

GUJARAT MINERAL DEVELOPMENT CORPORATION LIMITED

NAME OF WORK: Work of Repair, Retrofitting and water proofing work at Colony quarters and other buildings at SKV Nagar, GMDC lignite project Panandhro.

NOTE: All items mentioned under the criteria of "DEMOLITION" /"REMOVAL "shall include- Providing, Erecting and Dismantling all necessary scaffolds, tools, tackles, construction cranes and other equipment etc. working at any floor , breaking with Mechanical Breakers using appropriate attachments, scrapping the surfaces with wire-brush or broom to remove the remnant lumps, cleaning the surface with air-jet or water-jet, transporting via external independent temporary passage/lift/ramp to avoid disturbance , all debris down to ground level, with the help of covered sacs or chutes or through adjustable, flexible garbage ducts for preventing spread of dust and avoiding free hurling or throwing from upper floors, hauling immediately to the demarcated dump-yards on site, for temporary stacking, segregating the salvable/resalable scrap and finally carting away remaining debris from the site etc. complete.

Sr. No	Description of items	Total Qty	Unit	Rate	Amount
1	Labour charges for carefully chipping off loose / spalled concrete from slab bottom, damaged beams, columns etc. RCC structures up to good parent concrete or minimum up to 50 mm deep by manual / mechanically and cleaning the reinforcement and concrete surface with wire brush to receive further treatment and disposing the debris from the site completely. Rate shall include all the cost for scaffolding, tools, plants and labour etc. complete	716	Smt		
2	Providing & applying alkaline based rust converting primer FEOVERT or equivalent in two coats by brush over the exposed rusted reinforcement followed by IPNET-RB or equivalent (Central Building Research Institute,Roorkee) Technology in two coats with a time interval of minimum 4 hours including material,equipment,labours etc. complete as per direction at all heights.	175	Smt		
3	Supplying and providing reinforcement thermomechanically treated bars Fe 500 conforming to IS:1786 including initial straightening of coiled/uncoiled bars,removal of loose rust,cutting,bending to correct size & shapebinding with 18 gauge G.I wire.	3815	Kg		
4	Drilling of 16mm dia 75mm deep holes @300mm c/c distance in both horizontal and vertical directions as directed by engineer,transportation,bending to required shape and size,coating with IPN-RB or equivalent,fixing the same using anchor grout of HILTI/FISHER in such away that 65mm of bar is grouted bar having length of 85mm.The rate shall include all consumables,chemicals,tools, etc.The reinforcement shall be supplied as per issue by the client.				
4.1	10mm Dia	100	No.		
4.2	12 mm dia.	120	No.		
4.3	16 mm Dia.	150	No.		
4.5	20 mm Dia.	50	No.		
5	Providing & applying concrete penetrating,migratory type corrosion inhibitor EPCO KP 100 or equivalent by brush/spray with a dosage of 4 m ² /Ltr,over the entire chipped off area /exposed concrete area including material,equipment,labour etc. complete in order to arrest further corrosion of reinforcement bars.	250.00	Smt		
6	Providing and fixing in position water tight shuttering from good quality shuttering ply for columns,beams,slabs etc at all heights include scaffolding,application of de-shuttering oil,extra care of water tightness etc. complete as per specifications as directed.All the crevices in the form work shall be arrested using plaster of paris so as to ensure water tight form work.	250.00	Smt		
7	Providing ,laying and compacting microconcrete POLYGROUT-M of INFINITE OPTIONS Krishna conchern or Equivalent with addition of 25% by weight 10mm down size crushed stone and bipolar corrosion inhibitor EPCO KP-200(KRISHNA CONCHEM) or equivalent @ 6kg/m ³ (M:40) as per manufacture specifications .The form work shall be included.The rate include all scaffolding,tools,tackels,labour,materials, etc. complete.	10.50	Cum		

8	Providing & applying polymer modified mortar REPPATCH 45 T or equivalent up to average thickness of 30 to 40 mm with bond coat of EPIBOND OR Equivalent makes as per manufacture specifications including Labour charges for carefully chipping off loose /spalled concrete from slab bottom,damaged beams,columns etc. RCC structure up to good parent concrete or minimum up to 30 to 40mm deep by manual/mechanicallyand cleaning the reinforcement and concrete surface with wre brush to receive further treatment and disposing the debris from the site completely. Rate shall include all the cost for scaffolding ,tools,plants and labour etc.complete. required throughly surface cleaning,levelling & finishing,curing etc. to the satisfaction on EIC.	400.00	Smt		
9	Providing and carrying out injection grouting with MONOPOL or equivalent as per manufactures recommendations through the same nozzles refuses to accept the grout, cutting the nozzles after setting of grout and filling the nozzles with epoxy putty EPCO 1010 or equivalent including material, labour, machinery etc complete.	220.00	Kg		
10	Opening of structural cracks by chipping up to full depth, cleaning the surface and repairing the cracks by providing & applying epoxy mortar EPCO 2020 AP manufactured under licence from CECRI / CSIR (Central Electrochemical Resarch Institute) - Karaikudi including material, labour, machinery, etc complete to repair patches, dents in RCC up to 5 mm.	6910.00	Rmt		
11	Providing and fixing 10 guage GI weld mesh of 35 X 35 mm opening as skin reinforcement. The rate shall be inclusive of cutting, fixing, carting and wastages etc. complete.	25.00	Kg		
12	Providing and laying plain/reinforced concrete jacket for the structural members e.g. columns, pillars, piers, beams etc with concrete having the specified minimum characteristic compressive strength [with ordinary portland cement, coarse sand and graded stone aggregate of 10 mm maximum size in proportion as per design criteria] with specified average thickness all-round existing core of RCC member. Rates shall be for finished surface area of concrete and shall include the cost of making holes in existing RCC slab, if required, for pouring concrete in shuttering mould of jacket and appropriate approved super-plasticiser & Corrosion inhibiting admixture EPCO KP-200 for rendering concrete as flowable, self compacting and also include the cost of bond coat, shear keys, centering and shuttering, strutting, propping etc (Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding/tapping with a blunt metal instrument)(A)f) 100 mm thick in Grade M 25 with cement content not less than 350 Kg per Cu M	25.00	Smt		
13	Excavation for foundation upto 1.5 m depth including sorting out and stacking of useful materials and disposing off the excavated stuff upto 50 Meter lead.(A) Loose or soft soil (excavation for Jacketing)	10.20	Cum		
14	Filling available excavated earth (excluding rock) in trenches. plinth, sides of foundations etc. in layers not exceeding 20 cm. in depth consolidating each dispoised layer by ramming and watering.(For Jacketing)	8.00	Cum		
15	Brick masonry work using common burnt clay building bricks having crushing strength not less than 35 KG/SQ.CM. in cement mortar 1:5 (1 cement : 5 fine sand) in superstructure above plinth level upto Floor Two level height(B)Conventional	10.00	Cum		
16	Providing 15mm thick cement plaster in single coat on Rough (Similar)side of single or half brick walls for interior plastering upto floor two level and finished even and smooth in (i) Cement mortar 1:3 (1-cement:3-sand)	716.00	Smt		

17	20mm thick sand faced cement plaster on walls upto height 10 metres above ground level consisting of 12mm thick backing coat of C.M. 1:3 (1-cement : 3-sand) and 8mm thick finishing coat of C.M. 1:1 (1-cement : 1-sand) etc. complete.	558.00	Smt		
18	Ultrasonic Pulse Velocity (UPV) measurement in accordance with IS: 13311 Part-1-1992 by measuring the time taken for travel of a known distance through concrete medium being tested. The rate shall include the necessary surface preparation including its smoothening and making it flat, application of petroleum jelly, etc necessary for intimate contact of the transmitter & receiver with the concrete surface, recording the minimum & stable reading, necessary scaffolding and platform, presentation of results in an acceptable format etc all complete.	25.00	Each		
19	Measuring the Half Cell Potential readings at the nodes of pre-marked grid on concrete surface for determining the probability of corrosion activity of embedded steel reinforcement in concrete with specified half cell electrode in accordance with ASTM C876-1980 after moistening the concrete surface with water. The rate shall include surface preparation, moistening concrete surface, all the operations and materials enumerated above, necessary scaffolding and platform, presentation of each location results in an acceptable format etc all complete.(i)With Copper-Copper Sulphate Half Cell Electrode	25.00	Each		
20	Cutting and extracting undisturbed concrete core of specified diameters preferably with its length finished after end preparation equal to twice the diameter but in any case not less than the diameter of the core, without encountering any steel reinforcement from the RCC members at specified locations with portable power driven core cutting equipment. After the core has been extracted, the hole shall be made good by plugging with dry pack concrete and finished as per the existing finish. The rate shall include necessary scaffolding and platform and cost of all the operations, scanning T& P and materials etc complete.(ii) 75mm diameter	10.00	Each		
21	Providing and laying 24" x 24" Vitrified 8 mm thick tile flooring over 20 mm (average) base of cement mortar 1:6 (1 cement : 6 coarse sand) laid on new surface or fixing on existing flooring by adhesive material PMTA(INFINITE OPTIONS)including dismantling of existing flooring and jointed with colour cement slurry including finished with flush pointing & cleaning the surface etc.complete For light shade	280.00	Smt		
22	Providing and laying white glazed tiles 6mm thick in flooring treads of steps and landing laid on a bed of 12mm thick cement mortar 1:3 (1-cement : 3-coarse sand) finishing with flush pointing in white cement.	735.00	Smt		
23	Providing erecting and fixing double coated ISI watertank of required capacity each with all necessary fittings and connection etc. complete on terrace	53000.00	Ltr		
24	Providing laying and jointing in true line and level 15mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	1590.00	Rmt		
25	Providing and fixing to wall ceiling and floor 10.0 Kg. F/Cm2 working pressure poluthene pipes of the following outside Dia. Low density, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(G)110 mm	1590.00	Rmt		
26	Providing and fixing screw down bib taps of following size.(A) Brass screw down bib tap polished bright. (i) 15mm dia.	318.00	Each		

27	Providing and Laying controlled cement concrete M.150 and finishing smooth with curing etc. complete including the cost of formwork but excluding the cost of reinforcement for R.C.C work in including precast the slab & Place on site with all tools, tackles, labour, scaffolding etc. complete (i) Slabs upto 8cm ickness	54.50	Cum		
28	Providing and fixing water closet squatting Pan (Indian type W.C. Pan) size 580mm (Earthwork, bed concrete, foot reste and trap to be measured and paid for separately) (A) Vitreous China.(I) Long pattern -White colour	106.00	No.		
29	Providing & applied polyurethane hybrid roof topcoat water proof coating with flutyne technology to resist water intrusion & heat & highly elastic, seamless membrane that provides excellent protection from moisture and is resisting to ponding water. It should be exhibits excellent resistance to UV radiation and thermal aging.it includes 45 GSM Glass reinforced fibre mesh waterproofing membrane plain finished which consist a coat of primer for membrane of M/s CICO Technologies Ltd, SIKA/ FOSROC/Dr. Fixit as per manufacturers specifications to horizontal RCC roof terraces at all levels and part of parapet (upto 300 mm height returns/wattas) including neat clean the surface, crack filling with water proofing agent, cutting groove and forming drip mould with the joint of parapet wall plaster at height of minimum 300 mm from finished waterproof roof surface and at uniform level all along the parapet/vertical wall on tarrace or toilet block floor with ultra violet resistance. The waterproofing shall be done at sunk slab or on terrace up to any height with all lead and lift .The waterproofing should have minimum 5 years of guarantee bond on stamp paper of Rs. 300 against any leakage.etc complete as directed by engineer in charge.10 % amount of this item will be retained as a performance Gaurantee bond for a period of 60 months and will be refunded after completion of satisfactory defects liability period of 60 months.	29117.00	Smt		
Total					