



**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

**REHABILITATION OF EXISTING DRINKING WATER
SUPPLY SCHEME, TEHSIL NAWAGAI, DISTRICT
BAJAUR**

RFB No. BJ-CW-R-05

BILL OF QUANTITIES

APRIL 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 |

**REHABILITATION OF EXISTING DRINKING WATER SUPPLY SCHEME PEKHAORO NAWAGAI 1,
DISTRICT BAJAUR**

Contract Package : RFB-BJ-CW-R-05

BILL OF QUANTITIES

SUMMARY OF COST

| Sr.No | Name of Scheme | Amount (Rs.) |
|--------------|-------------------------|---------------------|
| 1 | DWSS Pekhaoro Nawagai 1 | |
| | Total Amount | |

REHABILITATION OF EXISTING DRINKING WATER SUPPLY SCHEME PEKHAORO NAWAGAI 1, DISTRICT BAJAUR

Contract Package : RFB-BJ-CW-R-05

BILL OF QUANTITIES

SUMMARY

| Bill No. | Description | Amount (Rs.) |
|----------|--|--------------|
| 1 | Civil Works for Booster Room, Boundary wall & Ground Surface Tank | |
| 2 | Rising Man & Distribution System Repair / Replacement & Construction of Valve Chambers | |
| 3 | Electrical Work for Pump Chamber & Booster Room | |
| 4 | Construction of Pump Chamber | |
| 5 | Construction of Tube Well | |
| 6 | E&S Compliance Cost | |
| | Total Amount | |

REHABILITATION OF EXISTING DRINKING WATER SUPPLY SCHEME PEKHAORO NAWAGAI 1, DISTRICT BAJAUR

Contract Package : RFB-BJ-CW-R-05

BILL OF QUANTITIES

Bill No: 1 CIVIL WORKS FOR BOOSTER ROOM, BOUNDARY WALL & GROUND SURFACE TANK

| BOQ Item No | Description | Unit | Quantity | Unit Rate (Rs.) | | Amount (Rs.) |
|---------------------|--|-------|----------|-----------------|----------|--------------|
| | | | | In Figure | In Words | |
| 1.1 | Dismantling 1st class tile roofing | Sqm | 21.01 | | | |
| 1.2 | Dismantling brick work in lime or cement mortar | Cum | 1.27 | | | |
| 1.3 | Dismantling RCC, separating reinforcement, cleaning & straightening the same | Cum | 13.89 | | | |
| 1.4 | Cement plaster 1:4, upto 20' height 1/2" thick | Sqm | 36.06 | | | |
| 1.5 | 1st class brick work in ground floor Cement, sand mortar 1:4 | Cum | 1.27 | | | |
| 1.6 | Cement pointing struck joints, on walls, upto 20' height : Ratio 1:3 | Sqm | 5.58 | | | |
| 1.7 | RCC in roof slab, beam, column & other structural members, insitu or precast. (1:2:4) | Cum | 13.89 | | | |
| 1.8 | Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60) | Tonne | 1.60 | | | |
| 1.9 | Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Horizontal | Sqm | 53.18 | | | |
| 1.10 | Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4) | Cum | 3.27 | | | |
| 1.11 | First class tile roofing including earth, mud plaster, gobi leeping, cement plaster etc complete | Sqm | 21.01 | | | |
| 1.12 | Distempering Old surface : Two coats | Sqm | 56.03 | | | |
| 1.13 | Painting old surfaces : Doors / windows any type First coat | Sqm | 7.53 | | | |
| 1.14 | Painting old surfaces : Doors / windows any type Each subsequent coat | Sqm | 7.53 | | | |
| 1.15 | White washing: Old surface : Two coats | Sqm | 141.12 | | | |
| 1.16 | Extra cost of labour & material for red oxide pigment in cement pointing to match bricks | Sqm | 228.67 | | | |
| 1.17 | 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. 3" Nominal Pipe Size (NPS) | Mtr | 7.31 | | | |
| 1.18 | Providing and fixing barbed (22 SWG) wire fence on compound wall, consisting of 1.5"x1.5"x3/16" angle iron post 3 ft long, 4 ft apart embedded in cement concrete 1:2:4 base of size 6"x6"x9", and 4 rows of barbed wire, including binding wire, painting posts, etc. complete in all respects. | Mtr | 73.15 | | | |
| 1.19 | Structural Backfill using Granular Material brought from outside Existing borehole plugging | Cum | 6.46 | | | |
| 1.20 | Mosaic dado or skirting complete as per specs Using grey cement : 3/8" thick | Sqm | 217.19 | | | |
| Total Amount | | | | | | |

REHABILITATION OF EXISTING DRINKING WATER SUPPLY SCHEME PEKHAORO NAWAGAI 1, DISTRICT BAJAUR

Contract Package : RFB-BJ-CW-R-05

BILL OF QUANTITIES

Bill No: 2 Rising Man & Distribution System Repair / Replacement & Construction of Valve Chambers

| BOQ Item No | Description | Unit | Quantity | Unit Rate (Rs.) | | Amount (Rs.) |
|-------------|---|-------|----------|-----------------|----------|--------------|
| | | | | In Figure | In Words | |
| 2.1 | Providing and fixing of air valve of BSS quality and weight BS 1074 complete with jointing material single air valve 4" (100 mm) dia | Each | 1.00 | | | |
| 2.2 | Providing and Fixing of Sluice valve of BSS quality (BS 5163) for GI, PVC, MS , HDPE and also for all type of pipes i/c rubber sheet , jointing material complete in all respect PN-16, 4" (100 mm) dia of Valve | Each | 1.00 | | | |
| 2.3 | Replacing of pressure gauge 0 to 500 | No | 1.00 | | | |
| | Repair /removal & testing of leakages in existing/ already laid pipe line i/c cost of extraction/ excavation with welding joint coating with bictumen/ red oxide and reinstallation to its original position after refilling with excavated material etc: complete in all respect of the following sizes. | | | | | |
| 2.4 | a) 6" (150 mm) dia | Each | 2.00 | | | |
| 2.5 | a) 4" (100 mm) dia | Each | 6.00 | | | |
| 2.6 | a) 3" (75 mm) dia | Each | 9.00 | | | |
| 2.7 | a) 2" (50 mm) dia | Each | 7.00 | | | |
| | 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. (Existing) | | | | | |
| 2.8 | (110 mm dia) PN-10 | Mtr | 51.38 | | | |
| | Providing, laying, cutting, jointing, testing and disinfecting GI pipeline in trenches, with socket joint, using GI pipes of EN 10255 - 2004 (Approved Light quality) including specials etc.Complete as per specifications except excavation. | | | | | |
| 2.9 | 6" Nominal Pipe Size (NPS) | Mtr | 14.50 | | | |
| 2.10 | 4" Nominal Pipe Size (NPS) | Mtr | 790.44 | | | |
| 2.11 | 3" Nominal Pipe Size (NPS) | Mtr | 1770.50 | | | |
| 2.12 | 2" Nominal Pipe Size (NPS) | Mtr | 1267.50 | | | |
| 2.13 | 1.5" Nominal Pipe Size (NPS) | Mtr | 5904.30 | | | |
| 2.14 | 1" Nominal Pipe Size (NPS) | Mtr | 141.61 | | | |
| 2.15 | Excavation in foundation of building, bridges etc complete : in shingle/gravel | Cum | 6.34 | | | |
| 2.16 | Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8) | Cum | 0.60 | | | |
| 2.17 | 1st class brick work in foundation and plinth in Cement, sand mortar 1:4 | Cum | 3.31 | | | |
| 2.18 | Cement plaster 1:4 upto 20' height 1/2" thick | Sqm | 14.50 | | | |
| 2.19 | Supplying and fixing, cast iron manhole cover with frame, etc. (Heavey Type) of approved quality complete. 24" (600 mm) dia. | Each | 4.00 | | | |
| 2.20 | RCC in roof slab, beam, column & other structural members, insitu or precast. (1:2:4) | Cum | 0.48 | | | |
| 2.21 | Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60) | Tonne | 0.06 | | | |

REHABILITATION OF EXISTING DRINKING WATER SUPPLY SCHEME PEKHAORO NAWAGAI 1, DISTRICT BAJAUR

Contract Package : RFB-BJ-CW-R-05

BILL OF QUANTITIES

Bill No: 2 Rising Man & Distribution System Repair / Replacement & Construction of Valve Chambers

| BOQ Item No | Description | Unit | Quantity | Unit Rate (Rs.) | | Amount (Rs.) |
|---------------------|---|------|----------|-----------------|----------|--------------|
| | | | | In Figure | In Words | |
| 2.22 | Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shape - Position / Horizontal | Sqm | 5.95 | | | |
| 2.23 | Supply & Erection of Pressure Guage 100 mm Dia Vacuum Upto 350 psi Complete In all respects (Digital). | Each | 1.00 | | | |
| 2.24 | Supply & Erection of Flow Meter 100 mm Dia Complete In all respects (Digital). | Each | 1.00 | | | |
| 2.25 | Providing, fixing, commissioning & testing of Hypo Chlorinator (make Etatraon Italy (Digital) or equivalent) consisting of multifunction dosing pump having capacity of 5 Liter/hour and operating pressure of 5 bar, having standard power supply of 230V A.C , 50 -60 Hz single phase, Insulation protection rating of IP65, complete with all accessories like injection valve, suction hose, discharge hose, valves, PKXMA/AL model, level switch, dosing tank to be installed complete in all respect with Sodium hypochlorite liquid. | Each | 1.00 | | | |
| Total Amount | | | | | | |

REHABILITATION OF EXISTING DRINKING WATER SUPPLY SCHEME PEKHAORO NAWAGAI 1, DISTRICT BAJAUR

Contract Package : RFB-BJ-CW-R-05

BILL OF QUANTITIES

Bill No: 3 ELECTRICAL WORK FOR PUMP CHAMBER AND BOOSTER ROOM

| BOQ Item No | Description | Unit | Quantity | Unit Rate (Rs.) | | Amount (Rs.) |
|---------------------|--|------|----------|-----------------|----------|--------------|
| | | | | In Figure | In Words | |
| 3.1 | Wiring of light/fan/call-bell point in 3/0.029" PVC insulated bare cable in PVC pipe recessed | Each | 6.00 | | | |
| 3.2 | Wiring of 2/3-pin 5-Amp plug point in 3/0.029" PVC insulated & sheathed cable on sahl wood | Each | 2.00 | | | |
| 3.3 | Supply and Erection wall/pole type bracket with double cover water tight reflector flexible wire & brass holder | Each | 2.00 | | | |
| 3.4 | Supply and erection iron/aluminium clad 500 volt main switch double pole: 30/35 Amp | Each | 1.00 | | | |
| 3.5 | Supply at site, installation, testing and commissioning of Six gang light control switches 10 Amps, 250Volts one way, including appropriate size concealed MS, powder coated back box, complete in all respects. | Each | 2.00 | | | |
| 3.6 | Supply and Erection of AC ENERGY EFFICIENT LED LIGHT BULBS (16-20 W) | No | 4.00 | | | |
| 3.7 | PVC conduit for surface wiring (dura duct) 1.5" including all charges for nail screws etc complete | Mtr | 40.00 | | | |
| Total Amount | | | | | | |

REHABILITATION OF EXISTING DRINKING WATER SUPPLY SCHEME PEKHAORO NAWAGAI 1, DISTRICT BAJAUR

Contract Package : RFB-BJ-CW-R-05

BILL OF QUANTITIES

Bill No: 4 Construction of Pump Chamber

| BOQ Item No | Description | Unit | Quantity | Unit Rate (Rs.) | | Amount (Rs.) |
|---------------------|---|-------|----------|-----------------|----------|--------------|
| | | | | In Figure | In Words | |
| 4.1 | Excavation in foundation of building, bridges etc complete : in shingle/gravel | Cum | 5.95 | | | |
| 4.2 | Structural backfill using Common Material available at site | Cum | 1.78 | | | |
| 4.3 | Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8) | Cum | 3.79 | | | |
| 4.4 | 1st class brick work in foundation and plinth in Cement, sand mortar 1:3 | Cum | 2.06 | | | |
| 4.5 | Dry rammed shingle brick ballast or stone ballast 1.5" to 2" guage | Cum | 1.42 | | | |
| 4.6 | Damp proof course of cem. conc. 1:2:4 including bitumen coat, 1 layer polythene & 1 coat bitumen (2" thick | Sqm | 3.00 | | | |
| 4.7 | 1st class brick work in ground floor Cement, sand mortar 1:4 | Cum | 10.60 | | | |
| 4.8 | RCC in roof slab, beam, column & other structural members, insitu or precast. (1:2:4) | Cum | 3.03 | | | |
| 4.9 | Supply & fabricate M.S. reinforcement for cement concrete (Hot rolled deformed bars Grade 60) | Tonne | 0.33 | | | |
| 4.10 | Cement plaster 1:4 upto 20' height 1/2" thick | Sqm | 55.68 | | | |
| 4.11 | White washing: New surface : Three coats | Sqm | 81.78 | | | |
| 4.12 | Cement pointing struck joints, on walls, upto 20' height : Ratio 1:3 | Sqm | 38.48 | | | |
| 4.13 | Extra cost of labour & material for red oxide pigment in cement pointing to match bricks | Sqm | 37.17 | | | |
| 4.14 | Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4) | Cum | 1.32 | | | |
| 4.15 | Providing and Fixing marble strip 2" wide and 3/8" thick for dividing the floor into panels | Mtr | 39.01 | | | |
| 4.16 | Supplying and Fixing 18 SWG MS Sheet Door with angle iron frame (1.5"x1.5"x1/8"), bolt, hinges,paint etc complete | Sqm | 4.28 | | | |
| 4.17 | First class tile roofing including earth, mud plaster, gobi leeping, cement plaster etc complete | Sqm | 9.29 | | | |
| 4.18 | Erection of Steel Girder 4"x8"x3/16" (Commercial size) including fitting in position | Mtr | 3.66 | | | |
| 4.19 | Supplying and Fixing 18 SWG MS Sheet Door with angle iron frame (1.5"x1.5"x1/8"), bolt, hinges, paint etc complete (2' x 2' Roof Cover) | Sqm | 0.37 | | | |
| 4.20 | UPVC Pressure Pipes Class B (6 Bar) except excavation. 3" Nominal Pipe Size (NPS) | Mtr | 3.66 | | | |
| 4.21 | Erection and removal of Form work with Plywood sheet finishing for RCC or Plain cement Concrete in any shpae - Position / Horizontal | Sqm | 12.60 | | | |
| Total Amount | | | | | | |

REHABILITATION OF EXISTING DRINKING WATER SUPPLY SCHEME PEKHAORO NAWAGAI 1, DISTRICT BAJAUR

Contract Package : RFB-BJ-CW-R-05

BILL OF QUANTITIES

Bill No: 5 Construction of Tube Well

| BOQ Item No | Description | Unit | Quantity | Unit Rate (Rs.) | | Amount (Rs.) |
|---------------------|---|------|----------|-----------------|----------|--------------|
| | | | | In Figure | In Words | |
| 5.1 | Conducting Elec: Resistivity survey of the area and furnishing its reports. | No | 1.00 | | | |
| 5.2 | Mobilization of Plant, Equipment and camping arguments etc., and demobilization after completion. | Job | 1.00 | | | |
| 5.3 | 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 and withdrawing of pipe, complete as per specifications.: Dia of Bore 18" (450 mm) i/d | Mtr | 82.29 | | | |
| 5.4 | Drilling of Bore holes for tube well in hard rock having unconfirmed compressive strength of 50 MPa and above from ground level upto 328 ft depth (0m to 100m), including sinking, collection of 100 % corings and withdrawing of pipe, complete as per specifications.: Dia of Bore 18" (450 mm) i/d | Mtr | 9.14 | | | |
| 5.5 | Drilling of Bore holes for tube well in all types of soil and soft rock except hard rock from a depth of 328.1 ft to 656 ft (100.1m to 200 m) depth, including sinking, collection of 100 % corings and withdrawing of pipe, complete as per specifications.: 18" (450 mm) i/d | Mtr | 60.96 | | | |
| 5.6 | Collection and submission at approved water testing laboratory of two water samples in bottles from each bore hole for testing. | Job | 1.00 | | | |
| 5.7 | Logging of bore hole with electrical equipment and furnishing reports. | Job | 1.00 | | | |
| 5.8 | Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:2:4) (Grouting) | Cum | 0.57 | | | |
| 5.9 | Providing and installing PVC Strainer BSS Class "D" of approved make \ quality in tube well bore hole, including socket, special sockets, studs etc. complete as per specification: 10" Nominal Pipe Size (NPS) (250 mm) | Mtr | 30.48 | | | |
| 5.10 | Providing and installing PVC bail plug in tubewell BSS Class 'D' working pressure : 10" (250 mm) i/d | Each | 1.00 | | | |
| 5.11 | Providing and installing PVC blind pipe BSS Class "D" in Tube Well Bore Hole including Sockets and Solvents and jointing with strainer etc. complete : 10" Nominal Pipe Size (NPS) (250 mm) | Mtr | 123.44 | | | |
| 5.12 | UPVC Pressure Pipes Class B (6 Bar) except excavation. 3" Nominal Pipe Size (NPS) | Mtr | 6.10 | | | |
| 5.13 | Testing and developing of tube well with DNT unit 8" i/d and above complete as per specifications | Hour | 72.00 | | | |
| 5.14 | Shrouding with graded pack gravel 3/8" (10 mm) to 1/8" (3 mm) around tube well in bore hole complete as per specification:- | Mtr | 152.39 | | | |
| 5.15 | Supplying and Fixing MS cap of 3/8" thick sheet : 10" i/d | EACH | 1.00 | | | |
| 5.16 | Supplying and Fixing MS Suspension Clamp 3/8" thick for housing pipe : 10" i/d | EACH | 1.00 | | | |
| 5.17 | Providing strong box of deodar wood 4' x 2½' x 9" with compartments, lock and locking arrangement, and preserving in it the corings / samples of strata collected from bore hole and supply to the approved soil testing laboratory for testing | Job | 1.00 | | | |
| Total Amount | | | | | | |

REHABILITATION OF EXISTING DRINKING WATER SUPPLY SCHEME PEKHAORO NAWAGAI 1, DISTRICT BAJAUR

Contract Package : RFB-BJ-CW-R-05

BILL OF QUANTITIES

Bill No: 6 E&S COMPLIANCE

| BOQ Item No | Description | Unit | Quantity | Unit Rate (Rs.) | | Amount (Rs.) |
|---------------------|---|-----------|----------|-----------------|----------|--------------|
| | | | | In Figure | In Words | |
| 6.1 | Provision of green cloth, 4 colour waste bins (240 Liters), safety signages (including Grievance Rederess Mechanism (GRM) details, Emergency contact numbers, PPEs requirements, First Aid / Fire Extinguisher placement, emergency exit etc), warning tape, necessary plastic and tarpulin sheet for covering of construction raw material on site and during transportation to the site | Each Site | 1 | | | |
| 6.2 | Handling of solid waste (storage, collection, transportation, utilization, and final disposal of solid wastes) | Each Site | 1 | | | |
| 6.3 | 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) | Each Site | 1 | | | |
| 6.4 | Fire alarm (Signal Transmission: Wired Alarm, Working Principle: Manual Alarm Button) | Each Site | 1 | | | |
| 6.5 | Ear plugs (corded Reusable silicon Earplugs) | Each | 23 | | | |
| 6.6 | Safety Helmets (PE shell with vents Lining; material: Plastic Chin strap included; Adjust head size by ratchet knob) | Each | 10 | | | |
| 6.7 | Safety shoes (Renowned brand) | Each | 5 | | | |
| 6.8 | Protective goggles (Anti-fog, Anti scratch, Poly-carbonate Scratch and impact resistant, side protection sheet) | Each | 5 | | | |
| 6.9 | Gloves (made up of nylon, polyurethane with ironclad) and safety Vest | Each | 5 | | | |
| 6.10 | Dust Mask | Each | 33 | | | |
| 6.11 | 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) | Each site | 1 | | | |
| 6.12 | Ground water Quality Testing (To be performed twice: Once before the start of construction, second during the construction period) | Each site | 2 | | | |
| 6.13 | Noise level monitoring (Meter) | Each | 1 | | | |
| 6.14 | 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 | 6 | | | |
| Total Amount | | | | | | |