

# TENDER

(NIT NO. TA/TCL/**39**/19-20)

**FOR**

**IMPROVEMENT WORK OF CLASS  
ROOMS IN VIKRAM SCHOOL PIPLANI IN  
BHEL TOWNSHIP BHOPAL.**

## PRICE BID

**SECTION - VI**



**TOWNSHIP CIVIL MAINTENANCE  
BHARAT HEAVY ELECTRICALS LIMITED**

**(A Government of India Undertaking)  
BHOPAL - 462 022 (M.P)**

## **PREAMBLE OF PRICE BID**

1.0. This Price Bid consists of three Schedules:

### **1.1 Schedule A**

Schedule A consists of two Annexures :

1) Annexure-I includes items based on DSR-2012, Rate analysis & previous work order.

**Bidders are requested to quote their rates in Percentage above/below/at Par for Annexure-I.**

2) Annexure-II – Scope of work

### **1.2 Schedule B**

Schedule B gives the details of free issue materials given by BHEL.

### **1.3 Schedule C**

Schedule C gives the details of Tools & Tackles provided by BHEL on Chargeable Basis.

2.0 The work to be carried out under the contract shall, except as otherwise provided in tender conditions, include all labour, materials, tools, plant, equipment, and transport which may be required in preparation of and for full & entire execution and completion of the Works. The descriptions given in the Schedule of Quantities shall, unless otherwise stated, be held to include waste on materials, carriage and cartage, carrying in return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion as aforesaid in accordance with good practice and recognized principles as laid down in Technical Specification & elsewhere in Tender Specification.

3.0 The price bid should not contain any condition. Conditional price Bids shall be summarily rejected.

4.0 The bidder should not leave any column blank in Price Schedules.

5.0 Price Quoted shall include all taxes, & duties except GST.

6.0 **Unless otherwise specified in the items involving cement or reinforcement steel, these items shall be issued free of cost by BHEL.**

**TOWNSHIP CIVIL MAINT. & CONST. DIVISION****SCHEDULE 'A'****Annexure: I****Name of work : Improvement work of class rooms in Vikram School Piplani in BHEL Township Bhopal.**

S.No	It. Code	Description of items	Qty.	Unit	Rate	Amount
1		Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level:				
	4.1.3 RA	1 : 2 : 4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	4.00	cum	2576.38	10305.52
2	5.3 RA	Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15 <sup>0</sup> degree, landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases upto floor five level excluding the cost of centring, shuttering, finishing and reinforcement with 1:2:4 (1 - cement : 2- coarse sand : 4 - graded stone aggregate 20 mm nominal size).	2.00	cum	3556.89	7113.78
3		Centring and shuttering including strutting, propping, etc. and removal of form for:				
	5.9.5 RA	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	20.00	sqm	251.23	5024.60
4	5.12 CS RA	Providing, hoisting and fixing upto floor five level precast Reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like, including the cost of required centering, shuttering, but excluding cost of reinforcement with 1 : 2 : 4 (1 cement : 2 coarse sand : 4 grades stone aggregate 20 mm nominal size).	0.25	cum	3361.12	840.28
5	RA 5.22.6/ 5.22.6A	Steel Reinforcement for RCC work i/c straightening, cutting, bending, placing in position and binding all complete upto/above plinth level :TMT bars (excluding cost of steel bars)	160.00	kg	7.40	1184.00
6		Providing and fixing factory made ISI marked steel glazed doors, windows, and ventilators side / top/ centre hung with beading and all members such as F 7 D, F 4 B, K 11 B and K 12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, including priming coat of approved steel primer, but excluding the cost of other fittings, complete all as per approved design (sectional weight of only steel member shall be measured for payment).				

	10.11.1 CS RA	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete blocks 15x10x10 cm of C.C. 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	200.00	kg	87.00	17400.00
7		Steel work welded in built up sections/framed work including cutting hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
	10.25.2 RA	In gratings, frames, guard bar, ladders, railings, brackets, gates and similar works.	700.00	kg	69.38	48566.00
8		Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with :				
	10.30.1 RA	4.0 mm thick glass panes	10.00	sqm	597.00	5970.00
9	11.36 RA	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS:15622 (thickness to be specified by the manufacture) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge in skirting, risers of steps and dados over 12 mm thick bed of Cement Mortar 1:3 (1 Cement :3 Coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete. <b>Note:- Approved make of tile-</b> NITCO:-Magnum series glossy finish tile size 375x250mm, Kajaria:-Plain/printed series glossy finish tile, size-200x300mm, Johnson:- Screen print series glossy finish tile size 200x300mm, Orient Bell Group B-III digital (OD Series)/ Non digital tile size 200x300 mm & Orient Bell Group B-III SD series tile size 300x450 mm size.	10.00	sqm	588.98	5889.80
10	11.37 RA	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours, such as White, Ivory, Grey, Fume, Red Brown, laid on 20mm thick Cement Mortar 1:4 (1 cement : 4 Coarse sand) including pointing the joints with white cement and matching pigment etc., complete. <b>Note:- Approved make of tile-</b> NITCO:-Crust series matt finish tile size 300x300 mm, Kajaria:- Premium series matt finish tile, size-300x300mm, Johnson:- Classical series matt finish tile size 300x300mm, joint free Lenox series matt finish tile size 300x300mm, Orient Bell Group B-II matt finish & rustic finish tile size 300x300 mm.	110.00	sqm	600.89	66097.90

11		Providing gola 75x75 mm in cement concrete 1 : 2 : 4 (1 cement : 2 coarse sand : 4 graded stone aggregate 10 mm and down guage) including finishing with cement mortar 1 : 3 (1 cement : 3 fine sand) as per standard design:				
	12.21.1	In 75 x 75 mm deep chase	40.00	mtr	88.20	3528.00
12		12 mm cement plaster of mix:				
	13.4.2 RA	1 : 6 (1 cement : 6 coarse sand).	250.00	sqm	99.21	24802.50
13		15 mm cement plaster on the rough side of single or half brick wall of mix:				
	13.5.2 RA	1 : 6 (1 cement : 6 coarse sand).	230.00	sqm	114.32	26293.60
14	13.41.1	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade :				
		New work (two or more coats) over and including water thinable priming coat with cement primer	250.00	sqm	63.79	15947.50
		<b>Make of paint</b> - 'Tractor Acrylic Distemper' from Asian / 'Duwel Acrylic Distemper' from AkzoNobel / 'Bison Acrylic Distemper' from Berger / 'Beauty Premium Acrylic Distemper' from Nerolac				
		<b>Make of primer</b> - 'Trucare Interior Wall Primer-WT' from Asian / 'Duwel or ICI Water Based cement Primer' from AkzoNobel / 'BP Cement Primer(WT)' from Berger / 'Nerolac Cement Primer Water Thinnable' from Nerolac				
15		Finishing walls with Acrylic Smooth exterior paint of required shade :				
	13.46.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	230.00	sqm	60.04	13809.20
		<b>Make of paint</b> - 'Asian / AkzoNobel / Berger /Nerolac.				
		<b>Make of primer</b> - 'Acrylic exterior wall primer' from Asian / Berger / AkzoNobel / Nerolac.				
16		Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
	13.61.1 RA	Two or more coats on new work	60.00	sqm	50.19	3011.40
		<b>Make of paint</b> - 'Apcolite Premium Gloss Enamel' from Asian / 'Dulux Gloss Enamel' from AkzoNobel / 'Luxol High Gloss Enamel' from Berger / 'Synthetic Enamel Hi-Gloss' from Nerolac				

17	13.80' RA	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	230.00	sqm	67.68	15566.40
		<b><u>Make of putty</u></b> - Birla white wall care putty / JK wall putty / Asian wall putty / Sika wall décor putty.				
18		Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sqm and under including cutting the patch in proper shape raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50 meters lead				
	14.1.1 RA	With cement mortar 1 : 4 (1 cement : 4 fine sand).	10.00	sqm	145.34	1453.40
19		Demolishing cement concrete manually/by mechanical means including disposal of material within 50 metres lead as per direction of Engineer Incharge.:				
	15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix).	1.00	cum	671.05	671.05
20	15.3	Demolishing RCC work manually/by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer Incharge.	0.50	cum	978.95	489.48
21	15.7.4	Demolishing brick work manually/by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer Incharge.				
		In cement mortar.	1.00	cum	566.60	566.60
22	15.56	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 m lead.	20.00	sqm	15.00	300.00
23	15.60	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	2.00	cum	101.75	203.50
24	6.4.2 RA	Brick work with Ghol bricks having compressive strength not less than 50 Kg/cm <sup>2</sup> in super structure above plinth level upto floor V level in all shapes and sizes in cement mortar 1:6 (1 cement:6 Coarse sand) .	15.00	cum	5748.71	86230.65
25	6.13.2 RA	Half brick masonry with Ghol bricks having compressive strength not less than 50 Kg/cm <sup>2</sup> in superstructure above plinth level up to floor V level. Cement mortar 1:4 (1 cement :4 coarse sand) .	10.00	sqm	670.79	6707.90

26	Non-DSR Item	Supply and installation of coated galvalume steel sheet having maximum of pitch of 200 mm c/c and minimum 30mm crest depth in length as per site requirement. The supplied material is to be manufactured out of 0.50 mm TCT (total coated thickness) and 550MPA tensile strength, with zinc aluminium alloy of AZ-150(As per AS -1397:1993).The sheet shall have a hot dip metallic zinc aluminium alloy coating of zinc (43%), silicon(1.5%) and aluminium(55%) with total mass coating of 150 gms/sqm on each of the two sides self drilling/self tapping screws with EPDM seal fixed to the existing MS purlins/runner complete as per drawing and as directed by engineer-in-charge.	30.00	sqm	415.13	12453.90
27	Non-DSR Item	Removing of old tarfelt of water proofing treatment of any course from the top of roof horizontal or vertical or any floor including disposal of removed material within 50 m lead.	100.00	sqm	4.00	400.00
					<b>Total Rs.</b>	<b>380826.96</b>
Percentage quoted by the Contractor			%	Above	Below	At Par
Percentage quoted by the Contractor in words						
<b>Note:-</b>		The contractor shall ensure the following:				
i	The contractor shall, wherever required, scrap the entire area earmarked for application. Scrapping shall be, duly, verified by Engineer-in-charge. Only after verification of scrapping the first coat shall be applied. The first coat shall then be verified by engineer-in-charge followed by application of the second coat which shall also be verified before taking measurement for payment. This stagewise verification shall be applicable for all the coats of putty and paint.					
ii	The contractor shall take signatures of engineer-in-Charge at three processes i.e. at the end of surface preparation, after application of primer (wherever applicable) after application of 1st coat and after application of 2nd coat (wherever applicable).					
iii	All the materials (for painting work) shall be brought by the contractor in sealed container in sufficient quantities at a time to suffice for a fortnights work, and same shall be kept in BHEL Store in Township. All the materials shall be issued from BHEL Store.Empty container of paints,primer & putty shall be deposited back by the Contractor, failing which deduction @ 1.25 times the prevailing market rate of the material worked out against the shortfall in returning of empty container(s). Proper record shall be maintained in this regard. The empty container(s) deposited back by the contractor shall finally be returned to him by the department after the final bill.					
iv	The choice in regard of selection of products rests, solely, with the department. The decision of the department shall be final and binding on the contractor.					
v	The contractor shall submit to the Engineer-in-charge supporting papers such as invoice, cash memo, challan etc. as a proof of purchase of the material.					
vi	The contractor shall provide all safety appliances such as safety belts, helmets, walkways, safety ladders etc. for use by his labourers while working at height. Safety appliances must be of standard, approved quality.					
vii	Standard construction safety nets made of polypropylene (as per IS:5175) may be required to be used to protect/guard labourers working at height against fall as per discretion of Engineer- In-charge. The contractor shall arrange for the net without extra cost to BHEL over and above his quoted rates.					
viii	All the works shall be executed as per relevant CPWD specification.					
Signature of Contractor						

**ANNEXURE-II****SCOPE OF WORK**

**Name of work : Improvement work of class rooms in Vikram School Piplani in BHEL Township Bhopal.**

Scope of work is inclusive of but not limited to the following activities :-

<b>S. No.</b>	<b>Description of Activities</b>
<b>1</b>	Providing and laying of cement concrete and reinforced cement concrete of specified grade with necessary centering and shuttering work and reinforcement work.
<b>2</b>	Structural steel work including fabrication and erection complete.
<b>3</b>	Fixing of glass panes in structural steel doors, windows etc.
<b>4</b>	Fixing of ceramic wall and floor tiles in rooms with best finishing.
<b>5</b>	Brick masonry work with necessary cement plastering.
<b>6</b>	Finishing of internal wall surfaces with oil bound washable distemper paint, putty and primer (wherever required).
<b>7</b>	Finishing of external wall surfaces with acrylic smooth exterior paint and primer (wherever required).
<b>8</b>	Finishing of structural steel surfaces with synthetic enamel paint.
<b>9</b>	Demolishing and dismantling of cement concrete, RCC, brick masonry etc including disposal and carriage of dismantled material.

The above scope may undergo some minor changes based on final requirement. of BHEL.

Signature of Contractor



SCHEDULE – “B”								
Name of work : Improvement work of class rooms in Vikram School Piplani in BHEL Township Bhopal.								
Issued free of cost at Gadia Store/ sub-division								
1 Cement								
2 Reinforcement Steel								
Note: If the contractor fails to return to the department unconsumed portion of total quantities of respective free issue material after completion of work or as and when instructed by Engineer-incharge, recovery at twice the respective material cost of the item as procured/decided by BHEL shall be made from the contractor's bill(s).								
SCHEDULE – “C”								
1 Electricity charges at Rs.66.00/- per M.T. of fabrication of structural steel.								
Signature of Contractor								