

**Office of the Executive Engineer
PSTP Division, Dhaka WASA.**

Name of the work: Repair and maintenance of main trunk sewer line from mirhajirbagh siphon to 31 no. ward commissioner office.

Section (6): Bill of Quantity (BOQ) PW-2a:

Item No.	Basis of rate	Description of Items	Unit	Qty	Rate	Amount = (6x7)
		Repair and maintenance of main trunk sewer line from mirhajirbagh siphon to 31 no. ward commissioner office. with the supply of following materials including necessary tools & equipments as per direction of the Engineer. The materials/completed works will be accepted after joint inspection of EE, AE, and SAE of PSTP division and EE, P&D (Sewer) division in presence of SE, W& STP circle. Final bill be paid after getting satisfactory acceptance at the time of joint inspection comparing with the mentioned technical specification and sample. The contractor will provide free service during defect liability period of 6 (six) months of concerning any problem of this work.				
1	Approved rate	Making cross bundh of required height & width for the purpose of dewatering and keeping the site always workable, with sand/ soil & empty bags arranged by the contractor and maintaining the same till the completion of work including supply of necessary planks, runner hinges etc. with necessary equipments & removal the same accurately after completion of work as per direction of the Engineer-in-charge.(for brick sewer 2400 mm dia & above).	each	6.00	45000.001	270000.006
2	DWASA-6.6 Year-2011	Fitting & fixing of De-watering pump Bailing out of all shorts of water from Trances, cannel the line with all lead & lift by the required nos of 5 Cusec capacity de-watering pump should be used usually, including supplying the fuel, lubricants spares & all other required accessories & man power etc. all complete as per direction of the Engineer –in-Charge.	hour	144.00	549.001	79056.144
3	DWASA-6.1 Year-2011	Cleaning the following sizes pipe drain/Brick sewer manhole catch pits etc. including removing the bund inside the line manhole cleaning the solid semi-solid & slushy earth, debris, polythene and any other foreign materials by manually labour by using ladder or by any other means, from the existing base of the line, without making any damage to the structure, including supply of all necessary equipments materials if necessary to ensure the proper cleaning along the whole length & width up to the invert level of the line and removing the sludge & debris to safe distant place without causing any disterbence to the traffic etc. all complete as per direction the E/C.	cum	633.55	289.001	183095.889
4	DWASA-6.2 Year-2011	Removal of Pipe line and Brick sewer sludge from the cleaning site up to the nearest D.C.C. dumping yard carrying loading unloading etc. complete as per direction of the Engineer-in-charge.	cum	443.48	326.001	144576.005
5	Approved rate	Geo textile bag. (size-600 mm x 500 mm, 400 GSM/PP, thickness-3 mm).	each	70.00	149.001	10430.070
6	Approved rate	Geo textile bag. (size-800 mm x 500 mm, 400 GSM/PP, thickness-3 mm).	each	70.00	179.001	12530.070
7	Approved rate	Geo textile bag. (size-1000 mm x 1000 mm, 400 GSM/PP, thickness-3 mm).	each	70.00	371.001	25970.070

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	Basis of rate	Description of Items	Unit	Qty	Rate	Amount = (6x7)
8	Approved rate	Solvent Cement 500 ml can.	can	20.00	509.001	10180.020
9	Approved rate	Construction concrete admixture.	kg	20.00	350.001	7000.020
10	PWD-07.12.12.1. Year-2022	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: Arches, domes, vaults up to 8m span (for single use)	sqm	19.96	2145.001	42805.640
11	Approved rate	Grade 400 (B400DWR / B420DWR: complying BDS ISO 6935-2:2016 / ASTM A615) 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 480 MPa and whatever is the actual 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 17% and 8% respectively : up to ground floor.	kg	309.70	130.001	40260.790
12	PWD-07.7.2 Year-2022	Reinforced cement concrete works from batch mix/machine mix with minimum cement content relates to approved mix ratio having minimum f_{cr} = 40.5 MPa, satisfying a specified compressive strength f'_c = 32 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 wellgraded stone chips conforming to ASTM C-33 (Aggregate grading as per table shown in technical specification), High-range water reducing chemical admixture Type-G under ASTM C494 (Doses to be applied as per Manufacturer's Guideline) making and placing shutter in position and maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position; using machine batched and machine mixed concrete using cement content as per approved design mix (minimum 445 kg/ cum), including pumping of concrete using line pump or boom placer to site of laying, maintaining allowable slump of 100mm to 150mm, 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, cost of all materials and other charges etc. all complete, approved and accepted by the Engineer-in-charge. (Rate is excluding laboratory test fees, the cost of reinforcement and its fabrication, placing, binding etc. and the cost of shuttering & centering)	cum	2.57	15373.001	39440.971
13	PWD-4.19 Year-2022	Providing 125 mm thick brick work in superstructure (partition walls) with cement sand (F.M. 1:2) mortar (1:4) with machine made ceramic bricks of approved size having uniform colour, carefully laid in cement mortar of uniform width & depth of joints, true to vertical and horizontal lines including racking out joints, filling the interstices with same mortar, making bond with connected walls, cleaning, soaking brick at least 24 hours and washing of sand, curing 7 days in all floors, including cost of water, electricity and other charges accepted by the Engineer-in-charge. (Cement: CEM-II/B-M) In	sqm	6.00	1890.520	11343.120

	Basis of rate	Description of Items	Unit	Qty	Rate	Amount (6x7)
4	Approved rate	Rant of compressor, oxygen mask and full set for expct water sink man.	days	7.00	12500.001	87500.007
15	Approved rate	Rent of tripod, MS plate and other acessorices	days	7.00	1250.001	8750.007
16	Approved rate	All working site cleaning.	LS	1.00	20000.001	20000.001
					Total TK. (PW-2a)	992938.829
In word: (Nine Lakh Ninety Two Thousand Nine Hundred Thirty Eight Point Eight Two Nine Taka Only).						


 26/9/23
 Md. Nur Hossain
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 23/10/26
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 26/09/2023
 Md. Rahat Shikder
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