BILL OF QUANTITY Civil Works

Regional Traning Center Swat

S.H.1. Civil Works

CSR. Ref:	S.No	Description	Quantity	Units	Rate	Amount
04-22-b		Dismantling 2nd class tiles , dismenteling , cleaning & removal of surplus marterials. Dismenteling of existing floor upto required level as per instructions of Engineer incharge.	3800.00	Cft		,
<u>26.15</u>	C-2	P/A: An emulsiable concentrated insecticide shall be used with dilution for water, specially formulated to prevent intestation by termites. Provide a working solution of any of the following chemical element and concentration.	3800.00	Cit		
		a) Agenda 25 EC containing Fipronil or				
		b) Biflex with Bifen thiour				
		c) Dursbin or				
		d) Tenekil plus or				
		All mixing shall be done at site and mixing proportion of insecticide with water shall be in accordance with approved manufacturer's recommendations which shall be verified by the engineer incharge.				
		Inside solution shall be appled with approved pressure spraying equepment maintining a pressure of 150 psi to all application on or in earth. The chemical shall be applied/sprayed on all foundation beds, foundation sides, under floor, plinth protection.				
		a) Stage 1. Foundation portion				
		b) Stage 2. Under floor and joinery	1300			
		c) Stage 3. Plinth protection	1300 1300	SFT		
04-35 ± 04.36	C-3	Romoving of sky lights with chowkat and Remving for ventilators and sunshads	12.00	Nos		
04-19-c	C-4	Dismantling PCC (1:2:4), dismenteling, cleaning & removal of surplus marterials. Dismenteling of existing floor upto required level as per instructions of Engineer incharge.				
		novor do por moradante de Engineer menarge.	2938.40	Cft		
.04-20	C-5	Dismantling RCC (1:2:4) Coulnms in center of hall with the help of Cutter, grander, dismenteling, cleaning & removal of surplus marterials. Dismenteling of existing floor upto required level as per instructions of Engineer incharge.	6.00	Nos		
<u>.04-13</u>	C-6	Dismantling Brick work , dismenteling , cleaning & removal of surplus marterials. Dismenteling of existing superstructure upto required level as per instructions of Engineer incharge.	577.50	Cft		
L	L	<u> </u>	3. , .00	<u> </u>	L	

C-7	Excavation in foundation of building, bridges etc complete : in sand, ashes or loose soil, As per instruction of Engineer incharge.	1431.00	Cft	
C-9	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8), and as per instruction of Engineer inchagre	157 41	Cft	
C-10	Pacca brick work in foundation and plinth in Cement, sand mortar 1:6, the best quality well brunt brick as per approved by Engineer inchagre			
C-11	Pacca brick work in ground floor Cement, sand mortar 1:6, the best quality well brunt brick as per approved by Engineer inchagre		Cft	
C-12	P/L: P.C.C 1:4:8 in any part of building such as foundation, sub flooring etc. using 1½" down graded stone aggregate i/c form-work, placing, consolidating & compacting, leveling and curing etc. Complete as per specifications and instructions of Engineer inchagre	1818.96	Cft	
C-13	P/L: RCC 1:2:4 i/c mixing in machine, placing in water tight form work, levelling consolidating with vibrators in all footing, retaining walls, columns, Plinth beams, lintel, beams, shades, projection, slabs & pardies using graded approved quality crushed	92.00	Cft	
C-14	P/F: In position deformed reinforcement bars, of minimum 40000 PSI yield strength, of any size and diameter i/c straightening, cutting, bending, placing and binding and providing of spacers etc. Complete as per specifications and instructions of Engineer			
C-15	P/L: 6" thick layer of Clean coarse sand under floor from an approved source i/c levelling watering, consolidating machanically by plate compactor etc.Complete as per specifications and instructions of Engineer incharge.	1982.00	Cft	
C-16	P/L:Ceramic, white/coloured matt flooring 12"x12" tiles of Master/Shabeer (supreme quality) or equivalent and approved, laid over 1-1/2" thick PCC 1:2:4 using 3/4" thick cement mortar laid with 1:2 with sand of approved quality c/s mortar i/c filling of joint as per instruction of Engineer inchagre	1888.00	Sft	
	C-10 C-11 C-12 C-13	Excavation in foundation of building, bridges etc complete: in sand, ashes or loose soil, As per instruction of Engineer incharge. C-9 Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8), and as per instruction of Engineer inchagre C-10 Pacca brick work in foundation and plinth in Cement, sand mortar 1:6, the best quality well brunt brick as per approved by Engineer inchagre C-11 Pacca brick work in ground floor Cement, sand mortar 1:6, the best quality well brunt brick as per approved by Engineer inchagre C-12 P/L: P.C.C 1:4:8 in any part of building such as foundation, sub flooring etc. using 1½" down graded stone aggregate i/c form-work, placing, consolidating & compacting, leveling and curing etc. Complete as per specifications and instructions of Engineer inchagre C-13 P/L: RCC 1:2:4 i/c mixing in machine, placing in water tight form work, levelling consolidating with vibrators in all footing, retaining walls, columns, Plinth beams, lintel, beams, shades, projection, slabs & pardies using graded approved quality crushed C-14 P/F: In position deformed reinforcement bars, of minimum 40000 PSI yield strength, of any size and diameter i/c straightening, cutting, bending, placing and binding and providing of spacers etc. Complete as per specifications and instructions of Engineer C-15 P/L: 6" thick layer of Clean coarse sand under floor from an approved source i/c levelling watering, consolidating machanically by plate compactor etc.Complete as per specifications and instructions of Engineer incharge. C-16 P/L: Ceramic, white/coloured matt flooring 12"x12" tiles of Master/Shabeer (supreme quality) or equivalent and approved, laid over 1-1/2" thick PCC 1:2:4 using 3/4" thick cement mortar laid with 1:2 with sand of approved quality c/s mortar i/c filling of joint as per	Excavation in foundation of building, bridges etc complete: in sand, ashes or loose soil, As per instruction of Engineer incharge. 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C-16 P/L: Ceramic, white/coloured matt flooring 12"x12" tiles of Master/Shabeer (supreme quality) or equivalent and approved, laid over 1-1/2" thick PCC 1:2:4 using 3/4" thick cement mortar laid with 1:2 with sand of approved quality c/s mortar i/c filling of joint as per

13-a-02 + 12-1	C-17	First class deodar wood wrought joinery work Deodar wood frame 13/4" thick with springs, inculding Provide & fix MS chowkat of doors, windows etc MS 1.5"x1.5"x1/4" welded with MS flat in hold fast and other accerssiores, holder, locks and completed in all respect inculding 2 coat of red oxizide and filling concerte in hollow protion of MS and approved design and instructions of Engineer inchagre. Ms Door Frame Chowkat	158.00	Rft		
		Doors	178.50	Sft		
<u>NSI</u>	C-18	Deveople face wall with help of stone work / fae wall tiles , beam and column completed in all respect as per provided design and drawing the hight of design is 8 feet and length of design is 17 feet. Photos are annexed for over view the concept	L.s	Job		
<u>NSI</u>	C-19	P/L:Ceramic, coloured matt flooring 24"x24" tiles of imported Spanish tiles (supreme quality) and approved, laid over 1-1/2" thick PCC 1:2:4 using 3/4" thick cement mortar laid with 1:2 with sand of approved quality c/s mortar i/c filling of joints laid in Hall and Manager Room and Crime secne Room. Approved by Engineer incharge.	2400.00	Sft		
NSI	C-20	The Tiles used in Floor should cut in proper shape and use as skirting in hall /manager room / Crime secne room. As per instruction of Engineer incharge. P/L inculding cutting in shape, filling.	400.00	0.00		
11-09-c	C-21	P/A: 1/2" thick plaster on walls, soffit of slab, beams projections, shades & pardi in 1:2machine mixed cement/sand mortar using approved quality sand includind scafolding, chambering of edges, rounding the corners, making groves and edges where required. As per instruction of Engineer Incharge.	180.00 3018.00	Sft Sft		
<u>NSI</u>		P/L: best quality rockwall approved colour, shade and quality i/c surface preperation of plaster on concrete and block masonry surface of approved shade i/c primer of approved quality, making finishing, complete with rubbing etc as per instruction og engineer incharge.	5600.00	Sft		
15-53-d01	C-23	P/F: aluminum Permiem 4" section slidind windows with 5mm Clear glass "U" rubber, imported sliding rail & rollers, handles etc. complete in all respect as per specifications and instructions of Engineer incharge.	698.41	Sft		
<u>NSI</u>	C-24	Fall Ceiling of approved design with Moulded Plastic of Paris , the work inculd wooden polish , colour paint , filling etc . The design photo will be provided for conecpt of work , the design approved from Concern officals of project . Inculding border , and				
		implementation.	4886.00	Sft]	

09.05+09.1 2+11.17+9.	C-25	Roof Treatment				
34c +		P/L: roof treatment				
polythene sheet		a) 2 coats of hot bitumen (10-15 grade) with coarse sand blinding.				
		b) 2 layers of approved polythene sheet & 1" thick thermopore sheet between 2 layers of polythene				
		c) 4" thick compacted earth with proper slope.				
		d) 1½" thick brick tiles laid in 1:4 mortar, grouting in 1:2 and flush pointing in 1:1.	6065.00	Sft		
9.19a+(9.20+ 9.21)/15	C-26	P/F: 4" Ø C.I. rain water pipe I/c bends, shoes, heads, jointing with lead and yarn i/c painting, with primer coat of red oxide & 2 coats 0f enamal paint of approved quality. Complete in all respect as per specifications and instructions of Engineer Incharge.		Rft		
<u>06-05-h</u>	C-27	Plinth Protection: Providing and placing PCC 1:3:6 in plinth protection around the building over compected earth or where required including formwork, mixing in concrete mixer, placing, leveling, compacting, finishing and curring etc.Complete in all respect		Cft		

Internal Electrification

Regional Traning Center Swat

S.H.2. Internal Electrification

CSR. Ref:	S.No	Description	Quantity	Units	Rate	Amount
15.50	E-1	Supply and installation of wiring for light, fan & call bell point with 3.029 PVC insulated cable "Pak cable/AGE" in 25 mm dia PVC conduit recessed in wall column and ceiling etc, i/c all accessories such as junction boxes, sockets, bends, hoocks flash	92	Each		
<u>15-76b</u>	E-2	P/F: 4' long tube light TMS-140 (Phillips) with box louver, starter, choke etc. Complete in all respect as per specifications and instructions of Engineer incharge.	8	No		
<u>15-68c</u>	E-4	Supply and erection of AC ceiling fan complete with GI rod, canopy, blades, dimmers, capacitors, 56" sweep, approved quality (Pak Fan) or equivilant. Complete in all respect as per specifications and instructions of Engineer incharge.	14	No		
15-69c	E-5	P/F: Exhaust fan 12" sweep complete with shutter and regulator, wiring & switch of best quality (Pak Fan) or equivilent quality. Complete in all respect as per specifications and instructions of Engineer Incharge.	4	No		
<u>NSI</u>	E-6	Supply and erection of 3" Down light wirth holder, gallery and 20 watt E-Saver, best approved quality. Complete in all respect as per specifications and instructions of Engineer Incharge.	50	No		
<u>15-83</u>	E-7	Supply and fixing light plug 10 Amp mutil stock in one, best quality light plug of approved size and design as per instruction of engineer inchagre.	12	No		
15-81	E-8	Supply and fixing Power plug 20 Amp mutil stock in one , best quality light plug of approved size and design as per instruction of engineer inchagre.	4	No		
15-51	E-9	Same as item # E1, but wiring of 5 pin 5 Amp. Light plug away from switch board i/c P/F: of light plug (imported) i/c wiring with 7/.029, 5 Amp switch socket unit fitted on steel box and separate circuit etc. Complete as per instructions of Engineer Inch	12	Each		
15.75a+15. 70c+15.72 b	E-10	P/F: of Main board comprising: - Main panel board (14 SWG) a) Main switch (Industrial) TPN 100 Amp (Approved quality), b) Changeable switch 100 Amp, c) 4 Bus Bars copper, d) C.T of appropriate power, e) Steel vertical panel with door lock and, h) 3 indication lights & volt/Amp meters. Complete in all respect as per specification and instruction of Engineer incharge.	1	Job		
15-42	E-11	Earthing of main switch with 8 SWG copper wire, laid in ½" dia GI (IIL or National)pipe from main switch to 2'x2'x1/8" copper plate burried in 7 feet deep pit alongwith salt & charcoal mixture i/c digging & refilling of pit. Complete as per instruction of	1	No		
15-16+15- 17	E-12	Supply and erraction of call bell 250/220 volt with push botton (PPI) or imported of approved quality. Complete as per instruction of Engineer Incharge.	2			
15-44	E-13	Supply and erraction of 1" dia and 1 meter long lightening conductor copper rod with 5 spikes ball and base etc of approved quallity. Complete as per instruction of Engineer Incharge.	1			

Internal Water Supply and Sanitary Installations

Regional Traning Center Swat

S.H.3. Internal Water Supply and Sanitary Installations

CSR. Ref:	S.No	Description	Quantity	Units	Rate	Amount
14.01a+14. 10a+14.25 +14.47a	P-1	P/F: Water closet apparatus European pattern (ICL, Boch, Asia or equivalent) comprising 13.5 liters flushing cistern, seat cover, tee-stop cock (Coupled set in Light colour) approved quality, Pak made (Export or equivalent quality). Complete in all respect				
			4	Nos		
14.05a- 02+(14.25x 2)+14.27	P-2	P/F: Wash hand basin (ICL, Boch, Asia or equivalent), of approved make, colour, shape & quality including pedestal, bottle trap with union 1-1/4" basin waste, tee-stop cocks, chromium plated chain and rubber plug, C.P. mixer for cold and hot water, jointing complete in all respect	2	Nos		
14-17	P-3	P/F: Glass mirror of 22" x 16" size with plastic border local made including plugs & screws, making holes in concrete, masonry, or wood etc. & then repairing it including all other fittings for complete installation. Complete in all respect as per specif	2	Nos		
14-15	P-4	P/F: Toilet paper holder (SS) of approved shape, pattern and size, Pak make, Baig, Asia or equivelant. complete with plugs, screws etc., fixed to concrete, brick, stone or wood work. Complete in all respect as per specifications and instructions of Engineer incharge.	4	Nos		
14-20a	P-5	P/F: Soap tray of approved shape, pattern and size, Pak make, Faisal, Asia, Master, complete with plugs, screws etc., fixed to concrete, brick, stone or wood work. Complete in all respect as per specifications and instructions of Engineer incharge.	2	Nos		
Non Schedule	P-6	P/F: Muslim Shower combined with double bib- cock of approved design colour & style including all fitting for complete installation, (Pak made), Faisal, Asia, Master. Complete in all respect as per specifications and instructions of Engineer incharge.		Nos		
-	P-7	P/F: Cold and hot water pipes I/c all fittings, specials, cutting, jointing, making holes in concrete or masonry etc. and then repairing holes, supports and hangers etc. make of the following diameters. Complete in all respect Pak made (IIL, National) or	,			
14.55-f		a) ½ inch i/d	200	Rft		
<u>14.55-e</u>		b) ¾ inch i/d	150	Rft		
<u>14.55-d</u>		c) 1 inch i/d	100	Rft		

,					 	
	P-8	P/F: uPVC soil, waste, and vent pipes i/c specials of the following diameters, including imported rubber ring/solvent cement fittings, jointing, cutting and breaking concrete /		i		
		masonry etc. and then making it good i/c excavation & refilling of earth, clean the top level compacted as per instruction of Engineer inchagre.				
24.18a-03		a) 6 inches	200.00	Rft		
24.18a-02		b) 4 inches	90.00	Rft	 	
24.18a-01		c) 3 inches	300.00	Rft	 	
14-31 <u>b</u>	P-9	P/F: C.I Floor Trap (110x75mm) including strainer, of approved make i/c making required number of connections; breaking concrete or masonry work & then making it good. Complete in all respect as per specifications and instructions of Engineer incharge.	6	Nos		
Non Schedule	P-10	P/F: Providing, fabricating & fitting uPVC floor Cleanout of 4" dia including 2 No. 45° elbows, transition pipe, socket plug, breaking concrete or masonry work & then making it good, etc. Complete in all respects as per drawings & specifications and inst	4	No		
Non	P-11	P/F: 2" diameter uPVC pipe i/c special (Dadex,	1	No		
Schedule		Beta). Complete in all respects as per drawings & specifications and instructions of Engineer incharge.	80	Rft		
14-33	P-12	Construction of Gully Trap Chamber (12"x12" clear) including supply & fixing of approved make gully trap; construction of 4-1/2" thick brick masonry in 1:4 c/s mortar, 3" thick 1:4:8 PCC at bottom, 1:2:4 PCC in benching, (12"x12") CI cover with frame	4	Nos		
14-28b	P-13	P/F: Bronze 1.25" Gate valves, conforming to BS standards, Mughal, Faisal, Asia, (Pak) make or approved equivalent, including unions & jointing arrangement with pipe on both ends of valves, nuts, botts etc. Complete in all respect as per specification and				
			2	Nos		
<u>14-37c</u>	P-14	P/F: 24"X24" (Grade 'C'-light duty) bitumen coated cast iron cover with fame conforming to BS-497, on manholes etc, including all fittings for complete installation. Complete in all respect as per specifications and instructions of Engineer Incharge.	5	Nos		
Non Schedule	P-15	Construction of RCC manholes/catch pits including all works like excavation, backfill, P.C.C (1:4:8), R.C.C (1:2:4), steel reinforcement, 1:4 c/s plaster ½" thick, P:C:C (1:3:6) benching, fixing of C.I cover and frame etc complete in all respect as shown	3	Nos		
3.23d+3.16 a	P-16	Structural excavation in all kinds of soil / material wet or dry including gravels, conglomerate etc. and including timbering & bracing if required, and disposal of surplus excavation material at approved designated locations. Complete in all respect as per instruction of engineer incharge	720	Cft		
<u>6.03b</u>	P-17	Providing, placing, PCC 1:4:8 as lean concrete (plain cement concrete using ordinary Portland cementin) foundations i/c compacting, consolidating finishing and curing. Complete in all respect as per specifications and instructions of Engineer Incharge.				
1	l		39.6	Cft	I	l

6.06a- 03+6.38a x 2 + 11.10c x 2		Providing, placing, compacting, finishing and curing class C, RCC (ratio 1:2:4 & cube strength 3000 psi) using ordinary Portland cement, in walls, slabs etc. Complete in all respect as per specifications and instructions of Engineer Incharge.	Cft	
9.12	P-19	Applying two coats of hot bitumen @ 0.4lb/sft each coat of 10/20 grade to concrete surfaces in contact with earth. Complete in all respect as per specifications and instructions of Engineer Incharge.	Sft	
6.07c	P-20	Providing and placing deformed steel reinforcement (grade 40) of various sizes / diameters with and including the cost of transportation, loading, unloading, cutting, straightening, bending, binding, wastage and overlapping, placing in position by concret		

External Works

Regional Training Center Swat

S.H.4. External Works

03-23-a	W-1	Excavation in foundation of building, bridges etc complete : in sand, ashes or loose soil, As per instruction of Engineer incharge.	1620.00	Cft	
<u>06-05-i</u>	W-2	Plain Cement Concrete including placing, compacting, finishing & curing (Ratio 1:4:8), and as per instruction of Engineer inchagre	217.80	Cft	
07-04-a-05	W-3	Pacca brick work in foundation and plinth in Cement, sand mortar 1:6, the best quality well brunt brick as per approved by Engineer inchagre		Cft	
07-05-a-05	W-4	Pacca brick work in ground floor Cement, sand mortar 1:6, the best quality well brunt brick as per approved by Engineer inchagre	1155.00	Cft	
NSI	W-5	Cutting Dressing leveling , plantation , rmoving surplus soil around 20 feet of building, giving out look to building , inculding develop access road to RTC comprise of tuff tiles or concerte . Any additional work required as per instruction of Engineer inchagre.	1	Job	

