

**Bharat Heavy Electricals Limited**  
**High Pressure Boiler Plant**  
**Tiruchirappalli – 620 014. India**  
**Civil Engineering Department (Factory)**

**TENDER DOCUMENT (PRICE BID)**

**Name of work** : Civil projects under CSR 2019-2020.  
1.Providing Aluminium Zinc alloy coated sheet roof and converting into a multipurpose Hall at Boiler Plant Girls Higher Secondary School 2.Raising the level of compound wall at Sri Paramahamsa Nursery & Primary School,Kattur 3.Demolishing and relocating the existing Toilets at Arivalayam (School for special Children) 4.Construction of Urinal points for boys at Govt ADW higher secondary school,Sholamadevi

**Value of work** : Rs. 13,08,591.13 + Applicable GST

**Tender Schedule No.** : CT:TS:039/19-20

**Period of Contract** : 03 (Three) Months

**EMD** : Rs. 26172/- (Rupees Twenty Six Thousand One Hundred and Seventy Two only)

**Issued to** :

**Date of Notification** : 20.01.2020

**Last Date for Receipt of Tender** : 28.01.2020 at 10.00 hrs

**BHARAT HEAVY ELECTRICALS LIMITED  
TIRUCHIRAPALLI - 620 014**

**SCHEDULE - A**

**Name of Work:** Civil projects under CSR 2019-2020. 1.Providing Aluminium Zinc alloy coated sheet roof and converting into a multipurpose Hall at Boiler Plant Girls Higher Secondary School  
2.Raising the level of compound wall at Sri Paramahansa Nursery & Primary School,Kattur  
3.Demolishing and relocating the existing Toilets at Arivalayam (School for special Children)  
4.Construction of Urinal points for boys at Govt ADW higher secondary school,Sholamadevi

I / We \_\_\_\_\_ have read the condition of tender attached hereto and agree to abide by such conditions. I/We offer to execute the works in **CT:TS:039/19-20 for a period of 03 (Three) Months** at the percentage below / at par / above the rates contained in Bill of Quantities appended **below from Page 03.**

I / We further agree to sign an Agreement Bond to abide by the General Conditions of Contract and to carry out all works according to the specifications for materials and works of Bharat Heavy Electricals Limited, Tiruchirapalli-620 014. In case of acceptance of the tender by the BHEL, I/We bind myself/ourselves to execute the contract documents within 7 days after notice that my/our tender has been accepted and this contract has been awarded to me/us and thus failing which I/We shall have no objection to the forfeiture of the Earnest Money amount to **Rs. 26172/- (Rupees Twenty Six Thousand One Hundred and Seventy Two only)** lodged with Bharat Heavy Electricals Limited, Tiruchirapalli-620 014.

I / We further agree to include all tools & plants and consumables required for the work in my / our scope but required power and water will be provided at one point by BHEL at free of cost and based on this, we have quoted our percentage.

**Note:** Details & Quantities of each item of work shown in the BILL OF QUANTITIES are only approximate and the same is appended below. They are given as a guide for the purpose of tendering only and are liable to variation and alteration of the Competent Authority. The work under each item as executed shall be measured and priced at the overall percentage quoted by the contractor **Below (100-X) % / At par (100%) / Above (100+X) %** of the rates provided in Bill of Quantities appended below from **Page 03**

Sl. No.	Approx. Value of work	Common single percentage rate, Below (100-X) % / At par (100%) / Above (100+X) % to be quoted with respect to the BHEL estimate rate provided in Bill of Quantities appended below from <b>Page 03</b>	
		In Figures	In Words
1.	<b>Rs. 13,08,591.13</b> (Excluding GST) = 100%		

**CONTRACTOR**

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**ACCEPTING OFFICER**

**Note: BHEL estimate total 100% is given below. Contractor has to quote Common single percentage, Below (100-X) % / At par (100%) / Above (100+X) %, with respect to the estimate total in Bill of Quantities below, at page 2 both in figures and in words.**

**BHEL / TRICHY-620 014 , CIVIL ENGINEERING DEPARTMENT-FACTORY**

**BILL OF QUANTITIES**

**Name of work : Civil projects under CSR 2019-2020. 1.Providing Aluminium Zinc alloy coated sheet roof and converting into a multipurpose Hall at Boiler Plant Girls Higher Secondary School 2.Raising the level of compound wall at Sri Paramahansa Nursery & Primary School,Kattur 3.Demolishing and relocating the existing Toilets at Arivalayam (School for special Children) 4.Construction of Urinal points for boys at Govt ADW higher secondary school,Sholamadevi**

**Specification:**

<b>1. Providing Zinc Alloy coated sheet roof and converting into a multipurpose Hall at Boiler Plant Girls Higher Secondary School under CSR 2019-20.</b>						
<b>Sl. No.</b>	<b>SR Item</b>	<b>Description</b>	<b>Unit</b>	<b>Qty.</b>	<b>Rate (Rs)</b>	<b>Amount (Rs)</b>
10	1001A1	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of unserviceable materials by transporting and dumping in the near by low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge.Brick work in cement mortar	M3	30.000	530.25	15,907.50
20	1001A3	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of unserviceable materials by transporting and dumping in the near by low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge.Old plastering / skirting raking out joints / chipping the concrete and roughening the surface.	M2	50.000	14.15	707.50

**CONTRACTOR**

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**ACCEPTING OFFICER**

30	1001A4	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of unserviceable materials by transporting and dumping in the near by low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge.Plain Cement Concrete.	M3	30.000	387.15	11,614.50
40	1001A7(i)	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of unserviceable materials by transporting and dumping in the near by low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge. Precast concrete or stone slabs in walls, partition walls etc. Thickness upto 40 mm	M2	100.000	78.00	7,800.00
50	1001A12	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of unserviceable materials by transporting and dumping in the near by low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge.Doors / Windows / Ventilators (steel or wood) including frame and shutters, holdfasts, hinges, fastenings etc. of area 3 sqm and below.	EA	20.000	110.15	2,203.00
60	0311C	Brick work with modular bricks ( second class table moulded chamber bricks ) of class designation 50/75 in foundation and plinth in: Cement mortar 1:5	M3	50.000	3,894.45	1,94,722.50
70	0801C	Plastering with cement mortar as per standard specifications. In Cement mortar 1:5, 12mm thick	M2	400.000	92.95	37,180.00
80	0201d	Providing and laying in position plain cement concrete of specified grade including consolidation, curing etc. complete, all as per standard specifications. All works upto plinth level. Rate excludes cost of centring and shuttering. 1:2:4 with graded stone aggregate 40 mm nominal size.	M3	25.000	1,866.15	46,653.75
90	0603	Finishing the top of all floors with 25 mm thick cement concrete (without using sand) in the proportion of one part of cement and three parts of 3 to10 mm gauge hard broken granite stone chips, finishing the surfaces smooth, rounding of corners, curing, providing borders etc., complete, all as per standard specifications. (Ellispattern flooring)	M2	250.000	235.10	58,775.00

CONTRACTOR

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100	0501	Collection from BHEL stores and transporting the raw structural steel sections to the contractor's site fabrication shop, fabrication of steel work including all materials going into the process of fabrication and forming an integral part of the steel work together with all shop welding including using low hydrogen electrode wherever necessary, all as per drawings and standard specifications. Rate includes delivery of fabricated steel work at erection site ready for erection, including preparation and supply of drawing office despatch list for BHEL's approval, all charges for packing (wherever called for) handling, conveying, stacking and all other incidental charges both for raw materials and fabricated steel works. Rate excludes raw structural steel sections which will be supplied by BHEL at stores at free of cost.	MT	1.000	12,371.75	12,371.75
110	0503	Collection from BHEL stores and transporting ERW/seamless steel tubes with necessary plates to the contractor's site fabrication shop, fabrication of ERW/seamless steel tubes with necessary plates etc. instead of structural steel sections for columns, trusses, purlins, tie runners etc. (all tubular) including all materials going into the process of fabrication and forming an integral part of the steel work together with all shop welding including using low hydrogen electrode wherever necessary, all as per drawings and standard specifications. Rate includes delivery of fabricated steel work at erection site ready for erection, including preparation and supply of drawing office despatch list for BHEL's approval, all charges for packing (wherever called for) handling, conveying, stacking and all other incidental charges both for raw materials and fabricated steel works. Rate excludes ERW/seamless steel tubes, plates etc. which will be supplied by BHEL at stores at free of cost.	MT	1.000	13,608.90	13,608.90
120	0505	Carrying from stacks at erection site to erection positions and erection of fabricated steel work including all handling, conveying, assembling, hoisting, erecting in position and site welding and or bolting, alignment of structures, all as per drawings and standard specifications. Rate includes bolts and nuts, hire for welding tools and plants, labour etc., but excluding cost of fabricated components. If required, power will be given free of cost by BHEL. Weight of fasteners will not be accounted for payment.	MT	2.000	6,667.90	13,335.80
130	0834B	Painting one priming coat with approved primer over structural steel works in roof structures, columns etc., including preparing the surfaces by thoroughly cleaning oil, grease, dirt and other foreign matters and scoured with wire brushes, fine steel wool scrapers and sand paper, all as per standard specifications. Red oxide primer	MT	2.000	562.35	1,124.70

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140	0835A	Painting (excluding priming coat) on structural steel works in roof structures, columns etc.with synthetic enamel paint of approved brand and shade, brushing to give an even shade including cleaning the surfaces of all dirt, dust and other foreign matters, scaffolding charges etc.complete. All as per standard specifications. Two coats	MT	2.000	1,580.50	3,161.00
150	0819	Applying one coat of cement primer of approved brand and manufacturer on wall surfaces.	M2	400.000	29.25	11,700.00
160	0840B	Painting with exterior emulsion paint (ACE or any other equivalent and approved brand) of approved shade on surfaces to give an even shade including preparing the surfaces, removal of dirt, thorough cleaning by watering etc., all as per standard specifications. Rate includes cost of necessary plaster of paris and putty wherever required, labour and all incidentals etc.complete. Two coats	M2	100.000	62.05	6,205.00
170	0824B	Painting with ready mixed plastic emulsion paint of approved brand and shade on surfaces to give an even shade including thorough scraping, removal of dirt, applying necessary plaster of paris, putty etc.complete, all as per standard specifications. Two coats	M2	350.000	55.55	19,442.50
180	0831A	Painting with black board paint of approved brand and manufacture on surfaces to give an even shade, all as per standard specifications. Two coats.	M2	20.000	59.85	1,197.00

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190	704	Supplying at site of work , hoisting and fixing in position of 0.47 to 0.50mm thick colour coated Aluminium zinc alloy coated high tensile steel rib profile sheets with accessories such as ridge pieces, barge boards, curves, etc., as per technical specifications given in note below for side sheeting at all heights with necessary xylon coated self tapping / self drilling screws with EPDM washers at every valleys, etc., complete .All as per drawings, manufacturers specifications and instructions of Engineer-in-charge .Rate includes cost of all materials like colour coated Aluminium zinc alloy coated high tensile steel rib profile sheets with accessories such as ridge pieces, barge boards, curves, self tapping / self drilling screws with EPDM washers at every valleys, etc., and labour charges for fixing, hire charges for tools and plants like drilling machines, providing lifeline and other provisions for safety, and all other incidental charges etc., complete. The payment will be made for the actual laid area only.Note: (1)The Aluminium zinc alloy coated high tensile steel sheets and specials shall be 0.47 to 0.50mm thick (TCT) (Aluminium around 55%, Zinc around 43%) alloy coated high tensile steel (Yield strength 550 MPA) colour coated rib profile sheets as per ASTM A792M, coating standard as per AS 1397-1933 Conforming to AZM 150 (Min Coating mass of 150 gsm) having cover width of 1000 plus or minus 10mm and over all width of 1060mm of any length to suit site conditions (2) About 90% area of the Aluminium zinc alloy coated high tensile steel sheets shall be colour coated with Light Blue RAL 5012 and 10% of the covered area is of with white. All ridge pieces and barge boards are of white.(3) The Aluminium zinc alloy coated high tensile steel sheets shall be Pre-Primed with a Primer of 5µm and finished with a final paint coat of 17-20 µm on top surface. A single backing coat of 7-10µm should be applied on reverse side.	M2	300.000	585.60	1,75,680.00
<b>TOTAL 1 =</b>						<b>6,33,390.40</b>

<b>2. Raising the level of compound wall at Sri Paramahansa Nursery &amp; Primary School, Kattur under CSR 2019-20.</b>						
<b>Sl. No.</b>	<b>SR Item</b>	<b>Description</b>	<b>Unit</b>	<b>Qty.</b>	<b>Rate (Rs)</b>	<b>Amount (Rs)</b>
10	1001A1	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of unserviceable materials by transporting and dumping in the near by low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge.Brick work in cement mortar	M3	6.000	530.25	3,181.50
20	0311C	Brick work with modular bricks ( second class table moulded chamber bricks ) of class designation 50/75 in foundation and plinth in: Cement mortar 1:5	M3	30.000	3,894.45	1,16,833.50

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30	0801C	Plastering with cement mortar as per standard specifications. In Cement mortar 1:5, 12mm thick	M2	200.000	92.95	18,590.00
40	0819	Applying one coat of cement primer of approved brand and manufacturer on wall surfaces.	M2	450.000	29.25	13,162.50
50	0840B	Painting with exterior emulsion paint (ACE or any other equivalent and approved brand) of approved shade on surfaces to give an even shade including preparing the surfaces, removal of dirt, thorough cleaning by watering etc., all as per standard specifications. Rate includes cost of necessary plaster of paris and putty wherever required, labour and all incidentals etc.complete. Two coats	M2	450.000	62.05	27,922.50
<b>TOTAL 2 =</b>						<b>1,79,690.00</b>

**3. Demolishing and relocating the existing Toilets at Arivalayam (School for special children) under CSR 2019-20.**

Sl. No.	SR Item	Description	Unit	Qty.	Rate (Rs)	Amount (Rs)
10	1001A1	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of unserviceable materials by transporting and dumping in the near by low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge.Brick work in cement mortar	M3	15.000	530.25	7,953.75
20	1001A3	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of unserviceable materials by transporting and dumping in the near by low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge.Old plastering / skirting raking out joints / chipping the concrete and roughening the surface.	M2	500.000	14.15	7,075.00
30	1001A4	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of unserviceable materials by transporting and dumping in the near by low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge.Plain Cement Concrete.	M3	15.000	387.15	5,807.25
40	1001A7(i)	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of	M2	30.000	78.00	2,340.00

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		unserviceable materials by transporting and dumping in the near by low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge. Precast concrete or stone slabs in walls, partition walls etc. Thickness upto 40 mm				
50	1001A12	Dismantling / removing / demolishing as the case may be of the following by manually/mechanical means and carefully stacking the serviceable materials at site of work or conveying and handing over the same at BHEL stores and disposal of unserviceable materials by transporting and dumping in the near by low level areas within a lead of 100 metres. All as per instructions of Engineer-in-charge. Doors / Windows / Ventilators (steel or wood) including frame and shutters, holdfasts, hinges, fastenings etc. of area 3 sqm and below.	EA	20.000	110.15	2,203.00
60	0101A	Earthwork excavation (TRENCHES) in soils given below by mechanical means (Hydraulic excavator)/manual means and depositing the excavated earth at suitable places within the initial lead of 50 meter and initial lift of 1.5 meter for foundation in building works, roads, narrow drains, sewers, bridges, pipe lines etc., sectioning the subgrade to proper level and grade, watering and consolidating the subgrade to receive concrete bed, all as per standard specifications and instructions of Engineer-in-charge. All kinds of soil except rock	M3	30.000	125.80	3,774.00
70	0201f	Providing and laying in position plain cement concrete of specified grade including consolidation, curing etc. complete, all as per standard specifications. All works upto plinth level. Rate excludes cost of centring and shuttering. 1:4:8 with graded stone aggregate 40 mm nominal size.	M3	8.000	1,908.50	15,268.00
80	0301a	Random rubble masonry in foundation and basement in the mix given below including simultaneous flush pointing, all as per standard specifications. Cement mortar 1:5	M3	20.000	1,775.55	35,511.00
90	0112	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead upto 50 m and lift up to 1.5 m etc. complete.	M3	20.000	78.90	1,578.00
100	0204d	Centring and shuttering including strutting, propping, assembling etc. and removal of form work. Upto a maximum height of 4.50 metre of each floor and also upto floor five level. Lintels, beams, plinth beams, girders, bressumers and cantilevers	M2	10.000	253.50	2,535.00
110	0204c	Centring and shuttering including strutting, propping, assembling etc. and removal of form work. Upto a maximum height of 4.50 metre of each floor and also upto floor five level. Suspended floors, roofs, landings, balconies, access platform and sunshades.	M2	5.000	323.65	1,618.25

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120	0805	Damp proof course with cement mortar 1:3, 20 mm thick mixed with water proofing compound (Accoproof or Impermo or equivalent) at 1 Kg per 50 Kg of cement for water facing surfaces etc. complete., all as per standard specifications.	M2	20.000	134.15	2,683.00
130	0311C	Brick work with modular bricks ( second class table moulded chamber bricks ) of class designation 50/75 in foundation and plinth in: Cement mortar 1:5	M3	22.000	3,894.45	85,677.90
140	0110	Supply and filling with river sand in foundation, plinth, under floor etc. including watering, ramming, consolidating and dressing complete.	M3	9.000	502.95	4,526.55
150	0801C	Plastering with cement mortar as per standard specifications. In Cement mortar 1:5, 12mm thick	M2	60.000	92.95	5,577.00
160	0203	Straightening, cutting, bending, placing in position of MS/CTD bars and binding with MS binding wires of 18/20 gauge etc. for reinforcement of RCC works. Rate includes cover blocks, cost of binding wire , conveyance of MS/ CTD bars from BHEL stores to site of work, labour etc. complete. MS/CTD bars will be supplied by BHEL at Stores at free of cost.	MT	1.000	7,439.40	7,439.40
170	0202c	Providing and laying in position specified grade of reinforced cement concrete including vibration charges, curing etc. complete but excluding cost of centring, shuttering, finishing and reinforcement. 1:2:4 with graded stone aggregate 20 mm nominal size - All works upto plinth level.	M3	8.000	2,235.45	17,883.60
180	0615	Providing and laying ceramic glazed floor tiles (of required thickness) of first quality approved make confirming to IS:15622 and in all colours of required sizes in flooring, treads of steps, landings etc., laid over a bed of cement slurry @ 3.30 Kg/SQM and a backing layer of 20 mm thick cement mortar 1:4, finished with flush pointing in white cement using appropriate colour pigment etc. complete, all as per standard specifications.	M2	30.000	678.65	20,359.50
190	0616	Providing and laying ceramic glazed wall tiles (of required thickness) of first quality of approved make confirming to IS:15622 and in all colours of required sizes in skirting, walls, risers of steps and dado laid over a bed of cement slurry @ 3.30 Kg/SQM and a backing layer of 12 mm thick cement mortar 1:3 plaster and joined with white cement using appropriate colour pigment etc.complete, all as per standard specifications.	M2	80.000	745.80	59,664.00
200	1125a	Providing and fixing in position of orissa pattern water closet of approved brand with integral type foot rests,suitable P or S trap etc. complete. 580 mm size (White) (Parryware/Neycer/Cera)	EA	6.000	1,815.25	10,891.50

CONTRACTOR

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210	0603	Finishing the top of all floors with 25 mm thick cement concrete (without using sand) in the proportion of one part of cement and three parts of 3 to 10 mm gauge hard broken granite stone chips, finishing the surfaces smooth, rounding of corners, curing, providing borders etc., complete, all as per standard specifications. (Ellis pattern flooring)	M2	35.000	235.10	8,228.50
220	0213a	Providing precast cement concrete Jali 1:2:4 using graded stone aggregate 6 mm nominal size with suitable reinforcement including centring and shuttering, roughening, cleaning, fixing and finishing in cement mortar 1:3 etc. complete. Rate excludes reinforcement steel and fabrication charges. 50 mm thick	M2	5.000	538.75	2,693.75
230	0435	Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5 mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos. of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineer-in-Charge.	RM	50.000	409.25	20,462.50
240	0436a	Providing and fixing factory made 30 mm thick door shutter made of solid PVC foam profile. The styles and rails shall be of size 75 mm x 30 mm having wall thickness 5 mm. The styles, top and bottom rails shall have one side wall thickness of 15 mm integrally extruded on the hinge side of the profile for better screw holding power. The styles and rails shall be reinforced with M.S. tubes of size 33 mm x 17 mm x 1 mm, painted with primer, all four corners of reinforcement to be welded or sealed. Solid PVC extruded bidding (push fit type) will be set inside the styles and the rails with a cavity, to receive single piece extruded 5 mm PVC sheet as panel. The styles and rails will be mitred cut and joint with the help of PVC solvent cement and self driven self tapping screws. Single piece extruded solid PVC lock rail of size 100 mm x 30 mm with wall thickness 5 mm and 15 mm integrally extruded in the middle of the lock rail and fixed with styles with the help of PVC solvent cement and self driven self tapping screws of size 100 mm x 8 mm complete as per manufacturer's specifications and direction of Engineer-in-charge. Non decorative finish.	M2	14.500	2,482.30	35,993.35
250	0819	Applying one coat of cement primer of approved brand and manufacturer on wall surfaces.	M2	100.000	29.25	2,925.00
260	0840B	Painting with exterior emulsion paint (ACE or any other equivalent and approved brand) of approved shade on surfaces to give an even shade including preparing the surfaces, removal of dirt, thorough cleaning by watering etc., all as per standard specifications. Rate includes cost of necessary plaster of paris and putty wherever	M2	100.000	62.05	6,205.00

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		required, labour and all incidentals etc.complete. Two coats				
270	0815b	White washing on surfaces using best shell lime to give an even shade including cleaning, brushing of walls and preparing surfaces in accordance with standard specifications. Rate includes cost of all materials, labour etc., complete. Two coats	M2	100.000	5.95	595.00
280	1104a	Providing and fixing PVC water pipes and specials conforming to ISS on walls and floors with clamps at one metre spacings, joining with proper adhesive as suggested by manufacturers, cutting and making good the wall etc. complete. (internal work - exposed on walls) PVC Pipe 18/20 mm OD (10 kg/Sq.cm)	RM	35.000	62.90	2,201.50
290	1109b	Providing and fixing in position C.P brass bib cock / stop cock (Medium Duty) of approved brand (ISI marked) 20 mm nominal bore.	EA	10.000	265.25	2,652.50
<b>TOTAL 3 =</b>						<b>3,82,322.80</b>

**4. Construction of Urinal points for boys at Govt. ADW higher secondary school, Sholamadevi under CSR 2019-20.**

Sl. No.	SR Item	Description	Unit	Qty.	Rate (Rs)	Amount (Rs)
10	0101A	Earthwork excavation (TRENCHES) in soils given below by mechanical means (Hydraulic excavator)/manual means and depositing the excavated earth at suitable places within the initial lead of 50 meter and initial lift of 1.5 meter for foundation in building works, roads, narrow drains, sewers, bridges, pipe lines etc., sectioning the subgrade to proper level and grade, watering and consolidating the subgrade to receive concrete bed, all as per standard specifications and instructions of Engineer-in-charge. All kinds of soil except rock	M3	20.000	125.80	2,516.00
20	0201f	Providing and laying in position plain cement concrete of specified grade including consolidation, curing etc. complete, all as per standard specifications. All works upto plinth level. Rate excludes cost of centring and shuttering. 1:4:8 with graded stone aggregate 40 mm nominal size.	M3	6.000	1,908.50	11,451.00
30	0301a	Random rubble masonry in foundation and basement in the mix given below including simultaneous flush pointing, all as per standard specifications. Cement mortar 1:5	M3	16.000	1,775.55	28,408.80
40	0112	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead upto 50 m and lift up to 1.5 m etc. complete.	M3	5.000	78.90	394.50
50	0204d	Centring and shuttering including strutting, propping, assembling etc. and removal of	M2	5.000	253.50	1,267.50

CONTRACTOR

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ACCEPTING OFFICER

		form work. Upto a maximum height of 4.50 metre of each floor and also upto floor five level. Lintels, beams, plinth beams, girders, bressumers and cantilevers				
60	0805	Damp proof course with cement mortar 1:3, 20 mm thick mixed with water proofing compound (Accoproof or Impermo or equivalent) at 1 Kg per 50 Kg of cement for water facing surfaces etc. complete., all as per standard specifications.	M2	10.000	134.15	1,341.50
70	0311C	Brick work with modular bricks ( second class table moulded chamber bricks ) of class designation 50/75 in foundation and plinth in: Cement mortar 1:5	M3	10.000	3,894.45	38,944.50
80	0110	Supply and filling with river sand in foundation, plinth, under floor etc. including watering, ramming, consolidating and dressing complete.	M3	3.000	502.95	1,508.85
90	0801C	Plastering with cement mortar as per standard specifications. In Cement mortar 1:5, 12mm thick	M2	75.000	92.95	6,971.25
100	0203	Straightening, cutting, bending, placing in position of MS/CTD bars and binding with MS binding wires of 18/20 gauge etc. for reinforcement of RCC works. Rate includes cover blocks, cost of binding wire , conveyance of MS/ CTD bars from BHEL stores to site of work, labour etc. complete. MS/CTD bars will be supplied by BHEL at Stores at free of cost.	MT	0.200	7,439.40	1,487.88
110	0202c	Providing and laying in position specified grade of reinforced cement concrete including vibration charges, curing etc. complete but excluding cost of centring, shuttering, finishing and reinforcement. 1:2:4 with graded stone aggregate 20 mm nominal size - All works upto plinth level.	M3	2.000	2,235.45	4,470.90
120	0603	Finishing the top of all floors with 25 mm thick cement concrete (without using sand) in the proportion of one part of cement and three parts of 3 to 10 mm gauge hard broken granite stone chips, finishing the surfaces smooth, rounding of corners, curing, providing borders etc., complete, all as per standard specifications. (Ellis pattern flooring)	M2	16.000	235.10	3,761.60
130	1104a	Providing and fixing PVC water pipes and specials conforming to ISS on walls and floors with clamps at one metre spacings, joining with proper adhesive as suggested by manufacturers, cutting and making good the wall etc. complete. (internal work - exposed on walls) PVC Pipe 18/20 mm OD (10 kg/Sq.cm)	RM	25.000	62.90	1,572.50
140	1109b	Providing and fixing in position C.P brass bib cock / stop cock (Medium Duty) of approved brand (ISI marked) 20 mm nominal bore.	EA	7.000	265.25	1,856.75
150	1108a	Providing and fixing in position of brass wheel valve / gate valve (G.M) of approved brand with C.I wheel etc. complete. (ISI marked) 15 to 25 mm nominal bore	EA	2.000	421.70	843.40
160	0819	Applying one coat of cement primer of approved brand and manufacturer on wall surfaces.	M2	70.000	29.25	2,047.50
170	0840b	Painting with exterior emulsion paint (ACE or any other equivalent and approved brand) of approved shade on surfaces to give an even shade including preparing the surfaces, removal of dirt, thorough cleaning by watering etc., all as per standard	M2	70.000	62.05	4,343.50

CONTRACTOR

13

ACCEPTING OFFICER

		specifications. Rate includes cost of necessary plaster of paris and putty wherever required, labour and all incidentals etc.complete. Two coats				
TOTAL 4 =						1,13,187.93

	<b>BHEL estimate total (100%) = (Total 1 + Total 2 + Total 3 + Total 4)</b> <b>Rs. 6,33,390.40 + Rs. 1,79,690.00 + Rs. 3,82,322.80 + Rs. 1,13,187.93 =</b>					
						<b>Rs. 13,08,591.13</b>

Mentioned rates excludes GST%

NOTE:Work will be divided and will be given as subwork orders to execute the work .