



Project Implementation Unit (PIU)
Khyber Pakhtunkhwa Rural Investment and Institutional
Support Project (KP-RIISP)
Public Health Engineering Department (PHED)
Government of Khyber Pakhtunkhwa (GOKP)

PROCUREMENT OF SMALL WORKS
SANITATION SCHEME - BARA, DISTRICT KHYBER
(RFB No. KH-SNW-02)

BILL OF QUANTITIES (BOQ)

OCTOBER 2026

BILL OF QUANTITIES

Preamble

1. The Bill of Quantities shall be read in conjunction with the Conditions of Contract, Specifications and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work executed and measured by the Contractor and verified by the Engineer and valued at the rates and prices as given in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix as per the Contract.
3. The rates and prices as given in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the Contract include all costs of Contractor's plant, labour, supervision, materials, execution, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract. Furthermore, all duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, as on the date 28 days prior to deadline for submission of Bids, shall be included in the rates and prices and the total Bid Price submitted by the Bidder.
4. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor will have failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
5. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of the Works, or the same shall be determined by the Engineer in accordance with Conditions of Contract.
6. General directions and description of work and materials are not necessarily repeated nor summarized in the Bill of Quantities. References to the relevant sections of the Bidding Documents shall be made before entering prices against each item in the Bill of Quantities.
7. The following abbreviations for units have been used in Bill of Quantities:

Units		Abbreviations
Cubic Meter	=	Cum
Square Meter	=	Sqm
Meter	=	Mtr

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT
PROJECT (KP-RIISP)

SANITATION SCHEME BARA, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-02

SUMMARY OF WORKS

Bill No.	Works Description	Amount (Rs.)
1	EARTH WORKS INCLUDING SCARIFICATION EXCAVATION & BACKFILLING	
2	PIPES, FITTINGS AND MARKER TAPE	
3	CONSTRUCTION OF RCC/BBW MANHOLES & HOUSE CONNECTIONS	
4	ROAD & STREET RESTORATION	
5	REHABILITATION OF DRAINAGE SYSTEM	
6	ANAEROBIC BAFFLED REACTOR (ABR) I/C PLANTATION	
7	NATURE BASE SOLUTION (RAIN BARRELS & BIORETENTION SYSTEM)	
8	E&S COMPLIANCE	
9	UTILITY DIVERSION	
Total Amount		
Total Amount (Millions)		

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME BARA, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-02

BILL OF QUANTITIES

Bill No. 01: EARTH WORKS INCLUDING SCARIFICATION, EXCAVATION & BACKFILLING

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
1.1	Dismantling and removing road metalling	Cum	351.65			
1.2	Saw Cutting of Asphalt/Concrete edges upto required depth	Per Cut	5207.98			
1.3	Dismantling : Plain Cement Concrete 1:2:4	Cum	351.65			
1.4	Dismantling brick work in lime or cement mortar	Cum	351.65			
1.5	Dismantling RCC, separating reinforcement, cleaning & straightening the same	Cum	175.83			
1.6	Excavation in open cut for sewers & manhole except shingle, gravel & rock : Upto 2m	Cum	20892.21			
1.7	Excavation in open cut for sewers & manholes except shingle, gravel & rock : 2m to 5m	Cum	12535.33			
1.8	Earth excavation in open cut upto 1.5m depth for drains, pipes etc & disposal : in Gravel & shingle	Cum	8356.88			
1.9	Structural backfill using Common Material available at site.	Cum	24941.38			
1.10	Structural Backfill using Common Material brought from outside	Cum	6235.34			
1.11	Supplying and filling sand under floor or plugging in wells	Cum	10607.70			
1.12	Transportation of earth all types beyond 250 m and upto 500 m.	Cum	10607.70			
1.13	Transportation of earth all types for every 100m extra lead beyond 500m upto 1.5 km.	Cum	10607.70			
1.14	Difference of Cement OPC/SRC in R.c.c pipe and Concrete works. Cement Brand should be used after approval or directed by the engineers.	Per Bag	37758			
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME BARA, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-02

BILL OF QUANTITIES

Bill No. 02: PIPES, FITTINGS & MARKER TAPE

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
House Connnections Pipes						
2.1	Supplying and Fixing UPVC soil waste and vent pipe class B : 4" dia	M	1912.80			
2.2	Supplying and Fixing UPVC soil waste and vent pipe class B : 6" dia	M	478.20			
Network Pipes						
2.3	Providing and laying R.C.C. pipe, moulded with cement concrete 1:1-1/2:3, with spigot, socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part-I, 1981 Class "L" including carriage, lowering in trenches to correct alignment and grade, jointing, cutting pipe where necessary, finishing and testing, etc. complete:- 6" dia:	M	50.00			
2.4	Providing and laying R.C.C. pipe, moulded with cement concrete 1:1-1/2:3, with spigot, socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part-I, 1981 Class "L" including carriage, lowering in trenches to correct alignment and grade, jointing, cutting pipe where necessary, finishing and testing, etc. complete:- 9" dia:	M	18156.60			
2.5	Providing & laying R.C.C. pipe sewers, moulded with cement concrete 1:1-1/2:3 conforming to ASTM specification C-76-79, Class IV, Wall B, including carriage, lowering in trenches to correct alignment and grade, jointing with rubber ring, cutting pipes where necessary, testing, etc. complete:- 12" i/d, Wall B	M	465.90			
2.6	Providing & laying R.C.C. pipe sewers, moulded with cement concrete 1:1-1/2:3 conforming to ASTM specification C-76-79, Class IV, Wall B, including carriage, lowering in trenches to correct alignment and grade, jointing with rubber ring, cutting pipes where necessary, testing, etc. complete:-15" i/d, Wall B	M	828.20			
2.7	Providing & laying R.C.C. pipe sewers, moulded with cement concrete 1:1-1/2:3 conforming to ASTM specification C-76-79, Class IV, Wall B, including carriage, lowering in trenches to correct alignment and grade, jointing with rubber ring, cutting pipes where necessary, testing, etc. complete:-18" i/d, Wall B	M	669.50			
2.8	Providing & laying R.C.C. pipe sewers, moulded with cement concrete 1:1-1/2:3 conforming to ASTM specification C-76-79, Class IV, Wall B, including carriage, lowering in trenches to correct alignment and grade, jointing with rubber ring,cutting pipes where necessary, testing, etc. complete:-21" i/d, Wall B	M	2741.50			
2.9	Providing and installing, C.I. ventilating shaft painted with bituminous paint with foundation bolts, as per PHED Standard Drawing STD/PD No. 4 of 1977, (except concrete foundation block):- 4" dia complete in all respects as per drawings, Specifications and as instructed by the Engineer.	M	458.23			
2.10	Providing & laying of PVC Marker Tape as per Drawing over all the pipes complete in all respects as per drawings, Specifications and as instructed by the Engineer.	M	22911.70			
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME BARA, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-02

BILL OF QUANTITIES

Bill No. 03: CONSTRUCTION OF RCC/BBW MANHOLES & HOUSE CONNECTIONS

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
BBW Circular Manholes						
3.1	Excavation in open cut for sewers & manholeexcept shingle, gravel & rock : Upto 2m	Cum	9812.37			
3.2	Excavation in open cut for sewers & manholeexcept shingle, gravel & rock : 2m to 5m	Cum	2453.09			
3.3	Lean concrete for use as thin layer under neathfootings with cylinder compressive strength of1423 psi on 28 days.	Cum	803.40			
3.4	Concrete Class A1	Cum	803.45			
3.5	Supply & fabricate M.S. reinforcement for cementconcrete (Hot rolled deformed bars Grade 60)	Tonne	80.34			
3.6	Plain Cement Concrete including placing,compacting, finishing & curing (Ratio 1:3:6)	Cum	203.39			
3.7	1st class brick work other than building upto 10 ft.height : Cement, sand mortar 1:3	Cum	2330.68			
3.8	Cement plaster 1:3 upto 20' height 1/2" thick	Sqm	17013.26			
3.9	Supplying and filling sand under floor or pluggingin wells	Cum	813.56			
3.10	Extra for 1st class brick work in steining of wellsor any other circular masonry.	Cum	2330.68			
3.11	Plain Cement Concrete including placing,compacting, finishing & curing (Ratio 1:2:4)	Cum	4.15			
3.12	Bitumen coating to plastered / cement concretesurface : 14 lbs. per 100 sft.	Sqm	12544.47			
3.13	Supply and Fixing (RPC) Manhole cover & frame (Round shape) Dia of cover : 645mm , Dia of frame : 790mm , clear opening : 600mm with Locking Arrangement	Each	1143			
3.14	Galvanised MS ladder rings 3/4" dia inside and outside water tanks; Each rung of 12" width, 6" projected outside the wall and 6" embeded in RCC on both ends; including all necessary works for complete installation.	Kg	10287			
3.15	Structural Backfill using Common Materialbrought from outside	Cum	332.53			
3.16	Erection and removal of Form work with Plywoodsheets finishing for RCC or Plain cement Concretein any shape - Position / Vertical	Sqm	2912.85			
3.17	Fabrication of heavy steel work with angle, tees,sheet iron etc for making trusses, girders etc	Tonne	2			

Bill No. 03: CONSTRUCTION OF RCC/BBW MANHOLES & HOUSE CONNECTIONS

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
Construction of Backdrop Manhole						
3.18	Excavation in open cut for sewers & manholeexcept shingle, gravel & rock : Upto 2m	Cum	134.16			
3.19	Lean concrete for use as thin layer under neath footings with cylinder compressive strength of 1423 psi on 28 days.	Cum	4.65			
3.20	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Cum	72.79			
3.21	Erection and removal of Form work with Wood Surface Finshing for RCC or Plain cement Concrete in any shape - Position / Vertical	Sqm	673.75			
3.22	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications uPVC Pressure Pipes Class D (12 Bar) except excavation. 10" Nominal Pipe Size (NPS)	M	79.50			
3.23	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications uPVC Pressure Pipes Class D (12 Bar) except excavation. 12" Nominal Pipe Size (NPS)	M	40			
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME BARA, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-02

BILL OF QUANTITIES

Bill No. 04: ROAD & STREET RESTORATION

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
Road Repair						
4.1	Granular Sub Base Using Crushed Stone Aggregate	Cum	732.10			
4.2	Aggregate Base Course	Cum	1098.15			
4.3	Water Bound Macadam Base Course	Cum	1098.15			
4.4	Bitumenous Prime Coat	Sqm	7320.98			
4.5	Asphaltic Wearing Course (Asphalt Batch PlantHot Mixed) i/c Transportation and Finishingcomplete	Cum	366.05			
4.6	Plain Cement Concrete including placing,compacting, finishing & curing (Ratio 1:2:4)	Cum	54.91			
Street Permeable Pavement						
4.7	Earth excavation in open cut upto 3 m depth for drains, pipes etc & disposal : in Ordinary Soil	Cum	1843.55			
4.8	Dressing & levelling earth to designed sectionsAshes, sand, silt or soft soil upto cut or fill 6inches	Cum	2765.33			
4.9	Cement Concrete (brick/stone ballast, 1.5" to2"/nullah shingle well graded and cleaned) infoundation & plinth (Ratio 1:6:12)	Cum	276.53			
4.10	Dismantling : Plain Cement Concrete 1:2:4	Cum	414.80			
4.11	Dismantling brick work in lime or cement mortar	Cum	414.80			
4.12	Dismantling RCC, separating reinforcement,cleaning & straightening the same	Cum	138.27			
4.13	Plain Cement Concrete including placing,compacting, finishing & curing (Ratio 1:4:8)	Cum	47.38			
4.14	Plain Cement Concrete including placing,compacting, finishing & curing (Ratio 1:2:4)	Cum	47.38			
4.15	Providing and Fixing marble strip 2" wide and3/8" thick for dividing the floor into panels	M	62.18			
4.16	Providing and Fixing Precast Concrete 5000 psiTUFF Tiles 60mm thick over bed of 2" thick sand	Sqm	18435.50			
4.17	RCC in roof slab, beam, column & other structuralmembers, insitu or precast. (1:2:4)	Cum	100.81			
4.18	Supply & fabricate M.S. reinforcement for cementconcrete (Hot rolled deformed bars Grade 60)	Tonne	9.50			
4.19	Transportation of earth all types beyond 250 mand upto 500 m.	Cum	967.86			
4.20	Supply and Fixing 120 Litre Dustbin With fixed Hanging Stand with Locking Arrangement	Each	150			
Total Amount						

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SANITATION SCHEME BARA, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-02

BILL OF QUANTITIES

Bill No. 05: REHABILITATION OF DRAINAGE SYSTEM

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
Construction/Rehabilitation of Existing Drain & Access Slabs						
5.1	Earth excavation in open cut upto 3 m depth for drains, pipes etc & disposal : in Ordinary Soil	Cum	4531.48			
5.2	Earth excavation in ashes, sand, shingle & soft soil or silt clearance by mechanical means undressed lead upto 15m.	Cum	4741			
5.3	Dismantling : Plain Cement Concrete 1:2:4	Cum	449.24			
5.4	Dismantling brick work in mud mortar	Cum	289.83			
5.5	Dismantling RCC, separating reinforcement, cleaning & straightening the same	Cum	117.19			
5.6	Granular Backfill	Cum	1152.22			
5.7	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8)	Cum	315.04			
5.8	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4)	Cum	1764.69			
5.9	Erection and removal of Form work with Wood Surface Finshing for RCC or Plain cement Concrete in any shape - Position / Horizontal	Sqm	2137.20			
5.10	Erection and removal of Form work with Wood Surface Finshing for RCC or Plain cement Concrete in any shape - Position / Vertical	Sqm	8216.14			
5.11	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:2:4)	Cum	81.93			
5.12	Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60)	Tonne	6.43			
5.13	Supplying and filling sand under floor or plugging in wells	Cum	342.76			
5.14	Transportation of earth all types beyond 250 mand upto 500 m.	Cum	856.27			
5.15	Cement plaster 1:5, upto 20' height 1/2" thick	Sqm	3823.39			
Provision for Grating						
5.16	Fabrication of heavy steel work with angle, tees,sheet iron etc for making trusses, girders etc	Tonne	17.08			
5.17	Providing and fixing grating in opening includingfixing at site with flat iron 2" x 3/8" and 3/4"round bars at 4" center to center.	Sqm	4298.18			
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME BARA, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-02

BILL OF QUANTITIES

Bill No. 06: ANAEROBIC BAFFLED REACTOR (ABR) I/C PLANTATION

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
Outfall-01						
6.1	Structural Excavation in Common Material by mechanical means	Cum	3436.32			
6.2	Earth excavation in open cut upto 1.5m depth for drains, pipes etc & disposal : in Gravel & shingle	Cum	171.82			
6.3	Lean concrete for use as thin layer under neathfootings with cylinder compressive strength of1423 psi on 28 days.	Cum	57.80			
6.4	RCC in raft foundation slab, base slab of column& ret. wall etc, not including in 06-07-a-01 (1:1:2)	Cum	14			
6.5	Class A3 cement concrete for concrete in pile/foundation slab, base slab of column & ret. wall etc with minimum cylinder compressive strenght 4000 psi on 28 days other than concrete in water and piles with consistency range in slump 100-150 mm with water cement ratio 0.58	Cum	699.98			
6.6	Supply & fabricate M.S. reinforcement for cementconcrete (Hot rolled deformed bars Grade 60)	Tonne	66.50			
6.7	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE) Din-8074/Din-8075/ISO-4427 in trenches, complete in all respects except excavation. (110 mm dia) PN-10	M	797.70			
6.8	Providing, laying, cutting, jointing, testing and disinfecting GI pipeline in trenches, with socket joint, using GI pipes of EN 10255 - 2004 (Medium Approved Quality) including specials etc.Complete as per specifications except excavation. 4" Nominal Pipe Size (NPS)	M	10			
6.9	Providing & laying R.C.C. pipe sewers, moulded with cement concrete 1:1-1/2:3 conforming to ASTM specification C-76-79, Class IV, Wall B, including carriage, lowering in trenches to correct alignment and grade, jointing with rubber ring, cutting pipes where necessary, testing, etc. complete:- 18" i/d, Wall B	M	20			
6.10	Supplying and Fixing C.I. vent pipe for storagetanks including jally etc	M	50			
6.11	Supplying and fixing, cast iron manhole coverwith frame, etc. (Heavey Type) of approvedquality complete. 24" (600 mm) dia.	Each	11			
6.12	Galvanised MS ladder rings 3/4" dia inside and outside water tanks; Each rung of 12" width, 6" projected outside the wall and 6" embeded in RCC on both ends; including all necessary works for complete installation.	Kg	641.43			
6.13	Bitumen coating to plastered / cement concretesurface : 20 lbs. per 100 sft.	Sqm	1624.12			
6.14	Rehandling of earthwork upto a lead of 25 m.	Cum	1718.16			
6.15	Providing and fixing 2" x 1 " Expansion Joint withone component polyurethane fuel sealant including50 mm Baker Rod and one coat of primer butwithout Aluminum or steel cover.	M	20			
6.16	Erection and removal of Form work with Plywoodsheets finishing for RCC or Plain cement Concretein any shpae - Position / Horizontal	Sqm	760.47			

Bill No. 06: ANAEROBIC BAFFLED REACTOR (ABR) I/C PLANTATION

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
6.17	Erection and removal of Form work with Plywoodsheet finishing for RCC or Plain cement Concrete in any shape - Position / Vertical	Sqm	2406.85			
6.18	Providing and fixing sluice valve of BSS quality (BS 5163) and weight Class 'B' for Cast Iron & AC pipe line (including cost of jointing material):- c) 6" (150 mm) dia of Valve	Each	1			
6.19	Supplying and Fixing PVC Water Stopper 8" wide 3/8" thick. Providing and fixing PVC water stopper 8" wide 3/8" thick in verticle (Wall/Column) or horizontal (Floor/Slab) expansion joint including cutting and jointing complete in all respects.	M	296.97			
Plantation (Earthworks)						
6.20	Clearing and Grubbing by mechanical means	Sqm	253.40			
6.21	Levelling, dressing and making lawns	Sqm	253.40			
6.22	Earth fill in lawns including dressing & compaction with suitable earth borrowed.	Cum	253.40			
6.23	Earth fill in lawns including dressing & compaction with earth available from cutting/excavation	Cum	77.20			
6.24	Supplying manure	Cum	77.20			
6.25	Turfing of lawn with Dacca Grass	Sqm	77.20			
6.26	Providing and fixing kerb stone (12"x18"x6") incement sand mortar 1:3 in center media or roundabout as specified.	M	84.50			
6.27	Providing and fixing kerb stone (12"x14"x6") incement sand mortar 1:3 in center media or roundabout as specified.	M	84.50			
Plantation Surrounding ABR						
6.28	Willow (Salix hastate)	Each	23			
6.29	Amaltas (Cassia fistula)	Each	23			
6.30	Lahura (Tecoma undulata)	Each	23			
6.31	Babul (Acacia nilotica)	Each	23			
6.32	Bakain (Melia azedarach)	Each	23			
6.33	Jand (Prosopis cineraria)	Each	23			
6.34	Conocarpus Lancifollius Seedling Height 5 feet	Each	204			
6.35	Nerium Oleander Seedling Height 5 feet	Each	204			
6.36	Ficus Benjamina (Weeping Fig) Seedling Height 3 feet	Each	204			
6.37	Bougainvillea Seedling Height 5 feet	Each	204			
6.38	Euonymous Seedling Height 5 feet	Each	204			
6.39	Narcissus Poeticus	Each	1688			
6.40	Purple Iris	Each	675			
6.41	Roses	Each	844			
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME BARA, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-02

BILL OF QUANTITIES

Bill No. 07: NATURE BASE SOLUTION (RAIN BARRELS & BIORETENTION SYSTEM)

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
Rain Water Harvesting (Rain Barrels)						
7.1	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches(conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bendetc.manufactured by the respective manufacturer complete as per specificationsUPVC Pressure Pipes Class B (6 Bar) except excavation. 4" Nominal Pipe Size (NPS)	M	1488			
7.2	Providing and Fixing Brass peet / gate valve heavy 4" dia	Each	186			
7.3	Supplying and Fixing Polyethylene Water Tankmade from food grade FDA Certified raw material, 3 layers UV stablized, inert with water,anti-fungus and anti-bacterial and have a servicelife of more than 10 years : 1000 gallons(Vertical)	Each	124			
7.4	Wall Mounted Fram for RHT complete in all respects as per drawings, specifications, and satisfaction of the Engineer.	Job	62			
7.5	1st class brick work in ground floor Cement, sand mortar 1:4	Cum	62.21			
7.6	Cement plaster 1:5, upto 20' height 1/2" thick	Sqm	725.69			
7.7	RCC in roof slab, beam, column & other structural members, insitu or precast. (1:1:2)	Cum	27.99			
7.8	Supply & fabricate M.S. reinforcement for cementconcrete (Hot rolled deformed bars Grade 40)	Tonne	3.36			
Bioretention Pond						
7.9	Earth excavation in open cut upto 3 m depth for drains, pipes etc & disposal : in Ordinary Soil	Cum	60.75			
7.10	Grouting stone filling or pitching with bajri	Cum	12.15			
7.11	Provide , Place & compact Coarse Filter (well graded gravel) in chimney drain vertical / horizantol on downstream of fine filter i/c leveling, moistening etc	Cum	12.15			
7.12	Selected Fill Material under Footings	Cum	10.45			
7.13	Supplying and filling sand under floor or pluggingin wells	Cum	12.15			
7.14	Provide , Place & compact shoulder material (sandy / silty gravel) in Dam Embankment, ofspecified grading, leveling/ dressing i/c haulage for obtaining of 95% modified AASHTO drydensity.	Cum	12.15			
7.15	Random rubble masonry in ground floor in cement,sand mortar : Ratio 1:6	Cum	4.86			
7.16	Stone pitching with hammer dressed stone on surface laid in courses including carriage of material with in 91.50 (300 feet) meters.	Cum	3.04			
7.17	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 4" Nominal Pipe Size (NPS)	M	5			

Bill No. 07: NATURE BASE SOLUTION (RAIN BARRELS & BIORETENTION SYSTEM)

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
7.18	Providing, laying, cutting, jointing, testing and disinfecting UPVC perforated pipeline in trenches jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 6" Nominal Pipe Size (NPS)	M	6.60			
7.19	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches(conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bendetc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 10" Nominal Pipe Size (NPS)	M	40			
7.20	Transportation upto 1.5km	Cum	60.75			
7.21	Drilling of Bore holes for tube well in all types of soil and soft rock except hard rock from ground level upto 328 ft depth (0m to 100m), including sinking, collection of 100 % corings andwithdrawing of pipe, complete as per specifications.: Dia of Bore 12" (300 mm) i/d	M	40			
7.22	Providing and fixing sluice valve of BSS quality (BS 5163) and weight Class 'B' for Cast Iron & AC pipe line (including cost of jointing material):- b) 4" (100 mm) dia of Valve	Each	1			
7.23	Providing and Fixing of Submerssible pump withmotor for pressure pump complete in all respect 1 HP	Each	1			
7.25	Providing and lowering pezu meter 1.25" GI pipeincluding all accessories.	M	1			
7.26	Providing and Fixing Brass peet / gate valve heavy6" dia	Each	1			
Chamber						
7.27	Earth excavation in open cut upto 3 m depth for drains, pipes etc & disposal : in Ordinary Soil	Cum	0.36			
7.28	Plain Cement Concrete including placing,compacting, finishing & curing (Ratio 1:2:4)	Cum	0.14			
7.29	Erection and removal of Form work with SteelSurface Finshing for RCC or Plain cementConcrete in any shape - Position / Vertical	Sqm	3.78			
7.30	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications UPVC Pressure Pipes Class B (6 Bar) except excavation. 6" Nominal Pipe Size (NPS)	M	2			
7.31	Providing and fixing grating in opening includingfixing at site with flat iron 2" x 3/8" and 3/4"round bars at 4" center to center.	Sqm	0.36			
7.32	Transportation upto 8km	Cum	0.36			
Total Amount						

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME BARA, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-02

BILL OF QUANTITIES

Bill No. 8: E&S COMPLIANCE

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
8.1	Provision of an E&S Specialist (Bachelor's or Master's degree) (16 years of education) in Environmental Sciences/Engineering or Social Sciences) with atleast 3 years of relevant work experience.	Months	24			-
8.2	Provision of green cloth, 4 colour waste bins (240 Liters), signages, warning tape, necessary plastic and tarpulin sheet for covering of construction raw material on site and during transportation to the site	Each Site	15			-
8.3	Handling of solid waste (storage, collection, transportation, treatment, utilization, processing, and final disposal of solid wastes)	Months	24			-
8.4	DCP Fire extinguishers (6 kg) in case of fire (The material of the cylinder is steel. The extinguishing agent is mono ammonium phosphate and ammonium sulfate powder and the discharge time of the agent is 13 seconds). Including the refilling of used chemical and replacement of expired chemical.	Each Site	5			-
8.5	Fire alarm (Signal Transmission: Wired Alarm, Working Principle: Manual Alarm Button)	Each Site	2			-
8.6	Ear plugs (corded Reusable silicon Earplugs)	Each	120			-
8.7	Safety Helmets (PE shell with vents Lining; material: Plastic Chin strap included; Adjust head size by ratchet knob)	Each	120			-
8.8	Safety shoes (Renowned brand)	Each	120			-
8.9	Protective goggles (Anti-fog, Anti scratch, Poly-carbonate Scratch and impact resistant, side protection sheet)	Each	120			-
8.10	Gloves (made up of nylon, polyurethane with ironclad) and safety Vest	Each	120			-
8.11	Dust Mask	Each	1000			-
8.12	First Aid Kit (pain killers, eyewash solution, antibiotic ointment, thermometer, plasters, sterile gauze dressings, sterile eye dressings, triangular bandages, crepe rolled bandages, safety pins, disposable sterile gloves and tweezers). Including the refilling of used contents and replacement of expired content.	Each Site	5			-
8.13	Ground water and drinking water Quality Testing (To be performed quarterly during the pre-construction and construction phase) at different locations	Lab Test	64			-
8.14	Ambient noise level at different locations in the project area (24 hours, readings taken at 15 s intervals over 15 min. every hour at 15 m from the receptors, and then averaged)	Test	20			-
8.15	Capacity building and training on Health, Safety & Environment, E&S requirements for workers/staff of contractor and local community	Session	10			-
8.16	Removal of Existing Trees upto any Girth, including removal of stumps & backfilling with sand & Plantation of (10 No.s) New Trees of the Type removed at each location and as per environmental compliance requirements	Job	5			-
8.17	Air Quality Testing for the Parameters CO, NO2, SO2, O3, PM2.5 & PM10 (To be performed quarterly during the pre-construction & construction phase) at different locations	Test	36			-
8.18	GRM operation, implementation of SEA/SH mitigation measures, E&S monitoring and reporting	Job	1			-
8.19	Safety Sign Boards/Warning Signs for each construction site including signs for, Grievance Rederess Mechanism (GRM) details, Emergency Contact Numbers, PPE's requirements, First Aid / Fire Extinguishers placement, Emergency Exists, Procedure of use of Fire Extinguishers & other construction related safety / warning signs	Each	40			-
Total Amount						-

KHYBER PAKHTUNKHWA RURAL INVESTMENT & INSTITUTIONAL SUPPORT PROJECT (KP-RIISP)

SANITATION SCHEME BARA, DISTRICT KHYBER

CONTRACT PACKAGE : RFB-KH-SNW-02

BILL OF QUANTITIES

Bill No. 09: UTILITY DIVERSION

BOQ Item	Description	Unit	Quantity	Unit Rate (Rs.)		Amount (Rs.)
				In Figure	In Words	
DIVERSION						
9.1	Construction of temporary diversions for the rehabilitation of Primary Drains involving plugging of the drain, pumping to approved location, disconnection and reconnection after completion of work and reinstatement of area as per previous conditions. Note: The Contractor shall submit the diversion plan and methodology for review and approval before carrying out any work at site for the locations where provision of diversion is necessary as per Engineer's instructions. (The section which needs rehabilitation would be of approximate length 200~225 feet), including duty and standby pumps according flow of water. The contractor would block the upstream and downstream drain section to make the section free of water and complete cleaning of sludge etc. (To keep the drain flow, the contractor has to dewater the section with dewatering pump and connect it to the downstream end accordingly) and contractor will be responsible of rehabilitation of all types to existing utilities services any cost if damage or disturb during construction period, complete cost in all respects works including at entire satisfaction of engineer and disposals of all rejected material, sludge and debris at any haulage limit or as designed place complete in all respect as per specification.	PS				
Total Amount						