

**INVITATION FOR TECHNICAL AND FINANCIAL BIDS FOR PROVISIONING OF  
TWO PRE-FABRICATED TEMPORARY CLASSROOM AT APS SUKNA**

1. Technical and Financial Bids in sealed envelope are invited by Principal, APS Sukna on behalf of Chairman, School Administration and Management Committee (SAMC), APS Sukna from Eligible Contractors for the following work.
  - (a) **Name of Work** : Provisioning of two x Classrooms.
2. Technical Specification of said construction is available in the school website- [www.apssukna.com](http://www.apssukna.com) and office of APS Sukna.
3. Eligibility criteria and documents required to be submitted alongwith tender are enumerated in succeeding Paras.
4. Reputed Contractors enlisted with any Central/State Govt will submit Technical & Financial bids separately based on Technical Specifications duly filled in details alongwith the following documents for checking eligibility:-
  - (a) Tender on firm's letter pad.
  - (b) **EMD**- Rs. 90,000/- (DD/At par cheque in favour of Army Public School, Sukna).
  - (c) **Tender Fee** - Rs. 200/- (Non refundable) DD/At par cheque in favour of Army Public School, Sukna should be submitted alongwith the Technical Bid.
  - (d) Copy of enlistment letter with Central/State Govt.
  - (e) Copy of Employees Provident Fund number.
  - (f) Copy of GST registration number.
  - (g) IT Returns of last two years.
5. Contractor not in possession of the above documents shall be disqualified and his Technical as well as Financial bids will not be accepted. Tenders not accompanied by requisite value **DD/At par cheque towards EMD** and **Cost of Tender** and other documents shall be rejected.
6. The firms/contractors who qualifies for **Technical Bids** will only be consider for Financial Bids.
7. Please note that subletting of work will not be permitted.
8. Right is reserved by SAMC to reject any or all tenders without assigning any reason. In case any dispute arises, the decision of SAMC will be final and binding, with no forum of appeal whatsoever.
9. Time of Completion after placement of Work Order : **75 days**.
10. Date and place of opening of Tender is as follows:-
  - (a) Technical Bid : **30 Oct 2021 at 12.00 hrs at APS Sukna**.
  - (b) Financial Bid : **02 Nov 2021 at 12.00 hrs at APS Sukna**.

Date : **08 Oct 2021**

Sd/- x x x x x  
(Mrs Dola Sarkar Sinha)  
Principal  
Army Public School, Sukna

**BRIEF SPECIFICATIONS FOR CONSTR OF 02 X CLASSROOM OF SIZE  
51' X 24' WITH VERANDAH 8.5' WIDE AND HEIGHT 10'6" AS  
SUPPLEMENTARY ACCN AT ARMY PUBLIC SCHOOL, SUKNA.**

1. Shelter of outer dimension of 15.30 x 7.20 mtr (25.5'x 24') and 10.5' clear ceiling height and 8.5' verandah with following specification over plinth.

(a) **Lean Concrete.** Lean concrete 100mm thick in cement concrete 1:4:8 type C1 using 40 mm graded stone aggregate to be provided below column and dwarf wall foundation.

(b) **Foundation for Shelters.** Foundation will be made by using fly ash Bricks in cement mortar 700 mm below ground level and 450 mm above ground level over 100 mm thick PCC 1:4:8 over 100 mm thick hardcore as shown in drg. Cement plaster in cement plaster mortar 1:4 will be done on brick masonry above ground level on the external surface.

(c) **Dwarf Wall Fdn.** 600mm wide and 100mm thick lean concrete in cement concrete in type C1 concrete 1:4:8, first footing 500 x 300 mm and second step in footing 350 x 200mm.

(d) Depth for column foundation 900 MM below natural ground level/ undisturbed ground level.

(e) **Structure Members.** Structural members shall be as per the schedule of structure. Executing agency will check stability and improvements if necessary shall be intimated to all concerned. All member of structure shall be medium graded steel tubes of 50 mm & 110 MM nomina dia conforming to IS 2713-1988 as per design schedule of structures att. Diagonal/ Longitudinal bracing members of suitable steel structure shall be provided as per design norms required for wind load of 55m/s (as per IS 875) and ensured by the executing authority. Make SAIL/TATA/JINDAL.

(f) **Side Walls.** The side walls of the structure will be 230mm thick above ground level upto Lintel level. Half brick walls will be constructed above lintel level and upto roof level. Cement plaster 15mm thick will be done 1:4 on external surfaces and 10 mm thick plaster on internal surfaces 1:6 CM ratio.

(g) **Partitions Walls.** Partition wall will be Half brick wall. The wall cement plaster is carried out internal surface 1:6 ratio.

(h) **Platform.** Platform will be provided for teachers of size 5' x 10' with non-skid ceramic tiles in flooring.

(j) **Fan Hooks.** Hooks for fixing of ceiling fans are to be provided. Necessary arrangement shall be made to fix the fans in the classroom.

(k) **Sunshades.** Suitable sunshades made out of PPGI sheets and angle iron frame will be provided to all external windows and doors not covered in verandah. The min projection for the sunshades will be 450 mm wider than the width of the opening. Necessary arrangement shall be made to fix angle iron frame on to the iron members.

(l) **Roofing.** The roofing of the structure will be of 0.50 mm thick pre-painted galvanized sheets of olive green (OG) color with 15 cm end lap two corrugations on side lap. 04 rows of wind ties on the roof of MS flat 50 x 4 mm shall be provided. The 0.50 mm thick pre-painted galvanized sheets on ridge shall be provided on all joints on the roof. Pre-painted galvanized sheets shall be of make TATA SHAKTI/SAIL/ JINDAL STEELS.

- (m) **Painting of Internal Surface.** Applying two coats of oil bound distemper over one coat of chalk whitening putty with preparation of newly plastered internal surface.
- (n) **Painting of External Surface.** Applying two coats of cemented base paint on plastered surface of wall including preparation of surfaces over a coat of cement primer complete all as specified.
- (o) **False Ceiling.** The false ceiling will be done with the help of anodized aluminum snap grid frame work with using 4mm thick gypsum board ceiling of size 60 x 60 cm fixed or laid/ inserted t timber/ GI/ Aluminum frame work with screws all as specified.
- (p) **Door.** Doors made of 40mm pressed wooden frame of size 7' x 3' with one or more rebates incld necessary lugs, hinges, lock strike plate, etc, complete as specified.
- (q) **Steel Window.** Steel window shall be fixed into prepared opening. They shall not be built in as the wall go up as per IS Code- 1038-1983 (3<sup>rd</sup> revision) steel window shall be checked to ensure that they are square and working satisfactorily.
- (r) **Flooring.** Flooring will be made of 600 x 600 x 8 mm non skid ceramic tiles over 200 mm thick 1.6 cement mortar screed bed laid over 40 mm thick PCC 1:2:4 over 100 mm thick 1:4:8 PCC sub base laid over reamed/ compacted earth and broken stone hard core 100 mm thick.
- (s) **Skirting.** The class area and verandah vertical surface will have skirting made of 600 x 600 x 8 mm non skid ceramic tiles over 20 mm thick 1:6 cement mortar which is laid in floor as same up to a height of 100 mm.
- (t) **Plinth Protection.** 600 mm wide plinth protection in PCC 1:3:6 using 40 mm graded stone aggregate of tape/ basalt stone of 75 mm thick will be laid with an outward slope of 1 in 12.
- (u) **Joints.** Joints of various components shall be totally leak proof. Jointing resin solution of 5 Kg or capsules of silicone gel Twenty Five Nos with gel gun will be provided with each shed to make joints between panels leak proof.
- (v) **Screws/ Fasteners.** Adequate quality of screws, fasteners and erection tools to be provided with each shed.
- (w) **Identification and Marking.** All the parts will marked for easy identifications. Catalogues/ erection manual will be supplied at scale of one per shelter.
- (x) **Electrification.** All electrical fittings will fixed as per users requirement all as specified and directed.
- (y) **RCC Columns, beams.** All columns and beams of size 250 x 250 mm will be costing in cement concrete 1:2:4 type B1 by using 20 mm graded stone aggregate.
- (z) **Structural Steel.** Structural steel E-250(FE-410W) quality A, B and C conforming to IS-2062-2006, specification for hot rolled low, medium and high tensile structural steel.
- (aa) **Form work.** The formwork shall be designed and constructed to the shapes, Lines and dimensions show on columns and beams drawing. All forms shall be sufficiently water eighth to present league of mortar forms shall be so constructed as to be removable in sections.

**SCHEDULE OF WORKS: E/M**

**Appendix B**

<u>Ser No</u>	<u>E/M WORK</u>	<u>Unit</u>	<u>Qty</u>	<u>Rate</u>	<u>Amount</u>	<u>Remarks</u>
1	S&F of 1200 mm sweep ceiling Fans of approved make as per user requiremennt Crompton Seawind 1200 mm(3 Blades) or equivalent	Each	9			
2	S & F of Philips twin glow 20 Watt Batten Tube light or equilent make of Philips Coy with operating viltage of 160 - 360 Volts.	Each	10			
3	S&F of 12 way TPN DB of approved makeas per user reqt	Each	1			
4	S&F of MCB SP of approved makeas per user requirment	Each	6			
5	S& F of MCB SPN of approved makesas per user reqirment	Each	2			
6	Wiring with copper wire 1.5 sqmm/2.5 sqmm for above points	Complete job	1			
7	Sub Main wiring with 6 sqmm wire.	Complete job	1			
				<b>Total E/M items -</b>		
				<b>B/R items-</b>		
				<b>Grand Total -</b>		

**SCHEDULE OF WORKS: B/R**

**Appendix `B`**

**Station :** Sukna

**Name of work :** Provn of Two X addl Class Rooms at APS Sukna

S No	Name of work	Brief description of items	Unit	Qty	Rate	Amount	Remarks
1	2	4	5	6	7	8	9
1	As above	1. Excavation in trenches n exc 1.5m wide and n exc 1.5m in depth and getting out in soft/loose soil	Cum	28			
		2. M&L cement concrete (1:4:8) type D2 using 40mm graded stone aggt as in fdn, filling, mass concrete etc all as spd	Cum	4			
		3. M&L RCC 1:2:4, (20mm graded stone aggregate) nominal mix as in fdn incl footing,plinth beam,base for column and mass concrete	Cum	6			
		4. M & L reinforced cement concrete(nominal mix) type B1 1:2:4 (20mm graded aggregate) in columns,posts,pillars complete all as specified and as directed.	Cum	3			
		5. M & L reinforced cement concrete type B1 1:2:4 (20mm graded aggregate) in lintels upto 1.5m clear span, sesmic and other similar bands etc complete all as specified and as directed.	Cum	7			
		6. M & L mild steel TMT bars 10mm dia and over, cut to length, bent to shape required, incl cranking, bending spirally and binding with and incl MS wire (annealed) not less than 0.9mm dia or securing with clips complete all as spd.	Kg	785			
		7. - Ditto - but 5mm dia and over upto and incl 10mm dia in stirrups, spacers and binders complete all as spd.	Kg	480			
		8. M & L form work to sides of concrete fdns, footings, base of column, raft beams, sides and soffits of fdn and plinth beams and similar work on rough finished surface of concrete complete.	Sqm	25			
		9. M & L form work to sides of concrete pillars,posts,columns in circular or rectulangular surface similar work on rough finished surface of concrete complete.	Sqm	50			
		10. S & F form work to sides and soffits of floor and roof beams, beam haunchings, lintels etc rough finished surface of concrete , flat complete all as spd.	Sqm	111			
		11. M&L Brickwork with fly ash bricks built in cement mortar 1:6 straight or curved on plan exc 6 m mean radius all as spd	Cum	40			
		12. M & L brick work with with fly ash bricks, straight or curved on plan to any radius in half brick thick wall built in cement mortor 1:6.	Sqm	25			
		13. S & F 105 X 60 mm pressed steel frames for doors with one rebates incl all necessary fixing lugs, hinges, lock strike plate etc, complete.	RM	10.5			
		14. S&F 30mm flush shutters, solid core construction, with block board core and plywood face panells, commercial types on both sides complete all as specified.	Sqm	4.5			
		15. Steel window with side hung shutter incl projecting type hinges with steel handle and steel peg stay without glazing bars complete all as specied.	Sqm	11			
		16. S & F 200mm long Alumn anodised, barrel tower bolts of extruded section and fixed	Each	4			
		17. S & F 100 mm long Butt hinges, medium weight cold rolled mild steel and fixed.	Each	6			
		18. S & F 300mm long Alumn alloy anodised sliding door bolts with hasp and staple and fixing clips of sheet cast or extruded sections and fixing bolts and sliding bolts .	Each	2			
		19. S & F 150mm long extruded alumn alloy handles , fabricated type .	Each	4			
		20. S & F Steel work in tubular trusses inclding special shaped washer etc. complete using ERW or induction butt welded tubes conforming ti IS 1161-1979 grade St-240 in cladding posts.	Kg	205			
		21. S & F Rolled section Fe-410w Gde -250 quality A as in main and cross beam, jack raters, purlins where connected to column rafter and running rails complete.	Kg	2200			
		22. S & F framed brackets of angle or tees with web and flanges cut to shape, drilled and counter sunk for screw incl. bending and welding angles as necessary gusset plates riviting etc. not exc 10kg each brackets conforming to Fe 290 Gde E-165 brackets over 10kg each to be measure under structural steel complete all as spd.	Kgs	55			

1	2	4	5	6	7	8	9
		23. M&L 15mm thick rendering in CM 1:6 on other than fairfaces of brick work or on concrete surfaces finished even and smooth without using extra cement complete all as spd.	Sqm	200			
		24. M&L 10mm thick rendering in CM 1:6 on fair faces of brick work or on concrete surfaces finished even and smooth without using extra cement complete all as spd.	Sqm	180			
		25. Pre-painted galvalume aluminium zink coating GI based corrugated steel sheet 0.50mm o an colour having tensile strength of 550Mpa as in roof covering/cladding to wall, fixed with self tapping screw as specified	Sqm	240			
		26. Pre-painted galvalume aluminium zink coating GI based plain steel sheet 0.50mm o an colour having tensile strength of 550Mpa as in roof covering/cladding to wall, fixed with self tapping screw as specified	Sqm	20			
		27. S & F hand rails, half round or other steel section or core for wooden hand rail straight portion, drilled and counter sunk for balustar running bars, nosing to steps incl embedding in concrete and screwing etc. Wind tie for roof incl securing bolts completed all as spd.	Kg	264			
		27. M & L Hard core usinf broken stone boulders of gauge n exc 63 mm deposited spread and levelled in layers n exc 15 cm thick watered and rammed to a true surface complete all as specified.	Cum	11			
		28. M&L 40mm thick cement concrete (1:2:4) type B-1 (20mm graded stone aggt as in flooring, finished even and smooth without using extra cement all as spd	Sqm	152			
		29. M&L 75mm thick plain cement concrete (1:4:8) type D-2 (40mm graded stone aggt) as in sub floors, sub bases etc complete all as spd.	Sqm	152			
		30. M&L 100 mm thick cement concrete (1:3:6) type B2 using 40mm graded stone aggt as in path/paving/plinth protection etc all as spd	Sqm	45			
		31. Returning, filling in incl spreading, levelling watering and well ramming in layers n exc 25 cm thick using excavated soil.	Cum	8			
		32. Removing excavated material soil to a distance n exc 50m and depositing where directed at a level n exc 1.5 m above the starting point.	Cum	22			
		33. S & F 4mm thick Non asbestos fibre cement building fixed or laid/ inserted to timber/GI/Aluminium frame work with screws.	Sqm	105			
		34. Anodised aluminium snap grid frame work or false ceiling all as specified.	Sqm	105			
		35. M & L Non Skid Ceramic tiles 7 to 8 mm thick (Square/Rectangular ) area of each tiles exc 0.18 but not exceeding 0.38 sqm in floors etc. set and jointed in neat cement slurry and pointed in white or coloueed cement to match	Sqm	105			
		36. - Ditto - but same as above on vertical surface such as skirting	Sqm	25			
		37. M & L Screed bed or bedding layer or mortar 15mm layer of mortar 15mm thick for laying floor finishes in CM 1:4 as floor finish to receive tiles.	Sqm	130			
		38. M&L applying two coats of oil emulsion over one coat of putty with preparation of newly plastered surfaces complete all as spd.	Sqm	200			
		39. M&L preparation of newly plastered surfaces of walls and applying two coats of cement base paint complete all as spd.	Sqm	180			
		40. M&L preparation of steel and iron surfaces of any description exc 10 cms width or girth and applying two coats of synthetic enamel paint over a coat of red oxide zinc chrome primer all as spd	Sqm	65			
			<b>Total</b>				
			<b>G Total</b>				