Lot Detail	
Lot No. :	BWDB/Sunam/HFMLIP/PW-07
Lot Description :	Slope protection work of the Dharmapasha Ruibeel Submersible Embankment from Km 0.00 to Km 0.935 0.935 km Km 0.965 to Km 2.180 1.215 km In between Km 4.500 to Km 4.570 0.040 km. In between Km 35.025 to Km 35.100 0.040 km Km 9.200 to Km 10.350 1.150 km Total length 3.380 km with 4.700 km Embankment re-sectioning work & 1 no 30.00 m width Flood Fuse at Km 0.950 & 2nos 15.00 m width Flood Fuse at Km 4.520 & Km 35.050 respectively in Upazilla Dharmapasha Dist- Sunamganj in c/w Haor Flood Management and Livelihood Improvement Project BWDB Part under Sunamganj O&M Division-1 BWDB Sunamganj.

Bill of Quantities

Table Name : Bill of Quantities

Item no.	Group	Item Code (if any)	Description of Item	Measurement Unit	Quantity	Unit Price In figures (BDT)	Unit Price In Words (BDT)	Total Price In Figures (BDT)	Total Price In Words (BDT)
1	1	1	Site preparation by manually removing all miscellaneous objectional materials from entire site and removing soil up to 15cm depth including uprooting stumps, jungle clearing, levelling dressing etc. complete as per direction of Engineer in charge.	Sqm	5060.00				
2	2	2	Erection of bamboo profile with full bamboo posts and pegs not less than 60mm in diameter and coir strings etc. complete as per direction of Engineer in charge.	Nos	166.00				
3	3	3	Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) in construction of cross bundh/ ringbundh as per design and specification with all leads and lifts, throwing the earth in layers not exceeding 150mm in thickness, including breaking clods, rough dressing, clearing the jungle, removing stumps, dug bailing and 75mm cambering etc. complete as per direction of Engineer in charge.	Cum	5016.00				

	4	4	4	Earth work by carried earth (by truck/boat or any other means) supplied at contractor's own cost (including royalty) in constructing/ resectioning of the embankment/ canal bank/ road etc. compacted to 85%/90% maximum dry density at optimum moisture content with reference to laboratory density test AASHTO modified hammer, with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) beyond initial lead of 300m including throwing the spoils to profiles in layer not exceeding 230mm in thickness with clod breaking to maximum size of 100mm, benching the side slopes, removing roots and stumps of trees of girth upto 200mm, stripping/ ploughing the base of embankment and borrow pit area, dug bailing, clearing jungles, bail out of water, rough dressing including 150mm cambering at the centre of crest with all leads and lifts complete (compaction will be done by the contractor with approved equipment including all ancillary charges for compaction and testing) as per direction of Engineer in charge. 300m to 1.00 km.(85% compaction)	Cum	16969.08				
	5	5	5	Earth work by Mechanical Excavator (Long Boon) in constructing/ resectioning of embankment/canal bank/ road etc. compacted to 85%/90% maximum dry density at optimum moisture content, with reference to	Cum	16969.08				

			laboratory density test AAHSTO modified hammer, with clayey soil(minm 30% clay, 0-40% silt, 0-30% sand) within the initial lead of 30m and all lifts including throwing the spoils to profiles in layers not exceeding 230mm in thickness with clod breaking to a maximum size of 100mm, benching the side slopes, removing roots and stumps of trees of girth upto 200mm from the ground, stripping /ploughing the base of embankment and borrow pit area, dug bailing, rough dressing including 150mm cambering at the centre of crest etc. complete, including maintenance of the same for 6 months after completion, (compaction will be done by the contractor with approved equipment, including all ancillary charges for compaction and testing) as per direction of Engineer in charge. Equipment; ht: 0 to 4m; 85% comp.							
6	6	6	Earth work in excavation of foundation trenches in all kinds of soil as per layout plan of foundation excavation with all leads and lifts and placing the spoil earth for constructing the ring bundh/ cofferdam where necessary as per design and specification or disposing it to a safe distance including pushing, levelling, dressing, etc. complete as per direction of Engineer in charge. For moving spoil earth upto a distance of 100m from the centre of the pit.	Cum	4840.65					
7	7	7	Royalty of specified earth taken from	Cum	11432.33					

			private land (with prior permission of the Executive Engineer on production of royalty deeds with the land owner) from the area to be selected by the contractor with mutual agreement.						
8	8	8	Extra rate for every additional lead of 15m or part thereof beyond the initial lead of 30m upto a maximum of 19 leads (3m neglected) for all kinds of earth work. Nos of lead = 2 nos leads	Cum	3463.25				
9	9	9	Extra rate for every additional lift of 1.0m or part thereof beyond the initial lift of 1.5m (30cm neglected) for all kinds of earth work. Nos of lifts= 2 nos lifts	Cum	3463.25				
10	10	10	Supplying and laying sand as filter layers as per specific size ranges and gradation including preparation of surface, compacting in layer etc. complete with supply of all materials and as per direction of Engineer in charge. FM : 1.0 to 1.5	Cum	1695.60				
11	11	11	Supplying and placing non-woven needle punched type geotextile fabric (100% Polypropylene Fabric, unit weight : 855 Kg/m3 to 946 Kg/m3) as filter materials of elongation at maximum force machine direction (MD) >=60% and <= 100 % , elongation at maximum force (CMD) => 40% and <= 100% ,horizontal and vertical permeability (under 2 kn/m² pressure)=>2x10E-3 m/sec. for effective erosion protection in hydraulic structures/river training works including local handling, placing in	Sqm	62271.26				

				position, providing machine seamed joints (with 100% polypropylene or nylon thread) or 35cm lap in dry condition or minimum 100cm lap under water including protecting the geotextile material from UV ray and from any other damages including supply of all materials, labours, equipment's etc. complete as per direction of Engineer in charge. (Geotextile delivered at site should be certified by ISO and clearly labelled with brand name and grade printed at regular intervals across the body of the fabric). 40-500-40 : Mass =>400 gm/m², thickness(Under 2 kpa pressure) =>3.00 mm, EoS<=0.08mm, strip tensile strength =>23 kn/m, grab strength =>1500 N, CBR puncture resistance =>3800 N. (Quantiy relating turfing item code 48-100 will be measurable and payable simultaneously. As such full grown continuous turfing over Geo-textile fabric inevitable/necessary)						
12	12	12	Supplying filling and placing of geo-textile bags of different sizes and capacity at project/work site, making with standard geo-textile fabric (100% Polypropylene fabric, mass>= 400gm/m², unit weight : 855 Kg/m3 to 946 Kg/m3, EOS<=0.075 mm) and sewing in accordancewith the drawing and Technical Specifications of BWDB and Schedule of Rates of BWDB, filling with sand (dry and minimum 80% sand must be retained on sieve no 100),	Nos	7431.00				

				sewing along one transverse (top) side after filling, staking in measurable/countable stakes, marking by synthetic enamel paint during counting, placing in position as per approved drawing including levelling, dressing and preparation of base, cost of all materials & equipments and its mobilization, labour, incidental charges etc. complete as per technical specification, approved design and direction of Engineer in charge. [fill volume and weight will be measured after filling with dry sand]" Geo-bag; inner size:1075mmx850mm, outer size:1125mm x900mmgeo-fabric th.=>3.0mm, Fill Vol: 0.1164cum; wt: 175kg						
13	13	13	Supplying filling and placing of geo-textile bags of different sizes and capacity at project/work site, making with standard geo-textile fabric (100% Polypropylene fabric, mass>= 400gm/m², unit weight : 855 Kg/m3 to 946 Kg/m3, EOS<=0.075 mm) and sewing in accordancewith the drawing and Technical Specifications of BWDB and Schedule of Rates of BWDB, filling with sand (dry and minimum 80% sand must be retained on sieve no 100), sewing along one transverse (top) side after filling, staking in measurable/countable stakes, marking by synthetic enamel paint during counting, placing in position as per approved drawing including levelling, dressing and preparation of base, cost of all materials & equipments and its mobilization, labour, incidental charges etc. complete as per	Nos	14137					

			technical specification, approved design and direction of Engineer in charge. [fill volume and weight will be measured after filling with dry sand]" Geo-bag; inner size:950mmx750mm, outer size:1000mmx800mm geo-fabric th.=>3.0mm, Fill Vol: 0.0840cum; wt: 125kg						
14	14	14	Supplying and laying shingles and peagravels as filter in two layers (top and bottom) as per specific size ranges and gradation including grading, preparation of surface, compacting each layer etc. complete with supply of all materials and as per direction of Engineer in charge: Well graded between 40mm to 20mm size.	Cum	1002.37				
15	15	15	Supplying and laying shingles and peagravels as filter in two layers (top and bottom) as per specific size ranges and gradation including grading, preparation of surface, compacting each layer etc. complete with supply of all materials and as per direction of Engineer in charge: Well graded between 20mm to 5mm size.	Cum	1002.37				
16	16	16	Manufacturing and supplying C.C. blocks in leanest mix. 1:2.5:5 with cement, sand (FM>=1.5) and Stone Chips (40mm down graded) to attain a 28 days cylinder strength of 12 N/mm² including grading, washing stone chips, mixing, laying in forms, consolidation, curing for at least 21 days, including preparation of platform, shuttering (steel shutter to be used) and stacking in measurable stacks, cost of all materials and charges, etc.	Nos	5295.00				

			complete as per direction of Engineer in charge . Block Size: 50cmx50cmx50cm						
17	17	17	Manufacturing and supplying C.C. blocks in leanest mix. 1:2.5:5 with cement, sand (FM>=1.5) and Stone Chips (40mm down graded) to attain a 28 days cylinder strength of 12 N/mm² including grading, washing stone chips, mixing, laying in forms, consolidation, curing for at least 21 days, including preparation of platform, shuttering (steel shutter to be used) and stacking in measurable stacks, cost of all materials and charges, etc. complete as per direction of Engineer in charge . Block Size: 50cmx50cmx30cm	Nos	10136.00					
18	18	18	Manufacturing and supplying C.C. blocks in leanest mix. 1:2.5:5 with cement, sand (FM>=1.5) and Stone Chips (40mm down graded) to attain a 28 days cylinder strength of 12 N/mm² including grading, washing stone chips, mixing, laying in forms, consolidation, curing for at least 21 days, including preparation of platform, shuttering (steel shutter to be used) and stacking in measurable stacks, cost of all materials and charges, etc. complete as per direction of Engineer in charge . Block Size: 40cmx40cmx40cm	Nos	15224.00					
19	19	19	Manufacturing and supplying C.C. blocks in leanest mix. 1:2.5:5 with cement, sand (FM>=1.5) and Stone Chips (40mm down graded) to attain a 28 days cylinder strength of 12 N/mm² including grading, washing stone chips, mixing,	Nos	59777.00					

			laying in forms, consolidation, curing for at least 21 days, including preparation of platform, shuttering (steel shutter to be used) and stacking in measurable stacks, cost of all materials and charges, etc. complete as per direction of Engineer in charge . Block Size: 40cmx40cmx20cm						
20	20	20	Labour charge for protective works in laying CC blocks of different sizes including preparation of base, watering and ramming of base etc. complete as per direction of Engineer in charge. Within 200 m	Cum	2154.637				
21	21	21	Labour charge for protective works in laying CC blocks of different sizes including preparation of base, watering and ramming of base etc. complete as per direction of Engineer in charge. 200 m to 500 m.	Cum	2154.637				
22	22	22	Cement concrete work in leanest mix. 1:3:6 with sand of FM>=1.5, in foundation or floor including breaking, screening, grading and washing aggregates with clear water, mixing, laying in position, consolidation to levels, curing, including supply of all materials, excluding the cost of formworks etc. complete as per direction of Engineer in charge. With 25mm down graded stone chips.	Cum	138.24				
23	23	23	Formwork for centering and water tight shuttering as per drawing with14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with	Sqm	354.71				

			necessary fabrication, welding, making the forms including fitting, fixing of steel forms with necessary ties, battens, struts, nuts & bolts, props etc. as per desired shape and size including levelling and removing the forms after specified period including the cost of all materials as per direction of Engineer in charg. Vertical and inclined walls, columns, piers with 60-80mm dia barrackbamboo props.						
24	24	24	M.S. Work for reinforcement with deformed M.S. bar, fy=400 N/mm², (made from billet) in RCC works, including local handling, cutting, forging, bending, cleaning and fabrication with supply of deformed M.S. bar in different sizes and binding with 22 to 18 gages G.I. wire etc. complete including the cost of all materials as per direction of Engineer in charge. 8mm dia to 30mm dia.	Kg	428.02				
25	25	25	Single brick flat soling including preparation of bed, sand filling (FM>=0.50), levelling, dressing and sand blinding in foundation or floor with supply of all materials etc. complete and as per direction of Engineer in charge With 1st class bricks	Sqm	6.00				
26	26	26	Reinforced cement concrete work in leanest mix. 1:1.5:3, with 20mm down graded coarse aggregates and sand of FM>2.0 to FM<=2.5, to attain a minimum 28 day cylinder strength of 22.0 N/mm², including breaking, screening, grading, washing aggregates with clean water, mixing, laying in forms, consolidation to levels, curing,	Cum	3.71				

				including supply of all materials, excluding cost of M.S. work for reinforcements and formworks etc. complete and as per direction of Engineer in charge. 28-200-10 : with stone chips.consolidation to levels, curing, including supply of all materials, excluding cost of M.S. work for reinforcements and formworks etc. complete and as per direction of Engineer in charge. With stone chips.						
27	27	27	Earth work by manual labour in constructing/ resectioning of embankment / canal bank/ road etc. compacted to 85%/90% maximum dry density at optimum moisture content, with reference to laboratory density test AAHSTO modified hammer, with clayey soil(minm 30% clay, 0-40% silt, 0-30% sand) within the initial lead of 30m and all lifts including throwing the spoils to profiles in layers not exceeding 230mm in thickness with clod breaking to a maximum size of 100mm, benching the side slopes, removing roots and stumps of trees of girth upto 200mm from the ground, stripping/ ploughing the base of embankment and borrow pit area, dug bailing, bail out of water, rough dressing including 150mm cambering at the centre of crest etc. complete, including maintenance of the same for 6 months after completion, (compaction will be done by the contractor with approved equipment, including all ancillary charges for compaction and	Cum	3463.25				

			testing) as per direction of Engineer in charge. 0 m to 3 m height with 85% compaction.						
28	28	28	Fine dressing and close turfing of the slopes and the crest of embankment with 75mm thick, good quality durba or charkanta sods of size 200mm x 200mm, with all leads and lifts, including ramming, watering until the turf grows properly, maintaining etc. complete (measurement will be given on well grown grass only). as per direction of Engineer in charge. (Quantiy relating item code 40-500-40 will be measurable and payable simultaneously. As such full grown continuous turfing over Geo-textile fabric inevitable/necessary).	Sqm	106121.80				
29	29	29	Earth work by manual labour, in all kinds of soil in removing the cross bundh/ ring bundh, including all leads and lifts complete and placing the spoils to a safe distance, (minimun 15m apart from the bank) as per direction of Engineer in charge.	Cum	13012.80				
30	30	30	Extra Rate for Carriage of Dredged earth/ Excavated earth or shifting of earth by dump truck including loading, unloading complete as per direction of Engineer in charge. Carriage by Dump Truck: Up to 1.0 km	Cum	9000.00				
31	31	31	Preparetion of mobilization of the site for construction of submersoble embankment or other structural components in c/w``Haor Flood Management and Livelihood Improvement Project (BWDB part) as per Technical	Item	1				

			Specifications, including land lease, rental charges, obtaining permissions for work, developing work area, preparation of platform for temporary semi pucca site office (40sqm), CI sheet labor sheds (200sqm), CI sheet stores (200 sqm), supply of wooden & cane seated furniture etc. as per specified and as per Contractor's method Statement and as per direction of Engineer in Charge.						
32	32	32	Providing and maintaining adequate portable water supply by installing 4 nos. of tube well and sanitation facilities by installing 6 nos. of sanitary latrines for usage of labours, Officials and others for prevailing the hygenic and healthy environment at allover the working sithe as per direction of the engineer in charge.	Item	1				
33	33	33	Operate, maintain of plant and equipment such as generator for site electrification for the purpose stated in the technical specification and Contractor's Method Statement and as per direction of Engineer in Charge.	Item	1				
34	34	34	Provide and maintain 1 (one) no. engine boat with boatmen having sun and rainproof cover to facilitate supervision by the Engineer/Engineer's Representative during whole construction period of the work as per Technical Specification, Contractor's Method statement and as per direction of Engineer in charge	Days	120.00				
35	35	35	Mobilize, Strengthen required land based construction	Item	1				

			equipment such as excavator, dump truck, chain dozer, vibro-compactor and plants such as generator for site electrification, digital camera for taking photographs and digital vedio camera for recording/Taking Photograph as sequences of works etc for keeping records of the works by providing following information including transfer to site, complete for the purpose stated in the technical specification and Contractor's Method Statement and as per direction of Engineer -in-Charge						
36	36	36	Demobilization and clean-up of the site upon completion of the works, as per Technical Specification, Contractor's Method Statement and as per direction of Engineer in Charge.	Item	1				
37	37	37	Environmental Monitoring through Sample Collection and analysis such as Air quality test, Surface water test, Sound Level monitoring, Traffic signs and road navigation, safety provisions with first aid and medical Assistant as per direction of Engineer in charge.	Item	1				
							Grand Total :		

Schedule of Day works

Table Name : .

Item no.	Group	Item Code (if any)	Description of Item	Measurement Unit	Nominal Quantity	Unit Price in Figures (BDT)	Unit Price in Words (BDT)	Total Price in Figures (BDT)	Total Price in Words (BDT)
1	1	1	N/A	N/A	1				

							Grand Total :		

Unconditional Discount Form

Table Name : Unconditional Discount

Discount in Percentage (%)[In figure]	Discount in Percentage (%) [In word]