

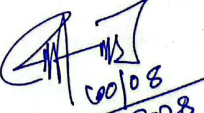
Office of Executive Engineer
Savar-Keraniganj Wellfield Plant, Dhaka WASA
Bhakurta, Savar, Dhaka

Name of the Work: Construction of gate valve chamber for IRP#2 backwash water line of SKWP.

BOQ						
SL. No.	Basis of Unit Rate	Description of Item/Work	Quantity	Unit	Unit Rate (BDT)	Total Amount (BDT)
1	PWD 2022 32.6.1.1	Dismantling of R.C.C. beam, lintel, column, drop wall, sun shade from any height and removal of debris to a safe distance.	94.204	Cum	3928.000	370032.872
2	PWD 2022 3.5.1	Mass concrete (1:2:4) in foundation or in floor with cement, sand (F.M. 1.2) and picked jhama brick chips including breaking of chips, screening, mixing, laying, compacting to required level and curing for at least 7 days including the supply of water, electricity, costs of tools & plants and other charges etc. all complete and accepted by Engineer-in-charge. (Cement: CEM-II/B-M)	2.499	Sqm	8886.000	22,206.114
3	PWD 2022 07.2.2	Reinforced cement concrete works with minimum cement content relates to mix ratio 1:2:4 having minimum $f_{cr} = 27$ MPa, satisfying a specified compressive strength $f_{cc} = 22$ MPa at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM, cement conforming to BDS EN-197-1-CEM-I, 52.5N (52.5 MPa) / ASTM-C 150 Type - I, best quality Sylhet sand or coarse sand of equivalent F.M. 2.2 and 20 mm down well graded stone chips conforming to ASTM C-33, making and placing shutter in position maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position; mixing in standard mixer machine with hopper fed by standard measuring boxes or mixing in batching plant, casting in forms, compacting by vibrator machine and curing at least for 28 days, removing centering-shuttering after specified time approved; including cost of water, electricity, testing charges of materials and cylinders as required, other charges etc. all complete, approved and accepted by the Engineer-in-charge. (Rate is excluding the cost of reinforcement and its fabrication, placing, binding etc. and the cost of shuttering & centering) For Boundary Wall Footing, beam and column.	9.964	Cum	13863.000	138,129.379
4	PWD 2022 07.12.1	Centering and shuttering, including strutting, propping etc. (The formwork must be rigid enough both in and out of plane, to make the concrete surface true to the designed shape and size by using necessary MS sheets of minimum 16 BWG, angles of minimum size 40 mm x 40 mm x 5 mm, flat bars etc.) and removal of form for.	350.890	Sqm	582.000	204217.980
5	PWD 2022 08.1.2	Supplying, fabrication and fixing to detail as per design : ribbed or deformed bar reinforcement for Reinforced cement concrete, produced and marked in accordance with BDS ISO 6935 - 2: 2006 (or standard subsequently released from BSTI) including straightening and cleaning rust, if any, bending and binding in position with supply of G.I. wires, necessary laboratory tests (excluding splices or laps) etc. complete in all respect and accepted by the Engineer-in-charge (Measurement shall be recorded only on standard mass per unit length of bars, while dia of bars exceeds its standard). Grade 400 (RB 400 /RB 400W: complying BDS ISO 6935-2:2006) ribbed or deformed bar produced and marked according to Bangladesh standard, with minimum yield strength, $f_y (ReH) = 400$ MPa but f_y not exceeding 450 MPa and whatever is the yield strength within allowable limit as per BNBC/ ACI 318, the ratio of ultimate tensile strength f_u to yield strength f_y , shall be at least 1.25 and minimum elongation after fracture and minimum total elongation at maximum force is 16% and 8% respectively : up to ground floor.	1772.524	Kg	100.000	177252.400
6	PWD 2022 15.2	Minimum 12 mm thick cement sand (F.M. 1.2) plaster with neat cement finishing to plinth wall with cement (1:4) up to 150 mm below ground level including washing of sand, finishing the edges and corners and curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/B-M) ground floor.	214.970	Sqm	362.000	77819.140
7	LS	Ladder (16 mm Dia MS Bar) & Manhole Cover Painting with WASA Monogram	1.000	LS	4500.000	4500.000
TOTAL:						994,157.885
Say total=						994,158.000
In Word: Taka Nine Lakh Ninety-four thousand One hundred and Fifty-eight Only.						


30.4.2024
মোঃ রেজাউল করিম
উপ-সহকারী প্রকৌশলী
সভার-কোরোনাল ওয়েলফিল্ড প্লান্ট, ঢাকা ওয়াসা।


৬/৪/২৪
কাজী বিল্লাল হোসেন
সহকারী প্রকৌশলী
সভার-কোরোনাল ওয়েলফিল্ড প্লান্ট
ঢাকা ওয়াসা।


৩০/০৪
মাসুদুল আলম
নিবাহী প্রকৌশলী
সভার-কোরোনাল ওয়েলফিল্ড প্লান্ট, ঢাকা ওয়াসা।

Office of Executive Engineer
Savar-Keraniganj Wellfield Plant, Dhaka WASA
 Bhakurta, Savar, Dhaka

Name of the Work: Construction of gate valve chamber for IRP#2 backwash water line of SKWP.

CALCULATION

SL. No.	Description of Item/Work	Length (m)	Width (m)	Height (m)	Area (m ²)	Volume (m ³)	Weight (Kg/m)	No. of Item	Total Quantity	Unit
1	Dismantling of R.C.C									
	Wash Out Wall	13.700	0.300	2.800		11.508		1.000	11.508	
	Wash Out Base	3.700	2.100	0.400		3.108		1.000	3.108	
	Wash Out Slab	3.700	2.100	0.200		1.554		1.000	1.554	
	Concrete	37.000	1.800	1.800		119.880		1.000	119.880	
	(-) Pipe area	37.000			1.131	41.846		1.000	-41.846	
									Total=	94.204
2	Mass Concrete									
	Wash Out Base	4.250	2.100	0.280		2.499		1.000	2.499	
									Total:	2.499
3	RCC Works (1:2:4) f _c = 22 MPa									
	Wash Out Wall	13.700	0.300	2.800		11.508		1.000	11.508	
	Wash Out Base	3.700	2.100	0.400		3.108		1.000	3.108	
	Wash Out Slab	3.700	2.100	0.200		1.554		1.000	1.554	
	Concrete	11.000	1.800	1.800		35.640		1.000	35.640	
	(-) Pipe area	37.000			1.131	41.846		1.000	-41.846	
									Total:	9.964
4	Steel Formwork									
	Wash Out Wall	13.700		2.800	38.360			2.000	76.720	
	Wash Out Slab	3.700	2.100		7.770			1.000	7.770	
	Concrete	37.000	7.200		266.400			1.000	266.400	
									Total:	350.890
5	Reinforcement (Grade 400)									
	a) W/O Base 12 mm-200 mm C/C Long Bar Double Layer	4.200				0.890		23.000	85.974	
	b) W/O Base 12 mm-200 mm C/C Short Bar Double Layer	2.750				0.890		39.000	95.453	
	c) W/O Wall 12 mm-200 mm C/C Double Layer	3.550				0.890		139.000	439.171	
	d) W/O Wall Binder 12 mm-200 mm Double Layer	13.700				0.890		30.000	365.790	
	e) Slab Bar 12 mm-100 mm C/C	37.000				0.890		19.000	625.670	
	f) Middle wall Concrete Wall Bar 12 mm-200 mm C/C	11.000				0.890		71.000	695.090	
									Total=	1772.524
	Plaster									
	Wash Out Wall	37.000		2.800	103.600			2.000	207.200	

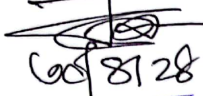
APM

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 মাসুদুল আলম
 নির্বাহী প্রকৌশলী
 সার্বজনীন স্বাস্থ্যকর প্রকৌশল বিভাগ, ঢাকা

SL. No.	Description of Item/Work	Length (m)	Width (m)	Height (m)	Area (m ²)	Volume (m ³)	Weight (Kg/m)	No. of Item	Total Quantity	Unit
6	Wash Out Slab	3.700	2.100		7.770			1.000	7.770	Sqm
								Total:	214.970	
7	Ladder (16 mm Dia MS Bar) & Manhole Cover Painting with WASA Monogram	1.000						1.000	1.000	Nos


30.4.2024
 মোঃ রেজাউল করিম
 উপ-সহকারী প্রকৌশলী
 দক্ষিণ-কেন্দ্রীয় ওয়েস্টবিক গ্রাউন্ড, ঢাকা ওয়াশা।


30/8/28
 কাজী রিহাশ হোসেন
 সহকারী প্রকৌশলী
 দক্ষিণ-কেন্দ্রীয় ওয়েস্টবিক গ্রাউন্ড
 ঢাকা ওয়াশা।


30/08/2028
 মাসুদুল আলম
 নির্বাহী প্রকৌশলী
 দক্ষিণ-কেন্দ্রীয় ওয়েস্টবিক গ্রাউন্ড, ঢাকা ওয়াশা।