



Construction of 14 new Shelters in Baharka 2- BOQ

#	Item	Unit	Quantity
A	Site preparation & Demarcation		
	Providing machinery and equipment for cleaning and filling area (20cm) by sub-base type B, the work includes proper compaction and proper watering. All works should be conducted according to instructions of supervisor engineer.	M ²	480
B	Concrete and Hollow block works (shelter: 8.8m * 7.5) Outer		
B1	Cast plain concrete class(21) (1:2:4) for floor 15 cm thickness with all necessary works. The work includes laying thick nylon under the concrete of flooring with one layer of BRC mesh wire 15 cm X 15 cm 6mm dia. and make it smooth face by using (copter).	M ²	930
B2	Concrete block works: Supply materials and construction concrete Hollow block wall (20x20x40)cm for the shelter (8.8m L*7.5m W) and the height of (2.9)m the price including filling the space between blocks from inside and outside using cement mortar 1:3 and Using steel angles 3mm for above doors and windows with all requirements, the price include fixing proper hooks from steel bars 16mm to connect room to the wall, the work should done according to the drawing and instructions of site engineer.	M ³	300
C	Roofing		
	Supply materials, workforce to install Sandwich panel roof by using an iron frame grid max 50cm C/C (rectangular pipe) 4cmX8cm, 1.8mm thickness for roofs and extended sandwich panel 20 cm from the walls, the price including painting all the frame with anti-rust paint plus two layers of synthetic paint. Moreover, connecting the roof with the wall by planting a steel bar in the wall welded to the frame. All the work according to the drawing and instruction of site engineer.	M ²	695
D	Door and Window		
D1	Steel Doors for Kitchens, latrines, and showers:- Supply material, workforce to manufacturing and install steel hinged doors (200x80)cm made of steel angle frame 2"x2" 2mm thickness, plated on one side (steel plate gauge 18) . All metal surfaces should be painted (primed) with anti-rust paint and finished with suitable oil paint; the price includes making steel angle frame 2"x2" 2mm thickness and install 4mm glass for the gap above the door (50x80)c, the price includes supplying and fixing of all required locks, hinges, etc. (Samples Required For Final Approval), All the work should be done according to the drawings and the instructions of the site Engineer.	No.	42
D2	Steel Doors for guest and bed room:- Supply material, workforce to manufacturing and install steel hinged doors (200x80)cm made of steel angle frame 2"x2" 2mm thickness, plated on one side (steel plate gauge 18) . All metal surfaces should be painted (primed) with anti-rust paint and finished with suitable oil paint; the price includes making steel angle frame 2"x2" 2mm thickness. the price includes supplying and fixing of all required locks, hinges, etc. (Samples Required For Final Approval), All the work should be done according to the drawings and the instructions of the site Engineer.	No.	28
D3	Steel Doors for main entrance:- Supply materials, workforce to manufacturing and install steel hinged doors (200x100)cm made of steel angle frame 2"x2" 2mm thickness, plated on one side (steel plate gauge 18) . All metal surfaces should be painted (primed) with anti-rust paint and finished with suitable oil paint, the price includes supplying and fixing of all required locks, hinges, etc. (Samples Required For Final Approval), All the work should be done according to the drawings and the instructions of the site Engineer.	No.	14
D4	Steel Window: Supply materials, workforce to manufacturing and install iron windows (1.5 m*1.5m), with steel angle frame 2"x2" 2mm thickness with all required. The price includes installing glasses 4mm thickness, good quality handle and also installing fibreglass wire mesh net (fly protection) good quality, all metal surfaces should be painted (primed) with anti-rust paint and finished with suitable oil paint the price includes supplying and fixing of all required locks, hinges, etc. (Samples Required For Final Approval), All the work should be done according to the drawings and the instructions of the site Engineer.	No.	28

E	Cement Plastering		
E1	Supply materials, workforce to do plastering (2 cm thickness) for exterior and Interior walls by using cement mortar 1:3. The work Include adding SBR 200 Gr for m², proper watering, and all required work according to the instructions of site engineer.	m2	3,220
F	Painting Work		
F1	Supply materials, workforce, and equipment for painting internal walls with three coats of best quality paint alight (JOTIN) ISO 901 color chosen by site engineer. The price includes 1.3 Oily painting for walls. All required works according to instructions of site engineer.	M2	2,583
F2	Supply materials, workforce, and equipment are for painting exterior walls with three coats of best quality paint alight (JOTIN) ISO 901colume chosen by site engineer. All required works according to instructions of site engineer.	M2	640
G	Sewerage Work: supply material, workforce and Install PVC pipe of 8",6",4" dia, of high-pressure resistance, where required, with all its requirements to complete the work such as elbow, T or y connections, extensions, steel cover for floor drains, etc. and all civil works requirements (earth excavation, backfilling).		
G1	4"Sewerage lines (PVC)inside shelters: Supply material, workforce to install grey and Blackwater 4" (3.7 mm wall thickness) pipes (Separately) from the shower, latrine, rainwater drainages, and kitchen and connect with manholes from outside the shelter. The price includes Excavation of trench min. (60 x 30) Cm in all type of soils, even rocky, removal of debris to the sites as directed by Engineer and laying with connecting, PVC pipes of Min.1% slope , with special glue, white color approved quality) with all necessary fittings and accessories (gully trap, Tee, Elbow 45/90 degree,...etc.). Good compacting of sites before laying the pipes and backfill the trenches of the pipes with approved materials, clean fine soil under & above the pipes, All the work should be done according to the drawings and the instructions of site Engineer.	M.L	240
G2	6"Sewerage lines (PVC) Combine system Outside shelters: Supply material, workforce to install 6" PVC pipes (4.5mm will thickness) to connect manholes with main manholes(80*80)cm , the work includes Excavation of trench (according to the site requirments) in all type of soils, even rocky, removal of debris to the sites as directed by Engineer. The price includes supply, laying and connecting the PVC pipes of Min.1% slope , with special glue, white colour approved quality)with all necessary fittings and accessories (gully trap, Tee, Elbow 45/90 degree,...etc.). Good compacting of sites before laying the pipes and backfill the trenches of the pipes with approved materials, clean fine soil under & above the pipes, All the work should be done according to the drawings and the instructions of site Engineer.	M.L	96
G3	8"Sewerage system (DWGP)Outside shelters: Provision of workforce to install 8" to connect with main manholes(80*80)cm to Existing sewage system , the work includes Excavation of trench (according to the site requirments) in all type of soils, even rocky, removal of debris to the sites as directed by Engineer. The price includes laying and connecting the DWGP pipes of Min.1% slope , with all necessary fittings and accessories (Tee, Elbow 45/90 degree,...etc.). Good compacting of sites before laying the pipes and backfill the trenches of the pipes with approved materials, clean fine soil under & above the pipes, All the work should be done according to the drawings and the instructions of site Engineer. Note: UNHCR will provide the DWGP pipes.	M.L	20
G4	Manhole (40x40) cm INNER DIM.: - Supply materials, workforce to build manholes OR Prefabricated PVC internal dimension (40X40) cm. (depth according to site requirements) For Combine sewage system with connections by 6" and 4" diam pipes., including excavation, a crushed stone layer of min. 10 cm thick and casting reinforcement concrete base of 15 cm thick with 12 mm @ 15x15 cm, masonry wall 40 cm thick by using solid concrete blocks (15*20*40)cm. The price includes plastering, reinforcement concrete slab cover with cast iron cover/GRP cover of heavy duty type with all other work requirements cleaning the site and transporting all demolished material and debris to outside of an approved location by municipality . all the works should be done according the instruction of the supervisor engineer.	No.	6

G5	Manhole (60x60) cm INNER DIM.: - Supply materials, workforce to build manholes OR Prefabricated PVC internal dimension (60X60) cm. (depth according to site requirements) For Combine sewage system with connections by 8" 6" and 4" diam pipes., including excavation, a crushed stone layer of min. 10 cm thick and casting reinforcement concrete base of 15 cm thick with 12 mm @ 15x15 cm, masonry wall 40 cm thick by using solid concrete blocks (15*20*40)cm. The price includes plastering, reinforcement concrete slab cover with cast iron cover/GRP cover of heavy duty type with all other work requirements cleaning the site and transporting all demolished material and debris to outside of an approved location by municipality . all the works should be done according the instruction of the supervisor engineer.	No.	4
G6	Manhole (80x80) cm INNER DIM.: - Supply materials, workforce to build manholes OR Prefabricated PVC internal dimension (80X80) cm. (depth according to site requirements) for combine sewage system with connection by 6" and 8" diam pipes., including cutting or breaking concrete floor,excavation, crushed stone layer of min. 10 cm thick and casting reinforcement concrete base of 15 cm thick with 12 mm @ 15x15 cm, masonry wall 40 cm thick by using solid concrete blocks (15*20*40)cm, plastering, reinforcement concrete slab cover with cast iron cover/GRP cover of heavy duty type with all other work requirements cleaning the site and transporting all demolished material and debris to outside of an approved location by municipality . all the works should be done according the instruction of the supervisor engineer.	No.	2
G7	Provide required machine, materials and workforce to installing ceramic toilet pan (Indian type) with siphon Gully(trap)(approved sample), with all necessary fittings and accessories, all required work according to instructions of site Eng.	No.	14
H	Water Supply system: Supply material, workforce to Install PPR pipes, valve, shower taps and accessories (tee Elbow 45/90 degree, valves, divider, Union ...etc.) connected to a main water source outside the shelter, to be sure the system works properly with all required plumbing works, fittings, and accessories. The work includes Excavating, backfilling, making holes, connections...etc.		
H1	Provision of materials and workforce to install water pipes (size OD 32mm, PN 16) from the tank to be used as the main feeder line , using PPR Composite Water Pipes with Min. 3 Layers side walls (PPR/GF or AL/PE), PPR-C inner layer and a special mixture of GF PP or Aluminum middle layer and should be coated with an external layer of LDPE (Low Density of Polyethylene Layer) dark grey color to provide protection against ultraviolet rays. The remaining network inside the unit (cold and hot water network) should be OD 25 mm PN 16, PPR Water Pipes with Min. 3 Layers side walls (PPR/GF or AL/PE), PPR-C inner layer. ((approved sample and suitable for drinking purpose/food grade), the work includes installation of a valve with size 25 mm. All materials and fitting to be from approved quality & sample and the supplier should provide a certificate of origin and quality of all supplied materials with all fitting and necessary work.	M.L	420
H2	Water Supply system (main source):- Provide, install/connect and test new pipeline extension P.E100 Pipe of OD 90 mm & SDR 11, (Pipe Wall Thickness 8.2mm, W=2.12 kg/m.l, SABIC Raw Material), with all accessories, fittings, valves (gate & non-return), excavation pipe trench of min.80/depth x 50/width cm backfilling and all other work requirements for connecting/installing pipes together by using electro fusion junction method for connecting. All the work according to Instruction of site Engineer.	M.L	220
H3	Supply required Equipment,materials and man power for install water taps 1/2" (best quality stainless steel tap,sample should be provided for approval). all the required work according to instruction of site engineer.	No.	28

H4	<p>WATER TANK:- Provision and installation of (HDPE) water tanks with capacity not less than 1,000 liters, approved sample vertical water tank with top/open cover, the walls with 3 Layers, of grey color internally and Blue color externally), and also with 25 mm cooper/brass outlet, 100% Virgin raw material not recycled (Polyethylene-linear high/low density) Food Grade. The tanks also should be Anti -ultra violet (U.V.) resistance which blocks the sunlight and sun heat free of Algae and odor. The work includes provision of float valve of 20 mm size with all required coonection and plumping works. All materials to be from approved quality & sample, and the supplier should provide certificate of origin and quality of all supplied materials. The work also includes fixing the tanks using a metallic chain or band, and installation of a EPS panel (25 kg/Cu.m) and wood panels beneath the tank, as shown in drawings, with all necessary work.</p>	No.	14
H5	<p>Kitchen Sink:- Providing & installing Stainless Steel Suspended Wash-basin of Double Wings & Bowel of good qualities 0.6 mm thickness screw washer, proper steel base painted with one coat anti-rust and two coat of oil paint, brackets for fixing basin inside Kitchen area, floor Drain and flexible hose pipe (Sample should be provided for approval), All the work should be done according to the drawings and the instructions of site Engineer.</p>	No.	14
H6	<p>Supply material, skilled labors and equipment's for installing Stainless Steel shower mixer with shower tree (Handle/Gear type, approved sample) with all necessary fittings and accessories all other required works according to instructions of site Eng.</p>	No.	14
I	<p>Electrical Works Inside shelters: all wires mainline 2x2.5 mm² and 2x 1.5 mm² for lighting. All parts & materials must be chosen of best quality available in the market according to the instructions of site engineer. the price includes connections sockets, switch plugs and lightings with the primary electrical source and main board</p>		
I1	<p>Supply material, workforce to install new waterproof type LED 18W lights suitable shape & size (best quality, approved sample),the work includes all electrical fittings, Jordanian wires2.5 mm² and all required works according to instructions of site Eng.</p>	No.	154
I2	<p>Supply materials, workforce to install, connecting and testing 13 Amp. Switch plug socket using original (BG or MK) brand and Jordanian made wires(2.5)mm2 according to the instructions of site engineer.</p>	No.	56
I3	<p>Supply materials, workforce and install waterproof boards,then supply and install main circuit breaker (30 amp),(10 amp,16 amp circuit), including interconnection. all required work according to instructions of site Eng.</p>	No.	14
Total of Work \$			