

BILL OF QUANTITIES FOR THE LONDOKWE SAND DAMS AND SPILLWAY PROTECTION					
KITISE KITHUKI WARD - MAKUENI SUB COUNTY, MAKUENI COUNTY					
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
BILL NO 1: PRELIMINARY AND GENERAL ITEMS					
1.1	Mobilize to site and provide machinery, personal protective equipment, materials and personnel necessary for the due and satisfactory completion of the works, provision of security, provide insurance, maintain contractor's camp, provision of access to site and shall remove same on completion	Item	1		
1.2	Allow for a project signboard to be installed at a convenient site to be maintained through out the project period, as directed by the Project Manager.	No	1		
Sub Total carried from Bill 1 to summary page					
BILL NO 2: SPILLWAY PROTECTION					
Concrete Sill and Stone Pitching					
2.2	Construct a 300 mm by 1 m depth by 30 m length concrete sill class 20/20 reinforced with D10bars @300 mm c/c across the spillway as directed by the supervising Engineer	Item	2		
2.3	Construct minimum 200mm stone pitching to bed and to slanting sides for the spillway channels jointed in 1:2 c/s mortar as directed by the supervising engineer	SM	800		
Sub Total Bill 2 Carried to summary page					
BILL NO 3: SAND DAM					
3.1 Site Clearance					
3.1.1	Clear the site of trees, bushes and stumps, dispose off as directed by the Supervising Engineer	No	91.5		
3.1.2	Allow for onsite demarcation of sand dams by the client representative	L/sum	1		
3.2 Excavation for wall foundation, wing walls and Key wall					
Bulk Excavation of dam foundation to depth not exceeding 1.5m.					
3.2.1	Remove the loose rocks and weathered rock debris and cart away as directed by the Supervising Engineer	CM	120		
3.2.2	Ditto over hard rock (all classes)	CM	30		
3.3 Construction of Foundation Base					
3.3.1	Use properly vibrated reinforced concrete for construction of sub structure which includes the keywall and apron as per the drawings provided and as instructed by the Supervising Engineer	CM	100		
3.4 Provision for Anchoring D16 bars to bedrock, packing of hardcore/boulders 250-350mm size and Casting of vibrated reinforced concrete. Pack boulders on bedrock, cast concrete and vibrate each layer ensuring 50% concrete (class 20 ratio 1:2:4 with additives and 20mm thick maximum aggregate size) and 50% approved boulders for crest and wing walls					
3.4	Use properly vibrated reinforced boulder cyclopean concrete for construction of sand dam crest wall as per the drawings provided and instructed by the supervising engineer	CM	56.25		
3.4.1	Use properly vibrated reinforced boulder cyclopean concrete for construction of wing walls to create steps as per the drawings provided and instructed by the supervising engineer	CM	45		
3.4.2	Use water proof cement for every bag of cement used in the construction of super structure	Kgs.	260		
3.5 Reinforcement. Include for cutting, bending, drilling in hard rock (0.5 - 1m as approved) to fix and fixing all steel works with required binding wire					
3.5.1	Nominal diameter T 16mm @ 500 mm drilled in rock	Kgs.	780		
3.5.2	Ditto but nominal diameter T 10mm @ 500 mm	Kgs.	584		
3.5.3 Form Work					
3.5.4	Using marine board or other similar quality material approved by the project manager provide formwork for the works	SM	200		
Total carried to Summary for 1 N0: Sand dam					
Sub Total Bill 3 Carried to summary page for 2 Sand dams					
MAIN SUMMARY					
1	PRELIMINARY AND GENERAL ITEMS				
2	SPILLWAY PROTECTION				
3	SAND DAMS				
SUB TOTAL 1					
Contingencies					45,000.00
SUB TOTAL 2					
Public Procurement Capacity Building Levy order 2023 which is 0.03% of the total cost before tax (Pursuant to PPRAs Circular No. 1 of 2024)					
Add 16% VAT					
Grand Total carried to form of Tender					

