**Bill of Quantity: Summary Sheet**

**Annex E**

**Province: Nangarhar**

**District: Jalalabad City**

**Village: Majboorabad**

**Type of Project: Construction of Thirty (30) Classrooms School Building for Angiza Shinwari High School**

| No | Description | Quantity | Unit | Unit Cost (US$) | Total Cost (US$) | Remarks |
|---|---|---|---|---|---|---|
| A | Construction of Thirty Classroom School | 1 | Ls | | | |
| B | Construction of Reservoir | 1 | Ls | | | |
| C | Construction of Well | 1 | Ls | | | |
| D | Solar System | 1 | Ls | | | |
| E | Construction of retaining wall and ditch | 1 | Ls | | | |
| F | Construction of Septic tank | 1 | Ls | | | |
| Grand Total | | | | | | |

**Please provide the following Information,**

**Company Name:**_____

**Company Address:**_____

**Contact Name:**_____

**Contact Details (Phone/E-mail):**_____

**Sign/Stamp:**_____

**Bill of Quantity (BoQ)**
**A - Construction of School Building**

**Annex E**

**Province: Nangarhar**

**District: Jalalabad City**

**Village: Majboorabad**

**Type of Project: Construction of Thirty (30) Classrooms School Building for Angiza Shinwari High School**

| S/No | Item | Quantity | Unit | Unit cost/US$ | Total cost/US$ | Remarks |
|---|---|---|---|---|---|---|
| 1 | Mobilization and demolition of old Building Leveling of area including the transportation of additional material and shift to the fair place with all Necessary Requirements | 1.00 | lumsum | | | |
| 2 | Bearing capacity test (for the strength of soil) | 1.00 | lumsum | | | |
| 3 | Excavation in second type earth for foundation | 1,177.00 | $m^3$ | | | |
| 4 | PCC ( under RCC foundation, first floor in two layers , sidewalk) Rtio-1:2:4 (M:150) | 170.30 | $m^3$ | | | |
| 5 | Stone masonry work with mortar 35% , mortar ratio : 1:4 (M:200) | 300.00 | $m^3$ | | | addintional 21m3 Stone masonary is considerd as the ground surface is not leveled |
| 6 | Pointing on supper stone masonry with 1:3mortar with all Necessary Requirements. | 77.00 | $m^2$ | | | |
| 7 | Filling of( floor, side walk)with soil & gravel and Bolder (thick=15cm) including compaction | 316.00 | $m^3$ | | | |
| 8 | Form work for concrete | 6,550.00 | m2 | | | |
| 9 | Total RCC for ( foundation, columns & Slabs stair and parapet wall ) ratio - 1:1.5:3 (M:200) with all Necessary Requirement | 1,000.10 | $m^3$ | | | |
| 10 | Brick Masonry with mortar 25%, ratio 1:1.5:3 (M200) | 725.30 | m3 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 11 | Carpentry work(Doors and windows) included all necessaries and installation from Khar wood | 673.00 | m2 | | | |
| 12 | Installation of glasses (4mm) best quality with all Necessary Requirement. | 382.50 | m2 | | | |
| 13 | Plaster with cement mortar ratio 1:3 M(250) | 9,180.00 | $m^2$ | | | |
| 14 | 3 coat Plastic Paint and weather shield 3( layers and filling ) for the building | 9,180.00 | m2 | | | |
| 15 | Oil painting of windows and Doors ( 3 coats) with all Necessary Requirement. | 926.60 | m2 | | | |
| 16 | Electrical work according map | 30.00 | rooms | | | |
| 17 | Celling Fluorescent light fixture 2x36W,50Hz good quality made in China. | 130.00 | pcs | | | |
| 18 | Ceiling fluorescent 4x15 watts,220 volte 50HZ good quality made in China. | 57.00 | pcs | | | |
| 19 | Ceiling fluorescent 4x15 watts,220 volte 50HZ water prove type out door good quality made in China. | 7.00 | pcs | | | |
| 20 | Round/globe fitting on wall 1x24 watts water prove type ,220 volte 50HZ. Out door good quality made in China. | 6.00 | pcs | | | |
| 21 | Round/globe fitting on wall 1x18 watts water prove type ,220 volte 50HZ. Out door good quality made in China. | 18.00 | pcs | | | |
| 22 | Ceiling Round/globe fitting 1x24 watts water prove type ,220 volte 50HZ.good quality made in China. | 12.00 | pcs | | | |
| 23 | One pole switch under plaster,10A,1 phase good quality made in Iran water prove type. | 29.00 | pcs | | | |
| 24 | One pole switch under plaster,10A,1 phase good quality made in Iran. | 7.00 | pcs | | | |
| 25 | Two pole switch under plaster,10A,1 phase good quality made in Iran. | 31.00 | pcs | | | |
| 26 | Two way switch under plaster,10A,1 phase good quality made in Iran . | 33.00 | pcs | | | |
| 27 | Socket outlet, single phase 16Amp high quality. | 191.00 | pcs | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 28 | Distribution panel complete with1X80Amp mine CB, 2x16Amp automatic fuse(CB) +RCBO & 16x20Amp automatic fuse(CB)+RCBO. (Residual Current Circuit Breaker with Over current).I=0.03mali Amper.t=0.1Secant. | 1.00 | pcs | | | |
| 29 | Distribution panel complete with1X70Amp mine CB, 2x16Amp automatic fuse(CB) +RCBO & 16x20Amp automatic fuse(CB)+RCBO. (Residual Current Circuit Breaker with Over current).I=0.03mali Amper.t=0.1Secant. | 2.00 | pcs | | | |
| 30 | Wire 1(3x10)mm2 good quality made in Iran | 25.00 | Meter | | | |
| 31 | PVC conduit 2 Inch. | 24.00 | Meter | | | |
| 32 | Wire 1x2.5mm2 copper good quality made in Iran | 3,100.00 | Meter | | | |
| 33 | Wire 1x4mm2 good quality made in Iran | 2,900.00 | Meter | | | |
| 34 | PVC conduit 1 Inch. | 1,800.00 | Meter | | | |
| 35 | Cable 1x35mm2 for Grounding good quality made in Iran. | 27.00 | meter | | | |
| 36 | Main distribution panel complete with50Amp 3Phase , main switch,1X80 Amp CB and 3x70Amp CB high quality. | 1.00 | pcs | | | |
| 37 | PVC joint box | 45.00 | pcs | | | |
| 38 | Grounding rod 3meter length,20mm diameter made in Turkish. | 4.00 | pcs | | | |
| 39 | Cable 1(4x35mm2) for mane feeder +cable 1x35mm2 for grounding good quality made in Turkish. | 50.00 | Meter | | | |
| 40 | PVC conduit 4 Inch good quality made in Iran. | 50.00 | Meter | | | |
| 41 | change over 3phase 50Ampers good quality | 1.00 | pcs | | | |
| 42 | change over 1phase 30Ampers good quality | 1.00 | pcs | | | |
| 43 | Ceiling PVC joint box for 72watts and 60 watts bulbs. | 185.00 | pcs | | | |
| 44 | Installation | 1.00 | L.sum | | | |
| 45 | Water supply system | | | | | |
| 46 | according to the drawing preparing and installation of Iranian's Eastern water closet and it's relative works | 18.00 | NO | | | |
| 47 | according to the drawing preparing and installation of Iranian's western water closet and it's relative works | 6.00 | NO | | | |

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|---|---|---|---|---|---|---|
| 48 | according to the drawing preparing and installation of Iranian's wash basin and it's relative works | 18.00 | NO | | | |
| 49 | according to the drawing preparing and installation of Iranian's floor drain and it's relative works | 12.00 | NO | | | |
| 50 | according to the drawing preparing and installation of 15 mm PPR water supply taps and it's relative works | 24.00 | NO | | | |
| 51 | according to the drawing preparing and installation of PPR 40 mm water supply pipe and it's relative works | 8.00 | ml | | | |
| 52 | according to the drawing preparing and installation of PPR 32 mm water supply pipe and it's relative works | 36.00 | ml | | | |
| 53 | according to the drawing preparing and installation of PPR 25 mm water supply pipe and it's relative works | 30.00 | ml | | | |
| 54 | according to the drawing preparing and installation of PPR 20 mm water supply pipe and it's relative works | 42.00 | ml | | | |
| 55 | according to the drawing preparing and installation of 15 mm PPR water supply pipe and it's relative works | 36.00 | ml | | | |
| 56 | according to the drawing preparing and installation of PPR 40 mm water supply pipe's Elbow ,T-Joint , union and it's relative works | 9.00 | NO | | | |
| 57 | according to the drawing preparing and installation of PPR 32 mm water supply pipe's Elbow,Tee,union and it's relative works | 20.00 | NO | | | |
| 58 | according to the drawing preparing and installation of PPR 25 mm water supply pipe's Elbow,Tee,union and it's relative works | 21.00 | NO | | | |
| 59 | according to the drawing preparing and installation of PPR 20 mm water supply pipe's Elbow ,Tee, union and it's relative works | 16.00 | NO | | | |
| 60 | according to the drawing preparing and installation of PPR 15 mm water supply elbow,Tee,reducer and it's relative works | 42.00 | NO | | | |
| 61 | according to the drawing preparing and installation of Italian 40 mm valve and it's relative works | 2.00 | NO | | | |

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|---|---|---|---|---|---|---|
| 62 | according to the drawing preparing and installation of Italian 32 mm valve and it's relative works | 6.00 | NO | | | |
| 63 | according to the drawing preparing and installation of UPVC class C ventilation pipe and it's relative works | 62.00 | ml | | | |
| 64 | according to the drawing preparing and installation of UPVC 100 mm class C canalization pipe and it's relative works | 80.00 | ml | | | |
| 65 | according to the drawing preparing and installation of UPVC class C 50 mm canalization pipe and it's relative works | 42.00 | ml | | | |
| 66 | according to the drawing preparing and installation of 50 mm UPVC class C ventilation pipe elbow,Tee,reducer and it's relative works | 18.00 | NO | | | |
| 67 | according to the drawing preparing and installation of UPVC class C canalization 100 mm pipe elbow,Tee,reducer and it's relative works | 32.00 | NO | | | |
| 68 | according to the drawing preparing and installation of UPVC class C canalization 50 mm pipe elbow,Tee,reducer and it's relative works | 54.00 | NO | | | |
| 69 | Extending Water supply pipe from water well to building and canalization 200 m pipe from building to septic tank | 1.00 | ls | | | |
| 70 | Chips work of 3 floor ( floor and stairs) with all Necessary Requirement. | 2,301.00 | M2 | | | |
| 71 | Ceramic stone work of( first,secend and third) floor toilet floor with cement mortar and with all necessary requirements. | 107.10 | M2 | | | |
| 72 | Prepare and installation of tile stone on the( first,secend and third ) floor toilet walls according to the drawing with all Necessary Requirements | 300.00 | M2 | | | |
| 73 | Prepare and installation of marble on the ( first ,secend,third) floor windows (thick=2cm,w=30cm) and all Necessary Requirement | 49.50 | M2 | | | |
| 74 | Prepare and installation of Granit tile in skirts of(first,secend ,third) floor Rooms and corridors with ( 1:3) mortar and all other necessary Requirement | 1,222.00 | M/L | | | |
| 75 | Installation of bituminous paper above first floor With all Necessary Requirement. | 780.00 | M2 | | | |
| 76 | Prepare and installation of angle iron (2 inch) on the step of stair with all other necessary Requirement | 245.00 | L/M | | | |

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|---|---|---|---|---|---|---|
| 77 | Mud and straw plaster in 2layer (thick=10 cm.) above the roof with all Necessary Requirement. | 845.00 | M2 | | | |
| 78 | Burnt brick pieces on the roof (thick=10cm) with all Necessary Requirement. | 845.00 | M2 | | | |
| 79 | Chwka brick on the roof with all Necessary Requirement. | 845.00 | M2 | | | |
| 80 | Installation of bituminous paper( Tar paper) above tap roof With all Necessary Requirement. | 845.00 | M2 | | | |
| 81 | Making of chimney pipe from GI sheet 24 gage With Necessary Requirement. | 63.00 | M/L | | | |
| 82 | Making of fixing heater caps from GI sheet 18 gage with Necessary Requirement. | 37.00 | Ea. | | | |
| 83 | Prepare and installation of fly screen with frame with all Necessary Requirement . | 140.00 | m2 | | | |
| 84 | Prepare and installation of Nickel handrail for roof ramp balconies and stair with all Necessary Requirement | 26.90 | M/L | | | |
| 85 | Wooden frame for blackboards | 86.40 | M/L | | | |
| 86 | Making of blackboard with cement mortar (1:3) with special paint. | 12.00 | Each | | | |
| 87 | Prepare and installation of duct door with wooden frames including oil painting 3 coats according to the drawing with all Necessary Requirements | 1.00 | Each | | | |
| 88 | Construction of ramps with metallic handrails | 12.00 | M/L | | | |
| 89 | Prepare and installation of stairs metal of roof with anti rust paint and oil paint with all Necessary Requirement. | 3.00 | M/L | | | |
| 90 | Gutters work (vertical) size (12x8) from GI sheet 24 gage with Necessary Requirment. | 126.00 | M/L | | | |
| 91 | Prepare and installation of metal handrail for ramp and stairs including anti rust paint and oil paint(3 coats ) with all Necessary Requirement. | 71.00 | M/L | | | |

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|---|---|---|---|---|---|---|
| 92 | Prepare and installation of metal grail for parapet wall (1m )Hight including anti rust paint and oil paint(3 coats ) with all Necessary Requirement. | 156.00 | M | | | |
| 93 | Prepare and installation of Ventilation Cover with all Necessary Requirement. | 8.00 | Ea. | | | |
| 94 | Prepare and installation of balconies handrail including anti rust paint and oil paint ( 3coats ) according to drawings .with all Necessary Requirements. | 65.00 | M/L | | | |
| 95 | Prepare and installation of aluminum plate above the joint (thick =3mm,w=10cm) with all Necessary Requirement. | 75.00 | M/L | | | |
| 96 | Prepare and install chair and table completed set according to drawings for students. | 560.00 | Ea. | | | |
| 97 | Making of blackboard with cement mortar (1:3) with all Necessary Requirement. | 30.00 | Ea. | | | |
| 98 | Making of blackboard wooden frame with all Necessary Requirement. | 216.00 | M/L | | | |
| 99 | Prepare and install of chair for computer table and teachers according to the drawings with all necessary works. | 21.00 | Ea. | | | |
| 100 | Prepare and install of chair for laboratory table according to the drawings with all necessary works. | 38.00 | Ea. | | | |
| 101 | Prepare and installation of tow fence table for computer from plywood wooden plate (thick=1.6)cm according to the drawings with all necessary works. | 11.00 | set | | | |
| 102 | Prepare and installation of table for laboratory from Russian hardwood (thick=3)cm according to the drawings with all necessary works. | 1.00 | Ea. | | | |
| 103 | Prepare and installation of project signboard size (0.5 x0.7m) from marble stone with all necessary works. | 0.35 | Ea. | | | |
| 104 | Prepare and installation of denunciation box from GI sheet 18 gauge with all Necessary Requirement. | 1.00 | Ea. | | | |
| 105 | Cleaning of area from waste material and shift to the fair please with all Necessary Requirements | 1.00 | la | | | |
| 106 | Safety tools | 1.00 | lumsum | | | |
| **Total** | | | | | | |

**Bill of Quantity (BoQ)**

**B - Construction of Water Reservoir**

**Annex E**

**Province: Nangarhar**

**District: Jalalabad City**

**Village: Majboorabad**

**Type of Project: Construction of Thirty (30) Classrooms School Building for Angiza Shinwari High School**

| No | Description | Quantity | Unit | Unit Cost (US$) | Total Cost (US$) | Remarks |
|---|---|---|---|---|---|---|
| 1 | Site Prepation | 30 | $m^2$ | | | |
| 2 | Excavation for Reservoir and Pipe network installation | 16 | $m^3$ | | | |
| 3 | Compacted gravel (in said ) of room with all requirements | 10 | $m^3$ | | | |
| 4 | Stone masonry work with mortar 35% , mortar ratio : 1:4 (M:200) | 7 | m3 | | | |
| 5 | PCC under columns and stand posts and in side of room M:150 | 5 | $m^3$ | | | |
| 6 | Form work for concrete(Shuttring ) | 250 | m2 | | | |
| 7 | RCC for foundation, columns, Bond Beam, Top Ring and Reservoir (M:200) | 35 | $m^3$ | | | |
| 8 | Brick Masonry with mortar 25%, M200 | 18 | m3 | | | |
| 9 | Metal Door and Window with all necessaries and installation | 5 | m2 | | | |
| 10 | Plaster with cement mortar ratio 1:3 | 333 | $m^2$ | | | |
| 11 | Water proof isolation (paddle powder, cement, zero chaps) in said of reservior | 37 | $m^2$ | | | |
| 12 | Plastic Paint for inside and out side the body with two layers | 302 | M2 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 13 | Metal hand rail and stair around reservoir with oil painting | 40 | m2 | | | |
| 14 | Oil painting for Metal work | 100 | m2 | | | |
| 15 | Inlet pipe G.I& Over flow dia 2 inch | 25 | m | | | |
| 16 | Out let pipe G.I dia 3 inch | 35 | m | | | |
| 17 | cleaning pipe with valve G.I (10 bars)dia 3inch | 3 | m | | | |
| 18 | Gate Valve 2" 3" | 5 | pcs | | | |
| 19 | Main Hole for Gate valave | 1 | LS | | | |
| 20 | Sefty tools (including First Aid Box) | 1 | LS | | | |
| 21 | Project sign board metalic (1N@ 5'x4' ft) marble stone board (3N @ 2'x2' ft) | 1 | LS | | | |
| Total | | | | | | |

**Bill of Quantity (BoQ)**

**C - Drilling of water well**

**Annex E**

**Province: Nangarhar**

**District: Jalalabad City**

**Village: Majboorabad**

**Type of Project: Construction of Thirty (30) Classrooms School Building for Angiza Shinwari High School**

| No | Description | Unit | Quantity | Unit cost (US$) | Total Cost (US$) | Remarks |
|---|---|---|---|---|---|---|
| 1 | Digging ( 16") | M | 80.00 | | | |
| 2 | PVC pipe dia 8inch class D(Pipe &Filtter) Wight 40 kg with installation | M | 80.00 | | | |
| 3 | Glue | kg | 3.00 | | | |
| 4 | Screw for pipes joining | box | 3.00 | | | |
| 5 | Water test (Chemical ,Biological, Quality and Quantity) with chlorination | L/S | 1.00 | | | |
| 6 | Well Head Protection | No | 1.00 | | | |
| 7 | Crash for well | m3 | 3.00 | | | |
| | **Sub-Total** | | | | | |

**Bill of Quantity (BoQ)**

**D - Solar System**

**Annex E**

**Province: Nangarhar**

**District: Jalalabad City**

**Village: Majboorabad**

**Type of Project: Construction of Thirty (30) Classrooms School Building for Angiza Shinwari High School**

| No | Description | Unit | Quantity | Unit cost (US$) | Total Cost (US$) | Remarks |
|---|---|---|---|---|---|---|
| 1 | Solar CSUN 270Watt Multicrystalline Solar Module(15 years guarantee ) | Panels | 20 | | | |
| 2 | Power or Electrical cable line 2x2.5 for Submersible | M | 80 | | | |
| 3 | Power or Electrical cable line 2x6 for solar system | M | 120 | | | |
| 4 | Galvanized Angle iron frame Full size stand | Ls | 2 | | | |
| 5 | Solar pump inverter- (SGY 5500H),5.5kvw,min DC voltage 450,MPPT best operation voltage 500-600volt,Maximum DC voltage 750volt (1 year guarantee ) | Ea | 1 | | | |
| 6 | Submersible pump-Modalerated power 3 kw,rated voltage 380 volt,Lift (m)120-60,flow (2-12)m3/hour , Made in Italy 1.5" Best quality | Ea | 1 | | | |
| 7 | Pipe from Submersible pump to water tank 1.5” Best quality | M | 150 | | | |
| 8 | Rope for Pump | M | 250 | | | |
| 9 | Water proof CU cable with 4x2.5 for pump | M | 130 | | | |

| | | |
|---|---|---|
| **Sub-total** | | |

**Bill of Quantity (BoQ)**

**E - Construction of Retaining Wall and Ditch**

**Annex E**

**Province: Nangarhar**

**District: Jalalabad City**

**Village: Majboorabad**

**Type of Project: Construction of Thirty (30) Classrooms School Building for Angiza Shinwari High School**

| SL | Activities | unit | Quantity | Unit Cost (US$) | Total Cost (US$) | Remmarks |
|---|---|---|---|---|---|---|
| 1 | Excavation of Foundation | $m^3$ | 125.10 | | | |
| 2 | PCC 1:2:4 | $m^3$ | 36.20 | | | |
| 3 | Stone Masonary | $m^3$ | 166.40 | | | |
| 4 | Shattering for side Ditch | m2 | 176.00 | | | |
| 5 | Pointing on stone masonry front of Retaining wall with 1:3mortar with all Necessary Requirements. | m2 | 226.00 | | | |
| | Sub-Total | | | | | |

**Bill of Quantity (BoQ)**

**F - Construction of Septic Tank**

**Annex E**

**Province: Nangarhar**

**District: Jalalabad City**

**Village: Majboorabad**

**Type of Project: Construction of Thirty (30) Classrooms School Building for Angiza Shinwari High School**

| S/No | Item | Quantity | Unit | Unit cost (US$) | Total cost (US$) | Remarks |
|---|---|---|---|---|---|---|
| 1 | Excavation | 129.00 | $m^3$ | | | |
| 2 | Plain Cement Concrete (PCC) ration 1:2:4 (M:150) | 5.000 | $m^3$ | | | |
| 3 | Stone Pitching(Graval) for bed | 5.950 | $m^3$ | | | |
| 4 | Brick Masonry with mortar 25%, ration 1:4 (M200) | 8.650 | $m^3$ | | | |
| 5 | RCC for (Slab, wall,Coulmn) Septic tanks (M:200) | 29.300 | m3 | | | |
| 6 | Form work for concrete both side | 200.000 | $m^2$ | | | |
| 7 | Plaster with cement mortar ratio 1:3 | 200.00 | m2 | | | |
| 8 | Installation of bituminous for bed and out side of Septic tank With all Necessary Requirement. | 120.000 | $m^2$ | | | |
| 9 | according to the drawing preparing and installation of UPVC class C canalization 100 mm pipe (4"-3" elbow,Tee,) and it's relative works from building to septic tank | 1.000 | LUMSUM | | | |
| | **Sub-Total** | | | | | |