

Annexure-A

Detailed estimate for the Construction of Gate and Check Post at Aeronautical Engineering College at Patiala

Sr. No	Ref to CSR	Description of Item	Quantity	Unit	Total Rate	Amount
		Civil work				
1	6.6	Earth work in excavation in foundations, trenches etc in all kind of soils where pick jumper work is not involved and not exceeding 2.0 mtr depth including dressing of bottom and sides of trenches stacking the excavated soil clear from the edge from excavation and subsequent filling around massonary in 15 cm layer with compaction including disposal all surplus soil as directed within a lead of 30 mtrs as per PWD specifications.	32.37	Cum	119.30	3862
2	10.10	Cement Concrete 1:4:8 with 40mm gauge stone aggregate using concrete mixer volumetric type.	2.02	Cum	3129.90	6332
3	10.16	Reinforced cement concrete M-25 mechnaily batch mixed using batch type concrete mixer as per IS 1791 and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in foundation and plinth, complete.	5.38	Cum	4670.34	25127
4	10.22	Reinforced cement concrete M-25 mechnaily batch mixed using batch type concrete mixer as per IS 1791 and vibrated by needle vibrator but excluding steel reinforcement centring and shuttering in superstructure	9.77	Cum	5075.64	49564
5	18.18	Cold twisted deformed (ribbed/ tor steel) Bars Fe 500 grade as per IS 1786-1985 for R.C.C. works, where not included in the complete rate of R.C.C. including bending, binding, and placing in position complete.	25.75	Qtls	5098.65	131274
		SHUTTERING:-				
6	9.1	Shuttering for Faces of Concrete Foundations and Foundation being and plinth beam (Vertical or battering) Footing/	39.06	Sqm	158.31	6184
7	9.6	Shuttering for Faces of beams and lintels	68.44	Sqm	188.73	12916
8	9.8	Shuttering for Faces of slab	7.41	Sqm	204.03	1512
9	11.6	1st class burnt brick work in cement sand mortar 1:5 in superstructure	4.08	Cum	3893.18	15895
10	15.9	Cement plaster 12.5mm in cement sand mortar 1:6	82.54	Sqm	117.83	9726
11	16.6+ 16.14	Preparation of plastered surfaces for distempering including surface, applying filling with approved quality filler consisiting of plaster of paris and chalk mitti including finishing the surface to the required finish complete Finishing walls with exterior decorative cement based paint such as snowcem, robbiacem etc. two or more coats to give an even shad	82.54	Sqm	100.34	8282

12	17.45	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate z sections and other sections conforming to Is: 733 and IS : 1285 of Jindal, Hindalco, Mahavir or equivalent make approved by Engineer in Charge, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC Plug/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitered and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing/paneling, C.P. brass/stainless steel screws, all complete as per architectural drawings and the direction of Engineer-In Charge. (Glazing and paneling to be paid for separately) :				
		for chowkats only	42.77	kgs	339.17	14506
13	17.45b	For openable door	16.15	kgs	351.84	5682
14	17.23b	Cost of Aluminium fittings complete for doors, windows such as tower bolts, handless and screw etc. for these fittings (Excluding sliding bolt)				
		side door shutter	1.98	Sqm	144.04	285
15	17.47	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC Plug/neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item) 5.5mm thick glass	8.34	Sqm	976.58	8147
16	17.49	Providing and fixing aluminium sliding door bolts ISI marked anodized (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete :				
		300X16MM	2.00	NOS	126.79	254
17	17.43B	Providing and fixing hydraulic door closer ISI mark with necessary screw etc. complete	1.00	NOS	990.74	991
18	NS	Wrought iron & Mild steel ladders, framed grills, gratings etc. with ends of bars rivetted of molded forged framed window guards, barred iron doors stair case iron railing etc. including cost of bolts and nuts, screws, welding rod complete fixing in position appx 50 kgs per Sqm	461.55	kgs	100.00	46155
19	16.17+ 16.18	Applying pink primer or aluminium priming coat on wood work including preparation of surface knotting and stopping etc. Painting two or more coats excluding priming coat with synthetic enamel paint in all shades on wood work, metallic or plastered, concrete surface to give an even shade. including wheels for opening and running of gate	13.66	sqm	79.39	1085
20	14.3	Base course of floor consisting of 100mm thick cement concrete 1:8:16 and 100mm sand filling	8.45	Sqm	308.92	2612

21	14.138	Providing and laying Rectified Rectified Porcelain floor tiles 400x400mm or more (thickness to be specified by the manufacturer) of premium quality conforming to IS:15622 of approved make in all colours laid on 20mm thick bed of Cement Mortar 1:4 (1 Cement : 4 Fine sand) for new flooring complete Rectified tiles have finished edges allowing them to be placed closer together for a narrower grout joint as opposed to other tiles and are more expensive. Unlike typical factory-edged tile, rectified tile is cut to size after the firing process. This process creates a precise, 90 degree angle edge and, as a result, can be laid with a tighter grout joint than unrectified tile. It gives a smooth, sophisticated and continuous look to the floor. Using a rectified tile allows you to place the tiles much closer together using tighter joint spacing. This makes the grout less visible as there is actually less grout used. When a wide space is used between tiles, the grout becomes a distinct part of the design and if the grout does not blend well with the tiles it can create a less than professional looking finish. In addition, the grout can easily become soiled and discolored over time and will detract from the look of the tile itself	8.45	Sqm	1112.37	9405
22	NS	Providing and fixing on faces of walls clay tiles size 9 inches x3 inches including all type of labour and material required for the purpose complete in all respect including polish finish	54.44	Sqm	1900.00	103445
23	NS	Over head sign board 12x0.75 mtrs (in brass letters) on Retro reflective sheeting of high intensity microprismatic grade including cutting, pressure pasting, cutting of word matter with computer plotter and design and layout of board	9.88	Sqm	20000	197520
24	NS	Extra for Logos	2.00	No's	15000	30000
25	NS	Extra for fixing board with the beam	9.72	Sqm	2000.00	19440
Electrical Work						
26	33.02 (i) b	RECESSED PVC CONDUIT PIPE WIRING SYSTEM WITH MODULAR SWITCHES: Wiring in PVC insulated copper conductor single core FR cable (ISI marked), 1100volts grade to be laid in heavy gauge, PVC, fire retardant conduit pipe 20mm/25mm dia. ISI Marked, recessed in wall etc., complete with powder coated/anodized concealed metal boxes required for suitable number of modules, for having electronic fan regulators, bell push, electronic buzzer, 3pin 6Amp., 3pin 16/20Amp. Sockets and 6Amp./16/20Amp. Switches (Screw Type Modular Accessories) etc., and covered with Frame Plate etc., & including the cost of required number of modular switches/sockets, step type electronic fan regulator 100watts, PVC connector (For Fan Box and Electronic Buzzer), Steel Hooks, Circular Inspection Box (Recessed Type and Deep Type) PVC conduit pipe &	01	Each	982.59	982.59

		copper wire and other petty material etc. including the cost of cutting and filling up of chases:- Wiring fan point with sheet metal fan box (shape hexagonal) in PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5 sq. mm, 1100volts grade with step type electronic fan regulator 100watts. Make List PVC Conduit Pipe Medium (ISI Marked) AKG, Diplast, Finolex. Make List PVC Copper Wire :- Finolex/Polycab/Havell,s. Make List Accessories Modular Switch, Socket etc.:- North West, Legrand (Mosaic Series), SSK Grand,				
	(ii)	Wiring light point in PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5 sq. mm, 1100volts grade.	04	Each	508.92	2035.68
	(iv)	Wiring 3 pin 6 Amp. wall socket (Shuttered) point in PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5 sq. mm, 1100volts grade complete with bonding to existing earth with PVC insulated copper conductor single core FR cable (ISI marked) overall 1 sq. mm, 1100volts grade.	03	Each	501.66	1504.98
	(v)	Wiring 3 Pin 6 Amp. Plug control comprising wall socket (shuttered) and switch including bonding to existing earth with PVC insulated copper conductor single core FR cable (ISI marked) overall 1 sq. mm, 1100volts grade complete.	04	Each	393.80	1575.20
	(vi)	Wiring 3 pin 16/20 amp. power plug control (shuttered) and switch.	01	Each	340.28	340.28
27	33.09	PVC INSULATED SINGLE CORE FR COPPER CONDUCTOR CABLE: Supply and erection of PVC insulated single core FR copper conductor cable ISI marked left bare in pipe or casing of suitable size excluding the cost of supply and erection of pipe or casing. Make List PVC Copper Wire Finolex/ Polycab/ Havell,s PVC insulated copper conductor single core FR cable (ISI marked) overall 1.5 sq.mm, 1100volts grade	50	Metre	15.11	755.50
	(iii)	PVC insulated copper conductor single core FR cable (ISI marked) overall 2.5 sq.mm, 1100volts grade	100	Metre	21.61	2161
	(xi)a	PVC INSULATED PVC SHEATHED TWIN FLEXIBLE COPPER CONDUCTOR CABLE: Supply and erection of PVC insulated PVC sheathed twin flexible wire with copper conductor complete in all respect as desired by the Engineer-in-charge. PVC insulated PVC sheathed twin flexible wire with copper conductor of size 0.5 sq.mm (16/0.20mm) Make List PVC Copper Wire Finolex/ Polycab/ Havell,s/ KEI	40	Metre	16.39	655.60
28	33.10B (x)	XLPE/ PVC INSULATED ARMOURED CABLES (LOOSE): Supply & laying of aluminium conductor XLPE/ P.V.C. insulated armoured and served cable to be laid loose in the existing trench or pipe as per PWD General Specifications (Electrical Works):- Aluminium conductor XLPE/ PVC insulated PVC sheathed armoured and served	300	Metre	131.43	39429

		cable working voltage 1100volts grade 16sq.mm (Three Core) Make List Finolex/ Polycab/ Havell.s/ KEI				
29	33.12 (viii)	PVC, HDPE PIPES & PVC FLEXIBLE PIPES: Supply & erection of PVC pipes & HDPE pipes (fire retardant) for wiring purposes including bends, inspection boxes etc., where necessary including other petty material as per PWD General Specifications (Electrical Works):- Heavy gauge PVC conduit pipe 32mm dia. (ISI marked) Flushed	5	Mtr	59.54	297.70
30	33.15 (xix)	SUPPLY AND ERECTION OF WIRING ACCESSORIES: Supply and erection of switches, sockets, power switch and sockets and other accessories (flush piano type/ modular accessories) in the existing bakelite/ modular cover frame including connections and petty material etc. Modular Telephone socket (RJ-11) one module Make List Accessories Modular Switch, Socket etc.:- North West, Legrand (Mosaic Series), SSK Grand,	02	Each	90.13	180.26
31	33.16 (xviii)	MINIATURE CIRCUIT BREAKERS/ RCBO's/ RCCB's: Supply and erection of Miniature Circuit Breakers/ RCBO's/ RCCB's in the existing MCB distribution board as per PWD General Specifications (Electrical Works) including connections with suitable size of thimbles/lugs. GROUP-B: (Havell's, HPL, ABB, Indo Asian & other brands approved by PWD) Miniature circuit breaker single pole 6 to 32amp. (Breaking capacity 10kA, Curve-C) suitable for 240/ 415 volts 50cycles AC supply	04	Each	188.04	752.16
	(xxiii)	Miniature circuit breaker double pole 40amp. (Breaking capacity 10kA, Curve-C) suitable for 240/ 415 volts 50cycles AC supply	01	Each	575.19	575.19
32	33.17 (xiii)	SHEET METAL DOUBLE DOOR DISTRIBUTION BOARD FOR MCB/ RCBO/ RCCB's: Supply and erection of sheet metal double door distribution boards of suitable size and of required no. of ways for mounting miniature circuit breakers/ RCBO's/ RCCB's in the existing MCB distribution board as per PWD General Specifications (Electrical Works) including connections with suitable size of thimbles and bonding to existing earth etc. GROUP-B: (Havell's, HPL, ABB, Standard & other brands approved by PWD) Sheet metal double door S.P. & N. distribution board (dust protected) provided with bus bar, neutral link and din bar, suitable for incorporating MCB's/ RCBO/ RCCB's, 8 way each	01	Each	897.00	897.00
33	33.18 (v)	SHEET METAL IRON CLAD SWITCHES: Supply and erection of sheet metal iron clad switch on existing surface with G.I. bolts & nuts/ rag bolts and nuts etc., according to the size of holes in the body of the enclosure including connections with suitable size of thimbles and bonding to the existing earth as Per PWD General Specifications	01	Each	1372.62	1372.62

		(Electrical Works). Sheet metal iron clad triple pole switch with neutral link 32amp. 415 volts Make: Havell's/ Asco/ L&T/ Siemens				
34	33.37 (i)	DOUBLE WALLED CORRUGATED (DWC) HDPE PIPES: Supply and erection of double walled corrugated (DWC) HDPE pipe to be laid 1mtr. below ground level including excavation (making necessary trench), placing the pipe in position and back filling with excavated soil etc. of the required size. Double walled corrugated (DWC) HDPE pipe 50/ 38mm (outer/ inner dia.) Make: Reliance/ Duraline/ Telerec/ Gemini	300	Metre	86.01	25803
35	NS	Supply & Erection of LED Floodlight 50 Watt Make Jaquar, Philips, Havells	04	Each	2450	9800
36	NS	Supply & erection of heavy duty Exhaust Fan 15" (380) sweep 900 RPM, Copper wound complete with louver shutter of matching colour of Exhaust fan on the existing surface according to the site requirements, including then cost of louver shutter including connection & testing etc. Complete in all as desired by the Engineer-in-Charge of the work. Make -Crompton, Havell's, Orient.	01	Each	1790.00	1790.00
37	NS	Supply and Erection of 1200mm (48") ceiling fan sweep with double ball bearing and aluminium blades without regulator suitable for 220V, 50Hz, AC Supply Make: Havell's Velocity/Orient New Breeze.	01	Each	1485.00	1485.00
38	NS	Supply and Erection of LED Tube light 4', 22 watt, 2500 lumen Aluminum Body Make-Philips, Crompton, Osram.	4	Each	967.27	3869.08
Total						806462.84

Note:

- Any error regarding description, reference to CSR quantity, rate, premium, unit calculations omission, addition will be corrected at any stage as per CSR, AOR, specifications and drawings and no claim whatsoever shall be entertained on this account.
- Quantity may vary at the time of execution of Work.

Say Rs 806463/-

(Eight Lac Six Thousand Four Hundred and Sixty Three Rupees Only)

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