

	<u>SCOPE OF WORK</u>
JOB :	WORK OF "REPAIR OF STORES, OFFICE AND BHEL QUARTERS PROVIDED BY UPRVUNL AT OBRA, SONEBHADRA U.P."
Sl. No.	DESCRIPTION
1.0	GENERAL SCOPE OF WORK
1.1	<p>The tender specification covers the civil and electrical works for "stores, office and BHEL quarters at 5 x 500 MW units at Obra, UP".</p> <p>Work under this tender includes providing and fixing corrugated asbestos, tar felt, electrical items, sanitary items, repairing of roofing, floor, plastering, wooden doors, windows, and painting, including supply of all materials, labour, consumables, transportation, sample testing etc.</p>
1.2	<p>The scope of work shall generally include but not limited to the construction/repairing of the following.</p> <p>The contractor is required to carry out all the items indicated in the BOQ.</p> <ul style="list-style-type: none"> • Wood work • Brick work • Flooring • Roofing • Plastering • Finishing work including plastering (as per site requirements by site), doors/windows, flooring, painting etc. • Asbestos sheet roofing/side cladding & partition work • Electrification of Building by providing Incoming cable, Main Distribution Board, Wiring for all installation Light fixtures, power sockets,
1.3	<p>UNDER THIS CONTRACT CONTRACTOR HAS TO CARRY OUT THE WORKS AT FOLLOWING PLACES AS MENTIONED BELOW:</p> <ul style="list-style-type: none"> ➤ STORES <ul style="list-style-type: none"> • Closed Shed (40 x 10 Metre) – 1 No. • Closed Shed (20 x 10 Metre) – 1 No. • Closed Shed (20 x 10 Metre) – 1 No. • Semi closed shed (45x10 Metre) --1 No. ➤ SITE OFFICE <ul style="list-style-type: none"> • Rooms (5x4 Metre) – 7 Nos. • Toilet/Lavatory (4x3 Metre) – 1 No. ➤ QUARTERS <ul style="list-style-type: none"> • Quarters (10x12 Metre) -- 20 Nos. <p>WORK WILL BE CARRIED OUT AS PER QUANTITIES MENTIONED IN BOQ FOR STORES, OFFICE AND QUARTERS. QUANTITY MAY VARY FOR STORES, OFFICE AND QUARTERS. THE PAYMENT WILL BE MADE AS PER ACTUALS.</p>
1.4	All the material used to be approved by Engineer-in-charge and in case of non-availability of approved make of material; BHEL Engineer-in-charge is authorized to substitute the same.
1.5	No fixtures, specials or any material will be given for any works which are required for the completion of works
1.6	The Contractor under this contract implant and maintain at least 50 new plants / trees and landscaping with flowers etc. at space identified by BHEL within first month of the contract and maintain it till the tenure of the contract. No separate payment will be made for this work.
1.7	<p>APPROVED MAKE OF MATERIALS</p> <p>CEMENT : ACC BIRLA JAYPEE</p> <p>ENAMEL PAINTS : JOHNSON & NICHOLSON BERGER ICI ASIAN PAINT</p>

5.3	The contractor shall execute the work in the most substantial and workman like manner. The same shall be, handled with care and diligence. Any loss to BHEL due to contractor's lapses shall have to be made good by the contractor. All surplus, damaged, unused materials etc. shall be returned to BHEL.
5.4	The supervisory staff deployed by the contractor shall ensure proper out-turn of work and discipline on the part of the labour put on the job by the contractor.
5.5	Contractor shall be responsible for providing all necessary facilities like residential accommodation, transport, electricity, water, medical, sanitation facilities etc. as required under various labour laws and statutory rules and regulations framed there under to the personnel employed by him at their cost.
5.6	GATE PASS& POLICE VERIFICATION OF PERSONNEL The agency shall arrange entry/exit gate passes for Manpower, Materials & Vehicles from concerned Security Agency of the Customer at their own cost as per the prescribed procedures of the customer. The agency must get the character & antecedents of all personnel deployed to site duly verified from the concerned Police Station/ S. P. Office as required by CISF.
5.7	INSURANCE, PROVIDENT FUND & LABOUR LICENCE OF WORKMEN : The contractor shall ensure compliance to all statutory requirements including but not limited to EPF deposition, Labour License, Insurance under applicable WC act & ESI failing which shall be liable for penal action as deemed by relevant act.
5.8	The Contractor shall provide insurance cover to all persons employed/engaged by him throughout the period of Contract, including the extended period, if any.
6.0	Some of the common safety rules to be followed during working are as follows :- Nobody is allowed to enter at construction site without Safety Shoe. Never enter work area without Safety helmet & chin strap in place. No climbing/working allowed without proper safety belt above 2 m. height. Do not exceed the speed limit 25 Kmph within premises. No debris obstacles allowed on the roads & passages. Do not walk on pipelines or false ceiling. Maintain good Housekeeping at work site. No photography/ Videography allowed without permission. Bamboo/wooden Scaffolding material not allowed. Good Housekeeping. Separate waste bins to be used for flammable & non flammable material. Provision & maintenance of fire extinguishers at construction site & material stores
7.0	The contractor shall comply with following towards Social Accountability; The contractor shall not employ any employee less than 15 years of age in pursuant to ILO convention. If any child labour were found to have been engaged , the Contractor shall be levied with expenses of bearing his education expenditure which will include stipend to substantiate appropriate education or employ any other member of family enabling to bear the child education expenditure. The contractor shall not engage Forced/Bonded Labour and shall abide by abolition of Bonded Labour System (Abolition) Act, 1976. The contractor shall maintain Health & safety requirement as stipulated in the Contract and Contract Labour (Regulation & Abolition) Act, 1970. The Contractor shall abide by UN convention w.r.t Human Rights and shall be liable for Discrimination/Corporal punishment for failure in meeting with relevant requirements. The Contractor shall abide the requirement of Contract Labour (Regulation & Abolition) Act, 1970 for working hours. The Contractor shall abide by the statutory requirement of Minimum Wages Act 1948, payment of Wages Act 1936. The Contractor shall arrange potable drinking water to its employees & workers.
8.0	FACILITIES TO BE PROVIDED BY BHEL/CONTRACTOR
8.1	BHEL shall provide limited open space for office and store at site free of rental charge. It is the responsibility of the contractor to construct sheds, provide all utilities like electricity, drinking water etc., as a part of his scope of work within the accepted rates. Raw Water will be provided

Agency
20/02/19

	at one point by BHEL from the water pipe line / source at plant premises / plant. Free Electricity for office and store will be provided at one point as decided by BHEL. Further distribution will have to be made by the contractors at their own cost.
8.2	On completion of work or as and when required by BHEL, all the temporary buildings, structures, pipe lines, cables etc shall be dismantled and levelled and debris shall be removed, as per instructions of BHEL, by the contractor at his cost. In the event of his failure to do so, the Engineer will get it done and expenses incurred shall be recovered from the contractor along with prevailing overheads. The decision of BHEL Engineer in this regard shall be final.
9.0	MOBILIZATION PERIOD
9.1	The selected contractor will have to mobilize for the job within 15 days of the issue of the letter of intent/ work order/work instruction/ verbal communication from Site Engineer Obra R&M.
10.0	COMPLETION PERIOD
10.1	Completion period for this subject job shall be of 06 Months.
11.0	TERMS OF PAYMENT
11.1	The 'Engineer' will certify regarding the actual work executed in the measurement books and bills, which shall be accepted by the contractor in measurement book
11.2	The Contractor shall be paid monthly running bill. The format for billing shall be approved by BHEL before raising invoices.
11.3	Payment shall be made up to total of 90% of the contract value of actual Works executed against monthly progressive bills submitted by the contractor in Triplicate based on measurement of work done and submission of necessarily document as applicable. Taxes will be deducted as per rule.
11.4	Final Payment of 10 % shall be released only on submission of: No dues certificate for any material/T&P issued to them, accommodation provided, gate passes issued, final wage sheet, challan for service tax & PF deposited and other documents as applicable and a certificate to the effect that the final payment is towards full & final settlement of all their dues against the relevant contract.
11.5	Contractor shall also submit bills for the work completed under the specification, once in a month detailing work done during the month. The format for billing shall be approved by BHEL before raising invoices.
12.0	PVC & ORC: NOT APPLICABLE
13.0	TAXES, DUTIES AND OCTROI CHARGES
13.1	The contractor shall pay all (save the specific exclusions as enumerated in this contract) taxes, fees, license charges, deposits, duties, tools, royalty, commissions or other charges which may be levied on the input goods & services consumed and output goods & services delivered in course of his operations in executing the contract. In case BHEL is forced to pay any of such taxes, BHEL shall have the right to recover the same from his bills or otherwise as deemed fit. However, provisions regarding Service Tax and Value Added Tax (VAT) on output services and goods shall be as per following clauses.
13.2	Service Tax and Cess on Service Tax as applicable on output Services are included in contractor's scope; therefore contractor's price/rates shall be inclusive of Service Tax and Cess on Output Services. Contractor shall obtain prior written consent of BHEL before billing the amount towards such taxes. The Service Tax Rules permit more than one option or methodology for discharging the liability of tax/levy/duty and BHEL will have the right to adopt the appropriate one considering the amount of tax liability on BHEL/Client as well as procedural simplicity with regard to assessment of the liability. The option chosen by BHEL shall be binding on the Contractor for discharging the obligation of BHEL in respect of the tax liability to the Contractor. Contractor shall submit to BHEL documentary evidence of Service Tax registration certificate specifying name of services covered under this contract. For the purpose of claiming any Service Tax from BHEL, the following procedure shall be adopted : Contractor shall submit serially numbered Service Tax and Cess Invoices, signed by him or a person authorized by him in respect of taxable service provided, and shall contain the following, namely:

	<p>The name, address and registration number of the contractor The name and address of the party receiving taxable service (BHEL) Description, classification and value of taxable service provided and the Service Tax payable thereon. All the four conditions shall be fulfilled in the invoice for payment of Service Tax by BHEL. Where more than one nature of Service under Service Tax Rules is involved, the invoice mentioned above shall contain the break up of all values for each nature of Service.</p>
13.3	<p>TDS under Income Tax, Sales Tax, Vat etc, if any, shall be deducted at prevailing rates on gross invoice value from the running bills unless Exemption Certificate from appropriate Authority / Authorities is furnished.</p>
13.4	<p>Price quoted shall be inclusive of all taxes, duties. The service tax, as legally leviable & payable by the contractor under the provisions of applicable law/act, shall be paid by BHEL as per contractor's bill. However, contractor shall have to submit proof of service tax deposited by them immediately after the deposit but not later than the next bill submitted after the due date of deposit. The contractor shall furnish proof of Service Tax registration with Central Excise Division covering the services covered under this contract. Registration should also bear endorsement for the premises from where the billing shall be done by contractor on BHEL for this project. The contractor shall obtain prior approval of BHEL before billing the service tax amount.</p>
13.5	<p>Contractor shall get his organization registered with concerned sales tax/VAT authorities within 15 days of award of this contract, if applicable. The delay on this account and delay in bringing the material shall be to contractor's account and no extension of time shall be allowed on this account. The sales tax/VAT registration for this contractor shall be forwarded to BHEL within 30 days from the date of LOI. In case the contractor is already registered for sales tax/VAT with Govt. Authorities he must quote his registration no, while submitting their tender.</p>
13.6	<p>Contractor has to make his own arrangement at his cost for completing the formalities, if required, with Sales Tax Authorities, for bringing his materials, plants and equipment at site for the execution of the work under this contract. No road permit shall be issued by BHEL for contractor's materials/equipments.</p>
14.0	<p>PERFORMANCE GUARANTEE:</p>
14.1	<p>Irrespective of provisions in tender elsewhere, in view of nature of work, performance guarantee is not required under this contract.</p>

		BILL OF QUANTITY	ANNEXURE-I	
SI No.		Description	Unit	Total Qty.
A	Repair works at BHEL Stores at Obra R&M Project			
1	Brick Work			
a		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-in-charge In cement mortar.	Cum	5
b		Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured) : From brick work in cement mortar.	Nos.	2325
c		Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:4 (1 cement : 4 coarse sand). Note: Old Bricks will be reused.	Cum	5
2	Wood Work			
a		Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, Second class teak wood 35 mm thick shutters.	Sqm	10
3	Flooring			
a		Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	Sqm	30
b		Cement concrete flooring 1:2:4 finished with a floating coat of cement slurry, 40 mm thick.	Sqm	30
4	Roofing			
a		Providing non-asbestos high impact Polypropylene reinforced cement 6 mm thick corrugated sheets (as per IS: 14871) roofing up to any pitch and fixing with polymer mm dia. G.I. plain and bitumen washers or with self drilling fastenercoated J, or L hooks, bolts and nuts 8 and EPDM washers etc. complete (excluding the cost of rafters and trusses), including cutting sheets to size and shape purlins, wherever required.	Sqm	250
b		Providing and fixing false ceiling with 12 mm thick plain/ semi perforated or with design ceiling tiles of BWP type phenol formaldehyde synthetic resin bonded pressed particle board conforming to IS:3087, finished with a coat of aluminium primer on both sides & edges, including two coats of synthetic enamel paint of approved quality on exposed face, fixed to a grid made out of anodised aluminium (with 15 micron anodic coating) T-sections 35 x15x1.5 mm size main runners, cross runners 23.5x19x1.5 mm fixed to main runners placed 600 mm centre to centre both ways so as to form a grid of 600 mm square. The frame work shall be suspended from ceiling by level adjusting hangers of 6 mm dia M.S rod fixed to roof slab by means of ceiling cleats and dash fastener. The suspenders shall be placed 600 x 1200 mm centre to centre including fixing to the frame with C.P brass screws and applying a priming coat of zinc chromate yellow primer.	Sqm	20
5	Repairs to Building			
a		Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq. meters 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 metres lead : With cement mortar 1:4 (1 cement: 4 coarse sand).	Sqm	300
b		White washing with lime to give an even shade Old work. (AT LEAST TWO COATS)	Sqm	1000
6	Water Supply			
a		Providing and fixing G.I. pipes complete with G.I. fittings including trenching	Metre	30

Accountant
22/07/2019

	and refilling etc. External work 20 mm dia nominal bore		
b	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work 25 mm dia nominal bore	Metre	20
c	Providing and fixing brass stop cock of approved quality 20 mm nominal bore	Each	2
7	Water Proofing		
a	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured.	sqm	100
b	Providing and laying four courses water proofing treatment with bitumen felt over roofs consisting of first and third courses of blown bitumen 85/25 or 90/15 conforming to IS : 702 applied hot @ 1.45 Kg per square metre of area for each course, second course of roofing felt type 3 grade-I (hessian based self finished bitumen felt) and fourth and final course of stone grit 6 mm and down size or pea sized gravel spread at 6 cubic diameter per square metre including preparation of surface but excluding grading complete with Bitumen felt (hessian base) type 3 grade I conforming to IS : 1322	sqm	140
c	Supplying and applying bituminous solution primer on roof and or wall surface at 0.24 litre per sqm.	sqm	140
8	Electrical Works		
a	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with piano type switch, phenolic laminated sheet, suitable size M.S. box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required Group A.	Point	10
b	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Metre	100
c	Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/ recessed steel /PVC conduit including dismantling as required. Group A.	Point	10
d	Supplying and fixing following piano type switch/ socket on the existing switch box/ cover including connections etc. as required		
i	5/6 amps switch	Each	10
ii	15/16 amp switch	Each	10
iii	3 pin 5/6 amp socket outlet	Each	10
iv	6 pin 15/16 amp socket outlet	Each	10
v	Bell push	Each	10
e	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc., including supplying and fixing ball and socket arrangement, 2 no. down rods of 20 mm dia X 1.6 mm thick steel conduit upto 30 cm length, painting and wiring the down rods and connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	10
f	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Double pole.	Each	10

Alamy
200816

B	Repair works at BHEL Site office at Obra R&M Project		
1	Wood Work		
a	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board, including providing and fixing of frame work made of special section power pressed/ roll form G.I. sheet with zinc coating of 120 gms/sqm(both side inclusive), consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm dia meter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre, and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre. The boards are to be fixed to the frame work with joints staggered to avoid through cracks, M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards, fixed to the studs using metal to metal flat head screws, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, angle beads at corners (25 mm x 25 mm x 0.5 mm), joint finisher and two coats of primer suitable for board as per manufacture's specification and direction of engineer in charge all complete. 66mm overall thickness Partition with 8mm thick double skin Calcium Silicate Board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process with Compressive Strength 225 kg/sq.cm, Bending Strength 100 kg./ sq.cm.	sqm	30
2	Flooring		
a	Providing & laying ceramic glazed wall tiles (IS15622) of approved make over 12 mm thick bed of cement mortar(1:3).	Sqm	20
3	Roofing		
a	Providing and fixing false ceiling with 12 mm thick plain/ semi perforated or with design ceiling tiles of BWP type phenol formaldehyde synthetic resin bonded pressed particle board conforming to IS:3087, finished with a coat of aluminium primer on both sides & edges, including two coats of synthetic enamel paint of approved quality on exposed face, fixed to a grid made out of anodised aluminium (with 15 micron anodic coating) T-sections 35 x15x1.5 mm size main runners, cross runners 23.5x19x1.5 mm fixed to main runners placed 600 mm centre to centre both ways so as to form a grid of 600 mm square. The frame work shall be suspended from ceiling by level adjusting hangers of 6 mm dia M.S rod fixed to roof slab by means of ceiling cleats and dash fastener. The suspenders shall be placed 600 x 1200 mm centre to centre including fixing to the frame with C.P brass screws and applying a priming coat of zinc chromate yellow primer.	Sqm	100
4	Repairs to Building		
a	Renewing glass panes with putty & nails as necessary with float glass panes of thickness 4 mm.	Sqm	2
b	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	Sqm	600
c	Distempering with dry distemper of approved brand and manufacture (one or more coats) and of required shade on old work to give an even shade.	Sqm	600
5	Sanitary Installations		
a	Providing and fixing water closet squatting pan (Indian type W.C.pan) with 100 mm sand cast Iron P or S trap, 10 litre low level whiteP.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors White Vitreous china Orissa pattern W.C. pan of size	Each.	2

A. Chandra
25/08/16

	580x440 mm with integral type foot rests		
b	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors Range of two urinal basins with 5 litre white P.V.C. automatic flushing cistern.	Each.	2
c	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap.	Each	2
6	Water Supply		
a	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work 20 mm dia nominal bore.	Metre	20
b	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work 25 mm dia nominal bore.	Metre	20
c	Providing and fixing brass stop cock of approved quality 20 mm nominal bore.	Each	8
7	Electrical Works		
a	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with piano type switch, phenolic laminated sheet, suitable size M.S. box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required Group A.	Point	15
b	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Metre	100
c	Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/ recessed steel /PVC conduit including dismantling as required. Group A.	Point	15
d	Supplying and fixing following piano type switch/ socket on the existing switch box/ cover including connections etc. as required.		
i	5/6 amps switch	Each	15
ii	15/16 amp switch	Each	15
iii	3 pin 5/6 amp socket outlet	Each	15
iv	6 pin 15/16 amp socket outlet	Each	15
v	Bell push	Each	15
e	Supplying and fixing call bell/ buzzer suitable for single phase 230 volts, complete as required.	Each	2
f	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc., including supplying and fixing ball and socket arrangement, 2 no. down rods of 20 mm dia X 1.6 mm thick steel conduit upto 30 cm length, painting and wiring the down rods and connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	15
g	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Double pole.	Each	15

C	Repair works at BHEL Quarters provided by UPRVUNL at Obra R&M Project		
1	Brick Work		
a	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-in-charge In cement mortar.	Cum	10
b	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured) : From brick work in cement mortar.	Nos.	4650
c	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:4 (1 cement : 4 coarse sand). Note: Old Bricks will be reused.	Cum	10
d	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:4 (1 cement : 4 coarse sand).	Cum	2
2	Wood Work		
a	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, Second class teak wood 35 mm thick shutters.	sqm	30
3	Flooring		
a	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	Sqm	300
b	Cement concrete flooring 1:2:4 finished with a floating coat of cement slurry, 40 mm thick.	Sqm	300
c	Providing & laying ceramic glazed wall tiles (IS15622) of approved make over 12 mm thick bed of cement mortar (1:3).	Sqm	140
4	Roofing		
a	Providing non-asbestos high impact Polypropylene reinforced cement 6 mm thick corrugated sheets (as per IS: 14871) roofing up to any pitch and fixing with polymer mm dia. G.I. plain and bitumen washers or with self drilling fastener coated J, or L hooks, bolts and nuts 8 and EPDM washers etc. complete (excluding the cost of rafters and trusses), including cutting sheets to size and shape purlins, wherever required.	Sqm	60
b	Providing and fixing false ceiling with 12 mm thick plain/ semi perforated or with design ceiling tiles of BWP type phenol formaldehyde synthetic resin bonded pressed particle board conforming to IS:3087, finished with a coat of aluminum primer on both sides & edges, including two coats of synthetic enamel paint of approved quality on exposed face, fixed to a grid made out of anodized aluminum (with 15 micron anodic coating) T-sections 35 x15x1.5 mm size main runners, cross runners 23.5x19x1.5 mm fixed to main runners placed 600 mm centre to centre both ways so as to form a grid of 600 mm square. The frame work shall be suspended from ceiling by level adjusting hangers of 6 mm dia M.S rod fixed to roof slab by means of ceiling cleats and dash fastener. The suspenders shall be placed 600 x 1200 mm centre to centre including fixing to the frame with C.P brass screws and applying a priming coat of zinc chromate yellow primer.	Sqm	60
5	Repairs to Building		
a	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq. meters 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 metres lead : With cement mortar 1:4 (1cement: 4 coarse sand).	Sqm	500
b	Renewing glass panes with putty & nails as necessary with float glass panes of thickness 4 mm.	Sqm	6
c	White washing with lime to give an even shade Old work (AT LEAST TWO COATS)	Sqm	5000

Handwritten signature
25/02/16

d	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	Sqm	3200
e	Distemping with dry distemper of approved brand and manufacture (one or more coats) and of required shade on old work to give an even shade.	Sqm	3200
f	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade : Old work (one or more coats).	Sqm	350
g	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	Sqm	350
6	Sanitary Installations		
a	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required: W.C. pan with ISI marked white solid plastic seat and lid .	Each.	2
b	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap.	Each	4
c	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS : 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls 510x1040 mm bowl depth 178 mm	Each	4
7	Water Supply		
a	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work 20 mm dia nominal bore	Metre	100
b	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work 25 mm dia nominal bore	Metre	50
c	Providing and fixing brass stop cock of approved quality 20 mm nominal bore.	Each	50
8	Water Proofing		
a	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured.	sqm	700
b	Providing and laying four courses water proofing treatment with bitumen felt over roofs consisting of first and third courses of blown bitumen 85/25 or 90/15 conforming to IS : 702 applied hot @ 1.45 Kg per square metre of area for each course, second course of roofing felt type 3 grade-I (hessian based self finished bitumen felt) and fourth and final course of stone grit 6 mm and down size or pea sized gravel spread at 6 cubic diameter per square metre including preparation of surface but excluding grading complete with Bitumen felt (hessian base) type 3 grade I conforming to IS : 1322.	sqm	800
c	Supplying and applying bituminous solution primer on roof and or wall surface at 0.24 litre per sqm.	sqm	800
9	Misc. Works		
a	Supplying & fixing of heavy duty GI wire netting 3/4" x 24 G mosquito net (jali) over the window/doors.	sqm	600
b	Cleaning of choked sewer lines & septic tank including labour/ T&P etc.	Each	10

Handwritten signature
20/05/14

10	Electrical Works		
a	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with piano type switch, phenolic laminated sheet, suitable size M.S. box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required Group A.	Point	80
b	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Metre	100
c	Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/ recessed steel /PVC conduit including dismantling as required. Group A.	Point	60
d	Supplying and fixing following piano type switch/ socket on the existing switch box/ cover including connections etc. as required.		
i	5/6 amps switch	Each	30
ii	15/16 amp switch	Each	30
iii	3 pin 5/6 amp socket outlet	Each	30
iv	6 pin 15/16 amp socket outlet	Each	30
v	Bell push	Each	6
e	Supplying and fixing call bell/ buzzer suitable for single phase 230 volts, complete as required.	Each	6
f	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc., including supplying and fixing ball and socket arrangement, 2 no. down rods of 20 mm dia X 1.6 mm thick steel conduit upto 30 cm length, painting and wiring the down rods and connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	40
g	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Double pole.	Each	38

Alim
20/02/16

RATE SCHEDULE

Sl. No	DESCRIPTION OF WORK	TOTAL VALUE in Rupees
1	Lump sum Rate in Rupees for entire SOW	(Amount In Figure) Rs. : (Amount in words) Rupees:
2	Extra work rate on per man-hour basis (inclusive of supervision, T&P, consumables and all other costs)	Rs. 60 ONLY

- The quantities indicated against each item above are tentative and these are liable to vary depending upon the site requirement.
 - Incomplete offer received may not be considered for the subject work.
 - The Rate shall be entered in figures as well as in words. In case of difference in rates between words and figures THE LESSER OF THE TWO will be treated as valid rate.
 - In case of omission in quoting any rate, the evaluation will be done considering the highest quoted rate obtained against that item but the work, if awarded, will be on the lowest quoted rate obtained against that item.
-

Alexander
25/06/19