Individual Report

Tender/Proposal Detail			
Tender/Proposal ID :	143780	**Invitation Reference No. :**	BWDB/Kishore/T-1/6591 Date: 30/11/2017
Closing Date and Time :	04-Jan-2018 14:40	**Opening Date and Time :**	04-Jan-2018 14:40
Procuring Entity :	Kishoreganj WD Division		
Brief :	WDB/Kish/HFMLIP/PW-20 Construction of 1 Causeway-4 nos a Chhitra Khal 4.00m at km 21.77 of Nunnir Haor b Nabinpur Khal 4.00m at km 23.38 of Noapara Haor c Dipjuri Khal 4.0m at km 27.00 of Boro Haor d Sudhi Khal 4.00m at km 33.30 of Boro Haor 2Box sluice/Dranage Culvert- 4 nos a Chhagalia khal at km 10.48 of Noapara haor b Near Nasir at km 7.74 of Nunnir haor c Singhpur khal at km 11.17 of Noapara haor d Goru Chara Khal at km. 10.00 of Boro Haor 3 Irrigation Inlet structure-36 nos in different placess in Noapara haor Nunnir haor & Boro haor in c/w Haor Flood Management and Livelihood Improved Improvement ProjectBWDB Part under Kishoregange WD Division BWDB Kishoregonj during the FY 2017-18 & 2018-19. Package No. WDB/Kish/HFMLI/PW-20.		

Package No	Package Description
WDB/Kish/HFMLIP/PW-20	Construction of 1 Causeway-4 nos a Chhitra Khal 4.00m at km 21.77 of Nunnir Haor b Nabinpur Khal 4.00m at km 23.38 of Noapara Haor c Dipjuri Khal 4.0m at km 27.00 of Boro Haor d Sudhi Khal 4.00m at km 33.30 of Boro Haor 2Box sluice/Dranage Culvert- 4 nos a Chhagalia khal at km 10.48 of Noapara haor b Near Nasir at km 7.74 of Nunnir haor c Singhpur khal at km 11.17 of Noapara haor d Goru Chara Khal at km. 10.00 of Boro Haor 3 Irrigation Inlet structure-36 nos in different placess in Noapara haor Nunnir haor & Boro haor in c/w Haor Flood Management and Livelihood Improved Improvement ProjectBWDB Part under Kishoregange WD Division BWDB Kishoregonj during the FY 2017-18 & 2018-19. Package No. WDB/Kish/HFMLI/PW-20.

AKA-UCL (JV)
(JVCA)

Bill Of Quantity -05-(Sudhi khal causeway)

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)
107	04-120	04-120	Construction of B.M. Pillars at site with first class bricks in cement mortar (1:4) of size 38cm x 38cm x 75cm on cement concrete (1:2:4) base of size 50cm x 50cm x 7.5cm with 12mm thick cement plastering (1:2) on exposed surfaces of pillar and cement morter on top (1:2), with inscription of "BWDB" with 25cm of the pillar balow ground level etc. complete including ramming the backfill and the cost of all materials as per direction of Engineer in charge.	each	5.000	1203.771	One Thousand Two Hundred and Three point Seven Seven One	6018.855	Six Thousand AND Eighteen point Eight Five Five
108	04-180	04-180	Site preparation by manually removing all miscellaneous objectional materials form entire site and removing soil upto 15cm depth including uprooting stumps, jungle clearing, levelling dressing etc. complete as per direction of	sqm	9000.000	27.701	Twenty-Seven point Seven Zero One	249309.000	Two Lakh Forty-Nine Thousand Three Hundred and Nine

			Engineer in charge.						
109	12-100	12-100	Installation of pizeometer including supply of 40mm G.I. pipe, brass strainer, socket, labour, by wash boring, lowering, fixing the elevation and providing cover on the top of the well etc. complete as per direction of Engineer in charge.	each	6.000	2584.221	Two Thousand Five Hundred and Eighty-Four point Two Two One	15505.326	Fifteen Thousand Five Hundred and Five point Three Two Six
110	16-310	16-310-10	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/offerdam 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. 16-310-10 : For moving spoil earth upto a distance of 100m from the centre of the pit	cum	2476.976	246.711	Two Hundred and Forty-Six point Seven One One	611097.226	Six Lakh Eleven Thousand AND Ninety-Seven point Two Two Six
111	16-560	16-560-20	Shoring for slope protection of foundation trench, canal, embankment, road, pond etc. as per design slopes, grades including removal of spoils to a safe distance as per direction of Engineer in charge. 16-560-20: By bamboo post of 6.0m length, c/c fixed with nails.	sqm	290.800	837.151	Eight Hundred and Thirty-Seven point One Five One	243443.511	Two Lakh Forty-Three Thousand Four Hundred and Forty-Three point Five One One
112	12-310	12-310-20	Bailing out of water with all leads and lifts by manual labour or pump, with all arrengements for protection of ring bund and side slopes of foundation pit against erosion or washout etc. complete actual volume of work will be measured by sounding method before starting the work) as per direction of Engineer in charge. 12-310-20 : By pump.	cum	50971.286	6.131	Six point One Three One	312504.954	Three Lakh Twelve Thousand Five Hundred and Four point Nine Five Four
113	44-240	44-240-30	Supplying at site U-shape hot rolled steel sheet pile of different section of Phosphorus=0.04%(Maximum), Sulphur = 0.04% (Maximum), Copper= 0.25% (Minimum), Tensile strength=> 490 N/mm2 , Yield strength =>296 N/mm2, Elongation =15% (Minimum) including all taxes, freights, incidental charges etc. complete as per direction of the Engineer -in- charge. 44-240-30 : U-shape, hot-rolled steel sheet pile width= 400mm to 600mm: height=> 100mm, Th.= > 10.5: wt. per sqm of pile wall =>120 kg/m2: sectional modulus per one meter of pile wall width => 874 cm3/m	Mton	14.112	150000.001	One Lakh Fifty Thousand point Zero Zero One	2116800.014	Twenty-One Lakh Sixteen Thousand Eight Hundred point Zero One Four
			Cutting of steel sheet piles to design length and shape as per				Thirty		Two Thousand

114	44-320	44-320-10	design length and shape as per requirement in design and drawing and as per direction of Engineer in charge. 44-320-10 : Upto 10mm thick.	m	66.640	39.161	Thirty-Nine point One Six One	2609.689	Six Hundred and Nine point Six Eight Nine
115	12-300	12-300	Construction of sump well with dug holes of size 1.80 m x 2.0 m, laying in position the perforated empty diesel/petrol drum sheet of 1.00 m dia to a depth 1.5m having slot area of 1000 sq.cm/sqm, slot dia being 30mm each with supply of necessary shrouding materials comprising of 60% 40mm down graded khoa and 40% coarse sand of FM>=2.50 and placing those around and beneath the drum sheet having thickness of 40cm and 50cm respectively including necessary welding, fitting etc. complete as per direction of Engineer in charge.	each	10.000	17211.171	Seventeen Thousand Two Hundred and Eleven point One Seven One	172111.710	One Lakh Seventy-Two Thousand One Hundred and Eleven point Seven One
116	44-270	44-270-20	Driving steel sheet piles of various sections and weights of any type of soil, by monkey hammer including handling and placing in position, staging and supplying of all equipments like monkey hammer, pully, rope, bamboo, bullah etc. including correcting leaning beyond tolerance & other defects and any other incidental cost etc. complete (measurement will be taken on projected width x height) as per direction of Engineer in charge. 44-270-20: U-type or any other type : Upto 4.50 m depth.	sqm	102.900	1250.751	One Thousand Two Hundred and Fifty point Seven Five One	128702.278	One Lakh Twenty-Eight Thousand Seven Hundred and Two point Two Seven Eight
117	72-180	72-180	Painting of steel sheet piles, 2 coats of bitumen paint, including preparation of surface with sand paper, iron brush etc. including the cost of all materials and labour etc. complete as per direction of Engineer in charge.	sqm	399.840	293.331	Two Hundred and Ninety-Three point Three Three One	117285.467	One Lakh Seventeen Thousand Two Hundred and Eighty-Five point Four Six Seven
118	44-310	44-310	Supplying and placing 20mm thick hessian cloth impregnated with bitumen in expansion joints or on top of sheet piles as per specification and direction of Engineer in charge.	sqm	49.980	461.801	Four Hundred and Sixty-One point Eight Zero One	23080.814	Twenty-Three Thousand AND Eighty point Eight One Four
119	44-220	44-220-10	Supplying and laying single layer polythene sheet in floor below cement concrete, RCC slab, on walls etc. complete in all respect as per direction of Engineer in charge. 44-220-10: Weighing minimum 1.0 kg per 6.50 sqm	sqm	249.964	31.221	Thirty-One point Two Two One	7804.126	Seven Thousand Eight Hundred and Four point One Two Six
			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,				Eleven Thousand		Three Lakh Eighty-Eight

120	28-120	28-120-20	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. 28-120-20: With 25mm down graded stone chips.	cum	33.807	11500.001	Thousand Five Hundred point Zero Zero One	388780.534	Thousand Seven Hundred and Eighty point Five Three Four
121	28-100	28-100-20	Cement concrete work in leanest mix. 1:4:8, 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. 28-100-20 : With 25mm down graded stone chips	cum	1.859	11500.001	Eleven Thousand Five Hundred point Zero Zero One	21378.502	Twenty-One Thousand Three Hundred and Seventy-Eight point Five Zero Two
122	28-200	28-200-10	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, 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	cum	166.264	12500.001	Twelve Thousand Five Hundred point Zero Zero One	2078300.166	Twenty Lakh Seventy-Eight Thousand Three Hundred point One Six Six
123	76-120	76-120-10	M.S. Work for reinforcement with deformed M.S. bar, fy=414 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. 76-120-10: 8mm dia to 30mm dia	kg	16297.154	81.001	Eighty-One point Zero Zero One	1320085.771	Thirteen Lakh Twenty Thousand AND Eighty-Five point Seven Seven One
124(a)	36-150	36-150-60	Formwork for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with 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	sqm	201.339	735.351	Seven Hundred and Thirty-Five point Three Five One	148054.835	One Lakh Forty-Eight Thousand AND Fifty-Four point Eight Three Five

			including the cost of all materials as per direction of Engineer in charge. 36-150-60: Footing, footing beams, grade beams, foundation slab with 60-80mm dia barrack bamboo props.						Five
124(b)	36-150	36-150-10	Vertical and inclined walls, columns, piers with 60-80mm dia barrack bamboo props.	sqm	424.300	909.691	Nine Hundred and Nine point Six Nine One	385981.891	Three Lakh Eighty-Five Thousand Nine Hundred and Eighty-One point Eight Nine One
125	16-520	16-520-20	Supplying and filling sand in foundation of hydraulic structures, buildings and in protective works with selected sand, in 150mm thick layer, including levelling, dressing, ramming, watering etc. complete (compacted to 50% relative density by manual labour using mallet/ vibro compactor) as per direction of Engineer in charge. 16-520-20 : sand of FM>=1.50	cum	226.981	921.991	Nine Hundred and Twenty-One point Nine Nine One	209274.439	Two Lakh Nine Thousand Two Hundred and Seventy-Four point Four Three Nine
126(a)	40-610	40-610-20	Supplying and laying dry 1st class or pick jhama chips as filter in two layers (top and bottom) as per specific size, range and gradation, including breaking chips, grading, preparation of surface, compacting each layer etc. complete with supply of all materials and as per direction of Engineer in charge: 40-610-20: Well graded between 40mm to 20mm size.	cum	17.938	3730.471	Three Thousand Seven Hundred and Thirty point Four Seven One	66917.189	Sixty-Six Thousand Nine Hundred and Seventeen point One Eight Nine
126(b)	40-610	40-610-30	Well graded between 20mm to 5mm size. (Combination of sub-item 10 & 30 or 20 & 30 shall be used)	cum	17.938	4076.091	Four Thousand AND Seventy-Six point Zero Nine One	73116.920	Seventy-Three Thousand One Hundred and Sixteen point Nine Two
127(a)	40-140	40-140-50	Manufacturing and supplying C.C. blocks in leanest mix. 1:3:6, with cement, sand (FM>=1.5) and Stone Chips (40mm down graded), to attain a minimum 28 days cylinder strength of 9.0 N/mm² including grading, washing stone chips, mixing, laying in forms, consolidation, curing for at least 21 days, including preparation of platform, shuttering and stacking in measurable stacks etc complete including supply of all materials (steel shutter to be used) as per direction of Engineer in charge.	nos	5710.000	485.001	Four Hundred and Eighty-Five point Zero Zero One	2769355.710	Twenty-Seven Lakh Sixty-Nine Thousand Three Hundred and Fifty-Five point Seven One

			(a) 40-140-50 : block size 30cmx30cmx30cm.						
127(b)	40-140	40-140-40	40-140-40 :block size 40cmx40cmx20cm	nos	1720.000	485.001	Four Hundred and Eighty-Five point Zero Zero One	834201.720	Eight Lakh Thirty-Four Thousand Two Hundred and One point Seven Two
128	40-220	40-220-10	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. 40-220-10 : Within 200 m.	cum	209.219	1250.001	One Thousand Two Hundred and Fifty point Zero Zero One	261523.959	Two Lakh Sixty-One Thousand Five Hundred and Twenty-Three point Nine Five Nine
129	40-600	40-600-20	Supplying and placing non-woven needle punched type geotextile fabric 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 position, providing machine seamed joints (with 100% polypropeline 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, equipments 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 accross the body of the fabric).Supplying and placing non-woven needle punched type geotextile fabric 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 position, providing machine seamed joints (with 100% polypropeline	sqm	318.375	158.661	One Hundred and Fifty-Eight point Six Six One	50513.696	Fifty Thousand Five Hundred and Thirteen point Six Nine Six

			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, equipments 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 accross the body of the fabric). 40-600-20 . Mass =>300 gm/m², thickness(Under 2 kpa pressure) =>2.00 mm, EoS<=0.11mm, strip tensile strength =>15 kn/m, grab strength =>850 N, CBR puncture resistance =>2200 N.						
130	16-140	16-140-10	Earth work by manual labour in resectioning of embankment/ canal bank/ river slopes/ road/ compound etc. manually compacted by 7.0 kg iron rammer to avoid any air pocket in clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) within the initial lead of 30m and all lifts including throwing the spoils to profile in layers not exceeding 150mm thickness with clod breaking to a maximum size of 100mm, removing roots & stumps of trees of girth upto 200mm from the ground, benching the side slopes, stripping/ ploughing the base of embankment and borrowpit areas, dug bailing, bail out of water, rough dressing including 150mm cambering at the centre of the crest (where necessary) etc. complete as per direction of Engineer in charge. 16-140-10: 0 m to 3 m height	cum	4320.000	187.791	One Hundred and Eighty-Seven point Seven Nine One	811257.120	Eight Lakh Eleven Thousand Two Hundred and Fifty-Seven point One Two
131	16-130	16-130	Earth work by manual labour in all kinds of soil in excavation or reexcavation of channels with the initial lead of 30m and lift of 1.5m including levelling, dressing and throwing the spoils to profile with breaking clods, rough dressing, clearing jungles including cutting trees upto 200mm girth, dug bailing etc. complete as per direction of Engineer in charge.	cum	3555.000	142.471	One Hundred and Forty-Two point Four Seven One	506484.405	Five Lakh Six Thousand Four Hundred and Eighty-Four point Four Zero Five
132	16-200	16-200	Extra rate for every additional lift of 1.00 meter part thereof beyond the initial lift of 1.5m (30 cm neglected) for all kinds of earth work. 1 no. lift	plt/cum	3555.000	10.991	Ten point Nine Nine One	39073.005	Thirty-Nine Thousand AND Seventy-Three point Zero Zero Five

133	16-220	16-220	Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) in construction of cross bundh/ ring bundh 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	2591.824	142.421	One Hundred and Forty-Two point Four Two One	369130.166	Three Lakh Sixty-Nine Thousand One Hundred and Thirty point One Six Six
134	16-190	16-190	Extra rate for every additional lead of 15 m or part thereof beyond the initial lead of 30m up to a maximum of 19 leads (3m neglected) for all kinds of earth work 1 no lead	pld/cum	2591.824	14.571	Fourteen point Five Seven One	37765.468	Thirty-Seven Thousand Seven Hundred and Sixty-Five point Four Six Eight
135	04-280	04-280-10	Constructing at site, cement mortar gauge on masonry wall, including engraving in meter, decimeter & centimeter, painting and figuring with black and red water proof paint, etc. complete as per direction of Engineer in charge. 04-280-10: 150mm x 25mm	m	5.000	44.731	Forty-Four point Seven Three One	223.655	Two Hundred and Twenty-Three point Six Five Five
136	16-240	16-240	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	82.480	142.471	One Hundred and Forty-Two point Four Seven One	11751.008	Eleven Thousand Seven Hundred and Fifty-One point Zero Zero Eight
137	16-540	16-540-20	Back filling in hydraulic structures including all leads and lifts in 150mm layer including watering, ramming, compacting to 30% relative density etc. complete by compactor or any other suitable method as per direction of Engineer in charge. 16-540-20 : Sand of FM>=0.80	cum	606.870	757.751	Seven Hundred and Fifty-Seven point Seven Five One	459856.349	Four Lakh Fifty-Nine Thousand Eight Hundred and Fifty-Six point Three Four Nine
138	16-530	16-530	Back filling in hydraulic structures and slope building in protective works including all leads and lifts with selected local soil in layer of 150mm including watering, ramming etc. complete compacted to 20% relative density by compactor or any other suitable method as per direction ofEngineer in charge.	cum	630.972	159.491	One Hundred and Fifty-Nine point Four Nine One	100634.355	One Lakh Six Hundred and Thirty-Four point Three Five Five
139	48-100	48-100	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,	sqm	1450.000	26.171	Twenty-Six point One	37947.950	Thirty-Seven Thousand Nine Hundred

	100	100	watering until the turf grows properly, maintaining etc. complete (measurment will be given on well grown grass only), as per direction of Engineer in charge.				Seven One		and Forty-Seven point Nine Five
							Grand Total:	14987881.783	One Crore Forty-Nine Lakh Eighty-Seven Thousand Eight Hundred and Eighty-One point Seven Eight Three

This Bill Of Quantity -05-(Sudhi khal causeway) is Electronically Signed by Mr. Md Ali on behalf of AKA-UCL (JV)

Ashim Singh-M/S Subroto Suttradhar-M/S Pritom Enterprise (JV)
(JVCA)

Bill Of Quantity -05-(Sudhi khal causeway)

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108	04-180	04-180	Site preparation by manually removing all miscellaneous objectional materials form entire site and removing soil upto 15cm depth including uprooting stumps, jungle clearing, levelling dressing etc. complete as per direction of Engineer in charge.	sqm	9000.000	27.721	Twenty-Seven point Seven Two One	249489.000	Two Lakh Forty-Nine Thousand Four Hundred and Eighty-Nine
109	12-100	12-100	Installation of pizeometer including supply of 40mm G.I. pipe, brass strainer, socket, labour, by wash boring, lowering, fixing the elevation and providing cover on the top of the well etc. complete as per direction of Engineer in charge.	each	6.000	2584.221	Two Thousand Five Hundred and Eighty-Four point Two Two One	15505.326	Fifteen Thousand Five Hundred and Five point Three Two Six

110	16-310	16-310-10	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/offerdam 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. 16-310-10 : For moving spoil earth upto a distance of 100m from the centre of the pit	cum	2476.976	246.711	Two Hundred and Forty-Six point Seven One One	611097.226	Six Lakh Eleven Thousand AND Ninety-Seven point Two Two Six
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			Construction of sump well with dug holes of size 1.80 m x 2.0 m, laying in position the perforated empty diesel/petrol drum sheet of 1.00 m dia to a depth 1.5m having slot area of				Seventeen		One Lakh Seventy-

115	12-300	12-300	depth 1.5m having slot area of 1000 sq.cm/sqm, slot dia being 30mm each with supply of necessary shrouding materials comprising of 60% 40mm down graded khoa and 40% coarse sand of FM>=2.50 and placing those around and beneath the drum sheet having thickness of 40cm and 50cm respectively including necessary welding, fitting etc. complete as per direction of Engineer in charge.	each	10.000	17211.171	Thousand Two Hundred and Eleven point One Seven One	172111.710	Two Thousand One Hundred and Eleven point Seven One
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118	44-310	44-310	Supplying and placing 20mm thick hessian cloth impregnated with bitumen in expansion joints or on top of sheet piles as per specification and direction of Engineer in charge.	sqm	49.980	461.811	Four Hundred and Sixty-One point Eight One One	23081.314	Twenty-Three Thousand AND Eighty-One point Three One Four
119	44-220	44-220-10	Supplying and laying single layer polythene sheet in floor below cement concrete, RCC slab, on walls etc. complete in all respect as per direction of Engineer in charge. 44-220-10: Weighing minimum 1.0 kg per 6.50 sqm	sqm	249.964	31.221	Thirty-One point Two Two One	7804.126	Seven Thousand Eight Hundred and Four point One Two Six
120	28-120	28-120-20	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. 28-120-20: With 25mm down graded stone chips.	cum	33.807	10954.481	Ten Thousand Nine Hundred and Fifty-Four point Four Eight One	370338.139	Three Lakh Seventy Thousand Three Hundred and Thirty-Eight point One Three Nine
			Cement concrete work in						

121	28-100	28-100-20	leanest mix. 1:4:8, 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. 28-100-20 : With 25mm down graded stone chips	cum	1.859	10601.191	Ten Thousand Six Hundred and One point One Nine One	19707.614	Nineteen Thousand Seven Hundred and Seven point Six One Four
122	28-200	28-200-10	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, 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	cum	166.264	11674.491	Eleven Thousand Six Hundred and Seventy-Four point Four Nine One	1941047.572	Nineteen Lakh Forty-One Thousand AND Forty-Seven point Five Seven Two
123	76-120	76-120-10	M.S. Work for reinforcement with deformed M.S. bar, fy=414 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. 76-120-10: 8mm dia to 30mm dia	kg	16297.154	77.341	Seventy-Seven point Three Four One	1260438.188	Twelve Lakh Sixty Thousand Four Hundred and Thirty-Eight point One Eight Eight
124(a)	36-150	36-150-60	Formwork for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with 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 charge. 36-150-60: Footing, footing beams, grade beams, foundation slab with 60-80mm dia barrack bamboo props.	sqm	201.339	735.351	Seven Hundred and Thirty-Five point Three Five One	148054.835	One Lakh Forty-Eight Thousand AND Fifty-Four point Eight Three Five
									Three Lakh Eighty-

124(b)	36-150	36-150-10	Vertical and inclined walls, columns, piers with 60-80mm dia barrack bamboo props.	sqm	424.300	909.691	Nine Hundred and Nine point Six Nine One	385981.891	Five Thousand Nine Hundred and Eighty-One point Eight Nine One
125	16-520	16-520-20	Supplying and filling sand in foundation of hydraulic structures, buildings and in protective works with selected sand, in 150mm thick layer, including levelling, dressing, ramming, watering etc. complete (compacted to 50% relative density by manual labour using mallet/ vibro compactor) as per direction of Engineer in charge. 16-520-20 : sand of FM>=1.50	cum	226.981	1420.061	One Thousand Four Hundred and Twenty point Zero Six One	322326.866	Three Lakh Twenty-Two Thousand Three Hundred and Twenty-Six point Eight Six Six
126(a)	40-610	40-610-20	Supplying and laying dry 1st class or pick jhama chips as filter in two layers (top and bottom) as per specific size, range and gradation, including breaking chips, grading, preparation of surface, compacting each layer etc. complete with supply of all materials and as per direction of Engineer in charge: 40-610-20: Well graded between 40mm to 20mm size.	cum	17.938	3730.471	Three Thousand Seven Hundred and Thirty point Four Seven One	66917.189	Sixty-Six Thousand Nine Hundred and Seventeen point One Eight Nine
126(b)	40-610	40-610-30	Well graded between 20mm to 5mm size. (Combination of sub-item 10 & 30 or 20 & 30 shall be used)	cum	17.938	4076.091	Four Thousand AND Seventy-Six point Zero Nine One	73116.920	Seventy-Three Thousand One Hundred and Sixteen point Nine Two
127(a)	40-140	40-140-50	Manufacturing and supplying C.C. blocks in leanest mix. 1:3:6, with cement, sand (FM>=1.5) and Stone Chips (40mm down graded), to attain a minimum 28 days cylinder strength of 9.0 N/mm² including grading, washing stone chips, mixing, laying in forms, consolidation, curing for at least 21 days, including preparation of platform, shuttering and stacking in measurable stacks etc complete including supply of all materials (steel shutter to be used) as per direction of Engineer in charge. (a) 40-140-50 : block size 30cmx30cmx30cm.	nos	5710.000	317.011	Three Hundred and Seventeen point Zero One One	1810132.810	Eighteen Lakh Ten Thousand One Hundred and Thirty-Two point Eight One
127(b)	40-140	40-140-40	40-140-40 :block size 40cmx40cmx20cm	nos	1720.000	381.461	Three Hundred and Eighty-One point Four Six One	656112.920	Six Lakh Fifty-Six Thousand One Hundred and Twelve point Nine

									Two
128	40-220	40-220-10	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. 40-220-10 : Within 200 m.	cum	209.219	1145.881	One Thousand One Hundred and Forty-Five point Eight Eight One	239740.077	Two Lakh Thirty-Nine Thousand Seven Hundred and Forty point Zero Seven Seven
129	40-600	40-600-20	Supplying and placing non-woven needle punched type geotextile fabric 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 position, providing machine seamed joints (with 100% polypropeline 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, equipments 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 accross the body of the fabric).Supplying and placing non-woven needle punched type geotextile fabric 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 position, providing machine seamed joints (with 100% polypropeline 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, equipments etc. complete as per direction of Engineer in charge. (Geotextile delivered at site should be certified by ISO and	sqm	318.375	190.471	One Hundred and Ninety point Four Seven One	60641.205	Sixty Thousand Six Hundred and Forty-One point Two Zero Five

			clearly labelled with brand name and grade printed at regular intervals accross the body of the fabric). 40-600-20 . Mass =>300 gm/m², thickness(Under 2 kpa pressure) =>2.00 mm, EoS<=0.11mm, strip tensile strength =>15 kn/m, grab strength =>850 N, CBR puncture resistance =>2200 N.						
130	16-140	16-140-10	Earth work by manual labour in resectioning of embankment/ canal bank/ river slopes/ road/ compound etc. manually compacted by 7.0 kg iron rammer to avoid any air pocket in clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) within the initial lead of 30m and all lifts including throwing the spoils to profile in layers not exceeding 150mm thickness with clod breaking to a maximum size of 100mm, removing roots & stumps of trees of girth upto 200mm from the ground, benching the side slopes, stripping/ ploughing the base of embankment and borrowpit areas, dug bailing, bail out of water, rough dressing including 150mm cambering at the centre of the crest (where necessary) etc. complete as per direction of Engineer in charge. 16-140-10: 0 m to 3 m height	cum	4320.000	155.001	One Hundred and Fifty-Five point Zero Zero One	669604.320	Six Lakh Sixty-Nine Thousand Six Hundred and Four point Three Two
131	16-130	16-130	Earth work by manual labour in all kinds of soil in excavation or reexcavation of channels with the initial lead of 30m and lift of 1.5m including levelling, dressing and throwing the spoils to profile with breaking clods, rough dressing, clearing jungles including cutting trees upto 200mm girth, dug bailing etc. complete as per direction of Engineer in charge.	cum	3555.000	130.001	One Hundred and Thirty point Zero Zero One	462153.555	Four Lakh Sixty-Two Thousand One Hundred and Fifty-Three point Five Five Five
132	16-200	16-200	Extra rate for every additional lift of 1.00 meter part thereof beyond the initial lift of 1.5m (30 cm neglected) for all kinds of earth work. 1 no. lift	plt/cum	3555.000	10.991	Ten point Nine Nine One	39073.005	Thirty-Nine Thousand AND Seventy-Three point Zero Zero Five
133	16-220	16-220	Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) in construction of cross bundh/ ring bundh 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	cum	2591.824	142.421	One Hundred and Forty-Two point Four Two One	369130.166	Three Lakh Sixty-Nine Thousand One Hundred and Thirty point One Six Six

			per direction of Engineer in charge.						
134	16-190	16-190	Extra rate for every additional lead of 15 m or part thereof beyond the initial lead of 30m up to a maximum of 19 leads (3m neglected) for all kinds of earth work 1 no lead	pld/cum	2591.824	14.571	Fourteen point Five Seven One	37765.468	Thirty-Seven Thousand Seven Hundred and Sixty-Five point Four Six Eight
135	04-280	04-280-10	Constructing at site, cement mortar gauge on masonry wall, including engraving in meter, decimeter & centimeter, painting and figuring with black and red water proof paint, etc. complete as per direction of Engineer in charge. 04-280-10: 150mm x 25mm	m	5.000	77.731	Seventy-Seven point Seven Three One	388.655	Three Hundred and Eighty-Eight point Six Five Five
136	16-240	16-240	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	82.480	142.471	One Hundred and Forty-Two point Four Seven One	11751.008	Eleven Thousand Seven Hundred and Fifty-One point Zero Zero Eight
137	16-540	16-540-20	Back filling in hydraulic structures including all leads and lifts in 150mm layer including watering, ramming, compacting to 30% relative density etc. complete by compactor or any other suitable method as per direction of Engineer in charge. 16-540-20 : Sand of FM>=0.80	cum	606.870	600.001	Six Hundred point Zero Zero One	364122.607	Three Lakh Sixty-Four Thousand One Hundred and Twenty-Two point Six Zero Seven
138	16-530	16-530	Back filling in hydraulic structures and slope building in protective works including all leads and lifts with selected local soil in layer of 150mm including watering, ramming etc. complete compacted to 20% relative density by compactor or any other suitable method as per direction ofEngineer in charge.	cum	630.972	159.491	One Hundred and Fifty-Nine point Four Nine One	100634.355	One Lakh Six Hundred and Thirty-Four point Three Five Five
139	48-100	48-100	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 (measurment will be given on well grown grass only), as per direction of Engineer in charge.	sqm	1450.000	26.171	Twenty-Six point One Seven One	37947.950	Thirty-Seven Thousand Nine Hundred and Forty-Seven point Nine Five
									One Crore Thirty-Three Lakh Eighty-Four

							Grand Total:	13384721.704	Four Thousand Seven Hundred and Twenty-One point Seven Zero Four

This Bill Of Quantity -05-(Sudhi khal causeway) is Electronically Signed by Mr. Ashim on behalf of Ashim Singh-M/S Subroto Suttradhar-M/S Pritom Enterprise (JV)

M/S. BHAWAL CONSTRUCTION

Bill Of Quantity -05-(Sudhi khal causeway)

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)
107	04-120	04-120	Construction of B.M. Pillars at site with first class bricks in cement mortar (1:4) of size 38cm x 38cm x 75cm on cement concrete (1:2:4) base of size 50cm x 50cm x 7.5cm with 12mm thick cement plastering (1:2) on exposed surfaces of pillar and cement morter on top (1:2), with inscription of "BWDB" with 25cm of the pillar balow ground level etc. complete including ramming the backfill and the cost of all materials as per direction of Engineer in charge.	each	5.000	1203.771	One Thousand Two Hundred and Three point Seven Seven One	6018.855	Six Thousand AND Eighteen point Eight Five Five
108	04-180	04-180	Site preparation by manually removing all miscellaneous objectional materials form entire site and removing soil upto 15cm depth including uprooting stumps, jungle clearing, levelling dressing etc. complete as per direction of Engineer in charge.	sqm	9000.000	27.721	Twenty-Seven point Seven Two One	249489.000	Two Lakh Forty-Nine Thousand Four Hundred and Eighty-Nine
109	12-100	12-100	Installation of pizeometer including supply of 40mm G.I. pipe, brass strainer, socket, labour, by wash boring, lowering, fixing the elevation and providing cover on the top of the well etc. complete as per direction of Engineer in charge.	each	6.000	2584.221	Two Thousand Five Hundred and Eighty-Four point Two Two One	15505.326	Fifteen Thousand Five Hundred and Five point Three Two Six
110	16-310	16-310-10	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/offerdam 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. 16-310-10 : For moving spoil earth upto a distance of 100m	cum	2476.976	246.711	Two Hundred and Forty-Six point Seven One One	611097.226	Six Lakh Eleven Thousand AND Ninety-Seven point Two Two Six

			from the centre of the pit						
111	16-560	16-560-20	Shoring for slope protection of foundation trench, canal, embankment, road, pond etc. as per design slopes, grades including removal of spoils to a safe distance as per direction of Engineer in charge. 16-560-20: By bamboo post of 6.0m length, c/c fixed with nails.	sqm	290.800	837.151	Eight Hundred and Thirty-Seven point One Five One	243443.511	Two Lakh Forty-Three Thousand Four Hundred and Forty-Three point Five One One
112	12-310	12-310-20	Bailing out of water with all leads and lifts by manual labour or pump, with all arrengements for protection of ring bund and side slopes of foundation pit against erosion or washout etc. complete actual volume of work will be measured by sounding method before starting the work) as per direction of Engineer in charge. 12-310-20 : By pump.	cum	50971.286	6.131	Six point One Three One	312504.954	Three Lakh Twelve Thousand Five Hundred and Four point Nine Five Four
113	44-240	44-240-30	Supplying at site U-shape hot rolled steel sheet pile of different section of Phosphorus=0.04%(Maximum), Sulphur = 0.04% (Maximum), Copper= 0.25% (Minimum), Tensile strength=> 490 N/mm2 , Yield strength =>296 N/mm2, Elongation =15% (Minimum) including all taxes, freights, incidental charges etc. complete as per direction of the Engineer -in- charge. 44-240-30 : U-shape, hot-rolled steel sheet pile width= 400mm to 600mm: height=> 100mm, Th.= > 10.5: wt. per sqm of pile wall =>120 kg/m2: sectional modulus per one meter of pile wall width => 874 cm3/m	Mton	14.112	145120.531	One Lakh Forty-Five Thousand One Hundred and Twenty point Five Three One	2047940.933	Twenty Lakh Forty-Seven Thousand Nine Hundred and Forty point Nine Three Three
114	44-320	44-320-10	Cutting of steel sheet piles to design length and shape as per requirement in design and drawing and as per direction of Engineer in charge. 44-320-10 : Upto 10mm thick.	m	66.640	39.161	Thirty-Nine point One Six One	2609.689	Two Thousand Six Hundred and Nine point Six Eight Nine
115	12-300	12-300	Construction of sump well with dug holes of size 1.80 m x 2.0 m, laying in position the perforated empty diesel/petrol drum sheet of 1.00 m dia to a depth 1.5m having slot area of 1000 sq.cm/sqm, slot dia being 30mm each with supply of necessary shrouding materials comprising of 60% 40mm down graded khoa and 40% coarse sand of FM>=2.50 and placing those around and beneath the drum sheet having thickness of 40cm and 50cm respectively including necessary welding, fitting etc. complete as per direction of Engineer in charge.	each	10.000	17211.171	Seventeen Thousand Two Hundred and Eleven point One Seven One	172111.710	One Lakh Seventy-Two Thousand One Hundred and Eleven point Seven One
			Driving steel sheet piles of various sections and weights of						

116	44-270	44-270-20	any type of soil, by monkey hammer including handling and placing in position, staging and supplying of all equipments like monkey hammer, pully, rope, bamboo, bullah etc. including correcting leaning beyond tolerance & other defects and any other incidental cost etc. complete (measurement will be taken on projected width x height) as per direction of Engineer in charge. 44-270-20: U-type or any other type : Upto 4.50 m depth.	sqm	102.900	1250.751	One Thousand Two Hundred and Fifty point Seven Five One	128702.278	One Lakh Twenty-Eight Thousand Seven Hundred and Two point Two Seven Eight
117	72-180	72-180	Painting of steel sheet piles, 2 coats of bitumen paint, including preparation of surface with sand paper, iron brush etc. including the cost of all materials and labour etc. complete as per direction of Engineer in charge.	sqm	399.840	293.331	Two Hundred and Ninety-Three point Three Three One	117285.467	One Lakh Seventeen Thousand Two Hundred and Eighty-Five point Four Six Seven
118	44-310	44-310	Supplying and placing 20mm thick hessian cloth impregnated with bitumen in expansion joints or on top of sheet piles as per specification and direction of Engineer in charge.	sqm	49.980	461.801	Four Hundred and Sixty-One point Eight Zero One	23080.814	Twenty-Three Thousand AND Eighty point Eight One Four
119	44-220	44-220-10	Supplying and laying single layer polythene sheet in floor below cement concrete, RCC slab, on walls etc. complete in all respect as per direction of Engineer in charge. 44-220-10: Weighing minimum 1.0 kg per 6.50 sqm	sqm	249.964	31.221	Thirty-One point Two Two One	7804.126	Seven Thousand Eight Hundred and Four point One Two Six
120	28-120	28-120-20	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. 28-120-20: With 25mm down graded stone chips.	cum	33.807	10954.481	Ten Thousand Nine Hundred and Fifty-Four point Four Eight One	370338.139	Three Lakh Seventy Thousand Three Hundred and Thirty-Eight point One Three Nine
121	28-100	28-100-20	Cement concrete work in leanest mix. 1:4:8, 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. 28-100-20 : With 25mm down graded stone chips	cum	1.859	10601.191	Ten Thousand Six Hundred and One point One Nine One	19707.614	Nineteen Thousand Seven Hundred and Seven point Six One Four
			Reinforced cement concrete						

122	28-200	28-200-10	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, 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	cum	166.264	11674.491	Eleven Thousand Six Hundred and Seventy-Four point Four Nine One	1941047.572	Nineteen Lakh Forty-One Thousand AND Forty-Seven point Five Seven Two
123	76-120	76-120-10	M.S. Work for reinforcement with deformed M.S. bar, fy=414 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. 76-120-10: 8mm dia to 30mm dia	kg	16297.154	77.341	Seventy-Seven point Three Four One	1260438.188	Twelve Lakh Sixty Thousand Four Hundred and Thirty-Eight point One Eight Eight
124(a)	36-150	36-150-60	Formwork for centering and water tight shuttering as per drawing with 14 BWG M.S. sheet, fitted and fixed with 40mmx40mmx6mm M.S. angle frame and 25mmx6mm F.I. bar stiffener, with 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 charge. 36-150-60: Footing, footing beams, grade beams, foundation slab with 60-80mm dia barrack bamboo props.	sqm	201.339	735.351	Seven Hundred and Thirty-Five point Three Five One	148054.835	One Lakh Forty-Eight Thousand AND Fifty-Four point Eight Three Five
124(b)	36-150	36-150-10	Vertical and inclined walls, columns, piers with 60-80mm dia barrack bamboo props.	sqm	424.300	909.691	Nine Hundred and Nine point Six Nine One	385981.891	Three Lakh Eighty-Five Thousand Nine Hundred and Eighty-One point Eight Nine One
16	16-		Supplying and filling sand in foundation of hydraulic structures, buildings and in protective works with selected sand, in 150mm thick layer, including levelling, dressing,				One Thousand Four Hundred		Three Lakh Twenty-Two Thousand Three

125	16-520	520-20	ramming, watering etc. complete (compacted to 50% relative density by manual labour using mallet/ vibro compactor) as per direction of Engineer in charge. 16-520-20 : sand of FM>=1.50	cum	226.981	1420.061	Hundred and Twenty point Zero Six One	322326.866	Three Hundred and Twenty-Six point Eight Six Six
126(a)	40-610	40-610-20	Supplying and laying dry 1st class or pick jhama chips as filter in two layers (top and bottom) as per specific size, range and gradation, including breaking chips, grading, preparation of surface, compacting each layer etc. complete with supply of all materials and as per direction of Engineer in charge: 40-610-20: Well graded between 40mm to 20mm size.	cum	17.938	3730.471	Three Thousand Seven Hundred and Thirty point Four Seven One	66917.189	Sixty-Six Thousand Nine Hundred and Seventeen point One Eight Nine
126(b)	40-610	40-610-30	Well graded between 20mm to 5mm size. (Combination of sub-item 10 & 30 or 20 & 30 shall be used)	cum	17.938	4076.091	Four Thousand AND Seventy-Six point Zero Nine One	73116.920	Seventy-Three Thousand One Hundred and Sixteen point Nine Two
127(a)	40-140	40-140-50	Manufacturing and supplying C.C. blocks in leanest mix. 1:3:6, with cement, sand (FM>=1.5) and Stone Chips (40mm down graded), to attain a minimum 28 days cylinder strength of 9.0 N/mm² including grading, washing stone chips, mixing, laying in forms, consolidation, curing for at least 21 days, including preparation of platform, shuttering and stacking in measurable stacks etc complete including supply of all materials (steel shutter to be used) as per direction of Engineer in charge. (a) 40-140-50 : block size 30cmx30cmx30cm.	nos	5710.000	317.011	Three Hundred and Seventeen point Zero One One	1810132.810	Eighteen Lakh Ten Thousand One Hundred and Thirty-Two point Eight One
127(b)	40-140	40-140-40	40-140-40 :block size 40cmx40cmx20cm	nos	1720.000	381.461	Three Hundred and Eighty-One point Four Six One	656112.920	Six Lakh Fifty-Six Thousand One Hundred and Twelve point Nine Two
128	40-220	40-220-10	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. 40-220-10 : Within 200 m.	cum	209.219	1145.881	One Thousand One Hundred and Forty-Five point Eight Eight One	239740.077	Two Lakh Thirty-Nine Thousand Seven Hundred and Forty point Zero Seven Seven
			Supplying and placing non-woven needle punched type geotextile fabric as filter						

129	40-600	40-600-20	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 position, providing machine seamed joints (with 100% polypropeline 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, equipments 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 accross the body of the fabric).Supplying and placing non-woven needle punched type geotextile fabric 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 position, providing machine seamed joints (with 100% polypropeline 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, equipments 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 accross the body of the fabric). 40-600-20 . Mass =>300 gm/m², thickness(Under 2 kpa pressure) =>2.00 mm, EoS<=0.11mm, strip tensile strength =>15 kn/m, grab strength =>850 N, CBR puncture resistance =>2200 N.	sqm	318.375	190.471	One Hundred and Ninety point Four Seven One	60641.205	Sixty Thousand Six Hundred and Forty-One point Two Zero Five
			Earth work by manual labour in resectioning of embankment/							

130	16-140	16-140-10	canal bank/ river slopes/ road/ compound etc. manually compacted by 7.0 kg iron rammer to avoid any air pocket in clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) within the initial lead of 30m and all lifts including throwing the spoils to profile in layers not exceeding 150mm thickness with clod breaking to a maximum size of 100mm, removing roots & stumps of trees of girth upto 200mm from the ground, benching the side slopes, stripping/ ploughing the base of embankment and borrowpit areas, dug bailing, bail out of water, rough dressing including 150mm cambering at the centre of the crest (where necessary) etc. complete as per direction of Engineer in charge. 16-140-10: 0 m to 3 m height	cum	4320.000	187.791	One Hundred and Eighty-Seven point Seven Nine One	811257.120	Eight Lakh Eleven Thousand Two Hundred and Fifty-Seven point One Two
131	16-130	16-130	Earth work by manual labour in all kinds of soil in excavation or reexcavation of channels with the initial lead of 30m and lift of 1.5m including levelling, dressing and throwing the spoils to profile with breaking clods, rough dressing, clearing jungles including cutting trees upto 200mm girth, dug bailing etc. complete as per direction of Engineer in charge.	cum	3555.000	142.471	One Hundred and Forty-Two point Four Seven One	506484.405	Five Lakh Six Thousand Four Hundred and Eighty-Four point Four Zero Five
132	16-200	16-200	Extra rate for every additional lift of 1.00 meter part thereof beyond the initial lift of 1.5m (30 cm neglected) for all kinds of earth work. 1 no. lift	plt/cum	3555.000	10.991	Ten point Nine Nine One	39073.005	Thirty-Nine Thousand AND Seventy-Three point Zero Zero Five
133	16-220	16-220	Earth work by manual labour with clayey soil (minimum 30% clay, 0-40% silt and 0-30% sand) in construction of cross bundh/ ring bundh 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	2591.824	142.421	One Hundred and Forty-Two point Four Two One	369130.166	Three Lakh Sixty-Nine Thousand One Hundred and Thirty point One Six Six
134	16-190	16-190	Extra rate for every additional lead of 15 m or part thereof beyond the initial lead of 30m up to a maximum of 19 leads (3m neglected) for all kinds of earth work 1 no lead	pld/cum	2591.824	14.571	Fourteen point Five Seven One	37765.468	Thirty-Seven Thousand Seven Hundred and Sixty-Five point Four Six Eight
			Constructing at site, cement mortar gauge on masonry wall, including engraving in meter				Seventy-		Three Hundred

135	04-280	04-280-10	including engraving in meter, decimeter & centimeter, painting and figuring with black and red water proof paint, etc. complete as per direction of Engineer in charge. 04-280-10: 150mm x 25mm	m	5.000	77.731	Seven point Seven Three One	388.655	Three Hundred and Eighty-Eight point Six Five Five
136	16-240	16-240	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	82.480	142.471	One Hundred and Forty-Two point Four Seven One	11751.008	Eleven Thousand Seven Hundred and Fifty-One point Zero Zero Eight
137	16-540	16-540-20	Back filling in hydraulic structures including all leads and lifts in 150mm layer including watering, ramming, compacting to 30% relative density etc. complete by compactor or any other suitable method as per direction of Engineer in charge. 16-540-20 : Sand of FM>=0.80	cum	606.870	757.751	Seven Hundred and Fifty-Seven point Seven Five One	459856.349	Four Lakh Fifty-Nine Thousand Eight Hundred and Fifty-Six point Three Four Nine
138	16-530	16-530	Back filling in hydraulic structures and slope building in protective works including all leads and lifts with selected local soil in layer of 150mm including watering, ramming etc. complete compacted to 20% relative density by compactor or any other suitable method as per direction ofEngineer in charge.	cum	630.972	159.491	One Hundred and Fifty-Nine point Four Nine One	100634.355	One Lakh Six Hundred and Thirty-Four point Three Five Five
139	48-100	48-100	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 (measurment will be given on well grown grass only), as per direction of Engineer in charge.	sqm	1450.000	26.171	Twenty-Six point One Seven One	37947.950	Thirty-Seven Thousand Nine Hundred and Forty-Seven point Nine Five
							Grand Total:	13666438.596	One Crore Thirty-Six Lakh Sixty-Six Thousand Four Hundred and Thirty-Eight point Five Nine Six

This Bill Of Quantity -05-(Sudhi khal causeway) is Electronically Signed by Mr. FAKHAR UDDIN AHMED on behalf of M/S. BHAWAL CONSTRUCTION