

BILL OF QUANTITIES (RATES WITH MATERIAL AND LABOUR) AS PER MCGM SOR 2023						
SR. NO.	ITEM NO	DESCRIPTION	UNIT	QTY	RATE 2023 (Rs)	AMOUNT (Rs)
DISMANTLING & DEMOLISHING WORK						
1	R3-CS-DD-56	Breaking and removing the water proofing layers of I. P. S. with bituminous joints and brick bat concrete over the existing terrace floor, chajja, top of headroom slab and canopy including cement vata and exposing R.C.C. slab top complete.	Sqm	22.00		
2	R3-CS-DD-64	Removing mosaic, cement marble, granites non-slippery, tandur, kotah, shahabad stone or Indian Pattern stone, glazed tiles in flooring and dado including bedding brick bat coba etc., and delivering materials in Ward Office and carting away unserviceable materials.	Sqm	165.00		
3	R3-CS-DD-65	Removing cement plaster of any finish from the wall, complete with racking out the joints to a depth of 20 mm.	Sqm	1980.00		
4	R3-CS-DD-70	Removing and refixing existing door or window with frames and shutters, making good the damaged brick work and applying 3 coats of Syn. Ena. paint.	Nos	20.00		
5	R3-CS-DD-3	Demolishing brick work in lime or cement mortar including plaster, paint, etc. 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.	Cum	1.00		
6	R3-CS-DD-71	Removing existing door or windows with frame and shutters and making good etc. to the existing surface.	NOS	5.00		
7		Removing existing weather sheds and M.S. Grills carefully and depositing the same with the occupant etc. complete as instructed and directed.	SQM	85.00		
8		Re-fixing the removed weather sheds & M.S. Grills with new steel nails(All additional material required for repair /Servicingof the old chajja to be provided by the owner)	SQM	85.00		
9		Removing Existing Damaged False Ceilings and carting away the debris as directed by the consultant	SQM	0.00		
10		Providing new false ceiling as directed by the consultant	SQM	285.00		
11		Carefully Removing AC units with MS Brackets all inclusive and stacking at a proper place etc complete as instructed and directed by the Consultants.	NOS	20.00		
12		Carefully Removing AC units etc complete as instructed and stacking at a proper place etc complete as instructed and directed by the Consultants.	NOS	20.00		
SUB TOTAL-1						
CONCRETING WORK						
13	R3-CS-CW-35	Providing and fixing in position steel bars reinforcement of various diameters for R.C.C. pile, pile caps, footings,raft,retaining wall,shear wall, lift wall, foundations, slabs, beams, columns, canopies, staircases, newels, chajjas, lintels, pardies, coping, fins, arches, etc. as per detailed designs, drawings and bar bending schedules,including straightening, cutting, bending, hooking the bars, binding with wires or tack welding, supporting as required etc. all complete at all levels.				
	R3-CS-CW-35-c	Thermo-Mechanically Treated steel bars. (Fe 500 D)	MT	0.55		
14	R3-CS-CW-45	Providing Ready Mix Micro Concrete jacketing to walls of thickness upto 75 mm using Polymer modified cement premixed quartz sand aggregate packed in bags of standard manufacture, for high early strength of 40 N/mm sq.cm of approved brand. The dry product is to be mixed with 12.5% water by weight, along with washed and poured into rigid form work moulds & tamped properly, & cu red for 3 days. [Payment is to be made by weight premixed of micro concrete product consumed as per site register records. No extra payment shall be made for shuttering or any other material.	Kg	7000.00		
15	R3-CS-CW-44	Jacketing the existing column of size as shown in the drawing by removing the concrete cover to reinforcement, by chipping or other suitable means to expose the reinforcement of existing column in order to make available the same for binding the extra reinforcement as shown in the drawing and also removal of rust, scales of the reinforcement in order to provide and apply approved make of epoxy resin to get proper bond with newly laid M25 grade concrete. The aforesaid concrete shall be laid by the sides of the existing column with uniform thickness of 115 mm or as specified, for jacketing purposes thereby increasing the sectional dimensions by 150 mm or as specified (excluding finishing) at any height with requisite shuttering, centring, scaffolding, propping, repairing the existing surface as specified and also removal of debris, curing etc. complete as per design and drawing etc. directed. (NOTE :- Reinforcement will be paid separately under respective item of schedule).	CUM	4.00		
16	R3-CS-RF-3	Shear Connectors: Make 10/12 mm dia holes using heavy duty electrically operated hammer drills in the concrete of RCC members to a depth of about 75 mm at 500 mm c/c or at suitable grid in zig-zag fashion, clean the holes using air jet and fix pre-fabricated 100 x 50 mm L-shape 8 mm dia rebar using Anti Corrosive protective coating so that 75 mm out of 100 mm is inserted inside the concrete and 25 mm remain outside along with 50 mm bend. The shear connectors are used to tie the additional reinforcement bars.s.	Nos	150.00		
17	R3-CS-CW-54	Chipping /removing loose concrete upto reinforcement bars, without damaging the reinforcement, removing all the loose materials and to make all the exposed surfaces free from oil, dust and all impurities etc complete.	Sqm	600.00		
18	R3-CS-CW-55	Removing corrosion of steel reinforcement by mechanical means like wire brushing, chipping to remove loose rust and then applying rust removal solution by using brush application, leaving the surface for at least 15 to 30 minutes, then removing loose materials by scrubbing or with brush and applying polymer bond to the old concrete surface before applying Polymer mortar.	Sqm	650.00		
19	R3-CS-CW-56	Providing and applying Ready Mix Polymer modified cement mortar of average thickness 15mm using Polymer in one or more layers in proportion 1:5:15 of Polymer Cement Quartz Sand as manufacturer's specifications in specific layers, curing the surface after 72 hours of application with wet gunny bags etc and by finishing the surface with 12mm thick (1:3) Cement sand plaster.	Sqm	360.00		
20	R3-CS-CW-57	Providing and applying Ready Mix Polymer modified cement mortar of average thickness 30mm using Polymer in two layers in proportion 1:5:15 of Polymer Cement Quartz Sand as manufacturer's specifications in specific layers, curing the surface after 72 hours of application with wet gunny bags etc and by finishing the surface with 12mm thick (1:3) Cement sand plaster.	Sqm	240.00		
21	R3-CS-RF-11	Injection Grouting High Performance Polymer Cement Grout: Providing & injecting high performance non shrink, Anti-washout Polymer Cement Grout per pack of 225gm for 50kg bag of cement as per manufacturer's specifications into honeycombing area / porous concrete with suitable pump at pressure of 2.0 Kg/Cm2 and subsequently cutting /removal of nozzles and sealing of holes with grout etc., complete.This does not include the rate of cement bag.	per 50kg bag of cement	40.00		
22	MA-GN-01	Cement for grouting	MT	2.00		
23	R3-CS-RF-13	Providing & laying applying Carbon Fiber sheet wrap at structural members including Surface Preparation: Grinding / moulding concrete substrate, cleaning it with wire brush, removing oil, laitance if present, rounding sharp edges to min 25 mm radius etc., complete. Profiling: Applying PRIMER on prepared substrate, filling holes and uneven surface with PUTTY etc., complete. Wrapping: Wrapping the Glass fibre wrap to structural element at desired orientation using tamping roller to avoid any air voids etc., Repeat the same procedure for multiple layer with interval of 8 hours. Sand Pasting: Applying saturant, rectify air voids if any, paste the river sand on it to make surface rough to take any further finishes. (Mode of Measurement: Per Sq.Mt of Fiber consume and not application of surface area.	Sqm	60.00		

24	R3-CS-CW-7	Providing and laying in position ready mixed design mix M-20 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying and the cost of centering, shuttering, finishing and excluding reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. The Mix design as per particular specifications shall be got approved by Engineer-in-Charge before execution of the item. The rate shall include cost of all specified materials and operations at all levels and heights, including the cost of centering, shuttering and excluding reinforcement which shall be paid under relevant item. (Note :- Cement content considered in this item is @ 300 kg/cum as per IS 456 table showing minimum cement content. No extra will be paid nor any amount will be recovered on account of variation of cement in mix design as per specifications for controlled concrete).				
	R3-CS-CW-7-d	Lintels, beams, plinth beams, girders, floor beam, coping.	CUM	1		
		SUB TOTAL-2				
		MASONRY WORK				
25	R3-CS-MW-5	Brick work with common burnt clay machine moulded perforated bricks of class designation 12.5 conforming to IS: 2222 in superstructure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) :				
	R3-CS-MW-5-a	With F.P.S. (non modular) bricks	Cum	1		
		PLASTERING WORK				
26	R3-CS-PL-09	Providing and applying 20 mm thick internal plaster with neeru finish at all heights and locations in cement mortar specified below in two coats for masonry (except stone masonry) and concrete surfaces including racking out joints, hacking of concrete surface, watering, finishing, curing, scaffolding etc complete as directed By Engineer In Charge.				
	R3-CS-PL-09-c	In cement mortar 1:4	Sqm	680.00		
27	R3-CS-PL-16	Providing and applying 20 mm thick external sand faced cement plaster with neat cement rendering upto 10m from ground level and at all locations in cement mortar proportion specified below in two coats for masonry (except stone masonry) and concrete surfaces including providing water proofing compound to the first coat of plaster as per manufacturers specification, racking out joints, hacking of concrete surface, finishing, curing, scaffolding etc complete as directed By Engineer In Charge. Min. time lag between two coats shall be 24 hours. (as per IS 2402 of 1963.)				
	R3-CS-PL-16-c	In cement mortar 1:3	Sqm	1300.00		
		Water proofing Work				
28	R3-CS-WP-32-a	Providing the waterproofing treatment as per item no CS-WP-34 but for existing terrace after removing the old brick bat coba, tiling work etc. completely so as to expose the R.C.C. slab surface and cleansing the same. The rate is inclusive of removing the debris from actual place of work to the ground and from there the same will have to be carted away immediately the debris will become contractors property and no extra payment will be made for removing and carting. [Injection treatment shall be given as per item no. CS-WP-45				
	R3-CS-WP-32-b	Providing waterproofing treatment as per Item No. CS-WP-32-a with Broken China mosaic flooring as per design.	Sqm	42.00		
29	R3-CS-WP-37	Providing waterproofing treatment through specialized agencies as per their specifications to the flooring of water closets, bathrooms, kitchen, nahanies, washing places, sanitary blocks etc. by giving INJECTIONS with cement solution with water proofing compound into the floor slab so as to make it consistent, homogeneous and impervious against leakage, seepage etc. The sunk portion shall then be covered with brickbat waterproof coba in 1:5 c.s. of required thickness with necessary gradient for easy flow of water. Finally the floor shall be covered with joint less waterproof cement plaster in 1:3 c.s. 12 mm to 15 mm thick finished rough for receiving tiles. The average thickness of complete treatment shall not be less than 100 mm. The soil pan area will not be deducted. (After completion of work leakage test shall be carried out after impounding the water for 7 days without any extra cost. The actual treated area will be measured and paid for).	Sqm	20.00		
30	R3-CS-WP-44	Water proofing treatment to the chajja after removing old plaster and roughening the surface and finishing the top surface with 20mm thk. 1:2 c.s. plaster with approved water proofing compounds and neat cement finish, the rate also includes for 1:3 c.s. facia of chajja to match the new surface(actual area treated will be paid).	Sqm	80.00		
31		PU Injection Grouting : Clean the surface and remove any dust, unsound or contaminated material, plaster, oil, paint, grease, corrosion deposits or algae. The surface should preferably be prepared using high pressure water jetting or light abrasive blasting, followed by thorough washing to remove dust and remaining particles. Dirt alone may be removed with wire brushes or similar mechanical means. Oil and grease deposits should be removed by steam cleaning, detergent scrubbing or the use of a proprietary degreaser. The effectiveness of decontamination should be assessed by a pull-off test. Blow the cracks and treated surface with oil free air to ensure complete removal of all dust and loose particles. Ensure that the surfaces are blown dry. In the presence of running water the flow must be stopped using Nitofill WS60 which produces a rapid setting waterstopping foam. When the water is stopped the cracks are re injected with Nitofill UR63. All cracks must be sealed and injection packers or nipples located in place before Nitofill UR63 is injected. Once grouting operation is completed remove the packers and make good any holes or voids with Nitomortar FC and allow to cure. The Nitomortar FC can be ground off or softened with a blow lamp and peeled off.	NOS	30.00		
32		Providing & laying Mariseal PU membrane coating system over walls/mother slab after cleaning the surface thoroughly etc. complete as per manufacturer's specs and as directed by the consultant .	SQM	120.00		
		SUB TOTAL-3				
		PAINTING WORKS				
33	R3-CS-PN-5	Providing and applying first single coat of approved primer and two coats of acrylic plastic emulsion paint of an approved make and colour as per manufacturers specifications to any surface, at all height and locations as directed including scaffolding, cleaning and preparing surfaces for painting by any approved means etc. complete as directed by Engineer-in-charge.	Sqm	2000.00		
34	R3-CS-PN-12	Providing and applying first single coat of approved primer and two coats of anti-algal, anti-fungal, exterior paint as specified below of an approved make and colour as per manufacturers specifications to any surface, upto 10m height from ground level and at all locations as directed including preparing surfaces for painting by any approved means, watering, scaffolding, cleaning and curing etc. complete as directed by Engineer-in-charge.				
	R3-CS-PN-12-a	By using acrylic based exterior paint	Sqm	1300.00		
		Notes: 1) All the rates are include all necessary conveyance and delivery, handling, unloading, storing, fabrication, hoisting, scaffolding, lead, lift, all labour for finishing to required shape and size, setting, fitting and fixing in position, straight cutting and waste, return of package and other incidental operations.				
35	R3-CS-PN-4	Providing and applying first single coat of approved primer and two coats of synthetic enamel paint/flat oil paint of an approved make and colour as per manufacturers specifications to surfaces specified below, at all height and locations as directed including scaffolding, cleaning and preparing surfaces for painting by any approved means etc. complete as directed by Engineer-in-charge.				
	R3-CS-PN-4-c	For steelwork	Sqm	70.00		
		SUB TOTAL-4				
		FLOORING WORK				
36	R3-CS-FL-07	Providing and laying 8mm thk. ceramic tiles as specified below conforming to I.S.15622-2006 for flooring of an approved, quality, make, size and pattern /design, for flooring including cement mortar bedding of 25 mm thick in 1:4 proportion, neat cement float, cutting, leveling, jointing, filling the joints by neat cement slurry or approved colour grout, curing, finishing etc complete as directed by Engineer In Charge.				
	R3-CS-FL-07-d	Dark coloured antiskid / matt ceramic tiles	Sqm	20.00		

37	R3-CS-FL-8	Providing and laying 600 x 600 x 8 mm thk. vitrified tiles as specified below conforming to I.S.15622-2006 with water absorption less than 0.08% for flooring of an approved, quality, make and pattern /design for flooring including cement mortar bedding of 25 mm thick in 1:4 proportion, cutting, leveling, jointing, filling the joints by neat cement slurry or approved colour grout, curing, finishing etc complete as directed by Engineer In Charge.				
	R3-CS-FL-8-a	Light coloured glazed vitrified tiles	Sqm	225.00		
38	R3-CS-FL-34	Providing and fixing 8mm thk. ceramic tiles as specified below conforming to I.S. 15622-2006 of approved quality, pattern and colour for dado in the dry area including preparing the surface and levelling in the desired line, backing of 20 thk. cement mortar in porportion 1:3, square cut top edge or chamfered top edge in cement mortar 1:3, cement float, machine cutting, leveling, jointing, filling the joints with neat cement slurry or approved colour grout, finishing, curing etc complete as directed by Engineer In Charge.				
	R3-CS-FL-34-d	Dark coloured antiskid / matt ceramic tiles	Sqm	100.00		
39	R3-CS-FL-01	Providing and laying polished natural stone as specified below (Machine cut) of an approved quality and size for paving /flooring in plain and/or diamond /approved pattern including cement mortar bedding of 25 mm thick in 1:4 proportion, cement float, machine cutting, dressing, leveling, jointing, filling the joints with neat cement slurry or with required pigment, machine polishing at site, curing, finishing, etc complete as directed by Engineer In Charge.				
	R3-CS-FL-01-c	25 to 30 mm thk. Kota stone of size 0.430m x0.56m (17"x22")	Sqm	30.00		
		SUB TOTAL-5				
		PLUMBING & SANITATION WORK				
40	R3-CS-PS-192	Providing and fixing in position uPVC/SWR (Soil/Waste/Rain) pipe of type-B 110 mm dia. in any position including all fittings and accessories, making joints / connections water tight with solvent cement, scaffolding if necessary and making good the damages if any (excluding excavation and refilling the trenches) etc. complete as specified and directed.(All fittings and accessories like clamps,etc. should be of same brand. No separate payment shall be made for fittings and accessories).	Rmt	75.00		
41	R3-CS-PS-191	Providing and fixing in position uPVC/SWR (Soil/Waste/Rain) pipe of type-B 75 mm dia. in any position including all fittings and accessories, making joints / connections water tight with solvent cement, scaffolding if necessary and making good the damages if any (excluding excavation and refilling the trenches) etc. complete as specified and directed.(All fittings and accessories like clamps,etc. should be of same brand. No separate payment shall be made for fittings and accessories).	Rmt	50.00		
	R3-CS-PS-87	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				
42	R3-CS-PS-87-a	40 mm nominal outer dia Pipes	RMT	100.00		
43	R3-CS-PS-87-c	25 mm nominal outer dia Pipes	RMT	25.00		
44	R3-CS-PS-87-b	20 mm nominal outer dia Pipes	RMT	25.00		
45	R3-CS-PS-87-a	15 mm nominal outer dia Pipes	RMT	50.00		
46	R3-CS-PS-95	Providing and fixing gun metal gate valve with C.I. wheel of approved				
47	R3-CS-PS-95a	25 MM nominal bore	EACH	3.00		
	R3-CS-PS-1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast iron P or S trap, 10 litre low level white P.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 wherever required :				
48	R3-CS-PS-1-a	White Vitreous china Orissa pattern W.C. pan of size 580x440mm with integral type foot rests.	NOS	5.00		
	R3-CS-PS-2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.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 wherever required :				
49	R3-CS-PS-2-a	W.C. pan with ISI marked white solid plastic seat and lid	NOS	5.00		
	R3-CS-PS-7	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 wherever require :				
50	R3-CS-PS-7-a	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps.	NOS	4.00		
	R3-CS-PS-18	Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete.				
51	R3-CS-PS-18-a	10 litre capacity - White	NOS	4.00		
52	R3-CS-PS-259	Providing & Fixing 100mm diameter Nahani trap Jali in steel finish with necessary fixing required to make the item well functional.	NOS	7.00		
		SUB TOTAL-6				
		ALUMINIUM WORK				
53	R3-CS-AW-04	Providing & fixing in position aluminum louvered window with anodised aluminum frame of approved make & of size 40mm x 20mm x 2.0mm (wt. 0.605 kg/Rm) including adjustable aluminum frame, 4 to 6mm thk. frosted glass, fixtures & fastenings etc. complete as directed by Engineer In Charge.	SQM	7.00		
		FRP WORK				
54	R3-CS-PV-03	Providing and Fixing to frames 30mm thick Fiber glass Reinforced Plastic (F.R.P.) flush door shutter in different plain and wood finish made with fire retardant grade unsaturated polyester resin, moulded to 3mm thk kFRP laminate all around, with suitable wooden block inside at required places for fixing off fittings and polyurethane foam (PUF) Polystyrene foam to be used as filler material throughout the hollow panel, casted monolithically with the stringers of F.R.P.laminate conforming to table - 3 of IS: 14856 : 2000 etc complete as directed.	SQM	16.00		
		MISC WORK				
55	R3-CS-RM-66	Providing and fixing in vertical position telescopic M.S.prop under deflected beam/lintel/slab/chajjas by using teak wood battens of size 1000 x 80 x 80 for packing between prop plate and the beam/lintel/slab/chajjas bottom surface as per the directions of engineer-in-charge	NOS	40		
		SUB TOTAL-7				
		TOTAL (1-7)				