Care international BOQ for Tunaydabha hafir construction -Capacity 15,000 m3 Capacity: 15,000 m3

Item No	Description	Unit	Qty	Unit cost (SDG)	Total cost (SDG)
1	Mobilization & Demobilization:				
1.1	These items extend to include physical mobilization of the equipment, materials and manpower of the contractor to the site to start the construction works and removal after completion of the work	job	1		
2	Site Clearance & Preparation :				
2.1	The site shall be cleared from trees, bushes , boulders and debris etc. as directed by the Engineer	job	1		
3	Hafir reservoir & Embankment works:				
3.1	Excavate of Hafir main reservoir to the dimension and depth shown in the drawings or as instructed by the engineer to reach the stated capacity , slop 1:2, a1 = 53.8m (bottom of hafir bed),b1=53 .8(bottom of hafir bed), a = 69.8 (top of hafir), b = 69.8 (top of hafir) , depth of hafir = 4m , the price include spread and compact in layers not exceeding 30cm an embankment from excavated soil for hafir banks and wings to at least 95% MDD(normal proctor) , slop 1:2 , to level determined by drawings and according to engineer instructions	m3	15000		
4	Stilling basin works:				
4.1	Excavate silting basin of hafir to the depth and dimensions $(30mx30m)$ depth = $1m$ as shown in the drawings or instructed by the engineer	М3	900		
5	Feeding canal works:				
5.1	Excavate for feeding canal or to provide materials for diversion structure (provisional) 300m*3m*0.5 m as instructed by the engineer	m3	450		
6	Inlet and Outlet System:				
6.1	Excavation				
6.1.1	Excavate the inlet, valve, energy dissipator , pressure and out let wells as shown in the drawings and instructed by the Engineer	m3	158		
6.1.2	Excavate the trenches of the inlet and outlet structures.	ML	84		
	Backfill with 30 cm layer of selected compacted soil at foundation of inlet, valve, energy dissipator, pressure & outlet wells	М3	14		
6.2	Concrete Works:				
6.2.1	Supply ,mix and place in position 10 cm plain concrete 6:3:1 under base slab of the inlet , valve, energy dissipater, pressure & and outlet wells as shown in the drawings and instructed by the Engineer.	m3	4.75		
622	Supply, mix and place in position 20 cm R.C. 1:2:4 at the base slab of the inlet well, valve well, pressure, energy dissipater and outlet well as shown in the drawings and instructed by the Engineer	m3	9.5		

6.3	Masonry work :			
6.3.1	"Supply and build Circular masonry walls 30cm thick in 4:1 sand-cement mortar in the inlet ,valve &energy dissipaters wells as shown in the drawings and as instructed by the Engineer"	m3	68.7	
6.4	Supply materials and lay sand for filter well as per drawing or the instructions of the engineer	m3	2.83	
6.5	Supply materials and lay aggregate (8-10mm) for filter well as per drawing or the instructions of the engineer	m3	2.12	
6.6	Supply materials and lay aggregate (20mm) for filter well as per drawing or the instructions of the engineer	m3	2.12	
7	Grill Cover :			
7.1	Provide and erect grill cover (2.4 m) of steel angle 3" for the outside frame and 5/8" steel bar mesh for every 10 cm, on the top of the inlet well, out let well as shown in the drawing or instructed by the Engineer	No	2	
8	Pipes lines valve fittings :			
8.1	Supply and lay UPVC Pipes of 14 "Dia For the inlet of the Hafir , not less than 10 bars, with complete fittings and as instructed by the Engineer	M.L	42	
8.2	Supply and lay UPVC Pipes of 8"Dia For the outlet of the Hafir ,not less than 10 bars, with complete fittings and as instructed by the Engineer	M.L	42	
8.3	Supply & fix of 8" flanged outlet sluice valve complete with Adaptors, Spindle & Hande	NO	1	
8.4	Supply & fix of 14" flanged inlet sluice valve complete with Adaptors ,Spindle & Handel	NO	1	
9	Distribution system (Raw water) :			
9.1	Supply and fix of 3" centrifugal pumping unit complete with diesel water cooled engine complete with suction & delivery 3" G.l pipe lines (= 160 ml), Q =15 m3/hr , T.M.H =20 M.T	NO	1	
	Supply of materials & Construction of 3X3 Pump & engine shed, complete with pump foundation, doors, windows as per drawings or Instructions of Engineer	job	1	
10	Fence & Gate :			
10.1	Provide and erect fence on the top of the Hafir Embankment, fence poles will be from concrete (concrete 4:2:1) as shown in the drawings	ML	500	
10.2	Provide and erect fence gate made of one leaf of steel angle 3 ", width of 1 m as shown in the drawings.	No	1	
10.3	Provide and erect fence gate made of two leafs of steel angle 3 ", width of 3m wide as shown in the drawings.	No	1	
	Total			
	VAT (17 %)	<u> </u>		
	Grand-Total			