## Schedule of Work (Civil)

## Name of work : Renovation of NABARD premises at 1st and 7th floor, Sterling Centre, Worli, Mumbai.

Sr. No.	Description	Qty	Unit	Rate	Amount
1	CARRIAGE OF MATERIALS				
1.1	By Mechanical Transport including loading, unloading and stacking				
1.1.1	Disposal of moorum/building rubbish/ malba/similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead upto 10 km for all lifts, complete as per directions of Engineer-in-charge. Note - Item to be applicable in urban areas having directions for restricted hours for movement/ plying of load carrying motor vehicle of 3.5 cum or more.	214.00	cum	573.16	122656.00
•	Total				122656.00
2.1.1 2.1.1 2.1.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, uttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing:  1:2:4 (1 Cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominalsize derived from natural sources)  1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources : 10 graded stone	10.00	cum	9882.27	114784.00
	aggregate 40 mm nominal size derived from natural sources).				
2.2	Extra for concrete work in superstructure above floor V level for each four floors or part thereof by mechnical means.	5.00	cum	196.56	983.00
	Total				234354.00
3	REINFORCED CEMENT CONCRETE				
3.1	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement:				

	Description	Qty	Unit	Rate	Amount
3.1.1	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	7.00	cum	12589.42	88126.00
3.2	Centering and shuttering including strutting, propping etc. and removal of form for				
3.2.1	Lintels, beams, plinth beams, girders, bressumers and cantilevers	17.00	sqm	854.22	14522.00
3.3	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
3.3.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	560.00	kg	125.11	70062.00
	Total				172710.00
4	MASONRY WORK				
4.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in superstructure above plinth level up to floor V level in all shapes and sizes in:				
4.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	12.50	cum	10562.90	132036.00
4.2	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 3.5 in superstructure above plinth level up to floor V level.				
4.2.1	Cement mortar 1:4 (1 cement :4 coarse sand)	285.00	sqm	1303.61	371529.00
4.3	Providing and laying Autoclaved Aerated concrete(AAC) blocks masonry with 150 mm to 300 mm thick with Grade-1 AAC blocks of density 551 to 650 kg/cum conforming to IS:2185 (Part 3) in super structure above plinth level up to floor V level with RCC band at sill level and lintel level with approved block laying polymer modified adhesive mortar all complete as per direction of Engineer-in-Charge. (The payment of RCC band and reinforcement shall	21.50	cum	9667.03	207841.00

5.1 F	CLADDING WORK Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels.  Granite stone slab of colour black, Cherry/Ruby red				
s s s t s s v i i F c c 5.1.1	cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels.  Granite stone slab of colour black, Cherry/Ruby				
5.1.1 C	vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels.  Granite stone slab of colour black, Cherry/Ruby				
s s s s t s s v i i r c c 5.1.1	similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels.  Granite stone slab of colour black, Cherry/Ruby				
s b s v i i F c c 5.1.1	shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels.  Granite stone slab of colour black, Cherry/Ruby				
5.1.1 C	base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels.  Granite stone slab of colour black, Cherry/Ruby				
5.1.1 S	sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels.  Granite stone slab of colour black, Cherry/Ruby				
5.1.1 C	with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels.  Granite stone slab of colour black, Cherry/Ruby				
5.1.1 C	including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels.  Granite stone slab of colour black, Cherry/Ruby				
5.1.1	polishing of edges to give high gloss finish etc. complete at all levels.  Granite stone slab of colour black, Cherry/Ruby				
1					
	Area of slab upto 0.50 sqnn	160.00	sqm	6279.66	1004746.00
	Area of slab over 0.50 sqm	25.00	sqm	5958.11	148953.00
	Stone tile (polished) work for wall lining over 12				
	mm thick bed of cement mortar 1:3 (1 cement: 3				
	coarse sand) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete.				
5.2.1	8 mm thick				
	Granite of any colour and shade	150.00	sqm	4196.36	629454.00
	Providing and fixing plywood 4 mm thick, one				
	side decorative veneer conforming to IS: 1328				
r	(type-1), for plain lining / cladding with necessary screws, including priming coat on unexposed surface with:				
	Decorative veneer facings of approved manufacture	180.00	sqm	2257.65	406377.00
5.4 F	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to	200.00	sqm	1470.82	294164.00
	be specified by the manufacturer), of approved				
	make, in all colours, shades except burgundy,				
	bottle green, black of any size as approved by				
F	Engineer-in-Charge, in skirting, risers of steps				
	and dados, over 12 mm thick bed of cement				
	mortar 1:3(1 cement : 3 coarse sand) and				
	jointing with grey cement slurry @ 3.3kg per				
	sqm, including pointing in white cement mixed				
V	with pigment of matching shade complete.  Total				2483694.00

Sr. No.	Description	Qty	Unit	Rate	Amount
6	WOOD AND P. V. C. WORK				
6.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).				
6.1.1	Second class teak wood	1.00	cum	165821.65	165822.00
6.2	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:				
6.2.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	26.50	sqm	2775.47	73550.00
6.3	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	31.50	sqm	536.33	16894.00
6.4	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS: 2046 Type S, including cost of adhesive of approved quality.				
6.4.1	1.5 mm thick.	350.00	sqm	1213.30	424655.00
6.4.2	1.0 mm thick.	350.00	sqm	1040.87	364305.00
6.5	Providing and fixing factory made uPVC glazed/wire mesh windows/ doors comprising of lead free uPVC multi-chambered frame, sash and mullion/coupler (where ever required) extruded profiles having minimum wall thickness of 1.70 mm for Series R1 and R2 profiles and 2.10 mm for Series R3 and R4 profiles conforming to EN: 12608 in any shape, colour and design duly reinforced with galvanized mild steel section made of required shape & size as per CPWD Specification, uPVC extruded glazing beads, interlocks and Inline sash adaptor (where ever required) of appropriate dimension, EPDM gasket, hardware, SS 304 grade fasteners of minimum 8 mm dia with countersunk head, comprising of matching polyamide PA6 grade				

Sr. No.	Description	Qty	Unit	Rate	Amount
Sr. No.	sleeve for fixing frame to finished wall as per IS 1367: Part 1 to 14, plastic packers, plastic caps and necessary stainless steel screws etc. Profile of frame, sash & mullion (if required) shall be mitred cut and fusion welded/mechanically jointed duly sealed at all corners, including drilling of holes for fixing hardware and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of approved size and quality, all complete as per approved drawing conforming to CPWD specification & direction of Engineer-in-Charge. Section of steel reinforcement and cross sections of uPVC profiles to be as per design approved by Engineer-in-Charge. Wire mesh / Glazing of plain/ toughened/ laminated/ double glass unit with / without high performance coatings as per design requirements and conforming to IS: 3548 & IS: 16231 shall be paid separately. Note:- Structural design proof checked from a Government Engineering Institute, to be provided by the manufacturer for (i) Sites with basic wind speed > 45 m/sec as per IS 875 — Part 3 (ii) Sites with	Qty	Unit	Rate	Amount
6.5.1	structure height more than 20m for all wind Two track two panels sliding window with Aluminium channel for roller track, wool pile, nylon rollers with SS 304 body.				
6.5.1.1	Using R2 series with frame (40mm & above) x (40mm & above) & sash (25mm & above) x (50mm & above) with zinc alloy (zamak) powder coated touch locks with hook (Height upto 1.2 meter)	102.00	sqm	9626.67	981920.00
6.5.2	Casement window single panel with S.S. 304 friction hinges as per size and weight of sash, multi-point locking system, zinc alloy (zamak) powder coated handles.				
6.5.2.1	Using R2 series with frame (39mm & above) x (39mm & above) & sash (39mm & above) x (60mm & above). (Height upto 1.2 meter)	55.00	sqm	16761.13	921862.00

Sr. No.	Description	Qty	Unit	Rate	Amount
6.6	Providing and fixing cuboard shutter with 19 mm thick one side decorative and other side balancing lamination factory pressed BWP grade marine ply as per IS 710 of approved brand including 2 mm thick PVC edege banding tape with hot glue by edege bending machine etc. with auto closing spring loaded hinges (hydraulic type) etc. complete as per direction of Engineer-in-charge. (Payment of providing and fixing auto closing hinges shall be paid separately)	200.00	sqm	3281.93	656386.00
6.7	Providing and fixing 19 mm thick both side balancing lamination factory pressed BWP grade marine ply as per IS 710 of approved brand boxes, shelves, racks, almirah, cupboard and drawer etc. including necessary nails, screws etc. complete as per direction of Engineer-in-charge.	125.00	sqm	3008.05	376006.00
_	Total				3981400.00
<u>7</u> 7.1	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300mm or more (thickness to be specified by the manufacturer), of 1stquality conforming to IS: 15622, of approved make, in colours White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4(1 Cement: 4 Coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.	18.00	Sqm	1542.80	27770.00
7.2	Providing and laying Vitrified tiles in floor in diferent sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm with up to 3mm thick spacer i/c grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.				
7.2.1	Double charge vitrified tile polished finish of size				
7.2.1.1	Size of Tile 800 x 800 mm	500.00	sqm	1780.43	890215.00

Sr. No.	Description	Qty	Unit	Rate	Amount
7.2.1.2	Size of Tile 800 x 1600 mm	500.00	sqm	2169.49	1084745.00
7.2.2	Glazed Vitrified tiles Matt/Antiskid finish of size				
7.2.2.1	Size of Tile 600 x 600 mm	575.00	sqm	1699.23	977057.00
7.3	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge:				
7.3.1	Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent	30.00	sqm	3696.57	110897.00
	Total				3090684.00
8	ROOFING				
8.1	Providing and fixing false ceiling at all heights including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS: 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50 mm long with 6 mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25 mm long dry wall screws @ 230 mm interval,				

Sr. No.	Description	Qty	Unit	Rate	Amount
Sr. No.	including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with:	Qty	Unit	Rate	Amount
8.1.1	12.5 mm thick tapered edge gypsum moisture resistant board	1232.00	sqm	1773.76	2185272.00
8.2	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI				

Sr. No.	Description	Qty	Unit	Rate	Amount
8.2.1	GI Metal Ceiling Lay in perforated Tegular edge global white color tiles of size 595x595 mm and 0.5 mm thick with 8 mm drop; made of GI sheet having galvanizing of 100 gms/sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC (Noise Reduction Coefficient ) of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation and backed with a black Glass fiber acoustical fleece.	85.00	sqm	2399.75	203979.00
	Total				2389251.00
9	FINISHING				
9.1	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:				
9.1.1	New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm)	723.50	sqm	198.48	143600.00
9.2	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	2300.00	sqm	181.02	416346.00
9.3	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.				
9.3.1	Two coats	2700.00	sqm	165.65	447255.00
9.4	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.	1022.00	sqm	29.17	29812.00
9.5	Melamine polishing on wood work (one or more coat).	180.50	sqm	160.20	28916.00
10	Total				1065929.00
10 1	REPAIR TO BUILDING	14.00	2001-	155 56	2170 00
10.1	Dismantling W.C. Pan of all sizes including disposal of dismantled materials i/c malba all complete as per directions of Engineer-in-Charge.	14.00	each	155.56	2178.00

Sr. No.	Description	Qty	Unit	Rate	Amount
10.2	Dismantling 15 to 40 mm dia G.I. pipe including	100.00	metre	3.77	377.00
	stacking of dismantled pipes (within 50 metres				
	lead) as per direction of Engineerin-Charge. (a)				
	Internal Work- Exposed on wall				
	Total				2555.00
11	DISMANTLING AND DEMOLISHING				
11.1	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.				
11.1.1	In cement mortar	25.00	cum	2389.83	59746.00
11.2	Dismantling doors, windows and clerestory				
	windows (steel or wood) shutter including				
	chowkhats, architrave, holdfasts etc. complete				
	and stacking within 50 metres lead:				
11.2.1	Of area 3 sq. metres and below	4.00	each	425.95	1704.00
11.3	Taking out doors, windows and clerestory				
	window shutters (steel or wood) including				
	stacking within 50 metres lead:				
11.3.1	Of area 3 sq. metres and below	20.00	each	166.46	3329.00
11.4	Dismantling tile work in floors and roofs laid in				
	cement mortar including stacking material				
	within 50 metres lead.				
11.4.1	For thickness of tiles 10 mm to 50 mm	1000.00	sqm	85.14	85140.00
11.5	Dismantling wooden boardings in lining of walls				
	and partitions, excluding supporting members				
	but including stacking within 50 metres lead:				
11.5.1	Thickness above 25 mm up to 40 mm	54.00	sqm	104.81	5660.00
11.6	Dismantling C.I. or asbestos rain water pipe with				
	fittings and clamps including stacking the				
	material within 50 metres lead:				
11.6.1	75 to 80 mm dia pipe.	30.00	metre	87.81	2634.00
11.6.2	100 mm dia pipe	20.00	metre	90.48	1810.00
11.7	Dismantling of flushing cistern of all types	14.00	each	129.98	1820.00
	(C.I./PVC/Vitrious China) including stacking of				
	useful materials near the site and disposal of				
	unserviceable materials within 50 metres lead.				
11.8	Dismantling old plaster or skirting raking out	140.00	sqm	63.39	8875.00
	joints and cleaning the surface for plaster				
	including disposal of rubbish to the dumping				
	ground within 50 metres lead.				
11.9	Dismantling aluminium/ Gypsum partitions,	185.00	sqm	65.37	12093.00
	doors, windows, fixed glazingand false ceiling				
	including disposal of unserviceable material and				
	stacking of serviceable material with in 50 meters				
	lead as directed by Engineerin- charge.				
	Total				182811.00

Sr. No.	Description	Qty	Unit	Rate	Amount
12	SANITARY INSTALLATIONS				
12.1	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 wherever				
	required:				
12.1.1	Kitchen sink with drain board				
12.1.1	Kitchen sink with dram board				
12.1.1.1	510x1040 mm bowl depth 250 mm	2.00	each	8056.90	16114.00
12.2	Providing and fixing soil, waste and vent pipes:				
12.2.1	100 mm dia.				
12.2.1.1	Hubless centrifugally cast (spun) iron pipes	72.00	metre	1356.39	97660.00
	epoxy coated inside & outside IS:15905				
12.2.2	75 mm dia.				
12.2.2.1	Hubless centrifugally cast (spun) iron pipes	35.00	metre	1118.53	39149.00
	epoxy coated inside & outside IS:15905				
12.3	Providing and fixing bend of required degree				
	with access door, insertion rubber washer 3 mm				
	thick, bolts and nuts complete.				
12.3.1	100 mm dia				
12.3.1.1	Hubless centrifugally cast (spun) iron epoxy	10.00	each	657.95	6580.00
	coated inside & outside as per IS:15905				
12.4	Providing and fixing plain bend of required				
	degree.				
12.4.1	100 mm dia				
12.4.1.1	Hubless centrifugally cast (spun) iron pipes	6.00	each	426.88	2561.00
	epoxy coated inside & outside as per IS:15905				
12.4.2	75 mm dia				
12.4.2.1	Hubless centrifugally cast (spun) iron pipes	10	each	294.06	2941.00
	epoxy coated inside & outside as per IS:15905				
12.5	Providing and fixing double equal plain invert				
	branch of required degree:				
12.5.1	100x100x100x100 mm				
12.5.1.1	Hubless centrifugally cast (spun) iron pipes	10	each	1276.41	12764.00
10.6	epoxy coated inside & outside as per IS:15905				
12.6	Providing and fixing single equal plain invert				
10 ( 1	branch of required degree:				
12.6.1	100x100x100 mm	10.00	1	7.40.70	7407.00
12.6.1.1	Hubless centrifugally cast (spun) iron pipes	10.00	each	748.72	7487.00
10.7	epoxy coated inside & outside as per IS:15905				
12.7	Providing and fixing single unequal plain invert				
10.7.1	branch of required degree :				
12.7.1	100x100x75 mm	( 00	a1	7(2.57	4501.00
12.7.1.1	Hubless centrifugally cast (spun) iron pipes	6.00	each	763.57	4581.00
12.0	epoxy coated inside & outside as per IS:15905				
12.8	Providing and fixing shielded coupling for				
	Hubless centrifugally cast iron pipe				

Sr. No.	Description	Qty	Unit	Rate	Amount
12.8.1	100 mm dia	-			
12.8.1.1	SS 304 grade coupling with EPDM rubber	114.00	each	501.18	57135.00
	gasket				
12.8.2	75 mm dia				
12.8.2.1	SS 304 grade coupling with EPDM rubber	49.00	each	501.18	24558.00
10.0	gasket				
12.9	Providing and fixing trap of self cleansing design				
	with screwed down or hinged grating with or				
	without vent arm complete, including cost of cutting and making good the walls and floors:				
	cutting and making good the wans and noors.				
12.9.1	100 mm inlet and 75 mm outlet				
12.9.1.1	Hubless centrifugally cast (spun) iron pipes	23.00	each	686.02	15778.00
	epoxy coated inside & outside as per IS:15905				
	Total				287308.00
13	WATER SUPPLY				
13.1	Providing and fixing Chlorinated Polyvinyl				
	Chloride (CPVC) pipes, having thermal stability				
	for hot & cold water supply, including all CPVC				
	plain & brass threaded fittings and fixing the				
	pipe with clamps at 1.00 m spacing. This				
	includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of				
	cutting chases and making good the same				
	including testing of joints complete as per				
	direction of Engineer in Charge. Concealed				
	work, including cutting chases and making good				
	the walls etc.				
13.1.1	15 mm nominal dia Pipes	87.50	metre	577.45	50527.00
13.1.2	20 mm nominal dia Pipes	100.00	metre	623.62	62362.00
13.2	Providing and fixing Chlorinated Polyvinyl				
	Chloride (CPVC) pipes, having thermal stability				
	for hot & cold water supply, including all CPVC				
	plain & brass threaded fittings, including fixing				
	the pipe with clamps at 1.00 m spacing. This				
	includes jointing of pipes & fittings with one				
	step CPVC solvent cement and testing of joints				
	complete as per direction of Engineer in Charge.				
	: Internal work - Exposed on wall				
13.2.1	32 mm nominal dia Pipes	92.50	metre	601.75	55662.00
13.2.1.1	50 mm nominal dia Pipes	54.00	metre	1083.61	58515.00
13.3	Providing and fixing uplasticised PVC				
	connection pipe with brass unions:				
13.3.1	45 cm length				
13.3.1.1	15 mm nominal bore	36.00	each	113.39	4082.00
		20.00	25.511	113.37	.002.00

Sr. No.	Description	Qty	Unit	Rate	Amount
13.4	Providing and fixing rectangular high density polyethylene water storage loft tank with cover, conforming to ISI: 12701, colour of opaque white or as approved by Engineer-in-charge. The rate includes making necessary holes for inlet, outlet & over flow pipes. The base support Including fittings & fixtures for tank shall be paid separately.	3700.00	per litre	12.76	47212.00
	Total				278360.00
14	ALUMINIUM WORK	1 ( - 0 - 0 - 0			<b></b>
14.1	Providing and fixing anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868. Minimum anodic coating of grade AC 15) sub frame work for windows, ventilators and partition with extruded built up standard tubular sections of approved make conforming to IS: 733 and IS: 1285, fixed with dash fastener of required dia and size.	1650.00	kg	467.25	770963.00
	Total				770963.00
15	WATER PROOFING				
15.1	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations:  (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.				
	(b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs				

Sr. No.	Description	Qty	Unit	Rate	Amount
	. (c) After two days of proper curing applying a				
	second coat of cement slurry using 2.75 kg/ sqm				
	of cement admixed with water proofing				
	compound conforming to IS: 2645 and approved				
	by Engineer-in-charge. (d) Finishing the surface				
	with 20 mm thick jointless cement mortar of mix				
	1:4 (1 cement :4 coarse sand) admixed with				
	water proofing compound conforming to IS:				
	2645 and approved by Engineer-in-charge				
	including laying glass fibre cloth of approved				
	quality in top layer of plaster and finally				
	finishing the surface with trowel with neat				
	cement slurry and making pattern of 300x300				
	mm square 3 mm deep.				
	(e) The whole terrace so finished shall be				
	flooded with water for a minimum period of two				
	weeks for curing and for final test. "All above				
	operations to be done in order and as directed				
	and specified by the Engineer-in-Charge":				
15.1.1	With average thickness of 120 mm and	600.00	gam	1954.14	1172484.00
13.1.1	minimum thickness at khurra as 65 mm.	000.00	sqm	1934.14	11/2404.00
15.2	Grading roof for water proofing treatment with				
15.2.1	Cement concrete 1:2:4 (1 cement : 2 coarse sand	12.00	cum	9329.07	111949.00
13.2.1	: 4 graded stone aggregate 20 mm nominal size)	12.00	Cum	7327.07	111717.00
	T graded stone aggregate 20 mm nommar size)				
	Total				1284433.00
16	NEW TECHNOLOGIES AND MATERIALS				
16.1	Providing and fixing false ceiling at all heights				
	with integral densified calcium silicate				
	reinforced with fibre and natural filler false				
	ceiling tiles of Size 595x595 mm of approved				
	texture, design and patterns having NRC (Noise				
	Reduction coefficient) of 0.50 (minimum) as per				
	IS 8225:1987, Light reflectance of 85%				
	(minimum). Non combustible as per BS:476				
	(part-4), fire performance as per BS:476 (part 6				
	&7), humidity resistance of 100%, thermal				
	conductivity < 0.043 W/m K as per ASTM				
	518:1991, nin true horizontal level suspended				
	on inter-locking metal powder coated T-Grid of				
	hot dipped galvanised iron section of 0.40 mm				
	thick on Silhouette profile,rotary stiched double				
	webbed white with 6 mm reveal profile (white/				
	black),				

Sr. No.	Description	Qty	Unit	Rate	Amount
51.110.	comprising of main-T runners of size 15x42 mm of length 3000 mm, cross - T of size 15x42 mm of length 1200 mm and secondary intermediate cross-T of size 15x42 mm of length 600 mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm)i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm. Galvanised iron perimeter wall angle of size 22x19x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40 mm long dry wall S.S screws. The work shall be carried out as per specifications, drawing andm as per directions of the Engineer-in-Charge.	Q.L.Y	Ont	IVALL	Amount
16.1.1	With 15 mm thick integral densified micro edge light weight calcium silicate false ceiling tiles Chipping of unsound/weak concrete material from slabs, beams, columns etc. with manual Chisel and/ or by standard power driven percussion type or of approved make including tapering of all edges, making square shoulders of cavities including cleaning the exposed concrete surface and reinforcement with wire brushes etc. and disposal of debris for all lead and lifts all complete as per direction of Engineer-In-Charge	200.00	sqm	3051.26	610252.00
16.2.1	25 mm average thickness	125.00	sqm	147.03	18379.00
16.3	Cleaning of reinforcement from rust from the reinforcing bars to give it a total rust free steel surface by using alkaline chemical rust remover of approved make with paint brush and removing loose particles after 24 hours of its application with wire brush and thoroughly washing with water and allowing it to dry, all complete as per direction of Engineer-In-Charge.		-4	- 17130	-337,700
16.3.1	Bars upto 12 mm diameter	700.00	metre	9.57	6699.00
16.4	Providing, mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and direction of Engineer-Incharge complete in all respect.				

Sr. No.	Description	Qty	Unit	Rate	Amount
16.4.1	SBR Polymer (@10% of cement weight) modified cementitious bond coat @ 2.2 kg cement per sqm of surface area mixed with specified proportion of approved polymer	125.00	sqm	163.79	20474.00
16.5	Providing, mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement: 4 graded coarse sand with polymer minimum 2% by wt. of cement used) as per specifications and directions of Engineer-in-charge. Note: Measurement and payment: The premeasurement of thickness shall be done just after the surface preparation is completed and 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 and/or the 75 mm size cube crushing strength at the end of 28 days to be not less than 30 N/Sqmm2).				
16.5.1	25 mm average thickness in 2 layers.  Providing and injecting approved grout in proportion recommended by the manufacturer into cracks/honey-comb area of concrete/masonry by suitable gun/pump at required pressure including cutting of nipples after curing etc. complete as per directions of Engineer-in-Charge. (The payment shall be made on the basis of actual weight of approved grout injected.)	125.00	sqm	681.33	85166.00
16.6.1	Stirrer mixed SBR Polymer (of approved make) modified Cement slurry made with Shrinkage Compensating Cement in concrete/RCC work.	60.00	kg	143.84	8630.00
16.7	Providing and inserting 12 mm dia galvanised steel injection nipple in honey comb area and along crack line including drilling of holes of required diametre (20 mm to 30 mm) up to depth from 30 mm to 80 mm at required spacing and making the hole & crack dust free by blowing compressed air, sealing the distance between injection nipple with adhesive chemical(Water proofing chemical + Cement slurry) of approved make and allow it to cure complete as per direction of Engineer- In-Charge.	500.00	each	274.80	137400.00

Sr. No.	Description	Qty	Unit	Rate	Amount
16.8	Providing and fixing factory made single				
	extruded WPC (Wood Polymer Composite) solid				
	board one side white color and other side of				
	board laminted with PVC foil of minimum 14				
	micron thickness of approved design pasted with				
	hot melt adhesive for cup boards, work stations				
	and bathroom/ kitchen cabinet etc. of required				
	sizes comprising of virgin polymer of K value 58-				
	60 (Suspension Grade), calcium carbonate and				
	natural fibers (wood powder/ rice husk/wheat				
	husk) and non toxic additives (maximum toxicity				
	index of 12 for 100 gms) having minimum				
	density of 650 kg/cum and screw withdrawal				
	strength of 1800 N (Face) & 900 N (Edge),				
	minimum compressive strength 50 N/mm2,				
	modulus of elasticity 850 N/mm2 and resistance				
	to spread of flame of Class A category with				
	property of being termite/borer proof,				
	water/moisture proof and fire retardant and				
	fixing with stainless steel piano hinges/soft close				
	clip on concealed hinges of required size with				
	necessary full body threaded star headed counter				
	sunk S.S screws, all as per direction of Engineer- In- Charge. (Note: stainless steel piano				
	hinges/soft close clip on concealed hinges and				
1.6.0.1	necessary S.S screws shall be paid separately)	41.00		4511 41	104060.00
16.8.1 16.9	25 mm thick	41.00	sqm	4511.41	184968.00
10.9	Providing and fixing factory made single				
	extruded WPC (Wood Polymer Composite) solid				
	plain white color board for backing of cup				
	boards and bathroom/kitchen cabinets etc. of				
	required size comprising of virgin polymer of K				
	value 58-60 (Suspension Grade), calcium				
	carbonate and natural fibers (wood powder/ rice				
	husk/wheat husk) and non toxic additives				
	(maximum toxicity index of 12 for 100 gms)				
	having minimum density of 650 kg/cum and				
	screw withdrawal strength of 1800 N (Face) &				
	900 N (Edge), minimum compressive strength				
	50 N/mm2, modulus of elasticity 850 N/mm2				
	and resistance to spread of flame of Class A				
	category with property of being termite/borer				
	proof, water/moisture proof and fire retardant				
	and fixing with stainless steel screws etc. all as				
	per direction of Engineer-In- Charge. (Note:				
	stainless steel screws shall be paid separately)				
16.9.1	6 mm thick	180.00	sqm	1275.25	229545.00
16.9.2	12 mm thick	130.50	sqm	1984.88	259027.00

Sr. No.	Description	Qty	Unit	Rate	Amount
16.10	Providing and fixing hermetically sealed double glazing unit in windows, ventilators and partition etc. consisting of float glass 6 mm thick substrate with reflective coating on face #2 (outer side), + 12 mm Airgap + 6 mm Clear Glass (inner side), both glass fully toughened of approved make and including EPDM gasket perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drwaings and direction of Engineer-in-charge complete.	5.0			
16.10.1	Float glass 6 mm thick substreate with reflectivecoarting of face #2 (outer side), + 12 mm mm Airgap + 6 mm Clear Glass (inner side), both glass fully toughened of approved make having properties at visible light transmittance (VLT) of 30 - 45%, Solar Heat Gain Coefficient of not more than 0.25 and U valyue of not more than 3 W/m2 degree K etc. for non-north having latitude < 15 degree and for all climate zone except cold climate, refer ECBC - 23017 for climate zone classification.	148.00	sqm	6183.50	915158.00
	Total				2475698.00
	DSR Total				19534212.00
	The cost after using Correction Factor on items of the DSR 2023 on account of applicability of GST @ 0.973 as per O.M dated 08.08.2024.			Total A	19006788.00
	Total A				19006788.00
17	NON SCHEDULE ITEMS				
17.1	Providing and applying 12 mm thick (average) premixed formulated one coat readymade plaster of approved brand and manufacturer having additives and aggregates produced at automated dry mix plant and mixed with cement in cement mortar and polymers applied on hacked / uneven background such as bare brick / C.C, and block / RCC work on walls & ceiling at all floors and locations as per manufactures specification finished in smooth line and level etc. complete.	150.00	sqm	467.25	70088.00

Sr. No.	Description	Qty	Unit	Rate	Amount
17.2	Providing and applying 15 mm thick (average) premixed formulated one coat readymade plaster of approved brand and manufacturer having additives and aggregates produced at automated dry mix plant and mixed with cement in cement mortar and polymers applied on hacked / uneven background such as bare brick / C.C, and block / RCC work on walls & ceiling at all floors and locations as per manufactures specification finished in smooth line and level etc. complete.	150.00	sqm	552.75	82913.00
17.3	Providing and applying 18 mm thick (average) premixed formulated Two coat readymade plaster of approved brand and manufacturer having additives and aggregates produced at automated dry mix plant and mixed with cement in cement mortar and polymers in two layers under layer 12 mm and top layer 6 mm thick applied on hacked / uneven background such as bare brick / C.C. and block / RCC work on walls & ceiling at all floors and locations as per manufactures specification finished in smooth line and level etc. complete.	150.00	sqm	702.70	105405.00
17.4	Providing and laying water proofing coating on the sunken portion of the WCs, bathroom, etc. by applying single component liquid polyurethane elastomeric compound with minimum elongation 400% (ASTM D 412) having tensile strength minimum 2 MPa (ASTM D 412) and minimum solid content 80% (ASTM C 1250) as below mentioned process: i) Preparation of base concrete surface and crack treatment, creating smooth corners by making of fillet at the corners of size 50mm x 50mm with epoxy mortar, ii) Applying of epoxy based primer of approved brand applied on the prepared concrete surface having moisture content less than 5% iii) Applying single component liquid polyurethane (PU) elastomeric compound to achieve Dry Film Thickness (DFT) of 1.5 mm in two or three coats iv) Providing and laying of Non woven Polyester / Polypropylene needle punched thermally bonded Geotextile of 150 GSM on the completed and cured surface, (over the horizontal, vertical surfaces and over the gola), the geotextile should stick to the PU membrane without any gaps and may be held in place with adhesive if required.	108.00	sqm	1078.10	116435.00

Sr. No.	Description	Qty	Unit	Rate	Amount
	v) 50mm thick protection screed concrete over horizontal surface to the required slope is to be provided with gola (fillet) at edges of size 50x50mm which shall be paid separately in CC 1:2:4 (1 Cement : 2 M-sand : 4 Coarse aggregate), vi) Premix plaster of 18mm thickness over vertical surfaces and terminated over the screed concrete shall be paid separately. The rate shall include all material, labour & machinery and nothing extra shall be payable, unless otherwise mentioned above. The work shall be carried out as per PU manufacturer and directions of Engineer in charge.				
17.5	Providing & fixing 12mm thick Fire retardant plywood as per IS- 5509:2021 with ECO certificate of approved brand icluding suitable full treaded SS screw for parition work fixed over aluminum/Steel/wood extruded section frame work/work station/cupboard etc with stainless steel screws @ 60cm centre to centre on frame as directed by Engineer in Charge (aluminum/ Steel/ wood work will be paid separately)	750.00	sqm	1580.00	1185000.00
17.6	Providing, supply and laying of 5+1 mm thick 5G Valinage Click-Lock tiles with wear layer is of 0.3 mm, made up of Stone Polymer composite, Has core layer thickness of 5 mm as per ENISO2436 (EN428) and has an IXPE Cushion backing of 1 mm as per EN ISO 2436 (EN 428) ,100% Water & Termite proof, Wear Layer Thickness as per EN ISO 24340 (EN 429), Scratch resistance as per Castor Chair standards EN ISO 4918( EN 425 ) / Resistance to Fire as per EN 13501-1 / UV resistant, Impact Sound Reduction as per EN ISO 140-8 EN ISO 717/2, Light Fastness as per EN ISO 105-B02, Resistance to Chemical as per EN ISO 26987 (EN 423), a Recyclable Green product having CLICK & LOCK click system with suitable skirting. Classification of abrasion resistance (Rubbing action of two abrading wheels of S42 Type, load Applied 500 grams, No. of Cycles 4,000). Design as approved by the Engineerin-Charge" (including T-Profile, foam 2mm thick and skirting for which nothing shall be paid extra)	213.00	sqm	2859.45	609063.00

Sr. No.	Description	Qty	Unit	Rate	Amount
17.7	Providing and fixing in position machine made dull 100% woven nylon printed carpet (of welspun or equivalent) ofapproved color, shade and pattern with woven propylenemesh backing on horizontal / vertical surface having pilecomposition as 100% Nylon pile height of 8mm (+/- 1mm)of gauge 1/8 inch cut pile, weight of pile minimum 750GSM, printed metal complex dyes, having class I fire resistance complete including cutting to required shape,edge building and machinery. Providing and installing over 5mm thick underlay of foam double sticking with syntheticrubber adhesive all complete as direction of Engineer-in-charge.	100.00	sqm	2415.45	241545.00
17.8	Providing & Fixing Single Glazed Modular System GD-45S of approved make sizes of section 30x45 and 2 mm thickness and required accessories i.e. glass to glass aluminium I/H sections, T section & 90 degree L sections & Glass packing to adjust the floor level. Ceiling profile, Floor profile and wall profile are 30 mm visible face and 45 mm wide All sections of Aluminium are 6063-T6 grade (Virgin aluminium) duly anodised up to 20-25 microns of approved shade with 10mm Clear tougheneded glass & insertion of Thermoplastic gasket to adhere the glass firm & airtight. The sound reduction Value is from 32 to 35 Db etc complete as per the direction 0f engineer in charge.	528.50	sqm	5243.50	2771190.00
17.9	Providing and fixing Single Leaf Stile Door System of required size and pattern with profile diemension 40 mm width and visible surface of size 75 mm of 2 mm thicness size of 75x40 with door profile GD-75T ie. 6063-T6 Virgin grade duly Anodized Aluminium Door Sections having sizes of 75x30x1.5mm thick,, 10 mm toughened Glass including Concealed Door Closer, 4 nos Flush Hinges, SS Offset D type Pull Handle 25 x 450 mm with narrow Stile mortise Dead lock, Door Seal & Gaskets.The sound reduction Value is from 32 to 35 Db etc complete as per the direction of engineer in charge.	110.00	sqm	26765.50	2944205.00

Sr. No.	Description	Qty	Unit	Rate	Amount
17.10	Providing and fixing Double Leaf Stile Door System of required size and pattern with profile diemension 40 mm width and visible surface of size 75 mm of 2 mm thicness size of 75x40 with door profile GD-75T ie. 6063-T6 Virgin grade duly Anodized Aluminium Door Sections having sizes of 75x30x1.5mm thick,, 10 mm toughened Glass including Concealed Door Closer, 8 nos Flush Hinges, SS Offset D type Pull Handle 25 x 450 mm with narrow Stile mortise Dead lock, Door Seal & Gaskets.The sound reduction Value is from 32 to 35 Db etc complete as per the direction of engineer in charge.	16.00	sqm	23505.00	376080.00
17.11	Providing and fixing Single Leaf Framless Door System of required size, 10 mm toughened Glass including hinge half round shape with cover in anodized, Over head door closer glass mounting plate for 10mm toughened glasss, stainless steel 304 half moon door stop,lever handle with lockset satin finish; dia.44x25(H)mm 3 pins both side key 42.8mm length 20.8mm+12mm, etc complete as per the direction of engineer in charge.	45.00	sqm	20415.00	918675.00
17.12	Providing & Fixing 10 mm thick Toughened Curved shaped frosted urinal glass partition of Size H-900 mm x W-450 mm of jaquar or equivalent with Fittings etc Complete as per direction of Engineer-in-charge	10.00	sqm	5587.00	55870.00
17.13	Supplying and Installation of lever handle and sash lock of aaproved make of lever handle: Pure 8100 Lever Handle with 6501 Roses,6612 Escutcheons,8mm Spindle with Fixing Screws for door thickness 35-55mm, SS 304, Finish: Satin - 1 nos Model no. of lock:271a Sash Lock Backset - 55mm, Centre to Centre - 72mm, 20mm Square Forend, Strike plate, SS 304, Finish: SSS EPC TTK Key L-70mm, SNP - 1 Nos etc. all complete as per direction of Engineer-in-charge	39.00	each	6291.00	245349.00
17.14	Providing and fixing Automatic Sliding door operator, compliant with future European standards and produced according to the guidelines for power-operated doors. TÜV design tested for durability of 1 Million Cycles, tested according to the low voltage guidelines, fulfils DIN 18650 standards,				

Sr. No.	Description	Qty	Unit	Rate	Amount
	for frameless glass door application with modular design including internal cover and with 12mm thick clear FT glass for 2 Nos sliding door panelsOperator Finish should be Silver Anodized E6/C0, with operator dimensions (H x D): 100 x 180 mm and of length as required to suit the opening size given below. Operators are of very study design with Self balancing Panel suspension system and with Anti-Jump fitting. The track profile should be separate from the main profile for enabling reduction in vibration insulation, With back plate for easy Installation.				
	Microprocessor-controlled control unit, Self-learning, with adjustable parameters for opening and closing speed, hold-open time and opening and closing force, reversing when obstruction is encountered, with SMPS, Class of protection IP 20. Activators- 6 Safe Combination Radars System (02 Nos) on Inside & Outside with Electro-mechanical locking, Bistable, Program Switch with Key. The system shall have constant power supply 230V+ 5%, 50Hz, AC . Size-2000mm x 2700mm as direction of Engineer-incharge	10.00	sqm	85546.15	855462.00
17.15	Supplying and Installation of 5 Knuckle, 2 Ball Bearing Butt Hinges 4"x 3"x 3 mm. Grade SS 304, Finish: SS of approved make etc all complete as per direction of Engineer-in-charge	200.00	each	431.00	86200.00
17.16	Supplying and Installation of approved make Stainless Steel Grade 304 Tubular Lever Handle. Finish: Satin Stainless Steel of approved make etc all complete as per direction of Engineer-incharge	86.00	each	1519.00	130634.00
17.17	Supplying and Installation of Sash Lock Forend Width - 20 mm, Backset - 55 mm, CTC - 72 mm. Forend Finish - Satin stainless Steel of approved make etc all complete as per direction of Engineer-in-charge	50.00	each	939.50	46975.00
17.18	Supplying and Installation of Euro Profile Cylinder (EPC) 5 pin EPC one side knob and other side key No. of keys - 3 Finish: Satin Nickel Plated Length = 70 mm of approved make etc all complete as per direction of Engineer-in-charge	50.00	each	825.65	41283.00

Sr. No.	Description	Qty	Unit	Rate	Amount
17.19	Supplying and Installation of Door Closer Concealed EN 4 with Hold Open Unit, Finish - Silver, Width Of Door - 1100 mm, Weight Of Door - 80 Kgs, Min. Thickness Of Door - 40 mm of approved make etc all complete as per direction of Engineer-in-charge	17.00	each	11075.40	188282.00
17.20	Supplying and Installation of H Type Pull Handle Length - 600 mm, CTC - 500 mm, Dia - 32 mm Grade SS 304, Finish Satin Stainless steel of approved make etc all complete as per direction of Engineer-in-charge	8.00	each	1519.20	12154.00
17.21	Supplying and Installation of Dead Lock Forend Width - 20 mm, Backset - 55 mm. Forend Finish - Satin stainless Steel of approved make etc all complete as per direction of Engineer-incharge	30.00	each	939.50	28185.00
17.22	Providing & fixing 30-35 micron (minimum) thick of approved make non reflective, matt, frosted / horizontal strip, scratch resistant, high performance resin coated polyster film on the glass surfaces of partitions, door shutters etc. complete as per direction of Engineer-in-charge. (Payment shall be made for the finished area of the film actually provided. No deduction shall be made for openings up to 0.10 sqm area each and nothing shall be paid extra for making such openings)	350.00	sqm	1213.97	424890.00
17.23	Providing & fixing 30-35 micron (minimum) thick of approved make non reflective high performance resin coated customised colour Graphics polyster film by means of laser cutting on the glass surface of partitions, door shutters etc. complete as per direction of Engineer-incharge. (Payment shall be made for the finished area of the film actually provided. No deduction shall be made for openings up to 0.10 sqm area each and nothing shall be paid extra for making such openings)	235.00	sqm	1550.00	364250.00
17.24	Providing and Fixing Channelled Woodworks perforated panels of approved make width 192mm, thickness of 15mm and length 2400 mm, made of a Moisture resistant fibre board substrate with a laminated facing as per the approved shade (Portland Maple, Sea Beech, Siam Wood & Mystique Walnut, Interior White, Alumina Pearl) and a melamine balancing layer on the reverse side				

Sr. No.	Description	Qty	Unit	Rate	Amount
	The boards shall have a special perforation pattern where the reverse surface has a "Helmholtz" fluted perforation with consecutive 3mm wide groove followed by 13mm of visible pane. The edges of the panel shall be "tongue-and-grooved" to fix special clips for installation and seamless visual. The back of the perforated panel shall have sound absorbing non-woven Soundtex acoustical fleece hot pressed to achieve NRC of 0.6. (Average value of Absorption Co-efficient readings taken at 250 Hz, 500 Hz, 1000 Hz and 2000 Hz) as per ASTM C423 and Humidity Resistance (RH) of 70% with camber limit less than 1mm/1000mm and bow less than 1mm/300mm. The panels shall be mounted on special aluminium splines (keel) using inside clip of approved by the Architect/ Engineer-in-Charge.	65.00	sqm	5743.06	373299.00
17.25	Providing and fixing 12 mm acrylic polymer solid surface of approved shade and make sheet thick composed of 1/3 rd acrylic resin also known as Polymethlyl methacrylate or PMMA and 2/3 rd natural minerals of approved brand manufacturer and of approved shade & shape and as per architectural drawing over the furniture top Plywood/ granite /marble /wash basin counters with adhesive like araldite or equivalent, jointing the edges with appropriate glue of the same material to form a homogeneous joint,rounding and finishing the edges wherever required etc. complete as per the direction of the Engineer-in-charge. (One side of the actual area of the sheet provided shall be measured for payment purpose.)	50.00	sqm	12528.00	626400.00
17.26	Supplying and fixing Zebra blind with light solid black out property or as per requirement made up of 0.5 mm thick fabric and weighing 197 gsm/sqm to 224 gsm/sqm, 100% polyester fabrics with horizontal segments alternating between sheer and solid fabric. Wide opacity on colours/shades / made of dual layers parallel to each other. The sheer band of fabric is aligned each other parallel a blurred view through will be possible, light filters through the sheer fabrics.				

Sr. No.	Description	Qty	Unit	Rate	Amount
	The opaque band of fabric is aligned each other parallel, light is defused for light filtering shades, for room darkening the shades light is blocked and the view through is blocked. Light filters through the sheer fabric when the shade is partially raised or lowered. Fabric shall be excellent UV protection, insulation and energy and air stain dust resistant. Luxurious metal hardware provides multilevel light control and multilevel privacy control. The fabric shall be manually rolled/adjusted vertically through roller such that it can be opened for soft view, closed for complete privacy or adjusted for flexible light control. with				
	TOP CASSETE SECTION:- Cassete type having weight of 0.800kg/mtr apporx and wall thickness 1mm with powder coating and in front side same fabric should be fixed. Cassete End cap: Plastic type with Brand symbol. Section for Fabric holding:- Aluminium round pipe having dia of 39mm and pipe wall thickness should be minimum 1 mm having weight of 0.328 kg/mtr. Section for bottom:- Aluminium round having dia of 14mm with 1.2mm wall thickness and weight should be 0.220kg/mtr with triangle type exterior bottom having minimum weight of 0.260 kg/mtr and size: 15.6x 28.8mm with plastic end cap with powder coating. Specification for fabric type: 100% polyester with combination of solid and net. Fabric color: as per selection. Solid part:- 100mm to 115 mm net part:- 70mm to 75mm. Blackout Ration:- Room darkening (90%)	185.00	sqm	2108.86	390139.00
17.27	Providing and fixing Anodised Aluminium of approved shade adjustable louver with 4.0 mm thick frosted glass of requide length and width and nessary locking arrangement of approved quality fixed with necessary screws, etc. complete and as per directed by Engineer -in -charge. (Cost of aluminium frame shall be paid separately.)	7.00	sqm	1727.73	12094.00
17.28	Providing and fixing white vitreous china rimless wall Hung WC with UF soft close seat cover. accessories set, size: 370x510X360 mm of approved brand with metropole flush valve dual flow 40 mm Size (Concealed Body) with exposed shut off provision (2.0/4.0 lts. per flushing) of approved brand with S-type drain pipe connection set etc complete as per direction of Engineer in charge.	16.00	each	21044.50	336712.00

Sr. No.	Description	Qty	Unit	Rate	Amount
17.29	Providing and fixing white vitreous china Table top wash basin of with fixing accessories shape of size 600x440x165 mm of approved brand with Click Clack waste coupling of 32 mm Size 130 mm height half thread and pressmatic wall mounted basin tap (Auto Closing) with wall flange (Square), etc complete as per direction of Engineer in charge.	10.00	each	10306.50	103065.00
17.30	Providing and fixing Urinal (Back Inlet) of size 385x325x635 mm of jaquar or equivalent with 32 mm Size 80 mm Height full Thread Click Clack Waste coupling and auto closing urinal flush valve with wall flange as per direction of Engineer in charge.	9.00	each	11713.56	105422.00
17.31	Providing and fixing 40mm dia PVC rigid pipe including clamps for waste line for wash basin etc. complete as per direction of Engineer-in-charge.	70.00	metre	98.30	6881.00
17.32	Providing and fixing C.P. brass 2 way bib cock with wall flange as per approved make list.etc. complete as per direction of Engineer-incharge.	15.00	each	2353.50	35303.00
17.33	Providing and fixing C.P. brass angular stop cock with wall flange as per approved make list etc. complete as per direction of Engineer-incharge.	31.00	each	1451.50	44997.00
17.34	Providing and fixing Hand Shower (Health Faucet) (ABS Body) with 8mm Dia, 1 Meter Long body Flexible Tube & Wall Hook with N.R.V (Back Flow Preventer) as per approved make list. etc complete as per direction of Engineer-in-charge.	16.00	each	1517.50	24280.00
17.35	Providing and fixing of Toilet Roll Holder with Flap as per approved make list. etc complete as per direction of Engineer-in-charge.	16.00	each	1887.00	30192.00
16.36	Providing and fixing of Soap Dispenser with Glass Bottle of approved make etc complete as per direction of Engineer in charge.	20.00	each	1322.50	26450.00
16.37	Providing and fixing Stainless steel Towel Ring square with round flange size 210 mm long of approved brand etc complete as per direction of Engineer in charge.	20.00	each	1261.50	25230.00
17.38	Providing and fixing CP Brass 32mm size Bottle Trap (with internal partition) Size with 300 mm & 190 mm long wall connection pipes & wall flange also available of approved brand etc complete as per direction of Engineer in charge.	20.00	each	1745.00	34900.00

Sr. No.	Description	Qty	Unit	Rate	Amount
17.39	Providing and fixing 6 mm thick looking mirror of aaproved brandand chamfered edge finish with 6 mm WPC backing and fixed with Studs etc complete as per direction of engineer in charge.	20.00	sqm	2250.00	45000.00
17.40	Providing and fixing stainless steel 304(corossion resistant) Tile Insert, size up to 150x150 mm of approved pattern with tray/ grate with recesse to hold a piece of surrounding floor tiles/ marble/ granite including cockroch trap and installed within the floor, channel beneath to direct water towards the drain pipe to create hidden / invisible drain etc complete as per direction of engineer in charge.	23.00	each	1756.00	40388.00
17.41	Providing and fixing Galvanised M.S. adjustable holder-bat clamps of approved design to Sand Cast iron/cast iron (spun)/ PVC rain water pipes comprising of Galvanised M.S. flat brackets made of 35 x 5 mm and 340 mm long flat of specified shape, projecting 75 mm outside the wall surface and fixed on wall with fastener 10mm dia and 50mm length including drilling necessary holes in brick wall / CC / RCC surface etc. The pipes shall be fixed to the already fixed brackets with the help of G.I.U bolts of dia. 8 mm and nuts and washers of required size for holding the pipes, one bolt on each side of the pipe.				
17.41.1	100 to 110 mm dia pipe.	50.00	each	275.15	13758.00
17.41.2	Providing and fixing linear baffle open ceiling with fixed and demountable torsion spring system, comprising of baffle width 30 mm and height 100mm manufactured out of 0.6 mm thick coil coated aluminium of alloy AA 3105 at a module of 100mm. The baffle shall be manufactured on high speed, high precision roll forming machine with ARKU SIX Hi configuration or equivalent roller levelling process to ensure the flatness and to avoid the failure of metal at corners which may occur normally on press brake machine.  The coil is coated on a continuous paint line double baked and shall be stove enamelled in a continuous coil coating process of the approved colour on the exposed side and the reverse side with polyester primer.	30.00	each	268.25	8048.00

Sr. No.	Description	Qty	Unit	Rate	Amount
	The baffle panels shall be mounted on coil coated customised hat type aluminium carrier of size 60mm x 30mm x 0.9mm thk. The customised carrier shall be suitable for bot torsion spring based & standard fixed baffle panels. The carrier shall be suspended with M6 Threaded rod hangers spaced at 1200mm c/c.with 50 mm long anchor fastener, maximum upto 20% of the total ceiling area, demountable torsion spring-based panels. The ends of the baffle panels covered with End Cap with finish as per approved shade. The length of the panel shall be upto 2400 mm. suspension system. The baffle ceiling system should meet the required standards for Green Pro certification and should qualify as green product as per CII green products and services council. (measurements shall be covered ceiling area in plan consideraing deductions for light, diffusers, columns) etccomplete as per direction of Engineer in charge.	150.00	sqm	6921.40	1038210.00
17.43	Providing and fixing 19 mm thick one side decorative and other side balancing lamination factory pressed BWP grade marine ply as per IS 710 of approved brands for Boxes, Shelves, Racks, Table top and Substructure, Dwawers in any shape (Rectangular, Oval, Circular) etc. including necessary nails, screws, hot glue by edge bending machine etcetc. complete as per direction of Engineer-in-charge.	50.00	sqm	2810.00	140500.00
17.44	Providing and fixing Toilet Cubicles System with 12mm thick High Pressure Laminate panels of approved brand and manufacturer and standard hardware /accessories such as top rail, U channel, SS door stopper channel, SS gravity hinges, SS coat hook, door knob, lockset with thumbturn indicator etc in standard stainless steel grade 304 and cubicle fixed at ceiling with support of 100 mm top rail width of aluminium material including 100mm -120 mm clear bottom gap with stainless steel screws etc.complete as per direction of Engineer-incharge	40.00	sqm	11224.00	448960.00

Sr. No.	Description	Qty	Unit	Rate	Amount
17.45	Providing and laying 14 mm thick Laminate flooring of class of use 15, wear resistant, impact resistance − IC 3, (as per EN 13329RPL System), top surface having a MLC (multi-layer composite)- highly developed laminate, top surface treated with (aluminium oxide) on top of high density fibreboard substrate (density ≥ 900 kg/m3) specially developed core; of Plank size 1200 mm x 190 mm having patented UNICLIC locking system joints to secure long lasting joint. Laminated wooden flooring will be confirms to EN 438.				
	The approved décor planks to be placed on the combi- underlay of thickness 2 to 3 mm extruded polyethylene based foam which is flexible, light weight, resilient and microbe free material. Combi- Underlay to resist any moisture movement from the sub floor. On top to secure the floating floor installation shall also include providing and fixing wall and Door Profile wherever required (density ≥ 600 kg/m3) Skirting , Beading , Reducer & T Moulding (Door Profile) of Skirting 14 mm , Beading 14 mm , Reducer & T Moulding 40 mm thickness & Skirting 55 mm , Beading 14 mm , Reducer & T Moulding 12 mm height in the required position & including Installation etc. complete & finished with approved shade all complete as per the direction of Engineer-In-Charge.	100.00	sqm	5892.75	589275.00
17.46	Rubbing and polishing on marble work/Granite work/stone work/Mosaic Tiles where ever required to give high gloss finish etc complete.as per direction of Engineer-in-charge	450.00	sqm	331.76	149292.00
17.47	Providing and fixing white vitreous china under counter basin with fixing accessories size 536x438x188 mm of approved brand with Click Clack waste coupling of 32 mm Size 130 mm height half thread and auto closing system pillar tap of 65 mm extension body as per direction of Engineer in charge.	10.00	each	9081.00	90810.00
17.48	Credit for dismantled materials received from the work:-Wooden, PVC items such as frames, shutters, windows and same like etc complete as per direction of Engineer-in-charge	500.00	kg	-17.70	-8850.00

Sr. No.	Description	Qty	Unit	Rate	Amount
17.49	Credit for taking away the dismantled aluminium	800.00	kg	-153.40	-122720.00
	windows frames/shutters etcas per direction of				
	Engineer- in-Charge				
				Total B	16508168.00
				Total (A+B)	35514956.00

Assistant Engineer O/o CE (Mumbai)-II, CPWD Mumbai Executive Engineer (P) O/o CE (Mumbai)-II, CPWD Mumbai