

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

**Section-6
Bill of Quantities**

Estimate

Name of Work: Replacing damaged HDPE pipeline and reconnection of existing house connection line at Haruria.

Sl. No.	Basis of Rate	Description of Item/Work	Unit	Quantity	Unit Rate (BDT)	Amount (BDT)
1	2	3	5	4	5	6
1	Approved Rate	Construction/laying including procurement, supply and carrying of High-Density Polyethylene (HDPE) water pipelines by Open Cut method in accordance with the technical specification and the standard detailed drawings, of any diameter specified below. The rate includes for excavation in all kinds of soil BFS/HBB/Bituminous road/Cement Concrete/Reinforced Cement Concrete road surface except rock to the full depth of trench required by the specifications, precautions necessary to avoid damage of underground utility services, (if any damage occurs, Contractor shall repair by his own cost) including removing the excavated earth & stacking the same to safe distance without any traffic obstacles, dry condition at all times, including all necessary shoring, boxing, must be protected from any collapse of trench sides, transportation of pipes to site, cleaning, jointing and laying of the water pipes; transport and disposal of surplus excavated material to a suitable location arranged by the contractor.				
	1.1	a) 110mm HDPE Pipe (PN10) (ISO 4427-2:2007):	rm	125.000	1,095.000	136,875.000
2	Approved Rate	Extra-over item 1 for installation including procurement, supply and carrying of HDPE (PN10, PE 100, SDR 11) fittings in accordance with the technical specification and the standard detailed drawings, of any diameter specified below. The rate includes for transportation of fittings to site, cleaning, jointing and laying of the fittings as per specifications and direction of Engineering in charge.				
	2.1.1	110 mm 45° Bend - EF	no's	4.000	2,595.000	10,380.000
	2.4.2	110 mm Sleeve/Coupler - EF	no's	4.000	2,465.000	9,860.000
3	Approved Rate	procurement, carrying, supplying materials and making of service connection for all depths, diameters, length up to consumers premises. The rate includes cost for excavation, all necessary HDPE service connection pipe, HDPE fittings (saddle clamp, ferrule, straight coupling, valves etc.), appropriate drilling system for making holes in pipes, backfilling with sand (FM 0.8), precautions necessary to avoid damage of underground utility services, (if any damage occurs, Contractor shall repair it by his own cost), plugging, de-watering, cleaning, unplugging. The contractor will keep record of total number service connections provided to the households. All works shall be done as per specifications and the standard detail drawing and direction of the Engineer.				
	11.1	Service connections of 25mm diameters from the distribution network composed of HDPE pipes of different diameters.	no's	18.000	4,553.000	81,954.000
4	Approved Rate (4)	Extra-over item 1 for the procurement, carrying, supply, depositing and compaction of fine sand (FM 0.8) for bedding and surrounding the pipes up to required depth with proper ramming of 150mm layer as per specifications and direction of Engineering in charge and standard detail drawings for all pipelines.	cum	37.500	708.000	26,550.000
5	Approved Rate (6)	Extra-over item 1 for backfilling by excavated soil including depositing and compaction at all required depth in accordance with the technical specification and direction of Engineering in charge, and standard detail drawings for all water pipe line diameters.	cum	75.000	347.000	26,025.000
6	PWD SoR 2022 SL: 02.19.1	Bailing out water by 1 cusec diesel operated pump including hire charge of pump, fuel, operator, spares and maintenance etc. all complete and accepted by the Engineer-in-charge.	hour	12.000	677.000	8,124.000
					Total =	299,768.000
In Words: Two Lakh Ninty-Nine Thousand Seven Hundred And Sixty-Eight Taka Only.						

14.05/2025
মোঃ আবুল কালাম আজাদ
উপ-সহকারী প্রকৌশলী
সাবার-কেরানীগঞ্জ ওয়েলফিল্ড প্লান্ট, ঢাকা ওয়াসা।

14.05/25
মোঃ সুমনা আহমেদ
সহকারী প্রকৌশলী / 1
সাবার-কেরানীগঞ্জ ওয়েলফিল্ড প্লান্ট
ঢাকা ওয়াসা।

17.05.25
মোঃ নাফিজ ইমতিয়াজ
নির্বাহী প্রকৌশলী
সাবার-কেরানীগঞ্জ ওয়েলফিল্ড প্লান্ট, ঢাকা ওয়াসা।

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 Bhakurta, Savar, Dhaka

Calculation

Name of Work: Replacing damaged HDPE pipeline and reconnection of existing house connection line at Haruria.

Sl. No.	Description of Item/Work	Length (m)	Width (m)	Height/Depth (m)	Volume (m ³)	No of Item	No of Work	Quantity of Works	Unit
1	2	3	4	5	6	7	8	9	10
1	Pipe Laying Work:								
	a) Damaged Section	125.000					1.000	125.000	rm
2	Supply of Fittings:								
	a) 110 mm 45° Bend - EF					4.000	1.000	4.000	no's
	b) 110 mm Sleeve/Coupler - EF					4.000	1.000	4.000	no's
3	Existing House Connection Installation:								
	a) 25 mm					1.000	18.000	18.000	no's
4	Fine Sand (FM 0.8) Filling:								
	a) Sand Filling	125.000	1.000	0.300	37.500	1.00	1.00	37.500	cum
5	Backfilling by Excavated Soil								
	a) Pipeline Trench	125.000	1.000	0.300	37.500	1.00	2.00	75.000	cum
6	Bailing out Trapped water:								
	a) By Mud Pump					1.000	12.000	12.000	hour

14.05
2025

মোঃ আবুল কালাম আজাদ
 ই.স.স.স. প্রকৌশলী
 সড়ক-কোরানীগঞ্জ ওয়েলফিল্ড প্লান্ট, ঢাকা ওয়াসা।

14/05/25

মোঃ সুমন আহমেদ
 সহকারী প্রকৌশলী
 সড়ক-কোরানীগঞ্জ ওয়েলফিল্ড প্লান্ট
 ঢাকা ওয়াসা।

14.05.25

মোঃ নাফিজ ইমতিয়াজ
 নির্বাহী প্রকৌশলী
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