, preparation and dosing*		*L.S*				
1.2.2.10	*Main power supply (high voltage or Medium Voltage) and transformers*		*L.S*				
1.2.2.11	*Electrical room, main low voltage board, LV boards*		*L.S*				
1.2.2.12	*All other necessary items required to complete the works (to detail)*		*L.S*				
1.2.3	**Ancillary Buildings within the WTP (Administration Building, Workshop, Laboratory & Gatehouse)**		**L.S**				
1.3	**Control / Command Works**						
1.3.1	Instrumentation		L.S				
1.3.2	Automation System		L.S				
1.3.3	Data network		L.S				
1.3.4	SCADA system		L.S				
1.3.5	All other necessary items required to complete the works (to detail)		L.S				
1.4	**Auxiliary Works**						
1.4.1	Fire detection , alarm system and fire fighting system		L.S				
1.4.2	Water supply system within WTP and RWPS		L.S				
1.4.3	Potable water system / facilities for the base camp, police station and clinic (constructed under the Dam Contract)		L.S				
1.4.4	Wastewater collection & treatment systems within WTP and RWPS		L.S				
1.4.5	Rain water Collection and Storage System		L.S				
1.4.6	Workshop Equipments		L.S				
1.4.7	Laboratory Equipments		L.S				
1.4.8	Handling equipments		L.S				
1.4.9	Ventilation systems		L.S				
1.4.10	Air-conditioning systems		L.S				

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 2: Equipment, Materials, Tools and Mandatory Spare Parts Supplied From Abroad

Item	Description	Country of Origin	Unit	Foreign Currency [1]	CIP Price	Custom Duties & Levies	Total Price (Excl. VAT)
1	2	3	4	5	6	7	8
1.4.11	Telephone/ Communication systems		L.S				
1.4.12	Lightning protection systems		L.S				
1.4.13	Anti-intrusion security alarm system (WTP and RWPS)		L.S				
1.4.14	CCTV security System (WTP and RWPS)		L.S				
1.4.15	General works (fencing, landscaping and street lighting, etc.)		L.S				
1.4.16	All other necessary items required to complete the works (to detail)		L.S				
1.5	**Mandatory Spare Parts**						
1.5.1	Raw Water Pumping Station		L.S				
1.5.2	Raw Water Pumping Mains		L.S				
1.5.3	Water Treatment Plant		L.S				
1.6	**Any other items not described above, but deemed necessary for the satisfactory completion of the works.**						
	Tenderer to detail:						
	a)		L.S				
	b)		L.S				
TOTAL CARRIED FORWARD TO THE GRAND SUMMARY (SCHEDULE No. 9)							

Notes:

[1] Specify currency in accordance with ITB 18.1 of the BDS

The amount quoted in this price schedule includes delivery to site, Contractor's overheads and profits.

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 3: Equipment, Materials, Tools and Mandatory Spare Parts Supplied Within Employer's Country (Kenya)

Item	Description	Unit	Price (Kshs.) Exc. VAT
1	2	3	4
1.1	**Mechanical Works**		
1.1.1	**Raw Water Pumping Station**		
1.1.1.1	*Pumps*	*L.S*	
1.1.1.2	*Valves and Accessories*	*L.S*	
1.1.1.3	*Pipes and Fittings*	*L.S*	
1.1.1.4	*Any other necessary items required to complete the works (to detail)*	*L.S*	
1.1.2	**Raw Water Pumping Mains**		
1.1.2.1	Pipes and Fittings	L.S	
1.1.2.2	Valves and Accessories	L.S	
1.1.2.3	*Any other necessary items required to complete the works (to detail)*	L.S	
1.1.3	**Water Treatment Plant**		
1.1.3.1	*Pre-treatment (if necessary)*	*L.S*	
1.1.3.2	*Aeration, pre-oxidation, shock chlorination, pH Adjustment*	*L.S*	
1.1.3.3	*Coagulation, Flocculation, Clarification*	*L.S*	
1.1.3.4	*Filtration*	*L.S*	
1.1.3.5	*Calco-carbonic balance and final disinfection*	*L.S*	
1.1.3.6	*Treated Water Tank*	*L.S*	
1.1.3.7	*Backwash Tank*	*L.S*	
1.1.3.8	*Sludge thickening and recycling system*	*L.S*	
1.1.3.9	*Chemical storage, preparation and dosing*	*L.S*	
1.1.3.10	*Conveying system*	*L.S*	
1.1.3.11	*Auxiliary standby diesel engine generator to serve both the WTP and RWPS*	*L.S*	
1.1.3.12	*All other necessary items required to complete the works (to detail)*	*L.S*	
1.1.3	**Ancillary Buildings within the WTP (Administration Building, Workshop, Laboratory, Gatehouse etc.)**	**L.S**	
1.2	**Electrical Works**		
1.2.1	**Raw Water Pumping Station**		
1.2.1.1	*Main power supply (high voltage or Medium Voltage) and transformers*	*L.S*	
1.2.1.2	*Electrical room, main low voltage board, LV boards*	*L.S*	
1.2.1.3	*LV equipment connection*	*L.S*	
1.2.2	**Water Treatment Plant**		
1.2.2.1	*Fine screening*	*L.S*	
1.2.2.2	*Aeration, pre-oxidation, shock chlorination, pH Adjustment*	*L.S*	
1.2.2.3	*Coagulation, Flocculation, Clarification*	*L.S*	
1.2.2.4	*Filtration*	*L.S*	
1.2.2.5	*Calco-carbonic balance and final disinfection*	*L.S*	
1.2.2.6	*Treated Water Tank*	*L.S*	
1.2.2.7	*Backwash Tank*	*L.S*	
1.2.2.8	*Sludge thickening and recycling system*	*L.S*	
1.2.2.9	*Chemical storage, preparation and dosing*	*L.S*	
1.2.2.10	*Main power supply (high voltage or Medium Voltage) and transformers*	*L.S*	
1.2.2.11	*Electrical room, main low voltage board, LV boards*	*L.S*	
1.2.2.12	*All other necessary items required to complete the works (to detail)*	*L.S*	
1.2.3	**Ancillary Buildings within the WTP (Administration Building, Workshop, Laboratory & Gatehouse)**	**L.S**	
1.3	**Control / Command Works**		
1.3.1	Instrumentation	L.S	
1.3.2	Automation System	L.S	
1.3.3	Data network	L.S	
1.3.4	SCADA system	L.S	
1.3.5	All other necessary items required to complete the works (to detail)	L.S	

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 3: Equipment, Materials, Tools and Mandatory Spare Parts Supplied Within Employer's Country (Kenya)

Item	Description	Unit	Price (Kshs.) Exc. VAT
1	2	3	4
1.4	**Auxiliary Works**		
1.4.1	Fire detection , alarm system and fire fighting system	L.S	
1.4.2	Water supply system within WTP and RWPS	L.S	
1.4.3	Potable water system / facilities for the base camp, police station and clinic (constructed under the Dam Contract)	L.S	
1.4.4	Wastewater collection & treatment systems within WTP and RWPS	L.S	
1.4.5	Rain water Collection and Storage System	L.S	
1.4.6	Workshop Equipments	L.S	
1.4.7	Laboratory Equipments	L.S	
1.4.8	Handling equipments	L.S	
1.4.9	Ventilation systems	L.S	
1.4.10	Air-conditioning systems	L.S	
1.4.11	Telephone/ Communication systems	L.S	
1.4.12	Lightning protection systems	L.S	
1.4.13	Anti-intrusion security alarm system (WTP and RWPS)	L.S	
1.4.14	CCTV security System (WTP and RWPS)	L.S	
1.4.15	General works (fencing, landscaping and street lighting, etc.)	L.S	
1.4.16	All other necessary items required to complete the works (to detail)	L.S	
1.5	**Mandatory Spare Parts**		
1.5.1	Raw Water Pumping Station	L.S	
1.5.2	Raw Water Pumping Mains	L.S	
1.5.3	Water Treatment Plant	L.S	
1.6	**Any other items not described above, but deemed necessary for the satisfactory completion of the works.**		
	Tenderer to detail:		
	a)	L.S	
	b)	L.S	
TOTAL CARRIED FORWARD TO THE GRAND SUMMARY (SCHEDULE No. 9)			

[1] Specify currency in accordance with ITB 18.1 of the BDS

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 4: Construction Works and Installation Services

Item	Description	Unit	Specify Curreny [1]		Price (excluding VAT)	
			Local Currency	Foreign Currency	Local Currency	Foreign Currency
1	2	3	4	5	6	7
1. Civil Engineering and Building Works						
1.1	**Raw Water Pumping Station**					
1.1.1	Pump house	L.S				
1.1.2	Kenya Power metering room	L.S				
1.1.3	Workshop and Store	L.S				
1.1.4	Administration building (includes reception, plant manager's office, operator's office etc)	L.S				
1.1.5	Gate house	L.S				
1.1.6	Internal access roads including parking & drainage works	L.S				
1.1.7	Landscaping works including earthworks,drainage works, irrigation network,plating of trees, lawns & flowers, fencing and gates	L.S				
1.1.8	Any other necessary items required to complete the works (to detail)	L.S				
1.2	**Raw Water Pumping Mains. Item covers all pipeline construction works which includes but not limited to the following: earthworks, pipelaying and jointing, installation of pipeline fittings & appurtenances, inspection chambers,anchors, road crossings, testing & Commissioning etc.**	**L.S**				
1.3	**Water treatment plant**					
1.3.1	Head works (screening, Aeration, pre-oxidation, shock chlorination, pH Adjustment)	L.S				
1.3.2	Coagulation, Flocculation, Clarification	L.S				
1.3.3	Filters	L.S				
1.3.4	UV Building	L.S				
1.3.5	Treated Water Tank	L.S				
1.3.6	Backwash water Tank	L.S				
1.3.7	Sludge thickening	L.S				
1.3.8	Sludge drying beds	L.S				
1.3.9	Chemical storage and chlorination building	L.S				
1.3.10	Adminstration building,Including Laboratory	L.S				
1.3.11	Workshop and store	L.S				
1.3.12	Gate house	L.S				
1.3.13	Internal access roads including parking & drainage works	L.S				
1.3.14	WTP Access Road connecting WTP to Dam Access Road (refer to Drawings for Information Drg. No. ART-8773361-PD-DWG-401	L.S				
1.3.15	Landscaping works including earthworks,drainage works, irrigation network,plating of trees, lawns & flowers, fencing and gates	L.S				
1.3.16	Any other necessary items required to complete the works (to detail)	L.S				
1.4	**Water supply facilities from the WTP to the base camp, police station and clinic. Includes a pumping system and elevated RC tank as detailed in the Employer's requirements**	**L.S**				
2. Installation Services						
2.1	**Mechanical Works**					
2.1.1	**Raw Water Pumping Station**					
2.1.1.1	*Pumps*	*L.S*				
2.1.1.2	*Valves and Accessories*	*L.S*				
2.1.1.3	*Pipes and Fittings*	*L.S*				
2.1.1.4	*Any other necessary items required to complete the works (to detail)*	*L.S*				
2.1.2	**Water Treatment Plant**					
2.1.2.1	*Pre-treatment (if necessary)*	*L.S*				
2.1.2.2	*Aeration, pre-oxidation, shock chlorination, pH Adjustment*	*L.S*				
2.1.2.3	*Coagulation, Flocculation, Clarification*	*L.S*				
2.1.2.4	*Filtration*	*L.S*				
2.1.2.5	*Calco-carbonic balance and final disinfection*	*L.S*				
2.1.2.6	*Treated Water Tank*	*L.S*				
2.1.2.7	*Backwash Tank*	*L.S*				
2.1.2.8	*Sludge thickening and recycling system*	*L.S*				
2.1.2.9	*Chemical storage, preparation and dosing*	*L.S*				
2.1.2.10	*Conveying system*	*L.S*				

Schedule No. 4: Construction Works and Installation Services

Item	Description	Unit	Specify Curreny [1]		Price (excluding VAT)	
			Local Currency	Foreign Currency	Local Currency	Foreign Currency
1	2	3	4	5	6	7
2.1.2.11	*All other necessary items required to complete the works (to detail)*	*L.S*				
2.1.3	**Ancillary Buildings within the WTP & RWPS - Includes Installation of Gantry Cranes in Workshops and other Mechanical Components in Ancillary Buildings**	**L.S**				
2.2	**Electrical and Instrumentation Works**					
2.2.1	Raw Water Pumping Station	L.S				
2.2.2	Water Treatment Plant	L.S				
2.2.3	Ancillary Buildings within the WTP	L.S				
2.2.4	Ancillary Buildings within the RWPS	L.S				
2.2.5	Installation of the Auxiliary standby diesel engine generator	L.S				
2.2.6	All other necessary items required to complete the works (to detail)	L.S				
2.3	**SCADA Control / Command Works**					
2.3.1	Instrumentation	L.S				
2.3.2	Automation System	L.S				
2.3.3	Data network includes optic fibre from the RWPS to WTP	L.S				
2.3.4	SCADA system	L.S				
2.3.5	All other necessary items required to complete the works (to detail)	L.S				
2.4	**Auxiliary Works**					
2.4.1	Fire detection , alarm system and fire fighting system	L.S				
2.4.2	Water supply system within WTP and RWPS	L.S				
2.4.3	Potable water system / facilities for the base camp, police station and clinic (constructed under the Dam Contract)	L.S				
2.4.4	Wastewater collection & treatment systems within WTP and RWPS	L.S				
2.4.5	Rain water Collection and Storage System	L.S				
2.4.6	Workshop Equipments	L.S				
2.4.7	Handling equipments	L.S				
2.4.8	Ventilation systems	L.S				
2.4.9	Air-conditioning systems	L.S				
2.4.10	Telephone/ Communication systems	L.S				
2.4.11	Lightning protection systems	L.S				
2.4.12	Anti-intrusion security alarm system (WTP and RWPS)	L.S				
2.4.13	CCTV security System (WTP and RWPS)	L.S				
2.4.14	All other necessary items required to complete the works (to detail)	L.S				
1.7	**Any other items not described above, but deemed necessary for the satisfactory completion of the works.**					
	Tenderer to detail:					
	a)	L.S				
	b)	L.S				
	Sub-Total - 2					
TOTAL CARRIED FORWARD TO THE GRAND SUMMARY (SCHEDULE No. 9)						

[1] Specify currency in accordance with ITB 18.1 of the BDS.

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 5A: Environmental, Social, Health and Safety (ESHS) Cost Schedule for Design and Build Part

Item N°	Description	ESHS Specifications Clause N°	Unit	Specify Currency[1]		Price (exc. VAT)	
				Local Currency	Foreign Currency	Local Currency	Foreign Currency
1	2	3	4	5	6	7	8
ESHS 1	Resources allocated to ESHS management	Clause 4	L.S				
ESHS 2	Drafting and updating the ESHS documentation, reporting, inspections	Clauses 1, 2, 3, 5, 6, 7, 9	L.S				
ESHS 3	Implementation of the Health and Safety Plan:Meetings, health care centre, medical check-ups, emergencies and evacuations, safety protective equipment, hygiene	Clauses 1, 9, 21 to 25, 27 to 35, 37, 38	L.S				
ESHS 4	Accommodation, drinking water, meals and transportation of staff (The Bidder shall detail the financial conditions of the supply of accommodation, meals and transport to its staff):	Clauses 36, 40, 41					
	- Accommodation		L.S				
	- Meals		L.S				
	- Transport		L.S				
ESHS 5	Training and local recruitment management costs (Includes Social Inclusion - Subclause 39.12)	Clauses 8, 39	L.S				
ESHS 6	Protection of adjacent areas, biodiversity, prevention of erosion and wastewater management	Clauses 10, 11, 12, 17, 18	L.S				
ESHS 7	Traffic, noise and atmospheric emissions management, land take	Clauses 13, 14, 42, 43, 44	L.S				
ESHS 8	Waste and hazardous products management	Clauses 15, 26	L.S				
ESHS 9	Vegetation clearing and Site rehabilitation	Clauses 16, 19, 20	L.S				
Any other items not described above, but deemed necessary for ensuring full commpliance (contractual and statutory) with Project ESHS Requirements.							
Tenderer to detail:							
a)							
b)							
TOTAL CARRIED FORWARD TO THE GRAND SUMMARY (SCHEDULE No. 9)							

Notes:

[1] Specify currency in accordance with ITB 18.1 of the BDS.

ESHS costs are deemed to cover operations on all Sites (as defined in Clause 1.3 of ESHS Specifications).

Interim Payment Certificates shall include the portion of each ESHS cost amounting to the percentage of the actual progress achieved in executing the ESHS measures in compliance with the ESHS Specifications and approved by the Employer's Representative.

The Bidder should refer to the ESHS Specifications - **Part 2, Section 7.6 of the Bidding Documents**

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 5B: Environmental, Social, Health and Safety (ESHS) Cost Schedule for Operation Service

Item N°	Description	ESHS Specifications Clause N°	Unit	Specify Currency[1]		Amount (exc. VAT) Local Currency	Amount (exc. VAT) Foreign Currency
				Local Currency	Foreign Currency		
1	2	3	4	5	6	7	8
ESHS 1	Resources allocated to ESHS management	Clause 4	L.S				
ESHS 2	Drafting and updating the ESHS documentation, reporting, inspections	Clauses 1, 2, 3, 5, 6, 7, 9	L.S				
ESHS 3	Implementation of the Health and Safety Plan:Meetings, health care centre, medical check-ups, emergencies and evacuations, safety protective equipment, hygiene	Clauses 1, 9, 21 to 25, 27 to 35, 37, 38	L.S				
ESHS 4	Accommodation, drinking water, meals and transportation of staff (The Bidder shall detail the financial conditions of the supply of accommodation, meals and transport to its staff):	Clauses 36, 40, 41					
	- Accommodation		L.S				
	- Meals		L.S				
	- Transport		L.S				
ESHS 5	Training and local recruitment management costs (Includes Social Inclusion - Subclause 39.12)	Clauses 8, 39	L.S				
ESHS 6	Protection of adjacent areas, biodiversity, prevention of erosion and wastewater management	Clauses 10, 11, 12, 17, 18	L.S				
ESHS 7	Waste and hazardous products management	Clauses 15, 26	L.S				
Any other items not described above, but deemed necessary for ensuring full commpliance (contractual and statutory) with Project ESHS Requirements.							
Tenderer to detail:							
a)							
b)							
TOTAL CARRIED FORWARD TO THE GRAND SUMMARY (SCHEDULE No. 9)							

Notes:

[1] Specify currency in accordance with ITB 18.1 of the BDS.

ESHS costs are deemed to cover operations on all Sites (as defined in Clause 1.3 of ESHS Specifications).

Interim Payment Certificates shall include the portion of each ESHS cost amounting to the percentage of the actual progress achieved in executing the ESHS measures in compliance with the ESHS Specifications and approved by the Employer's Representative.

The Bidder should refer to the ESHS Specifications - **Part 2, Section 7.6 of the Bidding Documents**

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 6: Security Cost Schedule

Price N°	Category Title	Reference of Security Specifications	Unit	Specify Currency[1]		Price (exc. VAT) Local Currency	Price (exc. VAT) Foreign Currency
				Local Currency	Foreign Currency		
1	2	3	4	5	6	7	8
Security 1	Security organisation	Article 4.1	L.S				
Security 2	Travel within the country and to the relevant area	Article 4.2	L.S				
Security 3	Accommodation during assignments	Article 4.3	L.S				
Security 4	Accommodation and security on project sites and worksites	Article 4.4	L.S				
Security 5	Communication	Article 4.5	L.S				
Other	This price may remunerate all the other services described in Articles 1 to 3 of the Security Specifications.	Articles 1 to 3, 5 to 6	L.S				
TOTAL CARRIED FORWARD TO THE GRAND SUMMARY (SCHEDULE No. 9)							

[1] Specify currency in accordance with ITB 18.1 of the BDS.

The prices include all activities and measures defined in the security specifications and correspond to additional costs compared to an environment without security risk.

A breakdown of security price items shall be included in the Bid.

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 7: Dayworks

Schedule A - Labor

Item N°	Description	Unit	Provisional Quantity	Specify Currency[1]		Price (excluding VAT)	
				Local Currency	Foreign Currency	Local Currency	Foreign Currency
1	2	3	4	5	6	7	8
Civil Engineering							
A.1	Working Gang	hr	200				
A.2	Craftsman (joiner/steel fixer etc)	hr	400				
A.3	Semi-skilled workman (Plant operator/pipelayer etc.)	hr	1000				
A.4	Unskilled labourer	hr	1000				
Mechanical / Electrical							
A.5	Technical Staff / Engineer	hr	200				
A.6	Electrician	hr	100				
A.7	Unskilled labourer	hr	400				
Technical Assistance							
A.8	Short term expert	day	60				
TOTAL CARRIED FORWARD TO THE GRAND SUMMARY (SCHEDULE No. 9)							

Notes:

[1] Specify currency in accordance with ITB 18.1 of the BDS.

The rates inserted herein should include for all costs such as insurance, travelling time, overtime, accomondation, use and maintenance of small tools of trade, supervisions, overheads and profit. Ony time engaged upon work will be paid.

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 7: Dayworks

Schedule B - Materials

Item N°	Description	Unit	Provisional Quantity	Specify Currency[1]		Price (excluding VAT)	
				Local Currency	Foreign Currency	Local Currency	Foreign Currency
1	2	3	4	5	6	7	8
B.1	Ordinary Portland Cement	Tonne	2				
B.2	Mild steel (any size from 8mm to 25mm dia.)	Kg	400				
B.3	High tensile steel (8mm to 25mm dia.)	Kg	100				
B.4	Fine aggregate for concrete	Tonne	2				
B.5	Coarse aggregate for concrete	Tonne	2				
B.6	Use of shuttering timber	m^2	20				
B.7	Murram / Gravel	m^3	40				
B.8	Concrete Class 15/20	m^3	50				
B.9	Concrete Class 20/25	m^3	50				
B.10	Concrete Class 30/37	m^3	50				
B.11	150mm thick stone/concrete Blocks	Nr.	400				
B.12	225mm thick stone/concrete Blocks	Nr.	400				
B.13	Formwork Class F3 (fair face)	m^2	150				
B.14	Formwork Class F1 (rough)	m^2	150				
TOTAL CARRIED FORWARD TO THE GRAND SUMMARY (SCHEDULE No. 9)							

Notes:

[1] Specify currency in accordance with ITB 18.1 of the BDS.

All materials are to comply with the specifications. The rates inserted herein are to include for delivery to site, storage, handling, overheads and profits.

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 7: Dayworks

Schedule C - Contractor's Equipment

Item N°	Description	Unit	Provisional Quantity	Specify Currency		Total Price - exc. VAT	
				Local Currency	Foreign Currency	Local Currency KES	Foreign Currency [1].....
1	2	3	4	5	6	7	8
C.1	Air Compressor up to 14m3/min including hoses free air delivery 7kg/cm2	hr	80				
C.2	Concrete mixer, closed drum with hopper wet capacity up to 200 litres	hr	40				
C.3	Vibrator poker air (excluding compressor)	hr	60				
C.4	Crane, crawler mounted, maximum safe working load:						
C.4a	up to 36 tonnes	hr	40				
C.4b	Up to 75 tonnes	hr	20				
C.5	Concrete skip for crane, struck capacity:						
C.5a	Upto 0.6m^3	hr	20				
C.5b	Up to 1.2m^3	hr	20				
C.6	Dumper two wheel drive, makers rated payload:						
C.6a	Up to 1500Kg	hr	100				
C.6b	Up to 5,000Kg	hr	100				
C.7	Rear dump truck, makers rated payload up to 17 tonnes	hr	20				
C.8	Articluated dump truck, makers rated payload up to 18.5 tonnes	hr	20				
C.9	Excavator mounted percussion breaker, unit weight less cradle:						
C.9a	Up to 100Kg	hr	20				
C.9b	Up to 1000Kg	hr	20				
C.10	Excavator, hydraullic full circle slew crawler or wheel mounted with single equipment, makers raed nominal weight:						
C.10a	Up to 2 tonnes	hr	20				
C.10b	Up to 14 tonnes	hr	20				
C.10c	Up to 21 tonnes	hr	60				
C.10d	Up to 30 tonnes	hr	20				
C.10e	Up to 55 tonnes	hr	20				
C.11	Excavator, hydraullic, offset or centre post, half circle slew, wheeled dual purpose back hoe/loader,makers rated loader bucket capacity up to 1.1m^3	hr	100				
C.12	Generator set, nomial rating:						
C.12a	Up to 10kVA	hr	30				
C.12b	Up to 25kVA	hr	30				
C.13	Transformer, (air cooled nominal rating):	hr	30				
C.13a	Up to 10kVA	hr	30				
C.13b	Up to 25kVA	hr	30				
C.14	Lorry maximum gross vehicle weight:						
C.14a	Up to 12 tonnes	hr	20				
C.14b	Up to 17 tonnes	hr	20				
C.14c	Up to 30 tonnes	hr	20				
C.15	Lorry, tipper, maximum gross vehicle weight:						
C.15a	Up to 12 tonnes	hr	40				
C.15b	Up to 17 tonnes	hr	20				
C.15c	Up to 30 tonnes	hr	20				
C.16	Van or pick-up, carrying capacity:						
C.16a	Up to 1 tonne	hr	40				
C.16b	Up to 2 tonne	hr	40				
C.17	Vibrating rammer, nominal weight up to 60Kg	hr	20				
C.18	Vibrating plate compactor, nominal weight :						
C.18a	Up to 80 Kg	hr	40				
C.18b	Up to 150 Kg	hr	40				
C.19	Pneumatic tools: breaker including steel	hr	60				
TOTAL CARRIED FORWARD TO THE GRAND SUMMARY (SCHEDULE No. 9)							

Notes:

[1] Specify currency in accordance with ITB 18.1 of the BDS.

The rates inserted herein should include for all operational and maintenance costs, fuel, oil, grease, operators, turnboys, supervision, overheads and profits. Only the time actually employed on works will be paid for and the rates should include for idle, travelling and overtime.

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 8: Operation Service

Item No	Description	Unit	Qty	Unit price exc. VAT in foreign Currency [1]……		Unit price exc. VAT in local Currency KES		Total price exc. VAT in foreign Currency [1]……		Total price exc. VAT in local Currency [1]……	
				Civil works	Equipment	Civil works	Equipment	Civil works	Equipment	Civil works	Equipment
1	2	3	4	5	6	7	8	9=5*4	10=6*4	11=7*4	12=8*4
1.1	**Fixed costs**										
1.1.1	Operation & Maintenance staff										
1.1.1.1	*Plant Manager*	man-month	24								
1.1.1.2	*Water Treatment Process Engineer*	man-month	24								
1.1.1.3	*Mechanical Engineer*	man-month	24								
1.1.1.4	*Electrical Engineer*	man-month	24								
1.1.1.5	*Lab technician*	man-month	24								
1.1.1.6	Any other Staff not described above, but deemed necessary to operate and maintain the works. Tenderer to detail:										
1.1.2	Maintenance & Repair										
1.1.2.1	*Civil works*	L.S	1								
1.1.2.2	*Equipment*	L.S	1								
1.1.3	Cost for electrical power provision	L.S	1								
1.1.4	Cost for gas provision	L.S	1								
1.1.5	Cost for fuel provision	L.S	1								
1.1.6	Cost for chemical provision	L.S	1								
1.1.7	Water analyses, laboratory	L.S	1								
1.1.8	Utilities and other costs	L.S	1								
1.1.9	Any other O&M item not described above, but deemed necessary to operate and maintain the works. Tenderer to detail:	L.S	1								
1.2	**Variables costs (for 24 months)**										
1.2.1	Chemical consumption										
1.2.1.1	*Potassium permanganate*	tonnes									
1.2.1.2	*Aluminium slufate*	tonnes									
1.2.1.3	*Polyelectrolyte*	tonnes									
1.2.1.4	*Acid*	tonnes									
1.2.1.5	*NaOH*	tonnes									
1.2.1.6	*NaOCl*	tonnes									
1.2.1.7	*Other chemicals not described above, but deemed necessary to operate and maintain the works. Tenderer to detail:*	tonnes									
1.2.2	Other consumables										
1.2.2.1	*Lubricants*	month	24								
1.2.2.2	*Laboratory reagents*	month	24								
1.2.2.3	*Laboratory Glasswere*	month	24								
1.2.2.4	*Activated carbon*	month	24								
1.2.2.5	*Other consumables*	month	24								
1.2.3	Electricity power consumption	kWh									
1.2.4	Gas power consumption	Nm3									
1.2.5	Fuel power consumption	L									
1.2.7	Utilities and other costs	month	24								
1.2.8	Any other O&M item not described above, but deemed necessary to operate and maintain the works. Tenderer to detail:	month	24								
Sub-Total											
TOTAL CARRIED FORWARD TO THE GRAND SUMMARY (SCHEDULE No. 9)											

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 9: Grand Summary

Schedule No.	Title	Amounts - exc. VAT	
		Local Currency KES	Foreign Currency [1].....
1	Preliminary Items		
2	Equipment, Materials, Tools and Mandatory Spare Parts Supplied From Abroad		
3	Equipment, Materials, Tools and mandatory Spare Parts supplied from within the Employer's country (Kenya)		
4	Construction Works and Installation Services		
5A	Environmental, Social, Health and Safety (ESHS) for Design and Build part		
6	Security Cost		
7	Dayworks		
7A	Labor		
7B	Materials		
7C	Contractor's Equipment		
Sum of (1) to (7)	***Sub-total 1***		
	15% Contingencies (Provisional)		
	Sub-total 2 for the Design-Build of the Works, to be also included in the Letter of Bid		
5B	Environmental, Social, Health and Safety (ESHS) for Operation part		
8	Operation Service (to be included in the Letter of Bid)		
	TOTAL (Sub-total 2 + 5B + 8)		
	Value Added Tax (VAT) - 16%		
	GRAND TOTAL (INCL. OF ALL TAXES) to be also included in the Letter of Bid		

[1] Specify currency in accordance with ITB 18.1 of the BDS.

IMPROVEMENT OF DRINKING WATER AND SANITATION SYSTEMS IN MOMBASA

Design, Build and Operate of MWACHE Water Treatment Plant

Price Schedules - FIRM PART

Schedule No. 10: Provisional Sums

No.	Item Description	Unit	Amount (Kshs.)
10.1	Provisional Sum for the Employer's share of the **Dispute Board**	P.S	10,000,000.00
10.2	Provisional sum for procurement of **Vehicles** for the Engineer / Employer	P.S	95,000,000.00
10.3	Provisional sum for **Operation and Maintenance of Vehicles** for the Engineer / Employer including cost for fueling, insurance etc.	P.S	65,000,000.00
10.4	Provisional sum for **Accommodation, Office Consumables / Expenses and Telephone** for the Supervision Staff	P.S	30,000,000.00
10.5	Provisional sum for **Inspection and Witness Testing** of Pipes, Fittings, Valves and Other Equipment at manufacturer's premises	P.S	20,000,000.00
10.6	Provisional Sum to cover costs of the **Employer's Counterpart Staff** assigned to the Project including transport, communication, allowances,	P.S	20,000,000.00
10.7	Provisional Sum to cover costs of **Interns and Attachees** assigned to the Project.	P.S	15,000,000.00
10.8	Provisional Sum to be used **as directed by the Employer / Engineer**	P.S	40,000,000.00
10.9	Provisional Sum to cover costs of **On-site and Off-site Training of Employer's Staff**	P.S	130,000,000.00
10.10	Provisional Sum to cover costs for procurement of **specialised tools** for Operation of the Treatment Plant and Raw Water Pumping Station	P.S	75,000,000.00
10.11	Provisional Sum to cover costs for the **electric connection line** from the HV/MV electric Sub-station (within Dam Area) to the WTP and RWPS.	P.S	15,000,000.00
	Sub-Total		**515,000,000.00**
10.11	Tenderer's **Overheads and Profits** for Provisonal costs above	**10%**	51,500,000.00
TOTAL CARRIED FORWARD TO SCHEDULE No. 1, ITEM 1.18			**566,500,000.00**