1.(C) GUARD ROOM							
S.No.	**PWD CG S.O.R 2015**	**DESCRIPTION OF ITEM**	**QTY.**	**UNIT**	**RATE**	**AMOUNT (SOR)**	**AMOUNT (N.S.)**
1	1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m liftand lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.					
a	1.1.1	In hard rocks where blasting in prohibited.	3.24	CUM	798.00	2585.52	
2	3.1	Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work.					
a	3.1.3	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size).	0.20	CUM	2659.00	521.16	
3	1.25	Diluting chemical emulsion (chlorpyrifos/ lindane) in water as per manufacturers recommendation and injecting for post - constructional anitermite treatment (excluding cost of chemical emulsion):					
a	1.25.1	Surface treatment by spreading emulsion under floor, over the plinth area before laying base concrete @ 5 litres / sqm	1.44	SQM	27.50	39.60	
4	1.22	Supplying chlorpyrifos/ Lindane emulsifiable concentrate of 20% in sealed containers including delivery as specified.	0.058	LITRE	208.00	12.06	
5	3.3	Providing and laying design mix reinforced cement concrete with crushed graded stone aggregate 20mm nominal size using batching plant, transit mixer and concrete pump, in all works upto plinth level excluding cost of form work.					
a	3.3.2	RCC M-25 Grade					
		For Footing	0.43	CUM	4298.00		
		For Coloum	0.36	CUM	4298.00		
			0.79	CUM	4298.00	3395.42	
6	3.12	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire in foundation and plinth all complete					
a	3.12.1	**Thermo-Mechanically treated bars FE 415**	93.26	KG	54.50	5082.56	
7	2.1	Providing and fixing form work including centring, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:					
a	2.1.1	Foundations, footings, bases of columns plinth beam, curtain wall in any shape and size and all type of wall below plinth level.					
		For Footing	2.88	SQM	139.00		
		For Coloum	4.80	SQM	139.00		
			7.68	SQM	139.00	1067.52	
8	1.18	Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.	2.81	CUM	371.00	1041.77	

9	9.7	Providing and fixing M.S. round holding down bolts with nuts, washer and plate in cement concrete complete. P/F M.S PLATE & Bolt as specified in drawing.					
	9.7	P/F M.S PLATE	16.96	KG	71.50		
		Bolt as specified in drawing	16.00	NOS			
			32.00	KG	71.50		
			48.96	KG	71.50	3500.64	
10	9.3	Steel work in tubular (round, square or rectangular hollow tubes etc.) structure in built-up sections, trusses and frame work including cutting,hoisting, fixing in position upto a height of 5m above plinth level, consisting of columns trusses, roof and bottom purlins, base plate, holding down bolts, wind ties bracing (if required), bolts, nuts and washers for fastening etc. complete with applying a priming coat of red oxide zinc chromate primer					
a	9.3.2	P/F HOLLOW TUBE 100 X 100X 5, TAKING TUBE WEIGHT = 14.70Kg/m					
			4.80				
			70.56	KG	93.50	6597.36	
	9.3.2	P/F HOLLOW TUBE 50 X 50 X 5, TAKING TUBE WEIGHT = 6.90Kg/m	1.10				
			7.59	KG	93.50	709.67	
11		WOODEN GUARD ROOM					
	N/S	Providing and fixing imported wooden prefabricated guard room of Area 1.6 sqm made up of Pine Wood, the guard room having wall height of 3 m and roof slope 35 deg the roof made out of spruce wood members supported on trusses with 0.75m overhang from walls, 12mm wooden panel for roof cladding with S.B.S membrane and asphalt fibre glass shingles. The outer walls made out of 36mm thick panels T &G style, columns made out of 128mm x 36mm sections. Base of the house made up of wooden frame and 19mm thick marine plywood. Floor truss size is 40 x 130. Door shutters made up of wooden frame 100mmx 35mm for top and panels 20mm thick mortise lock handle and hardware as per approved make. Every art of wood treated with Description antifungal and anti-termite treatments with chloropyriphos and borax. External wood is treated with UV and water resistant acrylic finish. Internal wood finished with melamine sealer. Flooring is of 120 x 12 Hard wood or Laminated wooden flooring. Whereas outdoor decking is 95 x 28 mm thermo treated decking.Roof truss is of 48 x 148 mm. Providing transport, freight assembling on site finishing all the structure with polishing etc complete. As directed by engineer in charge.(as per the detailed drawing attached), with following specifications and as per the detailed drawings:.	1.00		88000.00		88000
		a. Antitermite treatment: - Anti termite treatment by treating the Pine Wood structure floor truss shoud be ACQ treted at the rate of 3 liters of emulsion concentrate of one percent concentration of CHLORPYRIFOS 20% F.C. ISI approved conforming (I.S. 8944) (i.e. by diluting 5 liters. of chlorpyrifos 20% EC with 95 liters. of water) and spraying by high volume sprayer per square meter surface area.					

		b. Structure: - Structure of the Log huts should be structurally stable skeleton for walls , roofing etc. made up of graded & treated Pine Wood as per detailed design, drawing & schedule including cutting, binding, scaffolding & supporting as directed by engineer in charge.					
		The members given above are indicative with respect to the drawing and detail annexed. The vendor needs to provide the minimum size of the members as per the tender provision or higher whichever is required as per the detailed design. Design of the structure, detailed design drawings and shop drawings to be provided by the vendor. All design, detailed design drawings and shop drawings will be finally confirmed after the detailed structural scrutiny. All members and joinery should be designed complying to the Indian design standards/ norms. Design of the structure, detailed design drawings and shop drawing of the structure including of the joinery should be submitted by the Contractor for review, verification and approval from the Engineer- In Charge prior to execution of any work. For all connections stainless steel (grade 316) plates / fasteners / nuts and bolts (various sizes and thicknesses) powder coated to be considered. Any augmentation required in the sizes of members or connection, noticed in the review due to lacuna in the requirement as per standards shall be carried out by the bidder without any additional cost. Design of the structure, detailed design drawings and shop drawing of the structure including of the joinery shall be in the scope of the vendor without any additional cost.					
		c. Flooring: In door flooring 120 mm X 12 mm lamineted flooring.					
		d. Finishes					
		i. Roofing Sheets: Providing & Installation of Saint Gobain make Certain Teed Roofing shingle series Firehalt Timber blend (or as directed by engineer in charge) finish fixed on 12 millimetre marine ply. The item includes providing & installation of ridges & eaves, cutting, sizing, handling etc. required to install shingles including approved hardware, adhesives, sealeants etc. complete.					
		ii. Doors:- Wooden doors for main enterence.					
		Providing and fixing in position UPVC ventilators of various size with lovoured frame, 5 millimetre thick plain sheet glass (or as directed by Engineer In charge)of approved quality and fastenings,handle, stopper etc. complete including making the damaged structure to its original condition as directed by Engineer In charge.					
		Polishing:- (Inside / Outside) Weather Coat (or equivalent make) of approved shade and color by sand papering the surface, then applying a coat of oli base wooden stainer, then applying two coat of wood filler Putty, again sand papering the surface and applying the two coat of polish.					
		Wooden Finishes: - Finishing of all wooden surfaces in linseed oil coating in two coats, i.e. At the time of handing over & after end of first monsoon.					

		Notes:					
		1. Due care has been taken to elaborate various items of this tender by way of description and tender drawings, however the additional information/ execution techniques will be provided in details at the time of actual execution if required.					
		2. Pine wood should be with density not less than 310 kilograms per cubic meter klin dried, maximum moisture content less than 14%. Care should be taken that the cut wood should have full edge, cut on all four side, few healthy knoghts, no holes from insects, no slanting or warped planks should be used. The material should be certified as a material from renewable resource of Forest Stewardship Council (FSC) grade. Certificate in proof of the same shall be produced.					
		3. Tests :- Following test for the wood Specimen to be conducted and Test results obtained to be submitted:- Moisture Content (%), Density (kilograms per cubic meter), Specific Gravity, Compressive Strength Parallel to Grain, Compressive Strength Perpendicular to Grain, Flexural Strength Parallel to Grain, Flexural Strength Perpendicular to Grain, Tensile Stress Parallel the Grain, Tensile Stress Perpendicular the Grain.					
		4. All joinery should be designed complying to design standards/ norms, shop drawing of the structure including of the joinery should be submitted by the Contractor for review, verification and approval from the Engineer- In Charge prior to execution of any work. Any augmentation required in the sizes or connection, noticed in the review due to lacuna in the requirement as per standards shall be carried out by the bidder without any additional cost.					
		5. All structural members of the trusses should have gusset plate of required size, as specified by engineer in charge at the joinery of minimum thickness 8 millimetre Stainless Steel Powder coated.					
		6. All stainless steel fixtures and fasteners shall be of SS 316 grade powder coated of approved color.					

		7. No nailing shall be allowed except beading and the heads of the screw should not be seen/ visible. Length of the screw shall be as approved by the Engineer In charge					
		8. Silicon sealant, wherever specified or directed shall be of structural grade.					
		9. Wood structure work below and above ground shall be treated for anti-weathering, anti-termite treatment.					
		10. Contractor necessarily has to design prepare and detailed design drawings, shop drawings get approved in accordance with the tender drawings. Only after approval of these design, detailed design drawings and shop drawings by Engineer- In Charge, the work shall be executed. After approval to the detailed design drawing & shop drawings, Contractor has to construct one Mok - up for each category. Once the Mok - up is approved, permission by the Engineer- In Charge for proceeding further will be given.					
		12. All specifications shall be read in conjunction with tender drawings provided.					
		13. The cost includes 1 years maintenance without any additional cost.					
		14. Design of the structure for wind load shall be as per annexure map with (or as per the latest map as per Indian standard) additional 15% for cyclonic pressure.					
						24553.282	**88000**