

Madhya Pradesh State Tourism Development Corporation (MPSTDC)			
Orchha: A Medieval Splendour 2.0			
Summary			
Sno	Components	Break-up Cost (in Lakh)	Total Cost (in Lakh)
1	Tourist Experience Centre		663.97
1.1	Part-A Based on PWD SOR -2024	1,75,13,273.30	
1.2	Part- B Non SOR Civil	2,25,24,677.33	
1.3	Part-C Based on Electrical SOR -2024	87,87,011.96	
1.4	Part- D Non SOR Electrical	1,75,72,363.00	
2	Entry Plaza for Bridge		89.70
2.1	Part-A Based on PWD SOR -2024	11,70,536.98	
2.2	Part- B Non SOR Civil	16,06,088.00	
2.3	Part-C Based on Electrical SOR -2024	12,32,545.00	
2.4	Part- D Non SOR Electrical	49,60,380.00	
3	Orchha City Experience: Heritage Streetscaping (façade control along two Major Axes not Covered in Iconic)		906.54
3.1	Part-A- Based on Archaeology, Archives and Museums SOR 2022	54,80,886.13	
3.2	Part-B Based on PWD SOR -2024	1,31,16,680.23	
3.3	Part C PWD SOR 2024 Electrical	1,01,13,678.00	
3.4	Part-D Based on PWD Road SOR -2025	30,11,234.00	
3.5	Part- E Non SOR Civil	3,48,82,968.16	
3.6	Part- F Non SOR Electrical	2,40,48,590.00	
5	Hop-On Hop-Off Services for Tourist		136.01
5.1	Part- A Non SOR Electrical	1,36,01,321.00	
6	Website and App Development		131.83
6.1	Part- A Non SOR Electrical	1,31,83,140.00	
7	Skill Development Training		29.94
7.1	Part- A Non SOR	29,94,000.00	
8	Skill Development Training		58.05
8.1	Part- A Non SOR	58,05,000.00	
F	Sub Total		2,016.04
	GST @18% on F		362.89
	Add Architect @2% on F		40.32
	Add Contingency @3% on F		60.48
	Add DMO @1% on F		20.16
	Grand Total		2499.89

Madhya Pradesh State Tourism Development Corporation (MPSTDC)												
Orchha: A Medieval Splendour 2.0												
Measurement Book: Tourist Experience Centre												
S. No.	Item No.	Sub Item No	Item Name	ITEMS / DESCRIPTION	NO	L	B	H	Qty.	Unit	Rate	Amount
A				Part-A Based on PWD SOR -2024								
1	2.1		Surface dressing	Surface dressing of the ground including removing vegetation and in- equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m. in all kinds of soil.								
				Tourist Centre & open area	1.00	25.00	23.00		575.00			
					1.00	40.00	30.00		1,200.00			
				Semi-Open Lobby	1.00	22.00	12.50		275.00			
				Hunarshala	1.00	15.00	24.00		360.00			
				Crafts area for Artists	1.00	18.00	17.00		306.00			
				OAT	1.00	42.00	59.00		2,478.00			
									5,194.00	100 Sqm	803.00	41,707.82
2	2.2		Jungle clearing	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.								
				Tourist Centre & open area	1.00	25.00	23.00		575.00			
					1.00	40.00	30.00		1,200.00			
				Semi-Open Lobby	1.00	22.00	12.50		275.00			
				Hunarshala	1.00	15.00	24.00		360.00			
				Crafts area for Artists	1.00	18.00	17.00		306.00			
				OAT	1.00	42.00	59.00		2,478.00			
									5,194.00	100 Sqm	414.00	21,503.16
3	2.6		Excavation soil	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soi								
				*Tourist Centre Wall	1.00	15.00	0.60	0.9	8.10			
					1.00	20.00	0.60	0.9	10.80			
				Column	20.00	1.20	1.80	1.5	64.80			
				Pathway	1.00	30.00	3.30	0.60	59.40			
					1.00	22.70	2.50	0.60	34.05			
					1.00	10.00	2.50	0.60	15.00			
					1.00	10.00	3.30	0.60	19.80			
					1.00	10.00	3.00	0.60	18.00			
				Semi-Open Lobby	1.00	12.50	0.60	0.9	6.75			
				Hunarshala	1.00	15.00	0.60	0.9	8.10			
					1.00	20.00	0.60	0.9	10.80			
				Shops Column	38.00	1.20	1.20	1.5	82.08			
				Entry	1.00	6.00	12.50	0.6	45.00			
				Crafts area for Artists	1.00	21.00	3.80	0.6	47.88			
				Hunarshala Column	24.00	1.20	1.80	0.6	31.10			
				OAT	1.00	21.00	10.60	2.25	500.85			
					1.00	34.80	0.60	1.8	37.58			
					1.00	43.50	1.80	1.8	140.94			
					1.00	41.80	0.60	1.35	33.86			
					1.00	48.50	1.80	1.35	117.86			
					1.00	50.60	0.60	0.9	27.32			
					1.00	55.40	1.80	0.9	89.75			
					1.00	55.40	0.60	0.45	14.96			
					1.00	62.50	1.80	0.45	50.63			
									1,475.41			
				80% of Soi area					1,180.32			
				Say					1,180.00	cum	147.00	1,73,460.00
4	2.7		Ordinary rock	Earth work in excavation/ by mechanical means (Hydraulic Excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed								
		2.7.1	OR	Ordinary rock								
				20% of ordinary rock					295.08			
				Say					295.00	cum	287.00	84,665.00
5	2.24		Filling available excavated earth	Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.								
				70 % qty. Earth Work					1,032.50	cum	95.00	98,087.50
6	2.26		Under floor filling stone dust	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming and compacting in layers not exceeding 20cm in depth and dressing complete Note: - Maximum thickness of this layer shall be 20 cm.								
				*Tourist Centre Floor	1.00	15.00	20.00	0.15	45.00			
				Pathway	1.00	30.00	3.30	0.15	14.85			
					1.00	22.70	2.50	0.15	8.51			
					1.00	10.00	2.50	0.15	3.75			
					1.00	10.00	3.30	0.15	4.95			
					1.00	10.00	3.00	0.15	4.50			
				Entry	1.00	6.00	12.50	0.15	11.25			
				Crafts area for Artists	1.00	21.00	3.80	0.15	11.97			
				Hunarshala	1.00	15.00	20.00	0.15	45.00			
				Semi-Open Lobby	1.00	12.50	14.10	0.15	26.44			

				Stage	1.00	5.00	9.00	0.15	6.75			
				Say					182.97			
									183.00	cum	672.00	1,22,976.00
7	2.27		Under floor filling	Supplying and filling in plinth under floors including watering ramming consolidating in layers not exceeding 20cm in depth and dressing complete.								
7.1		2.27.1	Hard murrum hard copra	With hard murrum having CBR >12 % at under floors including watering, ramming and compacting (minimum compaction 95% of MDD) in layers not exceeding 20cm in thickness and dressing complete. (Note:- maximum thickness of this layer to be provided shall be 30cm								
				'Tourist Centre Floor	1.00	15.00	20.00	0.45	135.00			
				Pathway	1.00	30.00	3.30	0.45	44.55			
					1.00	22.70	2.50	0.45	25.54			
					1.00	10.00	2.50	0.45	11.25			
					1.00	10.00	3.30	0.45	14.85			
					1.00	10.00	3.00	0.45	13.50			
				Entry	1.00	6.00	12.50	0.45	33.75			
				Crafts area for Artists	1.00	21.00	3.80	0.45	35.91			
				Hunarshala	1.00	15.00	20.00	0.45	135.00			
				Semi-Open Lobby	1.00	12.50	14.10	0.45	79.31			
				Stage	1.00	11.00	21.50	0.45	106.43			
									635.09			
				Say					635.00	cum	393.00	2,49,555.00
	2.32		Pre-construct ion anti-termite treatment	Preconstruction anti-termite treatment to the building under construction by providing.								
				Stage 1: Treating the bottom and the sides (upto 30 cm height of the excavated trench @ 5 litres per sqm of the surface area. Stage 2: After masonry/RCC work, the backfill in the immediate contact with the foundation structure treatment @ 7.5 litres per sqm. Of the vertical surface of the substructure for each side. Stage 3: surface treatment by spreading emulsion over the plinth area before laying the base concrete under floors @ 5.0 litres/Sqm. Stage 4: Pumping the emulsion in plinth masonry on filling side at floor junction @ 7.5 litres/Sqm Stage 5: Pumping the emulsion from outer side of the plinth below ground around the masonry @ 5.0 litres/Sqm as per I.S. 8944 Emulsion. (1Chlorpyrifos: 19 water) with five years service guarantee (Measurements to be taken for plinth area)								
				Note – Treatment should start when foundation trenches and pits are ready to take bed concrete or levelling course in foundations. Lying of bed concrete should start when the chemical emulsion has been absorbed by the soil and the surface is reasonably dry. Treatment should not be carried out when it is raining or when soil is wet with rain or subsoil water. This also applies to fill up soil within the plinth area before laying the subgrade for flooring.								
				'Tourist Centre	1.00	15.00	20.00		300.00			
				Hunarshala	1.00	15.00	20.00	0.45	135.00			
				Semi-Open Lobby	1.00	12.50	14.10	0.45	79.31			
									514.31			
				Say					514.00	Sqm.	136.00	69,904.00
11	4.1		C.C. upto plinth level	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level								-
		4.1.1	With 20mm metal	With 20mm nominal size graded stone aggregate								
		4.1.1.3	M-15	M-15 – Grade concrete								
				'Tourist Centre Floor	1.00	15.00	20.00	0.15	45.00			
				Hunarshala	1.00	15.00	20.00	0.15	45.00			
				Semi-Open Lobby	1.00	12.50	14.10	0.15	26.44			
				Stage	1.00	5.00	9.00	0.15	6.75			
									123.19			
									123.00	cum	4471.00	5,49,933.00
		4.1.2	With 40 mm metal	With 40mm nominal size graded stone aggregate.								-
		4.1.2.2	M-10	M-10Nominal (Mix-1 Cement : 3 sand : 6 graded stone aggregate)								
				Pathway	1.00	30.00	3.30	0.15	14.85			
					1.00	22.70	2.50	0.15	8.51			
					1.00	10.00	2.50	0.15	3.75			
					1.00	10.00	3.30	0.15	4.95			
					1.00	10.00	3.00	0.15	4.50			
				Tourist Centre Long Wall	2.00	20.00	0.60	0.15	3.60			
				Short Wall	2.00	15.00	0.60	0.15	2.70			
				Columns	20.00	1.20	1.80	0.15	6.48			
				Pathway	1.00	30.00	3.30	0.15	14.85			
				Columns 'Hunarshala & open lobby	24.00	1.20	1.80	0.15	7.78			
				Shops Column	38.00	1.20	1.20	0.15	8.21			
				Hunarshala Wall	2.00	20.00	0.60	0.15	3.60			
					2.00	15.00	0.60	0.15	2.70			
				Semi-Open Lobby	2.00	12.50	0.60	0.15	2.25			
				Shops	15.00	2.40	2.40	0.15	12.96			
				OAT	1.00	36.60	1.20	0.15	6.59			
					1.00	43.50	1.20	0.15	7.83			
					1.00	50.60	1.20	0.15	9.11			
					1.00	57.60	1.20	0.15	10.37			
					1.00	64.70	1.20	0.15	11.65			
					1.00	11.00	21.50	0.15	35.48			

									182.70			
									183.00	cum	3,808.00	6,96,864.00
	5.1		RCC upto plinth	Providing and laying in position specified grade of reinforced cement concrete (nominal / design mix with 20mm nominal size graded stone aggregate) excluding the cost of centering, shuttering, finishing and reinforcement- All work up to plinth level :								
	5.1.1	M-20	M-20 Grade Concrete									
			Footing for Tourist center		20.00	1.20	1.80	0.6	25.92			
			Footing for Hunarshala & open lobby		24.00	1.20	1.80	0.6	31.10			
			Shops Column		38.00	1.20	1.20	0.6	32.83			
									89.86			
			Say						90.00	cum	6153.00	5,53,770.00
12	5.2		RCC in walls, columns, pillars etc	Reinforced cement concrete work (with 20 mm nominal size graded stone aggregate) in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, posts and struts etc. above plinth level and upto floor two level excluding cost of centering, shuttering, finishing and reinforcement								
	5.2.1	M-20	M-20 Grade Concrete									
			Columns		20.00	0.45	0.30	0.6	1.62			
			Wall RCC wall		4.00	15.00	0.20	0.75	9.00			
			Short Wall		4.00	20.00	0.20	0.75	12.00			
			Columns for Hunarshala & open lobby		24.00	0.45	0.30	0.6	1.94			
			open lobby Wall		2.00	12.50	0.20	0.75	3.75			
									28.31			
									28.00	cum	6,582.00	1,84,296.00
	5.3		RCC in beams, floors, staircases etc.	Reinforced cement concrete work (with 20 mm nominal size graded stone aggregate) in beams, suspended floors, roofs having slope of any degree landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral staircases above plinth level and upto floor two level excluding the cost of centering, shuttering, finishing and reinforcement in concrete grade.								
	5.3.1	M-20	M-20 Grade Concrete									
			Plinth Beam		2.00	15.00	0.45	0.23	3.11			
					2.00	20.00	0.45	0.23	4.14			
			Patyway Beam		8.00	3.30	0.3	0.3	2.38			
					4.00	3.80	0.3	0.3	1.37			
			Plinth Beam Hunarshala & open lobby		2.00	15.00	0.45	0.23	3.11			
					2.00	20.00	0.45	0.23	4.14			
					2.00	12.50	0.45	0.23	2.59			
									20.82	cum	6541.00	1,36,193.43
14	5.9		Centering and Shuttering	Centering and shuttering including strutting, propping etc. and removal of form for:								
15	5.9.1	Upto plinth	Foundations, footings, bases of columns, etc. for concrete upto plinth level									
			bases of columns		2.00	20.00	0.45	0.6	10.80			
					2.00	20.00	0.30	0.6	7.20			
			Footings		4.00	20.00	1.20	0.6	57.60			
			Foundations		2.00	15.00		0.75	22.50			
					2.00	20.00		0.75	30.00			
			bases of columns		2.00	24.00	0.45	0.6	12.96			
					2.00	24.00	0.30	0.6	8.64			
			Footings		4.00	24.00	1.20	0.6	69.12			
			Foundations & Hunarshala & open lobby		2.00	15.00		0.75	22.50			
					2.00	20.00		0.75	30.00			
									271.32	Sqm	190.60	51,713.59
	5.9.2			Walls (any thickness) in cladding attached pilasters buttresses, plinth beams and string courses etc.								
	5.9.2.1	Upto plinth level	Upto plinth level.									
			Plinth Beam		4.00	15.00		0.3	18.00			
					4.00	20.00		0.3	24.00			
					4.00	12.50		0.3	15.00			
									42.00	Sqm	219.00	9,198.00

16	5.16		Reinforcement	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detailing IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete . (Note:- 1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge. 2. No extra payment shall be done for overlaps and/or couplers. 3. Couplers shall be conforming to IS code on "Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification")										
	5.16.6		TMT/TMX	Thermo-Mechanically Treated bars. (TMT/TMX) FE 500 or more conforming to IS 1786			139.14	120.00	16696.26					
				Say					16696.00	Kg	80.00	13,35,680.00		
	7.1		RR masonry in foundation and plinth	Random rubble masonry with hard stone in foundation and plinth including leveling up with cement concrete 1:6:12 (1 cement : 6 sand : 12 graded stone aggregate 20mm nominal size) at plinth level with :										
	7.1.1		Cement mortar 1:6	Cement mortar 1:6 (1 cement : 6 sand)										
				OAT	1.00	36.60	0.90	1.2	39.53					
					1.00	43.50	0.90	1.65	64.60					
					1.00	50.60	0.90	1.65	75.14					
					1.00	57.60	0.90	1.65	85.54					
					1.00	64.70	0.90	1.65	96.08					
					1.00	4.80	9.10	0.6	26.21					
					1.00	56.00	0.75	1.2	50.40					
									437.49	Cum	4,147.00	18,14,271.03		
	7.2		RR masonry in superstructure upto floor two	Random rubble masonry with hard stone in superstructure above plinth level and upto floor two level, including leveling up with cement concrete 1:6:12 (1 cement: 6 sand: 12 graded stone aggregate 20mm nominal size) at window sills, ceiling level and the like.										
	7.2.1		Cement mortar 1:6	Cement mortar 1:6 (1 cement : 6 sand)										
				OAT Wall	1.00	56.00	0.45	4	100.80	Cum	4,351.00	4,38,580.80		
	7.3		Stone work in copings, cornices, string courses and plinth courses	Stone work, plain in copings, cornices, string courses and plinth courses, upto 75 mm thick in Cement mortar 1:6 (1 cement : 6 sand) including pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade										
	7.30.1		Red stone	Red sand stone										
				OAT	1.00	36.60	0.70	0.075	1.92					
					1.00	43.50	0.70	0.075	2.28					
					1.00	50.60	0.70	0.075	2.66					
					1.00	57.60	0.70	0.075	3.02					
					1.00	64.70	0.70	0.075	3.40					
					1.00	4.80	9.10	0.075	3.28					
									16.56					
									17.00	Cum	13,187.00	2,24,179.00		
20	9.158		UPVC door frame wall thickness 2.0mm	Providing and fixing factory made UPVC door frame made of UPVC extruded sections having an overall dimension as below (tolerance ±1mm), with wall thickness 2.0 mm (± 0.2mm), corners of the door frame to be jointed with galvanized brackets and stainless steel screws, joints mitred and Plastic welded. The hinge side vertical of the frame reinforced by galvanized M.S. tube of size 19 X 19mm and 1mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturers specification and direction of Engineer-in-charge:										
	9.158.2		42x50 mm.	Extruded section Profile size 42x50 mm.										
				Door (750mm)	4.00	4.95			19.80					
				Door (900mm)	9.00	5.10			45.90					
				Door (1050mm)	1.00	5.25			5.25					
				Door (1200mm)	1.00	5.40			5.40					
				Door (3000mm)	4.00	11.40			45.60					
									121.95					
				Say					122.00	Meter	208.00	25,376.00		
21	9.16		Panelled door shutter UPVC 30 mm thick	Providing and fixing UPVC panelled door shutter UPVC 30 mm thick factory made PVC or UPVC door shutter made of styles and rails of a UPVC hollow section of size 60x30 mm and wall thickness 2 mm (± 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a UPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a UPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.										
				Door (750mm)	4.00	0.75		2.10	6.30					
				Door (900mm)	9.00	0.90		2.10	17.01					
				Door (1050mm)	1.00	1.05		2.10	2.21					
				Door (1200mm)	1.00	1.20		2.10	2.52					
				Door (3000mm)	4.00	3.00		2.10	25.20					

									53.24			
				Say					53.00	sqm	2,026.00	1,07,378.00
22	9.77		Brass butt hinges	Providing and fixing bright finished brass butt hinges with necessary screws etc. complete :								
	9.77.3		100x5.5 mm	100x85x5.5 mm (heavy type)	52.00				52.00	each	387.00	20,124.00
23	9.79		Brass tower bolts	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete								
		9.79.3	200mm	200x10 mm	22.00				22.00	each	261.00	5,742.00
24	9.8		Brass door latch	Providing and fixing bright finished brass door latch with necessary screws etc. complete.								
		9.80.2	250mm	250x16x5 mm	22.00				22.00	each	225.00	4,950.00
25	9.81		Brass handles	Providing and fixing bright finished brass handles with necessary screws etc. complete.								
		9.81.1	125 mm	125 mm	24.00				24.00	each	205.00	4,920.00
26	9.83		Brass mortice latch and lock lever handles	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	22.00				22.00	each	539.00	11,858.00
27	9.197		UPVC white colour sliding glazed window	Providing and fixing factory made UPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of UPVC multi-chambered frame with in- built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to UPVC profile), appropriate dimension of UPVC extruded glazing beads and UPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealent shall be paid separately) Note: - For UPVC frame, sash and mullion extrudee profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made.								
28		9.197.1	Two track two panels sliding window	Two track two panels sliding window made of frame 52 x 44 mm &sash 32 x 60 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension. (Area of window upto 1.75 sqm)								
				Window	10.00	1.20		1.8	21.60			
									22.00	sqm	5,060.00	5,060.00
30	9.143		Frame work for partitions/ wall lining of hollow MS tubes	Providing and fixing frame work for partitions/ wall lining etc. made of 50x50x1.6mm hollow MS tube, placed along the walls, ceiling and floor in a grid pattern with spacing @ 60 cm centre to centre both ways (vertically and horizontally) or at required spacing near opening, with necessary welding at junctions and fixing the frame to wall/ ceiling/ floors with steel dash fasteners of 8 mm dia, 75 mm long bolt, including making provision for opening for doors, windows, electrical conduits, switch boards etc., including providing with two coats of approved steel primer etc. complete, all as per direction of Engineer- in-charge.								
				Wall partitions	2.00	4.80	3.30	12	380.16			
					2.00	4.20	3.30	12	332.64			
					2.00	9.00	3.30	12	712.80			
				Hunarshala	1.00	6.95	3.30	12	275.22			
					2.00	3.80	3.30	12	300.96			
					1.00	8.00	3.30	12	316.80			
					1.00	5.13	3.30	12	203.15			
					1.00	14.50	3.30	12	574.20			
					1.00	2.81	3.30	12	111.28			
									3207.20			
									3,207.00	Kg	101.00	3,23,907.00

31	9.155		Drywall partition magnaesia block 66 mm thick	Supplying and installation of magnesia block 66 mm thick drywall partition including Framework includes Floor/ Head GI channels having thickness 0.5mm, length 3600mm, equal flanges of 32mm and web of 50mm fixed to floor and ceiling with suitable fasteners at 300mm centers staggered. Noise and fire rated silicon bead sealant to be caulked along the perimeter of the partition frame before fixing channels. Then Stud channel having thickness 0.45mm, length 3600mm, unequal flanges of 34/36mm and web of 48mm should be placed into the floor/head channel positioned vertically at 600mm centers. Extra reinforcement to be provided at openings (doors, windows, etc.,) The first layer of magenesia oxide block 8mm thick should be fixed on one side of the Stud framework in a staggered pattern by using suitable metal fasteners at 300mm centers. Second layer of magenesia oxide block 8mm thick should be fixed other side of the frame work similar fashion as the first layer. 3mm gap should be maintained between boards.3 mm gap shall be filled with jointing compound. Magnesia oxide block shall have following physical charecterstics. • Core - Magnesia • Fire Rating – upto 150mins • Acoustics – STC upto 44-50 • Climate (OC RH) – 50, 99 • Moisture Absorption - 6.8% after 2hrs and 11.3% after 24hrs soaking • Wet Expansion - < 0.02% from ambient to saturation • Dry Contraction - ≤ 0.02% from evaporation • Moisture Movement - 0.02% • Light reflectance – 80 % • Green (RC %) – 30 • Strength - Antisag • Impact - 4kg hammer 175mm										
		9.155.3	74mm thick dry wall	Using12mm thick magnesia block										
				Wall	2.00	3.90		3.3	25.74					
					1.00	2.90		3.3	9.57					
					1.00	3.80		3.3	12.54					
					1.00	5.40		3.3	17.82					
					1.00	5.80		3.3	19.14					
					2.00	3.95		3.3	26.07					
					1.00	14.50		3.5	50.75					
					2.00	8.03		3.5	56.21					
					2.00	8.40		3.5	58.80					
					2.00	2.70		3.3	17.82					
					1.00	6.95		3.3	22.94					
					1.00	8.00		3.3	26.40					
					1.00	6.65		3.3	21.95					
					1.00	5.10		3.3	16.83					
					2.00	2.80		3.3	18.48					
					2.00	14.50		3.3	95.70					
				Shops	26.00	2.50		2.7	175.50					
									672.25					
				Say					672.00	Sqm	1,984.00	13,33,248.00		
32	9.156		Extra for thermal insulation to the dry wall	Add extra for providing and fixing Thermal insulation by providing 50mm thick synth PF having dencity 1000 GSM within the cavity held in position by using chicken wire mesh/ cross bracing/ pasting to the wall.					672.00	Sqm	768.00	5,16,096.00		
33	12.24		Mangalore tile on roof (on steel frame	Providing and fixing on roof pressed clay tile (Mangalore tile) 20 mm nominal thickness and of approved size and as per approved pattern on steel frame work complete (steel frame work to be paid separately)										
				Roof	1.00	16.00	20.60		329.60					
				Hunarshala	1.00	12.60	14.10		177.66					
				Semi-Open Lobby	1.00	16.00	20.60		329.60					
					16.00	2.50	3.00		120.00					
									956.86					
									957.00	Sqm	275.00	2,63,175.00		
34	10.2		Structural steel work built up sections	Structural steel work using M.S. flats, angles, channels I-section, H-section etc. riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete										
				150x150x5.5 mm Wall	38.00	3.60		22.5	3078.00					
				50x75x4mm	12.00	20.00		7.5	1800.00					
				50x75x4mm	12.00	15.00		7.5	1350.00					
				50x75x4mm	12.00	15.00		7.5	1350.00					
				150x150x5.5 mm Top	12.00	16.00		22.5	4320.00					
					4.00	20.60		22.5	1854.00					
					12.00	20.60		7.5	1854.00					
				'Shop top	64.00	4.00		6.5	1664.00					
				50x75x4mm	64.00	4.00		7.5	1920.00					
									19,190.00	Kg	103.00	19,76,570.00		
35	13.46		Plastic emulsion	Wall painting by any mechanical or manual means with plastic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new wor										
				For 'Structural steel					1,120.00	Sqm	64.00	71,680.00		
36	13.48		Acrylic emulsion	Wall painting by any mechanical or manual means with acrylic emulsion paint, 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.										
		13.48.2	Two coats.	Two coats.										

				Tourist Experience Center Wall	4.00	3.90		3.3	51.48			
					2.00	2.90		3.3	19.14			
					2.00	3.80		3.3	25.08			
					2.00	5.40		3.3	35.64			
					2.00	5.80		3.3	38.28			
					4.00	3.95		3.3	52.14			
					2.00	14.50		3.5	101.50			
					2.00	8.03		3.5	56.21			
					2.00	8.40		3.5	58.80			
					2.00	2.70		3.3	17.82			
					2.00	14.50		3.3	95.70			
					2.00	8.00		3.3	52.80			
				Hunarshala	2.00	8.40		3.5	58.80			
					2.00	2.70		3.3	17.82			
					1.00	6.95		3.3	22.94			
					1.00	8.00		3.3	26.40			
					1.00	6.65		3.3	21.95			
					1.00	5.10		3.3	16.83			
					2.00	2.80		3.3	18.48			
					2.00	14.50		3.3	95.70			
					1.00	12.60		3.3	41.58			
					1.00	16.00		3.3	52.80			
				Shops	34.00	2.50		2.5	212.50			
									1,190.38			
									1,190.00	Sqm	56.00	66,640.00
37	8.8		Spider glazing system	"Design, supply and installation of suspended Spider Glazing system designed to withstand the wind pressure as per IS 875 (Part- III). The Suspended System held with Spider Fittings of SS-316 Grade Steel of approved manufacturer with glass panel having 12 mm thick clear toughened glass held together with SS- 316 Grade Stainless steel Spider and bolt assembly with laminated glass fins 21 mm thick. The Glass fins and glass panel assembly shall be connected to Slab/beams by means of SS- 316 Grade stainless steel brackets and Anchor bolts and at the bottom using SS channel of 50x25x2mm using fastener and anchor bolts, non staining weather sealants of approved make, Teflon/ nylon bushes and separators to prevent bi-metallic contacts, all complete to perform as per specification and approved drawings. The complete system to be designed to accommodate thermal expansion and seismic movements etc. The joints between glass panels (6 to 8 mm) and gaps at the perimeter and in U channel of the assembly to be filled with non staining weather sealant, so as to make the entire system fully air tight, water proof and dust proof. The rate shall include all design, Engineering and shop drawing including approval from structural designer, labour, TandP, scaffolding, other incidental charges including wastage, enabling temporary services all fitting fixers nut bolts, washer, Buffer plates, fastener, anchors, SS channel laminated glass etc. all complete. For the purpose of payment actual elevation area of Glazing including thickness of joints and the portion of Glass panel inside the SS channel shall be measured.								
				Front Glass wall	1.00	14.50		2.8	40.60			
					2.00	10.40		2.8	58.24			
					1.00	14.50		2.8	40.60			
									139.44			
									139.44	Sqm	5,983.00	8,34,269.52
2	9.172		WPC solid board	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid board one side white colour and other side of board laminated 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 fibres (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 necessary S.S screws shall be paid separately) 18 mm thick								
		9.172.1		18 mm thick	12.00	1.90		3.6	82.08	Sqm	2,423.65	1,98,933.19
5	15.64		Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.					680.00	Cum	121.00	82,280.00

21	28.2		Supplying and stacking of good earth	Supplying and stacking of good earth specific useful for plantation at site including royalty if any and carriage (earth measured in stacks will be reduced by 20% for payment).									
				Landscape	1.00	28.00	18.00	0.3	151.20				
					1.00	11.00	11.00	0.3	36.30				
					1.00	10.00	20.00	0.3	60.00				
									247.50	Cum	511.00	1,26,472.50	
22	28.3		Supplying and stacking sludge	Supplying and stacking at site dump manure from approved source, including carriage (manure measured in stacks will be reduced by 8% for payment) :									
				Landscape	1.00	28.00	18.00	0.15	75.60				
					1.00	11.00	11.00	0.15	18.15				
					1.00	10.00	20.00	0.15	30.00				
									123.75	Cum	734.00	90,832.50	
23	28.8		Spreading of sludge, dung manure and / or good earth	Spreading of sludge, dump manure and / or good earth in required thickness as per direction of Engineer-in-charge (Cost of sludge, dump manure and / or good earth to be paid separately).					123.75	Cum	16.00	1,980.00	
24	28.9		Mixing earth and sludge or manure (fym) farm yard manure	Mixing earth and sludge or manure in the required proportion specified or directed by the Engineer-in-charge.					123.75	Cum	11.00	1,361.25	
	28.10		Planting of Grass	Grassing with Selection No.1 grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth, if needed (the grass and good earth shall be paid for separately):									
25		28.10.5	Grassing with selected grass turf	Providing and laying Selected type of Grassturf with earth 50mm to 60mm thickness on existing ground prepared with proper level and ramming with required tools wooden and than rolling the surface with light roller, making the surface smoothen and light watering the same, as per direction of Engineer-in-Charge									
				Landscape	1.00	28.00	18.00		504.00				
					1.00	11.00	11.00		121.00				
					1.00	10.00	20.00		200.00				
				OAT	5.00	51.00	1.80		459.00				
									1,284.00	Sqm	99.00	1,27,116.00	
26	28.13		Preparation of beds for hedging and shrubbery	Preparation of beds for hedging and shrubbery by excavating further 30cm deep of already prepared trench, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, levelling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and levelling as directed, within a lead of 50m lift upto 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately)	1.00			0.3	240.00	Cum	67.00	16,080.00	
27	28.14		Digging holes refilling mixed with manure or sludge	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% : 1 part of stacked volume of manure after reduction by 8%) flooding with water, dressing including removal of rubbish and surplus earth, if any with all leads and lifts (cost of manure, sludge or extra good earth if needed to be paid for separately) :									
		28.14.1	120 cm dia	Holes 120 cm dia and 120 cm deep.	90.00				90.00	Each	141.00	12,690.00	
		28.14.2	60 cm dia	Holes 60 cm dia and 60 cm deep.	2,100.00				2,100.00	Each	61.00	1,28,100.00	
		28.14.3	45 cm dia	Holes 45 cm dia and 45 cm deep.	925.00				925.00	Each	19.00	17,575.00	
28	28.15		Planting different variety of plants	Providing and planting different variety of plants of approved quality and sizes as mentioned including making pits of required size at site, refilled with B.C. Soil mixture manuring and pesticide etc. complete (to be paid separately) including watering and 90 days maintenance from the date of final bill as per direction of Engineer-in-Charge complete in all respect (B.C. Mixture paid separately).									
29		28.15.1	Shrubs (75-90 cm height)	Bahunia Tomentosa, Beloperone Species, Caselpinnia Pulcherima, Bird of Paradise, Callandra Emarginata, Callandra Hybrida, Cassia Bi flora, Cassia Laevigata, Cestrum Nocturnum, Dombeya Mastersii, Euphorbia Caracasana, Euphorbia Pulcherima, Excorea bi color, Excorea tri color, Ficus Blackii, Ficus Reginold, Ficus Panda, Gardenia, Gulphinia, Jasminoides, Hamelia Pattens, Heliconia, Hibiscus Rosasinensis, Hibiscus Verigated, Hibiscus Viceroy, Jatropha Multifida, Largestomia Indica, Malpighia Coccigera, Murraya Exotica, Murraya Koeniggi, Murraya Sambucum, Mussaenda Erythrophylla, Nerium Oleander, Nyctanthus Arbortristis, Plumbago Capensis, Putranjeeva Roxburghii, Tabernaemontana Coronaria, Tabernaemontana Divaricata, Tecoma Gaudi Chaudi, Tecoma Stans, Thevetia Nerifolia, Thuja Compacta and equivalent plants.					600.00	Sqm	80.00	48,000.00	
30		28.15.2	Creepers plants (height :30cm to 45 cm)	Allamanda Cathartica, Allamanda Grandiflora, Allamanda Violacea, Begonia Venustha, Boughan Villas (Variety : Butiana, Lady Mary Bearing, Mahaara, Mohan, Scarlet Queen Variagata, Glabra Formosa, Peruviana Odissi, Partha, Shubhra, Thimma, Spectabilis, L.N. Birla, Refulgens), Clerodendrum Splendens, Clerodendrum Thompsonae, Ipomea Purpurea, Jasminum Grandiflorum, Jasminum Humile (Yellow), Passiflora Caerulea (Rakhi Bel), Petrea Volubilis, Quis Qualis Indica, Tecoma Grandiflora, Veronia Elaegnifolia (Curtain Creeper), Mandevilla, Garlic Creeper, Callimitis					600.00	each	50.00	30,000.00	

31		28.15.3	Ground cover plants height: 30cm-45cm	Alpinia Verigated, Alternanthera species, Aspyragus Myerri, Aspyragus Springenii, Aspidistra, Canna (regular, Dwarf), Chlorodendron Inermii, Chlorophytum (Green), Chlorophytum verigated, Coffea Chinensis, Dianella Verigated, Durranta (Goldiana, Green, Verigated), Euphorbia Milli hybrid, Ipomea (Golden leaves), Iresine herbstii, Juniper Prostata, Juniper Africana, Ophiopogon plant, Ophiopogon jaburan, Portulacaria Afra (jade Plant), Schefflera Green, Schefflera verigated, Setcreasea Purpurea, Syngonium (Butterfly) species, Syngonium miniature, Syngonium Dwarf, Syngonium variegated, Tradescantia, Wadella Trilobata, Zebrina Tradescantia, Pendasas, Spider Lily Black, Spider Lily verigated, Aclypha (Red, Green,Mini), Lantana (Red, Yellow, Purple, White, verigated), Haemalia Mini and similar plants.					1,500.00	each	50.00	75,000.00
		28.15.6	Rose plants height: 30cm & above	Budded Roses of H.T variety and miniature Roses					400.00	each	170.00	68,000.00
		28.15.7	Rose plants creepers	Plant Creeper Rose Varieties					300.00	each	212.00	63,600.00
		28.15.8	Rose plant H.T. standard	Standard Roses H.T. Variety					225.00	each	382.00	85,950.00
32	28.18		Filling mixture of earth and sludge or manure	Filling mixture of earth and sludge or manure in the desired proportion in trenches, flooding with water and levelling (cost of supplying earth and sludge or manure and mixing excluded)					123.75	Cum	16.00	1,980.00
33	28.19		Excavation in dumped stones or malba	Excavation in dumped stones or malba including stacking of serviceable and unserviceable material separately and disposal of unserviceable material lead upto 50 m and lift upto 1.5 m disposed material to be neatly dressed.					22.00	Cum	155.00	3,410.00
34	28.32		Anti termite treatment of grass	Anti Termite treatment of Lawn area through premise 30.5%L.P, one liter premise diluted in 499 litres water and applying solution @ 1.00 liter solution per sq.m lawn or bed area. (Two application) i/c cost of chemical and as per direction of Engineer-in-Charge.					1,284.00	Sqm	10.00	12,840.00
35	15.2		Demolishing cement concrete	Demolishing cement concrete manually/by mechanical means including disposal of material within 50 metres lead as per direction of Engineer-in- Charge.								
	15.2.1	1:3:6 or richer		Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix).	1.00	15.00	12.00	0.2	36.00	Cum	578.00	20,808.00
36	15.3		Demolishing R.C.C.	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in- Charge.	1.00	15.00	20.00	0.15	45.00	Cum	844.00	37,980.00
37	15.5		Scrapping, cleaning straightening reinforcement	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. work (Payment shall be made on the cross sectional area of R.C.C. work) as per direction of Engineer-in- Charge	1.00	15.00	20.00		300.00	Sqm	276.00	276.00
38	15.6		Demolishing brick work	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								
	15.6.3	In cement mortar		In cement mortar.								
				Old Building	3.00	20.00	0.23	4.8	66.24			
					4.00	12.00	0.23	4.8	52.99			
									119.23	Cum	487.00	58,065.98
39	15.8		Demolishing stone rubble masonry	Demolishing stone rubble masonry 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:								
	15.8.2	In cement mortar		In cement mortar.								
				Old Building	3.00	20.00	0.60	1.2	43.20			
					4.00	12.00	0.60	1.2	34.56			
									77.76	Cum	582.00	45,256.32
40	15.11		Dismantling tile/ kota /marble/ Granite work	Dismantling tile/ Kota stone/ Marble / Granite work in floors/walls and roofs laid in cement mortar including stacking material within 50 metres lead.								
	15.11.2	Above 25mm thick		For thickness of tiles above 25 mm and upto 40 mm.								
				Old Building	1.00	12.00	20.00		240.00	Sqm	220.00	52,800.00
41	15.12		Dismantling stone slab flooring	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead								
				Old pathway	1.00	15.00	5.00		75.00	Sqm	64.00	4,800.00
42	15.13		Taking out paver blocks	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.								
				Old pathway	1.00	33.00	5.00		165.00	Sqm	31.00	5,115.00
43	15.14		Dismantling doors, windows, shutter including chowkhats,	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead								
	15.14.1	Area upto 3 sq.m.		Of area 3 sq. metres and below	20.00				20.00	Each	85.00	1,700.00
	15.14.2	Area>3.0 sq.m.		Of area beyond 3 sq. metres	25.00				25.00	Each	117.00	2,925.00

44	11.9			Planting of Trees and their Maintenance for three Year Planting of various varieties such as Pipal (Ficus religiosa), Bargad (Ficus benghalensis), Neem (Azadirachta indica), Ashok (Saraca Asoca), Kadam (Neolamarckia cadamba), Aam (Mango), Gulmohar (Delonix regia), Amaltass (Hibiscus rosa-sinensis), Bougainvillea (Bougainvillea glabra), Lantana (Lantana camara) etc. of trees as approved by the Engineer-in-charge by the road side (Avenue trees) in 0.60 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, planting the saplings, backfilling the trench, watering, and maintaining the plants excluding tree guard.									
			(ii)	Minimum Plant Height 1.50 M						40.00	each	2,750.00	1,10,000.00
3	12.85		Tensile (fabric) structure system	Design built, supply and erection of Tensile (fabric) structure system including designing and fabrication in M.S. steel tubular structure as per Indian standard section as per approved design and shape including base plate, dash fastener, clits etc. Cutting, patterning, plotting and welding of fabric with the help of tensile structure software. Fabric should be welded by high frequency PVC welding in proper line with PVC cader to be fixed on end of the fabric and to be stretched & fixed on M.S. design structure with the help of. M.S. Flat bar with self-taping screw. M.S. structure to be painted with one coat of epoxy primer with MRF PU paint of approved colour in desired shape. With 1050 GSM tensile fabric									
4		12.85.1		With preconstraint tensile membrane 1050 GSM (20 years Warranty)	3.00	3.00	2.50			22.50	Sqm	9,347.00	2,10,307.50
5	12.39		Three-dimensional space frame steel structure	Supply, fabrication and erection of three-dimensional space frame steel structure consisting of support node, primary space frame members, space nodes, bolts, sleeves (nut), purlin stool, purlin etc. to support roof sheet in plain or curved shape. The space frame steel structure shall be designed as per relevant IS codes for earthquake, wind and all applicable forces/load as per IS 875 and/or International standard ASCE-7, AISC 89, AISI 89 etc. and produced in compliance with ISO 9001-2008 quality system. The lowest point of space frame steel structure shall be the support node securely welded over a flange plate, made of steel conforming to ASTM A36, fixed securely on top of a well designed support shaft made of solid or hollow circular steel pipe or concrete column erected/constructed over a secured and unyielding steel or RCC foundation. Space frame nodes, which connect two or more primary space frame members, are solid spherical balls with internally threaded holes and manufactured by hot forging process from medium carbon steel conforming to BS EN 10083 Part-2. Primary space frame member, which connects two nodes and consists of well-designed hollow steel pipe of suitable length, shall have steel cones coaxially welded at both ends in accordance with welding standards. Pipes of primary space frame member shall be type E (ERW/HFIW) and conforming to ASTM A53, Grade A/B or IS 1239 Part I or IS 1161. Last primary space frame member shall have no coaxial steel cone at the end but shall be provided with galvanized plate. Coaxial steel cones (conical tips) preassembled at ends of primary space frame member shall conform to ASTM A36/ BS EN 10083, C-30 or DIN St 37-2 standards as applicable. Primary space frame member shall be hot dip galvanized during manufacturing as per ASTM A53 /ASTM A 123 as applicable with powder coated finish. The space frame nodes (except support nodes), fasteners, cones and all threaded parts shall be electro- galvanized finish. Average zinc coating done (in factory) on space frame pipes shall be 550 g /sqm (Approximate zinc coating thickness 77 Microns) and shall not be less than 400 g/sqm (Approximate zinc coating thickness 56 microns). Bolts, sleeves and cones shall be electro-galvanized to ASTM B 633 Type 2, SC3. Shop drawings along with structural design analysis shall be provided by the manufacturer for approval of the engineer in charge. Rate shall include cost of design, all material, all lifts, labour, transport, storage, machines, tools and plants, wastages, erection and installation at site all necessary scaffolding etc.									
				For tensile	12.00	3.00	22.50			810.00	K.g	312.00	2,52,720.00
	7.39		Structural steel for dry stone cladding	Providing and fixing structural steel frame (for dry stone cladding with 30 mm thick gang saw cut with machine cut edges sand stone) on walls at all heights using M.S. square/rectangular tube in the required pattern as per architectural drawing including cost of cutting, bending, welding etc. The frame work shall be supported in wall with the help of MS brackets/lugs of angle iron/ flats etc. which shall be welded to the frame and embedded in brick wall with cement concrete block 1:2:4 (1 cement: 2 sand: 4 graded stone aggregate 20mm nominal size) of size 300x200x300mm including cost of necessary centering and shuttering and with approved expansion hold fasteners on CC/RCC surface including drilling necessary holes. Approved cramps/ pins etc. shall be welded to the frame work to support stone cladding the steel work will be given a priming coat of Zinc primer as approved by Engineer-in-charge and painted with two or more coats of epoxy paint (Shop drawings shall be submitted by the contractor to the Engineer-in-charge for approval before execution).The frame work shall be fixed in true horizontal and vertical lines/ planes. (Only structural steel frame work shall be measured for the purpose of payment, stainless steel clamps shall be paid for separately and nothing extra shall be paid.)									
				dry stone cladding	4.00	20.00	3.60	30		8,640.00			
					2.00	15.00	3.60	30		3,240.00			
										11,880.00	K.g	138.00	16,39,440.00
	7.40		S.S. clamps for dry stone cladding	Providing and fixing adjustable stainless steel clamps of approved quality and of required shape and size adjustable with stainless steel nuts bolts and washer (total weight not less than 260 gms) for dry stone cladding fixed on frame work at suitable location including making necessary recesses in stone slab, drilling required holes etc. complete as per direction of the Engineer-in-Charge.	396.00		9.00			3,564.00	Each	208.00	7,41,312.00
	17.58		Unplasticised rigid PVC soil and waste pipes	Providing and fixing unplasticised Rigid PVC soil and waste pipes conforming to IS: 13592 Type B including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion. Single socketed pipes for working pressure of 4 kg/sq cm. (minimum wall thickness 3.2mm)									
		17.58.1	75mm dia	75 mm diameter	30.00					30.00	meter	136.00	4,080.00
		17.58.2	110mm dia	110mm dia	30.00					30.00	meter	238.00	7,140.00
	17.59		Unplasticised PVC pipe fittings	Providing and fixing unplasticised PVC moulded fittings/ accessories for unplasticised Rigid PVC soil and waste pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.						-			
		17.59.3	T with door	Single tee with door						-			
		17.59.3.1	75 mm	75x75x75 mm	2					2.00	each	219.00	438.00
		17.59.3.2	110 mm	110x110x110 mm	2					2.00	each	346.00	692.00
		17.59.5	Bend	Bend 87.50									-
		17.59.5.1	75 mm	75 mm bend	2					2.00	each	117.00	234.00

	17.59.5.2	110 mm	110 mm bend	3				3.00	each	172.00	516.00
17.61		UPVC trap of self cleaning design	Providing and fixing UPVC trap of self cleaning design complete. Including cost of cutting and making good the wall and floors. 100 mm inlet and 75 mm outlet	6.00				6.00	each	517.00	3,102.00
18.6		CPVC pipes internal work	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge.								
	18.6.1	Exposed on wall	Internal work - Exposed on wall								
	18.6.1.1	15mm	15 mm nominal outer dia .Pipes.	30.00				30.00	Meter	129.00	3,870.00
	18.6.1.2	20mm	20 mm nominal outer dia .Pipes.	15.00				15.00	Meter	153.00	2,295.00
	18.6.1.4	32mm	32 mm nominal outer dia .Pipes.	30.00				30.00	Meter	254.00	7,620.00
18.7		CPVC pipes for external work	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings. This included jointing of pipes and fittings with one-step CPVC solvent cement, trenching, refilling and testing of joints complete as per direction of Engineer-in- Charge. External Work								
	18.7.4	32 mm	32 mm nominal outer dia .Pipes.	70.00				70.00	Meter	238.00	16,660.00
	18.7.5	50 mm	50 mm nominal outer dia .Pipes.	40.00				40.00	Meter	498.00	19,920.00
19.9		Rectangular manhole	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 sand) R.C.C. top slab with Cement Concrete 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:2:4 mix (1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design								
	19.9.1	90X80 cm	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :								
	19.9.1.1	Well burnt bricks	With well burnt bricks	2.00				2.00	Each	7997.00	15,994.00
	19.9.3	120x90 cm	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg (weight of cover 108 kg and weight of frame 100 kg) :								
	19.9.3.1	Well burnt bricks	Well burnt bricks	1.00				1.00	Each	21816.00	21,816.00
19.4		Unplasticised PVC pipe Below ground	Providing and laying below ground unplasticised PVC pipe to with stand working pressure of 4 kg/cm2 solid waste pipes confirming to IS:13592 and IS:4985 including jointing with seal ring confirming to IS :5282 leaving 10mm gap for thermal expansion all necessary fittings etc. complete. Excavation to be paid separately.								
	19.4.1	110 mm dia	110 mm diameter OD (min. wall thickness 3.2mm)	40.00				40.00	metre	234	9,360.00
	19.4.2	160 mm dia	160 mm diameter OD (min. wall thickness 4.0mm)	60.00				60.00	Meter	477.00	28,620.00
19.5		Cement concrete 1:3:6 all-round unplasticised PVC pipes	Providing and laying cement concrete 1:3:6 (1 cement: 3 sand: 6 graded stone aggregate 20 mm nominal size) all-round PVC. pipes including bed concrete as per standard design:								
	19.5.1	110 mm dia	110 mm diameter PVC. Pipe	40.00				40.00	metre	576	23,040.00
	19.5.2	160 mm dia	160 mm diameter PVC. pipe	60.00				60.00	Meter	704.00	42,240.00
19.7		S.W. gully trap	Providing and fixing square mouth S.W. gully trap class SP1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :								
	19.7.3	180x150 mm	180x150 mm size P type								
	19.7.3.1	well burnt bricks	With well burnt bricks	2.00				2.00	Each	1913.00	3,826.00
19.30		Soak pit circular	Making soak pit 2.5 m diameter 3.0 Meter deep with 45 x 45 cm dry brick honey comb shaft with bricks of class designation 75 and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design								
	19.30.1	Well burnt bricks	With well burnt bricks	1.00				1.00	Each	20609.00	20,609.00
25.5		European Single Piece Pedestal WC	Providing and fixing white vitreous China Anti germ fluoro-polymer coated single piece W.C. dual flushing capacity 3 and 6 litre of approved shape with 15mm quarter turn angular stop cock and pvc connection pipe i/c cutting and making good the wall and floors wherever required all fittings and fixtures etc. complete.								
	25.5.2	Size 395X710X730 mm	Anti germ Fluoro-Polymer Coated Single Piece W.C. Pan Size 395X710X730mm with solid poly propylene made soft closing seat cover.(Premium Range)	2.00				2.00	Each	25954.00	51,908.00
25.63		Wall hung basin	Wall Hung Basin: Providing and fixing white vitreous china type Anti germ fluoro-polymer coated wall mounted wash basin with C.I. brackets, C. P. brass single lever basin mixer, 15mm quarter turn angular stop cock, 32 mm C.P. brass waste coupling length 130mm and 32 mm C.P. brass bottle trap size 200x300mm i/c cutting and making good the wall and floors wherever required, all fittings and fixtures etc. complete . (Premium Range)								
	25.63.2	570x470x190 mm	White Vitreous China Anti germ Fluoro-Polymer Coated Wash Basin Size 190x600x435mm with Table mounted single lever Tall boy basin mixture, (cartridge size 32mm.) (Premium Range)	2.00				2.00	Each	15100.00	30,200.00
25.11		Flat Back Half Stall Urinal	Providing and fixing white vitreous china flat back Anti germ fluoro-polymer coated urinal (Inbuilt spreaders, bottle trap and ceramic waste coupling) with 15mm brass pressmatic auto closing concealed urinal flush valve with wall flange (decol technology, 400000 operation warranted) i/c cutting and making good the wall and floors wherever required, all fittings and fixtures etc. complete .								

40		Nsor	VISITOR & OTHER STAFF CHAIR, RECEPTIONIST, GREEN ROOM	Providing and placing in position Medium Back Chair of the following specifications. The seat is made up of 12mm thick (7 layers) hot pressed plywood and moulded seat foam upholstered with fabric. Seat Size 485 mm (W) X 470 mm (D). Overall, Height is 980 - 1080mm the frame of back rest made up of injection moulded in black PA +30 % GF and upholstered with mesh fabric makes then assembled with outer frame. The back has cushioned lumber support for achieving comfortable seating posture. SINGLE POINT SYNCHRO MECHANISM: Conventional mechanism with one lever control for lock and seat height adjustment. Mechanism made out of MS Plate. Also, it has the back tension adjustment knob. The armrest structure is black polypropylene. Arm pad size 230mm (L) x 85mm (W). 1D arm rest with height adjustable up to 65mm. The base the pedestals shall be made of HR steel 1.2mm thk, chrome plated fitted with 5 nos. twin wheel castors. The pedestal dia shall be 65+/-0.5cm and the pitch centre dia shall be 75+/-1cm (with castors). The twin wheel castors shall be injection moulded in black nylon. The products should be as per BIFMA standards, all complete as per specifications, tender drawings, Reference images, approved samples/shop drawings and direction of Engineer - In - Charge. Make-GEEKEN, INDO INNOVATIONS, GODREJ INTERIO, ERGO TOUCH, AMARDEEP DESIGNS.	16.00				16.00	Each	8,450.00	1,35,200.00
			High Back Chair	Providing and placing in High Back Chair with Adjustable Headrest The seat is made up of 12mm thick (7 layers) hot pressed plywood and moulded seat foam upholstered with fabric. Seat Size 485 mm (W) X 470 mm (D). Overall, Height is 1140 -1240mm the frame of back rest made up of injection moulded in black PA +30 % GF and upholstered with mesh fabric makes then assembled with outer frame. The back has cushioned lumber support for achieving comfortable seating posture. SINGLE POINT SYNCHRO MECHANISM: Conventional mechanism with one lever control for lock and seat height adjustment. Mechanism made out of MS Plate. Also it has the back tension adjustment knob. The armrest structure is black polypropylene. Arm pad size 30mm (L) x 85mm (W). arm rest with height adjustable up to 65mm. The base The pedestals shall be made of HR steel 1.2mm thick, chrome plated fitted with 5 nos. twin wheel castors. The pedestal dia shall be 65+/-0.5cm and the pitch centre dia shall be 75+/-1cm (with castors). The twin wheel castors shall be injection moulded in black nylon. High Back Chair with Adjustable Headrest The seat is made up of 12mm thick (7 layers) hot pressed plywood and moulded seat foam upholstered with fabric. Seat Size 485 mm (W) X 470 mm (D). Overall, Height is 1140 -1240mm the frame of back rest made up of injection moulded in black PA +30 % GF and upholstered with mesh fabric makes then assembled with outer frame. The back has cushioned lumber support for achieving comfortable seating posture. SINGLE POINT SYNCHRO MECHANISM: Conventional mechanism with one lever control for lock and seat height adjustment. Mechanism made out of MS Plate. Also it has the back tension adjustment knob. The armrest structure is black polypropylene. Arm pad size 30mm (L) x 85mm (W). arm rest with height adjustable up to 65mm. The base The pedestals shall be made of HR steel 1.2mm thick, chrome plated fitted with 5 nos. twin wheel castors. The pedestal dia shall be 65+/-0.5cm and the pitch centre dia shall be 75+/-1cm (with castors). The twin wheel castors shall be injection moulded in black nylon. The products should be as per BIFMA standards, all complete as per specifications, tender drawings, Reference images, approved samples/shop drawings and direction of Engineer - In - Charge. Make-GEEKEN, INDO INNOVATIONS, GODREJ INTERIO, ERGO TOUCH, AMARDEEP DESIGNS.	5.00				5.00	Nos	9,750.00	48,750.00
6		Nsor	RECEPTION & CLOAK ROOM TABLE	Providing and fixing of Reception desk made out of 710 grade marine ply. all sides, top & partially front as per ref. image will be clad with 12mm thick solid acrylic & rest will be finished with approved laminate & 100mm high 304 grade brush finish stainless steel skirting in single piece, as per detail drawing. Cost to include all necessary hardware, wire managers of approved makes. Drawer Unit:- Drawer unit below the table top. 2 file drawer and 1 box drawer. The drawer front, back and side panels are made out of made out of commercial ply, edges dully sealed with pvc edge beading. The drawers boxes are mounted on rollers slides to enable smooth operation of the drawer. Drawer runs on soft closing telescopic channel The pedestal will have central locking mechanism and handles. The products should be complete as per specifications, tender drawings, Reference images, approved samples/shop drawings and direction of Engineer - In - Charge. Size '2700X1050X1050 mm	2.00				2.00	Nos	1,32,000.00	2,64,000.00
7		Nsor	RECEPTION TABLE	Providing and fixing of Reception desk made out of 710 grade marine ply. all sides, top & partially front as per ref. image will be clad with 12mm thick solid acrylic & approved stone as per detail drawing. Cost to include all necessary hardware, wire managers of approved makes. Drawer Unit :- 2 nos. Drawer units below the table top with 2 file drawer and 1 box drawer each. The drawer front, back and side panels are made out of made out of commercial ply, edges dully sealed with pvc edge beading. The drawers boxes are mounted on rollers slides to enable smooth operation of the drawer. Drawer runs on soft closing telescopic channel The pedestal will have central locking mechanism and handles. The products should be complete as per specifications, tender drawings, Reference images, approved samples/shop drawings and direction of Engineer - In - Charge. Size '4500X1050X1050	1.00				1.00	Nos	2,04,000.00	2,04,000.00

		Nsor	Waiting Area chair	Providing and placing Waiting Area chair, inner frame, basic structure made of Marandi hard wood and commercial ply frame with upholstery 40kg/m3, 130mm thick of foam in seat and 32kg/m3, 90 mm thick of foam in back, Back foam fabric tapestry with 1+/-1 mm thick. base frame & legs are made of first class solid teak wood with PVC shoe. Polishing and Varnishing – General Holes and indentations on surface shall be filled with putty made of whitening and linseed oil. The pad shall be moistened with polish and rubbed hard on the surface applying the polish sparingly but uniformly and completely over the entire surface. Another coat shall be applied in the same way after the first coat has dried sufficiently. Finishing coats shall be sprayed on the surface in 2 or more coats as required till the architect is satisfied with the result, using melamine polish of approved make. Complete as per the approved sample/image/ shop drawing and as per the direction of Architect & Engineer-In-Charge. Size (L)600x(W)600x(H)750	5.00				5.00	Nos	22,100.00	1,10,500.00
				Providing and placing Two-Seater Sofa of Size 1500mm x 800mm x750mm. The under structure shall be made in teakwood. Wood used complete process of timber seasoning by water seasoning method. The wood used in frame shall be termite resistant. Section of wood used 50mm x 50mm and 50mm x 25mm. The structure of arms shall be made in Plywood with Veneer. All the wood joints shall be fixed with adhesives. The sofa shall be upholstered fabric of high quality and finish. The elastic belt in seat with thickness of 2mm above all 100mm 40 density foam + 25mm 40 density foam in seat, 50mm 28 density foam + 25mm 32 density foam in back. Base shall be fixed with 15mm 28 density foam fixing with SR 505 solution. Hassien cloth belt in back with thickness of 2mm and width 55mm. the stapler machine shall be used for fixing hassien cloth and elastic belts for seat	2.00				2.00	Nos	48,000.00	96,000.00
				Providing and placing Single Seater Sofa of Size 1000mm x 800mm x750mm. The under structure shall be made in teakwood. Wood used complete process of timber seasoning by water seasoning method. The wood used in frame shall be termite resistant. Section of wood be 50mm x 50mm and 50mm x 25mm. The structure of arms shall be made in teakwood. The side panel should be covered with 6mm thick MDF sheet so as to enable the pasting of PU foam and facilitate the stretching of fabric. All the wood joints shall be fixed with adhesives and 100mm 80mm staple pin. The sofa shall be upholstered with high quality leatherite. Synthetic leatherette (Not less than 380GSM) of high-quality finish. The elastic belt in seat with thickness of 2mm above all 100mm 40 density foam + 25mm 40 density foam in seat, 50mm 28 density foam + 25mm 32 density foam in back. Base shall be fixed with 15mm 28 density foam fixing with SR 505 solution. Hassien cloth belt in back with thickness of 2mm and width 55mm. the stapler machine shall be used for fixing hassien cloth and elastic belts for seat and back. PU foam used of density 40-50kg/m3 and covered with approved leatherite. No wrinkles, stains, tear shall be visible. Nylon bonded thread shall be used for stitching the upholstering. Stitching shall be done in straight line. No wrinkles along the stitching line and no pin holes. The joint between side and seat shall be in straight line. The seat shall be separate from the structure and upholstered from all sides with the approved fabric/leatherite. Wooden legs to be provided under the sofa.	5.00				4.00	Nos	28,200.00	1,12,800.00
				Providing and fixing library book rack with entire structure to be made in 18mm thick Prelaminated particle Board with 3 nos. Vertical divisions and 4 nos. horizontal shelves to be provided at equal distance for achieving 5 compartments for storage of books. Size:- 3950mm L x 300mm D x 2100mm H	2.00				2.00	Nos	1,24,800.00	2,49,600.00
			SENIOR OFFICER CHAIR	Providing and placing ergonomical, comfortable and aesthetically design high back chairs. The seat size shall be 500mm (W) x 500mm (D) and the back size shall be mm 500(W) x 750mm (H) (Seat to back height). The seat and back shall be made of hot pressed moulded double layered plywood 16mm thk and Urethane foam upholstered (Foam density 40kg/m3) with Synthetic leather tapestry. The back shall be Urethane foam upholstered (Foam density 32kg/m3) with Leather tapestry. The armrests are made of CRC pipe 50mm X 15mm X 1.6mm chrome plated and cushion with foam and Synthetic leather tapestry. The mechanism shall be 360 degree revolving Torsion bar with single point locking and tension arrangement. The pneumatic height adjustment shall have an adjustment of 65mm BIFMA Standard class 3. The pedestals shall be made of HR steel 1.2mm thk, chrome plated fitted with 5 nos. twin wheel castors. The pedestal dia shall be 65+/-0.5cm and the pitch centre dia shall be 75+/-1cm (with castors). The twin wheel castors shall be injection moulded in black nylon.	3.00				3.00	Nos	25,900.00	77,700.00
			SENIOR OFFICER VISITOR & MEETING ROOM CHAIR	Providing and placing ergonomical, comfortable and aesthetically design high back chairs. The seat size shall be 500mm (W) x 500mm (D) and the back size shall be mm 500(W) x 550mm (H) (Seat to back height). The seat and back shall be made of hot pressed moulded double layered plywood 16mm thk and Urethane foam upholstered (Foam density 40kg/m3) with Synthetic leather tapestry. The back shall be Urethane foam upholstered (Foam density 32kg/m3) with Leatherite tapestry. The armrests are made of CRC pipe 50mm X 15mm X 1.6mm chrome plated and cushion with foam and Synthetic leather tapestry. The mechanism shall be 360 degree revolving Torsion bar with single point locking and tension arrangement. The pneumatic height adjustment shall have an adjustment of 65mm BIFMA Standard class 3. The pedestals shall be made of HR steel 1.2mm thk, chrome plated fitted with 5 nos. twin wheel castors. The pedestal dia shall be 65+/-0.5cm and the pitch centre dia shall be 75+/-1cm (with castors). The twin wheel castors shall be injection moulded in black nylon.	15.00				15.00	Nos	21,400.00	3,21,000.00

			Conference Table	Providing and fixing of modular table with work top made of 25mm thickness prelam particle board of interior grade II Type III as per IS 12823:1990 with flat edges, work top clad with decorative laminate on top as per standard and other side with white balancing laminate. Edges duly sealed with 2mm thick machine pasted PVC edge band tape. Worktop supported by 50mm MS Square pipe frame duly powder coated. Support beams of section 40mm x 20mm to be provided along the running length of the table and are connected to the main frame with Aluminium dye casted brackets with help of heavy-duty bolts. Table to be provided with 2 nos. metal brush flapper with metal cable tray below the table top made of CRCA steel 1.2mm thick for wire management and switch/socket mounting provision. Vertical cable riser made of CRCA steel 1.2mm thick for provision of moving wires from floor to flapper. All CRCA steel components / parts powder coated of 50-60 micron. The boards used should meet international standards of quality and safety, Indian standard IS 12823 grade II should meet long time load bending, screw - withdrawal strength and modulus rupture and modulus of elasticity bending test as per IS 2380 (Part 4, Part 13 and Part 14). size of 5000mm x 1200mm x 750mm H Complete as per the approved sample/image/ shop drawing by supplier and as per the direction of Architect & Engineer-In-Charge. Make-GEEKEN, INDO INNOVATIONS, GODREJ INTERIO, ERGO TOUCH, AMARDEEP DESIGNS.	1.00				1.00	Nos	1,60,550.00	1,60,550.00
			Office table	Providing and fixing office table which comprises of a Worktop supported on MS rectangle legs duly powder coated, pipe section shall be 60mm x 30mm. Table in Complete Particle Board with table top to be made of 25mm thick ISI marked particle board with 1mm thick decorative laminate on top and clad with 0.65mm thick backing laminate and having flat edges duly sealed with 2mm thick PVC edge band tape. The modesty of the table shall be made of 18mm thick particle board clad with 1.0mm thick ISI marked decorative laminate on both sides. Its edge shall be sealed with 2 mm thick PVC beading the entire desk unit is assembled with suitable KD fittings and hardware. Free standing 3 drawer pedestal unit made in 18mm thick Prelaminated particle board with movable castors below to be provided with the table. Worktop: - Made from 25mm Thick Pre-laminated Particle board. The board shall be sourced from reputed manufacturers and shall also be treated for termites to increase life. All the edges are sealed with 2 mm thick PVC edge band all around Under structure. Drawer Size : - 400mm(W) x 500mm(D) x 650mm(H)								
				Table Size: - Size:- 1200mm x 600mm x 750mm H Drawer Size: - 400mm W	2.00				2.00	Nos	25,350.00	50,700.00
				Table Size: - 1200mm x 750mm x 750mm H Drawer Size: - 400mm W	2.00				2.00	Nos	29,250.00	58,500.00
				Table Size: - 1500mm x 750mm x 750mm H Drawer Size: - 400mm W	2.00				2.00	Nos	31,850.00	63,700.00
				Table Size: - 1800mm x 900mm x 750mm H Drawer Size: - 400mm W	1.00				1.00	Nos	35,750.00	35,750.00
				Providing and Fixing Bunk Beds with main frame made in 40mm x 40mm square pipe. Header and footer to be provided in 25mm Square pipe. Long vertical frames to be welded with main frame pipes and are provided in pipe of section 40mm x 20mm. Horizontal pipes of section 25mm x 25mm to be provided at regular intervals for additional support and strength. 18mm thick PLY duly painted on both sides to be provided at both levels and should be screwed to the horizontal support pipes with SS screws. Countersunk holes to be provided in the horizontal pipes for receiving the screws through which the PLY will be fixed on the base of the bed.	4.00				4.00	Nos	21,400.00	85,600.00
				Providing and fixing of Table top to be made in 25mm thick PLPB with Gable ends to be made in 25mm thick PLPB and extended till the height of 900mm from the ground. The table top will be at height of 450mm from the ground. The front partition to be made in 25mm thick PLPB with overall height of 900mm with 450mm below the table top and 450mm above the table top. Overall Table Size: - Back-to-Back 1200mm L x 900mm D x 450mm/900mm H Table top Height from ground: - 450mm Linear Size 1200mm L x 450mm D x 450mm/900mm H Table top Height from ground: - 450mm	21.00				21.00	Nos	12,400.00	2,60,400.00
41				Providing and fixing of wooden benches with approximate size of 400mm (Height), made with appropriate sections of Frist class teak wood stained and 50x50x4 mm Stainless Steel (304 Grade) hollow box section legs to be provided, Top to be made as 50mm thick solid wooden top as per details mentioned in the drawing. Finishing coats shall be sprayed on the surface in two or more coats as required till the Engineer in charge/ Architect is satisfied with the result. Treated with anti-termite coatings and finished within superior quality PU coating, colour as specified. Finishing coats shall be sprayed on the surface in two or more coats as required till the Engineer-in-charge/ architect is satisfied with the result. Colour as per the instruction of the Engineer in charge/ Architect. To be completed as per approved drawing, design, sample and direction of the engineer-in-charge/ architect. Contractor/ Vendor should have to prepare one sample and only after getting it approved from the Engineer in charge/ Architect, they should start the actual production. Top side to be measured								
				Digital Orientation	4.00	1.55	0.45		2.79			
				Office	3.00	2.80	0.45		3.78			
									6.57	Sqm	22,000.00	1,44,540.00
42				Design, Manufacturing, Supply, Erection including Civil works and Handing over etc of Removable / Re-erectable type Pre-Engineered, Pre-fabricated Steel closed Storage Sheds with supply and supply & erecting of side rack as per specification including an internal cabin of 3 M x 3 M with false ceiling & partition all complete.	15.00				15.00	Sqm	22,000.00	3,30,000.00

			Free standing MS Partition - 150mm	Providing and fixing 150 mm overall thickness free standing partition up to 4 meter height consisting of ms hollow section 50X50mm/75X75mm/ as per site requirement of desired thickness in a grid pattern with 600mm c/c spacing bothways (horizontal and vertical) or at required spacing near opening, with necessary welding at junctions and fixing the frame to wall/ ceiling/ floors with ms base plate of desired size and thickness with steel dash fasteners of 8 mm dia, 75 mm long bolt, including making provision for opening for doors, windows, electrical conduits, switch boards etc. wherever required. The cost to be inclusive of applying one coat of steel primer of approved quality on the framework. The rate to be also inclusive of providing and installing top cover of 12mm ply conforming to BWR grade of Greenply/ Duroply/ Century ply or similar makes on both sides having bend radius as little as 100mm, ideal for tight radius work with edge profiles, including the cost of necessary hardware, screws etc all complete as per approved drawings and the direction of engineer in charge. The cost is also to be inclusive of providing surface base with a smooth with 2 base coat of water proof primer on top as per shade required after duly clearing off any unwanted scratches and undulations by sand papering or using a wire brush before actual application , being complete including cost of all material, labour, machinery, T&P, curing, all leads, lifts and sampling, testing and water arrangements complete as per drawings, requirements, specification and as directed by the Museum Consultant. The surface should be smooth enough for vinyl film application.	5.00	1.80		3.6	32.40	Sqm	10,100.00	3,27,240.00
			WPC Partition -6 mm/12 mm	Providing and fixing factory made single extruded WPC 12-18mm thk (Wood Polymer Composite) solid board one side white color board for backing of cup boards and bathroom/kitchen cabinet etc. of required sizes comprising of virgin PVC polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice husk/wheat husk) and nontoxic additives (maximum toxicity index of 12 for 100 29 gms) having minimum density of 650 kg/cum, screw withdrawal strength of 1800 N(Face) & 900 N (Edge), minimum compressive strength of 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.	12.00	2.00		3.6	86.40	Sqm	3,953.00	3,41,539.20
43				Supply, Installation, Testing & Commissioning of Slotted angle racks for storage shall be strictly as per the drawings and technical specifications as detailed in the tender and material specification shown above. Rate shall include all necessary accessories, hardware components, transportation, installation, structural components, making good the scratches made during installation etc. as directed by the Engineer In charge. RACK DIMENSIONS - 900 MM (width) X 1800 MM (length) X 2500 MM (height) It will be divided into 3 (three) compartments / loading levels. Each compartment shall have load bearing capacity of 750 Kg and space to hold 16 Nos of storage boxes of size 450mm(L)x400mm(W)x 300mm(H)	6.00				6.00	Nos	8,000.00	48,000.00
44			Signage	Vinyl Print with installation Providing & Fixing Printed Vinyl Graphics on Punned or Levelled Surface of (3M or Equivalent) , 3M Scotch print controltac & comply wall graphics IJ 180 C + 8520 over Plywood / MDF or Laminate. Cost to include cleaning for any stains, scaffolding for height upto 4000mm from FFL Make of vinyl: 3M, LG, Avery	15.00	2.40		3.6	129.60	Sqm	3,953.00	5,12,308.80
			Signage	Providing and fixing of Emergency Signage luminescent vinyl printed in on 6mm thick acrylic sheet back and 4 mm thick acrylic front sandwich panel , as per International standard signage graphic, mounted on Stainless Steel studs of complete as per drawing & design and direction of Architect consultants.	8.00	1.20		0.45	4.32	Sqm.	15,500.00	66,960.00
			Signage	Design/Supply/Installation of cut made signages laser of 12mm thick Acrylic solid surface sheet of various sizes including requisite fittings and fixtures . signages shall be fixed on wall/ceiling. All signages texts in Hindi & English font & size as per drawing. To be completed as per approved drawing, design, sample and direction of the engineer-in-charge/ architect. as per approved design.	10	4.00		24	960.00	Sqft	7,500.00	72,00,000.00
			Signage	Design/Supply/Installation of Floor standing signages fabricated with M.S hollow section tube finish with red oxide primer & black paint and clad with 6 mm thick Acrylic solid surface sheet. Signage will be of various sizes including requisite fittings and fixtures. All signages texts/pictograph will be in Hindi & English font & sizes as per drawing & design and shall be UV printed on exterior grade clear vinyl of minimum 120 micron/140 GSM pasted on the Acrylic solid surface sheet. To be completed as per approved drawing, design, sample and direction of the engineer-in-charge/ architect. as per approved design								
			Signage	TYPE 1 (As per Approved Design) Floor Standing Signage (Size 1950mm x 400mm top thick 35mm & bottom 175 mm thickn Base (Size : 475mmx250mmX 30mm)	3.00				3.00	Nos	65,900.00	1,97,700.00
5			'Projection Screen	Projection Screen Providing and fixing of 6 mm the flat Acrylic Solid Surface (ben +12 low VOC fully fire retardant Ply as cladding on existing wall/M.S frame/WPC Surface has to be finished as matte for projection to be played on this. To be completed as per approved drawing, design, sample and direction of the engineer-in-charge/ architect. Contractor/ Vendor should have to prepare one sample and only after getting it approved from the Engineer in charge/ Architect, they should start the actual production.								
				Digital Orientation Wall	2	4.80		3.3	31.68			
					2	4.02		3.3	26.53			
									58.21	Sqm	14,767.00	8,59,616.60
9			Signage	Providing and fixing of museum gallery Signage made of brass letter as per the approved drawing. The letter will be 10mm thick & height of the letter will be 50 mm in case of English and 50 mm in respect of Hindi and other language including matra (50 mm for Hindi alphabets & 75mm for matra). Brass having thickness of 18 gauge/ 1.2 mm finishing with approved colour & shade fixed with 30mm solid teak wood finish with polish. complete job as required and as per the direction of engineer in charge.	2.00	1.20		0.45	1.08	Sqm	78,700.00	78,700.00

6	NSOR	cobble sand	Providing and laying shaped cobble sand stone 80 -100 mm thick average thickness size of cobal stone 150x150 mm as directed laid on average 25-30 mm thick motor base 1:3 1 (1cement : 3 sand) with admixture of cement hardener of approve make like pidilite, Fosroc or equivalent including compaction and proper embedding/ laying of shaped cobble stone in design with gap of 8 -10 mm all around the stone as directed and filling of the joints with cement motor 1:2 (1 cement:2 send) with pigment to much the colour and shade looking edge with cc (M-20) top cleaning with hard wire brush, finished etc. with all respect including all wastages, transportation etc. complete							Sqm	2240.97	2,240.97
			Pathway	1.00	30.00	3.30		99.00				
				1.00	22.70	2.50		56.75				
				1.00	10.00	2.50		25.00				
				1.00	10.00	3.30		33.00				
				1.00	10.00	3.00		30.00				
			Pathway	1.00	30.00	3.30		99.00				
			Entry	1.00	6.00	12.50		75.00				
								417.75				
								418.00	Sqm		2240.97	9,36,725.46
7		Kerb stone	Providing and Fixing fine dressed "kerb stone (Sand stone) along with path way /gardening, tapper/round with top edges in cement sand mortar 1:3 including pointing with white cement an admixture of pigment complete in all respect as per direction of Engineer incharge. Size 100 x 450 mm									
			Pathway	2.00	30.00			60.00				
				4.00	23.00			92.00				
				2.00	10.00			20.00				
				1.00	10.00			10.00				
			Pathway	1.00	30.00			30.00				
			Entry	1.00	9.00			9.00				
								221.00				
								221.00	Rmt		1550.00	3,42,550.00
		Red sandstone flooring	40 mm thick machine-cut rubbed Sand stone (Red Shivpuri/ Basodha or local stone matching colour and hardness properties) on steps/ tread/ riser/ Landing/ Flooring, Best Quality Stone, as approved by Engineer-in-charge, with specfic design and as per drawing upt to any height, with necessary scaffolding/ centering etc., over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 sand) including pointing with cement mortar 1:2 (1 cement : 2 sand) with an admixture of pigment to match the shade of stone. For protection of stone, from weathered action coats of protection layer shall be apply on whole stone surface area, Stonework should have coated of water repellent silicone free (transparent in colour) in two or more coats of clear coat of make Killick Gaurd pidilite / k2 / Nippon/ equivalent. The process of coating should be followed: (i) cleaning of stone (ii) rubbing and polishing of stone (iii) first coat of clear algae and after drying of this coat, (iv) second coat of clear HD shall be applied. All this coating shall be done with spray paint machine until complete impregnation. All work shall be done in satisfactory manner and as per instructions of Engineer-in-charge.									
			Tourist Experience Center	1.00	11.00	20.00		220.00				
			Steps	1.00	7.40	2.50		18.50				
				1.00	7.60	2.50		19.00				
				6.00	0.15	2.50		2.25				
			Semi-Open Lobby	1.00	10.00	12.50		125.00				
				2.00	12.50	0.60		15.00				
				4.00	12.50	0.15		7.50				
			Hunarshala	1.00	12.50	20.00		250.00				
			Steps	1.00	8.00	2.50		20.00				
				1.00	8.00	2.50		20.00				
				6.00	0.15	2.50		2.25				
			Shops	15.00	2.50	2.50		93.75				
			OAT Steps	15.00	2.40	0.60		21.60				
				15.00	2.40	0.15		5.40				
								820.25				
								820.00	sqm		2680.00	21,97,600.00
8		Steel Jali	Providing and fixing of 4mm thk corten steel /S.S sheet with CNC cut Artwork (Jali) in 50% of the area on which paneling is done and backed with 25mm thk stone backing and 10% area with 2 mm SS artwork pated over/under the paneling. Item Rate to include jointing and finishing of corten steel and Khavada stone to a flush finish with recommended framework/dry cladding system / clamping system all complete. Maximum Height Upto :4500mm. corten steel paneling on concrete wall surface.									
			Shops	22.00	2.50	2.00		110.00	sqm		16780.00	18,45,800.00
		dry cladding	Providing and fixing dry cladding upto 10 metre height with 30 mm thick gang saw cut stone with machine cut edges of uniform colour and size upto 1mx1 m, fixed to structural steel frame work and/ or with the help of cramps, pins etc. and sealing the joints with approved weather sealant as per Architectural drawing and direction of Engineer-in-charge. (The steel frame work, stainless steel cramps and pins etc. shall be paid for separately).									
			Red sand stone - 30 mm thick gang saw cut stone									
			Tourist Experience Center	2.00	15.00		3.60	108.00				
				1.00	15.00		3.60	54.00				
			Hunarshala	2.00	20.00		3.60	144.00				
				1.00	10.00		3.60	36.00				
								342.00	Sqm		2,902.65	9,92,706.30
45			Providing and fixing in position Arch Swing dauble (WZ-KE-708) of kalia recreations including excavation of with 2 virgin Plastic seats& 'S' Hook, adjustable hook belt or Bucket Play Area, 3 Mts.x1.10 Mtsx 2.30 mts	1.00				1.00	Each		43,000.00	43,000.00

46				Providing & fixing of Double deluxe slide , Slide made out of S.S grade of FRP Area, 3 Mts.x4.5Mts (approx) Height & Length: 1.20mx2.40 (approx) kids Capacity: 4-6 Kids	1.00				1.00	Each	1,30,000.00	1,30,000.00
47				Providing & fixing of four seater sea saw, made of M.S. Pipe 42 OD of 2 to 3 mm thickness, Seats - structure made of FRP(4 TO 5 MM Thick, Handrails - structure made of M.S. 1" Pipe Round Pipe finish with PU Paint over two coat of epoxy primer Play Area, 2.5 Mtr.x 2 Mtr (approx) Height : 1 mtr (approx) kids Capacity: 8 Kids	1.00				1.00	Each	45,000.00	45,000.00
48				Providing & fixing of 4 Seater Spring See Saw, made of M.S. Pipe 32 OD of 2 to 3 mm thickness, Springs – Heavy Duty Springs of 8 to 10 mm thickness. Seats – Made of FRP Chequered sheet.Handrails - structure made of M.S. 1" Pipe (ISI239-2004) Round Pipe.finishing PU Paint over two coat of epoxy primer	1.00				1.00	Each	32,000.00	32,000.00
1				Providing and fixing of 3 seater stone bench made of 75mm thick stone slab finished by different numbers of ambry stone and two coats of 124 no sealer coat to prevent from weather including fixing on a pedestal (cost of pedestal to be paid separately)etc. complete as per direction of engineer in charge. Size: length 1500mm, width 600mm, legs height 500 mm, back support height 500mm	18.00				18.00	Each	9,700.00	1,74,600.00
2				Providing and fixing of stone table made of 75mm thick stone slab finished by different numbers of ambry stone and two coats of 124 no sealer coat to prevent from weather including fixing on a pedestal (cost of pedestal to be paid separately)etc. complete as per direction of engineer in charge. Size: length 1000mm, width 600mm, legs height 750 mm	7.00				7.00	Each	7,900.00	55,300.00
				Total								2,25,24,677.33
C				Part C PWD SOR 2024 Electrical								
52	5.1		Point wiring surface rigid P.V.C. casing & capping	Point wiring (excluding metallic switch box & sheet but including switches, sockets, lamp holders/ceiling roses etc) with 1.5sq. mm. PVC insulated cable FRLS with copper multi strand conductor ISI marked in Surface rigid P.V.C. casing and capping ISI marked of suitable size and 1.5sq. mm. PVC insulated FRLS copper earth continuity conductor of green colour inside casing & capping screwless connector for joints etc. as required as per specification for :- Using modular accessories								
		5.1.1	Light/fan points primary	Light point/fan points								
		5.1.1.1	Short	Primary short point	60.00				60.00	Each	358.00	21,480.00
		5.1.1.2	Medium	Primary medium point	50.00				50.00	Each	641.00	32,050.00
		5.1.1.3	Long	Primary long point	40.00				40.00	Each	943.00	37,720.00
		5.1.2	Looping point secondary	Light point/fan points) looping point								
		5.1.2.3	Long	Secondary long point	20.00				20.00	Each	472.00	9,440.00
		5.1.3	Socket 6A sep. board	3 Pin 6 Amp socket outlet on separate board					-			-
		5.1.3.1	Short	Short point	20.00				20.00	Each	481.00	9,620.00
		5.1.3.2	Medium	Medium point	25.00				25.00	Each	801.00	20,025.00
		5.1.3.3	Long	Long point	10.00				10.00	Each	1,094.00	10,940.00
53	5.2		Socket same board 6A	Point wiring (excluding metallic switch box & sheet but including switches, sockets) for 3 pin 6 Amp. socket outlet point with 1.5sq. mm. PVC insulated cable FRLS with copper multi strand conductor ISI marked in Surface rigid P.V.C. casing and capping ISI marked of suitable size and 1.5sq. mm. PVC insulated copper earth continuity conductor of green colour inside casing & capping with required materials as per specification on same board.	14.00				14.00	Each	265.00	3,710.00
54	5.3		Circuit wiring 2.5Sq. Mm	Wiring for circuit wiring with PVC insulated cable FRLS with copper multi strand conductor ISI marked in Surface rigid P.V.C. casing and capping of ISI marked suitable size etc. as required as per specification								-
		5.3.1	2 Wire	2x2.5 Sq.mm	320.00				320.00	Mtr	106.00	33,920.00
		5.3.2	4 Wire	4x2.5 Sq.mm.	560.00				560.00	Mtr	174.00	97,440.00
56	6.1		Power point wiring surface steel rigid conduit	Point wiring (excluding metallic switch box & sheet) for 3 Pin 16 Amp. socket outlet point with 4sq. mm. PVC insulated cable FRLS with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI marked of suitable size etc. with 20/16 Amp. F.T. switch & socket/S.S. combined 20/16/6 Amp. of ISI marked and 4sq. mm. PVC insulated FRLS copper earth continuity conductor of green colour inside conduit, screwless connector for joints as per specification for :-								-
		6.1.1	Power point	On separate board								-
		6.1.1.1	Medium	Medium point	10.00				10.00	Each	1,867.00	18,670.00
		6.1.1.2	Long	Long point	15.00				15.00	Each	2,856.00	42,840.00
59	30.1		Electric ceiling fan	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete of approved as required confirming to IS :374/2019 with upto date amendments.								-
60		30.1.2	1200 mm sweep	Ceiling Fan (ISI marked)-1200 mm Sweep, with minimum air delivery 210 m³/min and service value ≥ 4.00 as per BEE..	10.00				10.00	Each	2,292.00	22,920.00
61	30.2		Wall mounting fan	Supplying, erection and testing of approved make wall mounting fan oscillating type with base, blades, guard, speed regulator etc. AC 230-250 volts with connections and including raw bolt/anchor hole fastener etc. complete finished and as required.								-
		30.2.1	300 mm	300 mm sweep	16.00				16.00	Each	2,478.00	39,648.00
		30.4	Fresh air fan	Supplying, erection and testing of approved make 'Fresh air fan' AC 230-250 volts with connection and including frame bolt/anchor hole fasteners etc. complete finished and as required.								-
		30.4.2	225 mm	225 mm sweep bush type	2.00				2.00	Each	1,497.00	2,994.00

1	37.40		Safe earthing electrode consisting pipe-in-pipe technology	Supply and erection of approved make safe earthing electrode consisting pipe-in-pipe technology as per IS 3043-1987 made of corrosion free G.I. pipes with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for effective and maintenance free earthing in earth pit of minimum bore dia. 150mm size, as mentioned below :									
		37.40.1	2 Metre G.I. pipe, outer dia 50 mm	With 2 metre G.I. pipes having outer pipe dia of 50mm having 80-200 micron galvanizing, Inner pipe dia. of 25mm having 200-250 micron galvanizing, connection terminal dia. of 12mm in nominal soil with 25 kg (one Bag) back filling bentonite compound UL listed and confirm to relevant International/Indian standards around electrode upto ground level	2.00					2.00	Each	8972	17,944.00
2	37.41		Back filling bentonite compound	Providing back filling bentonite compound suitable for safe earthing device. The product should be UL listed and confirm to relevant International/Indian standards	120.00					120.00	Kg	134	16,080.00
3	37.42		Polycarbonate heavy duty pit cover	Supply and installation of polycarbonate heavy duty pit cover tested for 5000Kg SWL for earth electrode at ground level size 300x 300x155 mm with lockable lid.	4.00					4.00	Each	1501	6,004.00
4	46.41		Control cable	Control cable: - Supply and laying, testing & commissioning of following sizes of copper conductor control cables on existing tray including fixing clamps & proper connections to equipment etc. complete as required									
		46.41.3	4Cx2.5 sq.mm	4Cx 2.5 sq.mm						200.00	Rmt	214	42,800.00
		46.41.4	4Cx4 sq.mm	4Cx 4 sq.mm						220.00	Rmt	350	77,000.00
			G.I. tape 38x6	Providing and laying G.I. tape 38mm X 6mm thick for earth electrode directly in ground as required	20.00					20.00	RM	222	4,440.00
	38.33												
			Laying cu./G.I. tape 32x6mm	Laying of copper/G.I. tape 32mm X 6mm thick for earth electrode directly in ground as required	20.00					20.00	RM	23	460.00
	37.34												
			6 SWG dia G.I. wire on surface/recessed	Providing and fixing 4.0mm (8 SWG) dia G.I. wire on surface or in recessed for loop earthing as required	50.00					50.00	RM	25	1,250.00
	37.17												
			Earthing with copper earth plate 600x600x3 mm	Earthing with copper earth plate 600mm X 600mm X 3mm thick including accessories and providing masonry enclosure in cement mortar, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 metre long etc. (but without charcoal or coke and salt) complete as required	2.00					2.00	No.	16,341	32,682.00
	37.4												
			Earthing with G.I. earth plate 600x600x6 mm	Earthing with G.I. earth plate 600mm X 600mm X 6mm thick including accessories and providing masonry enclosure in cement mortar, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 metre long etc. (but without charcoal or coke and salt) complete as required	2.00					2.00	No.	7,487	14,974.00
	37.3												
5	42.71		Transformers, 33/0.4 KV 3 Phase	Supplying, installation testing and commissioning of 11/0.4 kv 3phase 50cycle oil immersed, naturally cooled, outdoor type transformer connected delta on H.T. side and star on L.T. side dehydrating silica gel breather on eye level rating and diagram plate two earthing terminal lifting lugs oil level gauge drain valve with plug temperature not exceeding 50 Degree C on Load oil filling hole with plug four unidirectional roller arcing horns, explosion vent terminal arrangement bushing on H.V side and cable box on LV side first filling of oil upto desired level and transformer installing on existing structure with all required material arrangement as required ISI marked & as per IS Specification hand operated off load tap changer switch above 100kva oil conservator with drain valve plug 63KVA and above.									-
			Level-2	Energy efficiency level -2 (New level -1)									
		42.71.1	Cu. Wound	Copper wound									
		42.71.1.1	100 Kva	100 Kva	1.00					1.00	Each	651820	6,51,820.00
			Construction of pedestal (plinth) for transformer	Designing and construction of pedestal (plinth) for transformer of desired size including excavation in hard rock/soft rock, base concrete M-7.5 (1:4:8), 20mm metal and pedestal of RCC M-15 (1:2:4) including required tar steel reinforcement for required height as per IE rules from base concrete including shuttering and finishing with 10mm thick plaster in cement mortar 1:3 curing & white washing etc. complete as per specifications.	1.00	1.20	1.80						
	42.87							1.5	3.24				23,907.96
6	41.10		Cable end termination with heat shrinkable jointing kit	Providing & Making cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for 33 kv/11 kv 3 core XLPE Alum. Conductor cable as required as per specification and as per accepted standard including connection testing complete.									-
		41.10.1	11 KV XLPE, 3 core	11 kv xlpe 3 core Heat shrinkable joint kit 11 kv XLPE 3 CORE									-
		41.10.1.1	11 KV XLPE cable O.D. termination	HEAT SHRINKABLE JOINTING KIT 11 KV XLPE CABLE O.D. TERMINATION									-
7		41.10.1.1.1	3X16-50 Sq. mm	3X16-50 Sq. mm	2.00					2.00	Each	9194	18,388.00
			High-tension XLPE cable, 1 core armoured al. conductor	Supply of approved High Tension XLPE Cable (Conforming IS- 7098/II/85) as per ISI Standard 3 Core armoured with alu. Solid/stranded conductor ISI Marked as Required									-
		41.3.1	3 core XLPE cable 11 Kv grade	3 Core XLPE Cable 11 Kv Grade									-
8		41.3.1.1	50 sq. mm	50 sq. mm	80.00					80.00	Meter	786	62,880.00
			Double wall corrugated pipes (DWC) of HDPE	Supplying and installing double wall corrugated pipes (DWC) of HDPE (IS 14930 Part II - marked) for cable laid underground with necessary material and at required depth upto 90cm. below road/ground surface, excluding excavation, back filling with excavated material, ramming and making the surface good.									
		41.14.1	50.00mm outs	50.00mm outside dia.	80.00					80.00	Meter	133	10,640.00

		41.14.4	110.00mm outside dia	110.00mm outside dia	120.00				120.00	Meter	252	30,240.00
		41.15	Cable laying	Cable laying								
9		41.15.1	Laying, 1.1KV grade of size not exceeding 25 sq. mm	Laying of one number armoured/unarmoured power cable 1.1 kv grade of size not exceeding 25 sq. mm direct in ground including excavation in all soil/murram /soft rock sand crushing protective covering and refilling the pit etc. are Required.	80.00				80.00	Meter	230	18,400.00
6	41.1			Supply of XLPE insulated power cable (conforming IS -7098 PART-I) 1100 volts grade , 1 core2 core 31/2 core 4 core ISI marked with alu . Stranded / solid conductor								
		41.1.10	4 core armoured	4 core armoured								
		41.1.10.1	6 sq mm	6 sq mm	2,000.00				2,000.00	mtr	151.00	3,02,000.00
		41.1.10.2	10 sq. mm.	10 sq. mm.	1,000.00				1,000.00	mtr	181.00	1,81,000.00
9	41.8		Pin terminal lugs	Supplying & fixing pin terminal lugs as per ISS specification suitable for cable evenly cramped with high pressure tool & connection to switch gear terminal as required complete								-
10		41.8.1	Aluminum lugs pin type	Aluminium lugs pin type								-
		41.8.2	upto 16sq mm conductor	upto 16sq mm conductor	500.00				500.00	each	19.00	9,500.00
11	29.27		LT panel	Supply , fixing , testing and commissioning wall / floor mounted LT panel primer coated with power coated paint & provided with required gasket for dust/ vermin proof with degree of protection IP42 suitable for 415V 3 phase 50hz , 4 wire system fabricated out of CRCA sheet upto 2mm thick (1.6mm for doors) duly comaprtmentalized for incomer, bus section, outgoing, cable alleys & CT PT ampere meter, violt meter, selector switches, frequency meter phase indicating, energy meter complete including cost of bus bars supports deattachable cable glands plates , 2 earthing terminals , internal wiring & fixing of separately supplied MCCBs . MCCBs, ACBs panel mounted changeover switches / SFUs etc as required but excluding cost of bus bar strips. Ampere meter, voltmeter, selecor switch as per approved design & specification .	4.00	180.00			720.00	kg	397.00	2,85,840.00
12	29.28		LT Panel Accessories	supply and fixing of LT panel accessories of approved make in existing LT panel including connections etc as required as per specification								-
		29.28.1		Digital Ampere Metre with CTs with selector switch	2.00				2.00	P.SET	2125.00	4,250.00
		29.28.2		Digital Volt Metre with selector switch & HRC fuse	2.00				2.00	P.SET	2398.00	4,796.00
		29.28.4		Copper bus bar strips with PVC sleeves	1.00				1.00	Kg	788.00	788.00
		29.28.5	Aluminium bus bar strips	Aluminium bus bar strips with PVC sleeves	40.00				40.00	Kg	284.00	11,360.00
		29.28.6		LED lamp indicator	2.00				2.00	Each	255.00	510.00
13	27.3		MCCB 3Ph & N, 4Pole, 50Hz, 415V (thermal - magnetic release)	Supply of ISI marked and approved make of moulded case circuit breaker (MCCB) suitable for 3 phase & N 4 pole 50HZ ,415V (Ics= 100%Icu) AC supply with TM based having respective breaking capacity (KA) at 415V cited against their range standard conforming to IS /IEC 60947-2								
		27.3.1	MCCB 63 to 100A, 25kA, 4P	MCCB 63 to 100A ,25KA , 4P adjustable overload setting 80%-100% of In , adjustable short circuit setting 6-10 In 4pole	6.00				6.00	Nos	9,781.00	58,686.00
		27.3.3	MCCB 160A, 25KA, 4P	MCCB 160A 25KA 4P adjustable overload setting 80%-100% of In , adjustable short circuit setting 6-10 In 4pole	2.00				2.00	Nos	15,835.00	31,670.00
14	27.8		MCB 'C' Series, 240/415V, 50 Cycle, 10kA/15kA	Supply of ISI marked and accepted standard of miniature circuit breaker (MCB) of C series with short circuit , indication , suitable for 240/415V Volts , 50 cycle , 10KA / 15KA value AC supply conforming to IS 8828: 1996 IEC : 60898: 2002 & 60947-2 but without enclosure								
		27.8.1	Single pole	Single pole								
		27.8.1.2	MCB SP 6A to 32A, 10kA	MCB SP 6A to 32A 10KA rating	80.00				80.00	Nos	263.00	21,040.00
		27.8.2	Double pole	Double pole								
		27.8.2.2	MCB DP 6A to 32A 10KA rating	MCB DP 6A to 32A 10KA rating	35.00				35.00	Nos	887.00	31,045.00
		27.8.3	Three pole	Three pole								
		7.8.3.2	MCB TP 6A to 32A 10KA rating	MCB TP 6A to 32A 10KA rating	25.00				25.00	Nos	1,411.00	35,275.00
	27.8.4		Four pole	Four pole								
		27.8.4.2	MCB FP 6A to 32A, 10kA	MCB FP 6Amp to 32Amp 10kA rating	6.00				6.00	Nos	1,965.00	11,790.00
		27.8.4.4	MCB FP 50Amp to 63 Amp 10kA rating	MCB FP 50Amp to 63 Amp 10kA rating	4.00				4.00	Nos	2,795.00	11,180.00
15	21.1		Sub-mains in recessed/concealed rigid steel conduit	Wiring of sub mains with PVC insulated cable FRLS with copper multi strand conductor ISI marked in recessed / concealed rigid steel ISI marked conduit of suitable size (conduit included) including accessories long neck threaded type , connection painting etc as required as per specification								
		21.1.2	3 Wire	3 wire sub main								
		21.1.2.1		2.5sq mm cable	1,500.00				1,500.00	mtr	270	4,05,000.00

1	46.18		VRV/VRF outdoor AC unit	VRV/VRF outdoor AC unit:- Supply installation testing and commissioning of VRV /VRF /MRV outdoor units with following multiple inverter based scroll type compressors, electronic expansion valve, R 410A/ecofriendly green refrigerant, cooling & heating mode both options, special pre-coated fin type heat exchanger, low noise direct driven propeller condenser fans in each module with top discharge including internal wiring, microprocessor controls, safety. The condensing unit should be capable of providing cooling between +/- 5deg. C. to 48 deg. C & heating within 0 deg. C to 15 deg. C, COP not less than 3.3. Each system should have the provision to combine maximum 3 nos compressor in each outdoor unit, every single outdoor unit should not have more than maximum Capacity 20 HP (3 phase) each compressor complete as per specification. Outdoor/indoor units should be of same make (brand). (Single phase/three phase)											-
		46.18.8	20 HP	20 HP							1	Each	483570	4,83,570.00	
		46.18.9	22 HP	22 HP							1	Each	591261	5,91,261.00	
2	46.28		VRF/VRV indoor AC unit (floor standing package)	VRF/VRV indoor AC unit (floor standing package):- Supply, installation, testing and commissioning of floor standing package type unit comprising of copper evaporator, electronic expansion valve, blower, motor, filter pad, auto air swing louvers, temperature & ON/OFF display with inbuilt drain pump & decorative panels including internal wiring, controls with wireless remote controller. (Single phase/three phase											
		46.28.1	4.13 TR	4.13 TR							4	Each	196483	7,85,932.00	
		46.28.2	6.54 TR	6.54 TR							4	Each	209535	8,38,140.00	
3	46.30		Copper piping	Copper piping: - Supply, installation, testing and commissioning of interconnecting copper refrigerant pipe work (19mm/13mm thick) duly insulated with elastomeric nitrile rubber type tubular insulation between indoor & outdoor units as per specifications. And exposed piping should be wrapped with glass woven cloth and lag coating for vapour barrier and weather protection. Joints shall be covered with nitrile rubber tape of 3 mm thick complete as per specification.											-
		46.30.2	41.1mm OD	41.1 mm O.D. wall thickness ≥ 1.4mm (insulation – 19 mm thick)							30	Rmt	2379	71,370.00	
		46.30.4	34.9mm OD	34.9 mm O.D. wall thickness ≥ 1.4mm (insulation – 19 mm thick)							30	Rmt	1821	54,630.00	
		46.30.5	28.6mm OD	28.6 mm O.D. wall thickness ≥ 1.2mm (insulation – 19 mm thick)							20	Rmt	1390	27,800.00	
		46.30.7	22.2mm OD	22.2 mm O.D. wall thickness ≥ 1.0mm (insulation – 19 mm thick)							20	Rmt	975	19,500.00	
		46.30.8	19.1mm OD	19.1 mm O.D. wall thickness ≥ 1.0mm (insulation – 13 mm thick)							44	Rmt	889	39,116.00	
		46.30.9	15.9mm OD	15.9 mm O.D. wall thickness ≥ 0.8mm (insulation – 13 mm thick)							65	Rmt	874	56,810.00	
		46.30.10	12.7mm OD	12.7 mm O.D. wall thickness ≥ 0.8mm (insulation – 13 mm thick)							44	Rmt	689	30,316.00	
		46.30.11	9.5 mm OD	9.5 mm O.D. wall thickness ≥ 0.8mm (insulation – 13 mm thick)							60	Rmt	588	35,280.00	
		46.30.12	6.4 mm OD	6.4 mm O.D. wall thickness ≥ 0.8mm (insulation – 13 mm thick)							40	Rmt	475	19,000.00	
4	46.31		Drain piping	Drain piping :- Providing and fixing of CPVC, 6Kg/cm2 drain water piping with fittings, support and insulated with 6 mm thick closed cell elastomeric nitrile rubber insulation complete as per specification.											-
		46.31.2	25 mm dia	25 mm dia ID							20	Rmtr	202	4,040.00	
		46.31.3	32 mm dia	32 mm dia ID							60	Rmtr	297	17,820.00	
5	46.34		Refrigerant	Refrigerant:- Supply and additional refrigerant charge of refrigerant R410/410A & equivalent Eco friendly green gas to compensate the additional piping done at site for all systems including testing commissioning as required,							35	Kg	1437	50,295.00	
6	46.35	Y joints		Y joints:- Supply, installation, testing & commissioning of ref nut/Y-joints brass for indoor and outdoor units of suitable size as per requirement,							8	Each	5500	44,000.00	
7	46.41		Control cable	Controlcable:- Supply and laying, testing & commissioning of following sizes of copper conductor control cables on existing tray including fixing clamps & proper connections to equipment etc. complete as required.											-
		46.41.1	2C x 0.75 sq.m	2C x 0.75 sq.mm							350	Rmtr	64	22,400.00	
8	46.42		Communication cable	Controlcable:- Supply and laying, testing & commissioning of following sizes of shielded copper conductor Communication cables on existing tray including fixing clamps & proper connections to equipment etc. complete as required.											-
		46.42.1	2Cx1.5 sq.m	2C x 1.5 sq.mm							330	Rmtr	255	84,150.00	
9	46.43		Outdoor stand fabrication	Outdoor stand fabrication :- Supply, fabrication and erection of angle/channel/flat iron stand, hanging arrangement for air conditioning machines & ducts etc, back /support clamps or other similar work etc. including nut bolts of required size, making holes, fabrication, welding, cutting, etc. and painting with one coat of red oxide paint & two coat of enamel paint as required as per specification.							140	Kg	85	11,900.00	
	46.44		Fresh air in line fan	Fresh air in line fan:- Supply, installation, testing and commissioning of fresh air inline fan.							2	Each	5473	10,946.00	
			150 CFM	150 CFM (static pressure upto 20 mm)											-
	46.45		Installation fresh air in line fan	Installation fresh air in line fan:- Installation of fresh air inline fan including internal wiring, controls complete as per specification as mentioned below :-											-
		46.45.1	Upto 300 CFM								2	Each	1599	3,198.00	
10	41.26		FRP/ GRP Cable Tray (Perforated Type) Supply	Supply and Erecting of Perforated type Fiber Glass Reinforced Polymer (FRP) / Glass Fiber Reinforced Polymer (GRP) cable tray of specific dimensions. The cable tray shall be hung from ceiling/ fixed to wall with necessary angle/ flat iron ceiling suspensors, clamps, nuts, bolts, washers complete with required tees, bends etc. as per specification to complete the job. The tray shall be as follows :-											-
		41.26.2	100mm	100 mm width with straight coupler plate size: 200x25x4mm & 8 sets of SS 304 Hardware size: M5x20mm							50	Mtr	875	43,750.00	
		41.26.3	150mm	150 mm width with straight coupler plate size: 200x25x4mm & 8 sets of SS 304 Hardware size: M5x20mm							85	Mtr	1018	86,530.00	
1	38.18		Floor mounting rack, base frame	Supply installation, testing and commissioning of floor mounting rack, base frame, top & bottom, front glass door with perforation, rear vented door, lockable & detachable side panels, 2 pairs 19" rail with depth members. fixed shelf, complete as mentioned below :-											-
		38.18.1	22U cabinet	22U cabinet with min. Dimensions 1150X600X600, floor mounting with power supply and fan, tray. Equipment support angle, vertical cable manager, 12 point 5Amp. vertical power strip, earthing continuity kit, castors (1 set of 4 nos.), captive H/W set of 10, fan tray with 4 fan, for computer							1	Each	47900	47,900.00	

2	54.27		8 port PoE switch with 2 SFP ports	8 port PoE switch with 2 SFP ports								-
		54.27.1	8 port PoE switch with 2 SFP ports	Supply, installation testing and commissioning of 8 port PoE switch with 2 SFP ports, having security features like port security supports 64 MACs per port, auto surveillance VLAN, loopback detection automatically disables a port when a loop is detected, cable diagnostics allows administrators to determine cable status, UTP cat. 5, cat. 5e (100 m max.), full/halfduplex for 10/100 MBPS, full-duplex for 1000 MBPS, auto MDI/MDIX adjustment for all twisted-pair ports, switching capacity, 40 GBPS, maximum 64 bytes packet forwarding rate, 14.88 MBPS, ports 1 to 8 compliant with 802.3at					2	Each	23024	46,048.00
3	38.14		HDMI connector & braided cord	Supply, installation testing and commissioning of High-Speed HDMI corrosion-resistant connector & braided cable, Supports Ethernet, 3D, 4K video, computers and other HDMI-enabled devices Black as required to complete the job as mentioned below								-
		38.14.1	1 Metre, HDMI cord	1 Metre, HDMI cord					10	Each	1058	10,580.00
4	38.13		Patch cord	Supply, installation testing and commissioning of patch cord as mentioned below								-
		38.13.3	CAT 6 RJ45, UTP 3metre	CAT 6 RJ45 patch cord UTP 3 metre					10	Each	601	6,010.00
5	38.15		Patch panel, RJ 45	Supply, installation testing and commissioning of 19" modular patch - 1 U patch panel 24, RJ 45 cat-6 connector					1	Each	11792	11,792.00
6	41.4		XLPE insulated FRLS heavy duty power cable	Supply of XLPE insulated FRLS heavy duty power cable conforming IS-7098 (Part-1) 1988, 1100 Volt grade, 2/3/4/8/10/12 core ISI marked with copper stranded/solid conductor								-
		41.4.2.1	Armoured 3 core 2.5 sq. mm	Armoured 3 core 2.5 sq. mm					1100	Meter	168	1,84,800.00
	54.10		4MP IP varifocal MFZ IR bullet camera	4MP IP varifocal MFZ IR bullet camera								-
7		54.10.1	IP bullet camera	Supply, installation testing and commissioning of the IP bullet camera shall be equipped with a 1/3" 4 MP progressive scan CMOS imager to capture full HD 1080p (25/30 fps)/2688 x 1520 (20fps), images, 2.7 -13.5mm, MFZ lens, digital zoom 16x and a waterproof (IP66) IK10 impact-resistant camera housing, as a true day/night solution, the camera shall use smart IR technology and provide up to 164ft (50 m) of IR illumination. The camera shall accept PoE (802.3af) or 12 V DC power input. min. illumination:-0.08 lux color @ F2.0 (color, 1/3s, 30 IRE), 0 lux B/W with IR LEDs on @ F2.0) video compression:- H.265+, noise reduction: 3DNR, backlight compensation:- True WDR 120 DB, angle of view 104°/87° (H), 57°/48° (V), UL listed					14	nos.	29192	4,08,688.00
	54.16		2 MP IP 30X zoom PTZ camera	2 MP IP 30X zoom PTZ camera								-
8		54.16.1	Outdoor PTZ IR ultra low light IP cameras	Supply, installation testing and commissioning of 2MP IP PTZ camera shall be equipped with a 1/2.8" exmor CMOS imager to capture full HD 1080p (50/60 fps)/ 25x zoom images, 4.8 mm- 120mm, and a waterproof (IP66) IK10 impact- resistant camera housing, as a true day/night solution, the camera shall use Smart IR technology and provide up to 328 ft (100m) of IR illumination. The camera shall accept PoE (802.3af) or 12 V DC power input. min. illumination:-0.08 lux color @ F2.0 (color, 1/3s, 30 IRE), 0 lux B/W with IR LEDs on @ F2.0) video compression :- H.265 +, noise reduction: 2D/3D, backlight compensation :- True WDR 120 DB, built-in analytics, including face detection, automatically restores to previous PTZ and lens position after power failure preset speed pan: Up to 240°/s, tilt: Up to 200°/s, angle of view H: 59.2° ~ 2.4° ,UL listed					2	nos.	207766	4,15,532.00
9	54.23		32 channel NVR with 1080p	32 channel NVR with 4 SATA								-
		54.23.1	16 channel NVR With 1080p	Supply, installation testing and commissioning of 16 channel NVR with 1080p real-time live view H.265/H.264 MJPEG dual codec decoding Up to 12 MP resolution preview & playback max 320 MBPS incoming bandwidth support 4 SATA HDDs up to 32TB, supports fisheye video de-warping in local and web user interface, supports visual or auditory notifications (a flashing light, bell, or siren) complete with UL certification					1	nos.	140084	1,40,084.00
10	54.29		Workstation with client license	Workstation with client license								
		54.29.1	Work station	The work station shall have the following specifications:- Processor Intel @i5 750 2.66 GHz with internal memory of 4 GB RAM. Operating system window 7 professional 64-bit (WOW 64mode) or window 7 professional 32-bit NVIDIA 1 GB independent graphic card. Resolution support for cameras 2560x1600 display resolution capable and directX true colour 32 bit. Dual link VDI outputs. Client software shall support Dual monitors each displaying 16 cameras simultaneously. A maximum of 32 cameras viewing per workstation at a time. Programmable to sequence.					1	Each	231656	2,31,656.00
11	54.3		Hard disk	Hard disk								
		54.30.2	4 TB	Providing & fixing of 4 TB hard disk					1	Each	10825	10,825.00
		38.2		SITC OF Gigabit Unmanaged Desktop Switch								
12		38.20.3	16-Port Gigabit Switch	16-Port Gigabit Unmanaged Desktop Switch. 1000Base-T Interface : 16. Auto MDI/MDIX. Switching Capacity : 32 Gbps. Operation Temperature 0 ~ 40 °C. Power Input AC : 100 ~ 240 V.					1	Each	11517	11,517.00
		38.19.7	Fiber Termination LIU									

13		38.19.7.1	6 Port LIU	SITC, Splicing, Termination of 6 Port Full loaded LIU with SC-LC/LC-LC / SC-SC adapter, Splicing tray, Pigtails, Termination, 1U 19" / ETSI versions available, Slidding Drawer for easy access of back side of connector, Fiber guides, radius controls & secure tie downs provided					2	nos.	21726	43,452.00
14		38.19.5.2	12 Core OS-2 SM Cable	SITC of 12 Core OFC Cable with Armored Uni-Tube, 9/125µm, OS 2 Type, . Complying to ISO/IEC 11801, ENS0173, ANSI/TIA 568-C.3, Telcordia GR-20, Uni-tube construction, Water Blocking Thixotropic Gel (Tube) Petroleum Jelly (Interstices) in indoor / outdoor ducts, direct burial and backbone cabling					150	Mtrs	148	22,200.00
		38.19		CAT6A/OFC Networking (10G Support)								
		38.19.1	CAT6A Cables									
15		38.19.1.1	CAT6A U/FTP Cable	Supply, Installation, lying, drawing of 4 Pair CAT6A U/FTP Cable having 23AWG condutor, LSZH Compliant with ETL & TIA/EIA- 568-C.2, Coupling Attenuation should be 45dB min @30-100 MHz 40-20 Log (f/100) @ 100-500 MHz, Should be certified by ETL/UL in existing conduit / wiring system as direction of EIC.					200	Mtrs	178	35,600.00
		47.3	UPS (3 phase input & 3 phase output)	Supply, installation, testing and commissioning of UPS with isolation transformer & battery for backup, having three phases input three phase output. Online double conversion VFI-SS-111 technology, with sinusoidal wave form, architecture (standalone of distributed parallel up to 8 units), having input characteristics i.e. input voltage (380v, 400v, 415v, 3Ph+N+PE), input frequency (45 -65 Hz), input voltage range (Ph - Ph) : (half load 208v - 467v/full load 312v - 467v), total harmonic distortion of input current < 3% (at full linear load), compatibility with diesel generators configurable for synchronization between the input and output frequencies even for high frequency variations, input power factor > 0.99, having output characteristics i.e. output voltage (380v, 400v, 415v, 3Ph+N (adjustable from front panel), efficiency up to 96%, efficiency in ECO mode up to 98.5%, output frequency (nominal) 50 /60 Hz 0.01% free run (adjustable from front panel), crest factor 3 : 1, total harmonic distortion of output voltage < 2 % (at full linear load), output power factor 0.9, output voltage tolerance ± 1%, built in automatic and maintenance bypass, inbuilt isolation transformer, battery type (VRLA - AGM maintenance free). Communication & management i.e. LCD display (touch screen, LED bar status, live synoptic view for real time), communication ports (RS 232, genset, programmable 4 relay contacts, modbus), Audible alarm (acoustic alarms and warnings), Net interface slot (SNMP card (optional)), having emergency power off (EPO) & remote management. Ambient conditions i.e. operating temperature °C (0°C - 40°C), relative humidity % (20% - 95% not condensing), protection index (IP20), noise at 1 m dBA < 55. UPS installation with all required material arrangements as required as per IS specification.								
		47.3.3	20 KVA 3Ph	20 KVA (3 phase input & 3 phase output)								
			30 min backup	For 30 minute backup, min. 16000 VAH	1.00				1	Each	525504	5,25,504.00
1		49.1	2 Loop microprocess or	Supply, installation, testing and commissioning of 2 loop microprocessor based intelligent and electronically addressable, modular, loop capacity of 159 detectors. Fire alarm control panel with 5.7 inch touch screen LCD display, multiple access levels, 10,000 event history logs in the nonvolatile memory (EEPROM). The panel should be modular microprocessor based in nature. The panel shall have 240V AC power supply, automatic battery charger, 24 V, ceiled lead acid maintenance free batteries sufficient for 24 hours normal working and then be capable of operating the system for 30 mints during emergency condition. The panel shall be EN 54/UL certification.					1	Each	188534	1,88,534.00
2		49.7	Addressable- automatic dual LED smoke detector	Supply, installation, testing and commissioning of addressable- automatic dual LED smoke detector with two integrated lightscattering smoke sensors using LEDs with different colors/wavelengths (blue/infrared) to avoid false alarm & should comply to test fire 1, Inbuilt Isolator, automatic addressing shall be UL/EN54 certified					16	Each	6300	1,00,800.00
3		49.8	Addressable- automatic dual LED multi detector (Thermal Sensor)	Supply, installation, testing and commissioning of addressable- automatic dual LED multi detector with two integrated lightscattering smoke sensors using LEDs with different colors/wavelengths (blue/infrared) to avoid false alarm & with thermal sensor, inbuilt isolator, automatic addressing shall be UL/EN54 certified					2	Each	8485	16,970.00
4		49.10	Indoor addressable manual break glass unit	Supply, installation, testing and commissioning of indoor addressable manual break glass unit (double action) with inbuilt isolators, with flexible network structures & necessary fixing arrangements with key complete as required shall be UL/EN54 certified					3	Each	5224	15,672.00
5		49.11	Outdoor addressable manual break glass unit	Supply, installation, testing and commissioning of outdoor addressable manual break glass unit (double action) with inbuilt isolators, with flexible network structures & necessary fixing arrangements with key complete as required, shall be UL/EN54 certified					1	Each	10703	10,703.00
6		49.19	Response indicator	Supply, installation, testing and commissioning of response Indicator shall be UL/EN54certified					2	Each	267	534.00
9		41.28	Fire Survival Cable	Supply of XLPE insulated 1.5 sq. mm. Armoured 2 core FRLSZH fire alarm cable (RED) Fire Survival Cable conforming IS-7098 (Part-1) 1988, 1100 Volt grade, 2/3/4/8/10/12 core ISI marked with copper stranded/solid conductor					200	Rmt	154	30,800.00
												87,87,011.96
D				Part D Nos Sor Electrical								
45				SITC of LED Track light fixture in Die cast aluminium body in cylindrical shape. This spotlight ideally helps in precision of the beam light is useful for museum/ exhibition or accent lighting application. The fixtures comes in (10-12) w which also includes the driver. System /Luminaire Efficacy should be 90 lpw or better. THD< 10 % with in built Driver Protection against short circuit, Miswiring and Surge Protection of upto 3kV. The fixture comes with multiple beam angle to choose from from 10 deg to as wide as 60 deg. CCT - (2700/ 3000/ 4000)k with CRI>90. RAL Colour finish as per approval from Department /Architect. Input voltage is 220/ 240v. the fixture comes with a Rotation range of 355 deg and tilt angle of 90 deg. Fixture Life of 50,000 burning Hours. Ingress Protection of IP 20.					60.00	Each	16310.00	9,78,600.00

46				SITC of Surface Mounted Track for Above Luminaires. Length of the track shall be 1 Mtr suitable for the above track spot luminaires. The track system shall be complete with live feed ends and endcap inclusive of all accessories					140.00	Each	5910.00	8,27,400.00
10				Supply, Installation, Testing & Commissioning of 32 "touchscreen kiosk: One single unit along with Metal Frame indoor housing from the same covering with 12mm Low Voc BWP Ply finish with 6 mm thick high density bendable acrylic solid surface approved colour , Touch screen specifications:- Full HD resolution, Brightness :400 cd2 or higher, Native Contrast Ration 4,000 : 1 or higher, 10 touch or more, capacitive touch, Response time 10 MS or more, In-Built Factory Fitted Speaker 10W x 2, Auto Cooling, Auto Heating, Anti Vandal Glass(8mm or better), Anti Reflection Coating, Auto Brightness Sensor, Powder Coated, Air Looping System, Temperature Operation (°C) -30 to 50, Temperature Operation (°C) -30 to 50, Humidity Non-condensing (%) 20 to 80. Certifications of LED : BIS, FCC, CE and UL. including software with mounting and accessories. (Approved makes : Samsung, LG and Panasonic					2.00	Nos.	1,24,840.00	2,49,680.00
				Intel® NUC Mini PC with 12th Generation Intel® Core™ Processors,Intel® Core™ i7 Processor),Windows 11 Pro*,2x 8GB DDR4-3200 SODIMMs,500GB Gen 4 NVMe SSD,Dual HDMI 2.0b w/HDMI CEC,Front: 2x USB 3.2, Rear: 1x USB 3.2, 1x USB 2.0, Internal: 1x USB 3.2 on m.2 22x42 (pins), 2x USB 2.0 (headers),Front panel: 3.5mm headphone/mic jack, with 3 year warranty.					2.00	Nos.	94,800.00	1,89,600.00
11				Supply, Installation, Testing, and Commissioning ofSITC of 2-way ceiling mounted music loudspeaker. The loudspeaker shall meet the following criteria: Frequency range (-10dB) of 65Hz to 20kHz; Power handling of 200Watt peak; Nominal dispersion of 155° Conical; Sensitivity of 86 dB SPL and Max SPL of 109 dB SPL peak; Nominal impedance of 8 Ohms with an Integral multi-tap Transformer with selectable tap settings of 6/12/25/50W@100V or better. The loudspeaker system shall be comprised of a powder-coated magnetic steel grill; 5.25-inch woofer and 1" coaxial Dome tweeter enclosed in engineered-plastics with integrated steel backcan and an In-built waveguide designed to provide uniform frequency coverage across the loudspeakers dispersion. UL-1480A rated and UL2043 rated for plenum-space installation. Make-Bose/amline/EAW					4.00	Nos	58,198.00	2,32,792.00
				SITC of Ceiling mounted Subwoofer. The loudspeaker shall meet the following performance criteria: Frequency range (-10dB) of 38Hz to 155Hz; Power handling of 600Watt peak; Nominal dispersion Shall be omnidirectional; Sensitivity of 89dB SPL and Max SPL of 117dB SPL peak; Nominal impedance of 8 Ohms with an Integral multi-tap Transformer with selectable tap settings of 40/80W/150@100V or better. The loudspeaker system shall be comprised of a powder-coated magnetic steel grill; 8-inch woofer enclosed in engineered-plastics with integrated steel backcan. UL-1480A rated and UL2043 rated for plenum-space installation. Make-Bose/amline/EAW					1.00	Nos	1,26,960.00	1,26,960.00
				SITC of Class D configurable amplifier with a digital signal processing architecture running at 48 kHz / 24 bit .The Amplifier shall have 600 watts output power asymmetrically distributed across 4 output channels with selectable 4/8ohms, 70/100 Volt or mixed use operation. The amplifier shall have four analog and dante channels ; Frequency Response : 20Hz - 20kHz ; S/N Ratio > 100db and THD < 0.04% at rated output. Built in DSP for Matrix routing, Speaker EQs, delays etc. Phoenix Input and output terminals,Built in DSP for Matrix routing, Speaker EQs,PEQ ,bandpass, delays etc Approved makes: Bose, Aimline, EAW					1.00	Nos	3,55,494.00	3,55,494.00
13				SITC of 1-chip DLP LASER Phosphor Multimedia Projection system having, min 9500 Lumens 20000 hours lamp life, 1920 x 1200 WUXGA Native Resolution, Inbuilt blending and warping with automatic calibration software, 3D ready, 4000000:1 Contrast Ratio, inputs: HDBaseT,HDMI2.0, DVI-D, Active 3D, Motorised zoom and focus, alongwith 0.65-0.75 lens & projector mountin bracket etc. complete with installation as per the site requirement. including software and accessories , Approved Make- Christie , NEC, Barco					6.00	Nos	11,25,923.00	67,55,538.00
14				3D Projection mapping software, Playback control System to manage, schedule and control the media servers. It should have direct control on inputs and media timelines. It should have an option of being controlled by an external unit integrated with the software. to complete the job with all respects Make- Dataton/Coolux/Pixera/Vioso Equivalent					3.00	Nos	1,70,741.00	5,12,223.00
15				Display media server/Workstation with 4K outputs as required , synced together. It should be capable of capturing content.Intel® i9 10th Gen, Rack Mountable workstation with 5 Year Onsite Warranty RAM- 32GB DDR4,SSD- 1TB(For WINDOWS BOOT), HDD: 2 TB , Nvidia Quadro GFX, 8GB, 3DP, Windows 10 Pro 64 Bi or higher config.It should also have genlock and framelock capability. Should also have Art-net Ethernet in/out. to complete the job with all respects. APPROVED MAKES:-HP, Dell, Asus					2.00	Nos	4,67,852.00	9,35,704.00
				Development of a projection show duration 2-3 mins. The film will have mixed media content including information graphics, illustrations, 2D animation/Motion Graphics/3D animation, and models with live action shoot wherever required as per the theme and storyline of the film. The content should be supported by sound design and voiceover in 2 languages - Hindi and English. All necessary photoshoots and video shoot to be included in the cost. The cost for any resources such as music composers, singers, artists, instrumentalists, sound engineers, recording studio charges, etc. required to be included in the cost. The content should be made in appropriate resolution as per screen size. Rate to include the choreography design of syncing the visuals, audio and lighting in the room will be synced with the choice of music and will be triggered accordingly. All user interface design, wireframing and user experience design and development to be includes in item rate.					1.00	Nos	10,51,158.00	10,51,158.00

16				The application software to be developed in enterprise version / commercial version of the gaming engines including content (Unity3D, Unreal etc.) which supports real time 3d rendering and texture/ light baking. All the API Communication with any kind of server if need to be done in PHP/ MySQL as backend if needed. The developed application should have perpetual license and no subscription at any given point of time. Application/Software development cost to be inclusive of SRS, UI/UX, 2D design, 3D design or anything else needed to run the application. Application flow and UI/UX to be finalised once approved by the museum consultant/ authorities. Bidder will be responsible for submission of application source code technical documents and user manuals. All submitted documents to be digitally signed by the authorised signatory from the bidder.					2.00	Nos	5,89,500.00	11,79,000.00
17				SITC of following accessories for the above items- The equipment should be operational from central control room. All the control equipment of all the AV & Screen, cables, electrical panel, media converter, video transmitter and receiver, network cable and switch, connector, console, keyboard mouse etc. Programming to be considered to run the equipment/gallery seamlessly with any central location or individual location					1.00	Job	4,54,000.00	4,54,000.00
25				Supply and fixing surface mounting LED down lighter, LED of 1 to 3Watt each assembled on single MCPCB, having color temp upto 6500K & having 50000 burning hrs. life with minimum @ L 70, system lumen output should be minimum with efficacy>100 lm/Watt. LED driver PF > 0.95, THD < 20% & surge protection 4KV. The colour rendering index of LED light should be more than 70. Housing made of pressure die cast aluminium/CRCA powder coated frame with glare free diffused polycarbonate cover. Submission LM 79-08/IS16106 (2012), IEC60598, IEC61347/c connection wire, testing etc. to complete the job.								-
				18/20 Watt, color temp 3000-6500k as required.					40.00	Each	4,783.00	1,91,320.00
7				Supply & Fixing of CO2 type Fire Extinguisher conforming to IS:15683:2018, charged with CO2 gas (purity 99.7% conforming to IS 15222), Powder coated Internal & External Surface Manganese steel ISI marked as per IS 7285 cylinder body , Wheel type Forged brass release valve ISI Marked as per IS 3224 with Inbuilt safety release device ((Fusible plug and Rupture Disc Type), 1.0 Mtr. Metal wire braided hose having minimum bursting pressure of 140 Kg/cm2, Horn with metallic thread connection, QR code for Product Traceability, including Fixing on wall with suitable Anchor Fasteners as required of following capacity. Test Certificates of all the Parameters along with Hydro test & Burst test (For Cylinder Body) Certificate from OEM / External NABL Accrediated Lab is to be submitted. All as per pre approved by Engineer in charge.Capacity 3.0 Kg.					6	Each	7332	43,992.00
8				Supply & Fixing of Dry Powder Agent (as per IS 4308:2019), ABC type Fire Extinguisher (Stored Pressure type) conforming to IS:15683:2018 , Powder coated Internal & External Surface Deep drawn cylinder body of Mild Steel CR2 grade conforming to IS: 513, Squeeze grip Forged brass release valve with Inbuilt safety release device, Diaphragm Type, 0 to 28 bar range pressure gauge, 450 mm long EPDM discharge tube, QR code for Product Traceability including Fixing on wall with suitable Anchor Fasteners as required of following capacity. Test Certificates of all the Parameters along with Hydro test & Burst test (For Cylinder Body) Certificate from OEM / External NABL Accrediated Lab is to be submitted. All as per pre approved by Engineer in charge.								-
				2 kg					6	Each	2767	16,602.00
1				Supply , installation testing and commissioning of Decorative lighting pole of 3-4 mtr height with post top / single arm/ double arm suitable for mounting of architectural luminaire .Pole is designed for street lighting , suitable for various architectural pendant types street light luminaries. This architecturally designed pole is structurally sound . Pole sections are joint together using MIG welding process , ,coated with epoxy zinc phosphate primer and finished using environmental stable polystyrene based paint . Base cover & embellishments shall be provided on the pole as shown . Built in control box with cast aluminium service door and safety rope /The control gear tray is pre wired with mCB terminal for loop in loop out arrangements. CE Make : K-lite /ligman /Philips/neri The bottom pipe section above the die cast aluminium embellishment shall bear the laser engraved LOGO (as prescribed) on a suitably shaped aluminium sheet .					30	EACH	55,200.00	16,56,000.00
2				Supply , installation testing and commissioning of modern heritage post top luminaire to be as per approved architectural design theme [approved by department and architects] 1 x 30W LED WW,CW,NW, upgraded with high performance light engines. Aesthetically designed sturdy construction ensures a long life against all weather conditions, maintaining initial performances through the lifetime of the installation. Designed for highest efficiency in terms of more lumens at reduced wattages WW type II LED lens Product offered asymmetrical light distribution. The luminaire comprises of die cast aluminium top cover with decorative supporting arms. Finished as per architectural design. The luminaire to include driver, connectors and surge protection devices . Make: klite /neri/Philips/legman					30	EACH	10,600.00	3,18,000.00
3				SITC of IP65 & IK06 6W spike / surface mounted compact spot light designed to provide directional light with beam angle 15° / 25° / 40°. Luminaire must be made of pressure die cast aluminium alloy of high corrosion resistance and non corrosive A2 stainless steel fasteners with clear toughened glass of atleast 4mm thickness. Surface mounting spike made of polypropylene black. Hybrid optics with lens & mirror finish pure aluminium reflector combination for higher efficiency, lower optical losses with optimum glare suppression. Swivel range of 0° - 90°. Single cable entrance M10 cable gland. Must have pure polyester powder coated graphite grey / anthracite grey / jet black and available in 3000K / 4000K / 5700K colour temperature, colour render index (CRI)>80, SDCM-3 MacAdam ,LED module with expected service life of at least 60,000 operating hours. Prewired with LED driver and suitable for operating on 240V, 50Hz single phase ac supply. CE & BIS Certified. As per Architectural design requirement and complete in all respects. Inhouse NABL Certified laboratory Make : Abby/ Osram/Philips /K-lite					50.00	Nos	7,498.00	3,74,900.00
5				SITC of IP66 IK07 dali based metal gobo projectors having floor/pole/wall mounted installation having optical compartments and base strip in die cast aluminum and transparent tempered sodium safety glass.Dual A2 stainless steel cable gland . Complete with output power supply cable /. Dali/DMX interface to be built to control remotely. Projections from the light to be approved by architect in charge. in as per architectural design requirement .Having atleast 25W, 3900lm . Make : iGuzzini /we-ef	4.00				4.00	Nos	2,80,850.00	11,23,400.00

				Total								1,75,72,363.00
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Madhya Pradesh State Tourism Development Corporation (MPSTDC)													
Orchha: A Medieval Splendour 2.0													
Measurement Book: Entry Plaza for Bridge													
S. No.	Item No.	Sub Item No	Item Name	ITEMS / DESCRIPTION	NO	L	B	H	Qty.	Unit	Rate	Amount	
A				Part-A Based on PWD SOR -2024									
1	2.1		Surface dressing	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m. in all kinds of soil.									
				Entry Plaza	1	62	16.5		1023	100 Sqm	803.00	8,214.69	
2	2.2		Jungle clearing	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.									
				Same qty Surface dressing					1023	100 Sqm	414.00	4,235.22	
3	2.6		Excavation soil	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soil									
				Entry Plaza	1	41	16.5	0.6	405.9				
				80% of Soil					324.72				
									325	cum	147.00	47,775.00	
4	2.7		Ordinary rock	Earth work in excavation/ by mechanical means (Hydraulic Excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed									
				Ordinary rock									
				20 % of Soil					81.18	cum	287.00	23,298.66	
5	2.24		Filling available excavated earth	Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.									
				70 % qty. Earth Work					284.13	cum	95.00	26,992.35	
6	2.26		Under floor filling stone dust	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming and compacting in layers not exceeding 20cm in depth and dressing complete Note: - Maximum thickness of this layer shall be 20 cm.									
				Entry Plaza	1	41	16.5	0.15	101.475				
				Say					101	cum	672.00	67,872.00	
7	2.27		Under floor filling	Supplying and filling in plinth under floors including watering ramming consolidating in layers not exceeding 20cm in depth and dressing complete.									
8		2.27.1	Hard murram hard copra	With hard muram having CBR >12 % at under floors including watering, ramming and compacting (minimum compaction 95% of MDD) in layers not exceeding 20cm in thickness and dressing complete. (Note:- maximum thickness of this layer to be provided shall be 30cm									
				Entry Plaza	1	41	16.5	0.45	304.425				
				Say					304	cum	393.00	1,19,472.00	
11	4.1		C.C. upto plinth level	Providing and laying in position cement concrete of specified grade excluding the cost of cantering and shuttering - All work upto plinth level									
		4.1.1	With 20mm metal	With 20mm nominal size graded stone aggregate									
		4.1.1.3	M-15	M-15 – Grade concrete									
				Parking	2	12	3	0.15	10.8				
					1	6	3	0.15	2.7				
									13.5	cum	4471.00	60,358.50	
		4.1.2	With 40 mm metal	With 40mm nominal size graded stone aggregate.									
		4.1.2.2	M-10	M-10Nominal (Mix-1 Cement : 3 sand : 6 graded stone aggregate)									
				Pathway	1	22	20	0.15	66	cum	3,808.00	2,51,328.00	
12	5.2		RCC in walls, columns, pillars etc	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets etc. upto floor two level, excluding the cost of cantering, shuttering and finishing :									
		5.2.1	M-20	M-25 – Grade concrete									
				Patway Beam	4	22	0.3	0.3	7.92	cum	6,582.00	52,129.44	
14	5.9		Centering and Shuttering	Centering and shuttering in cluding strutting, propping etc. and removal of form for:									
15		5.9.1	Upto plinth	Foundations, footings, bases of columns, etc. for concrete upto plinth level	8	22	0.3		52.8	Sqm	190.60	10,063.68	

16	5.16		Reinforce ment	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detailing IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete . (Note:- 1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge. 2. No extra payment shall be done for overlaps and/or couplers. 3.Couplers shall be conforming to IS code on "Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification")									
		5.16.6	TMT/TMX	Thermo-Mechanically Treated bars. (TMT/TMX) FE 500 or more conforming to IS 1786			7.92	120	950	Kg	80.00	76,000.00	
17	7.1		RR masonry in foundatio n and plinth	Random rubble masonry with hard stone in foundation and plinth including leveling up with cement concrete 1:6:12 (1 cement :6 sand : 12 graded stone aggregate 20mm nominal size) at plinth level with :									
18		7.1.1	Cement mortar 1:6	Cement mortar 1:6 (1 cement : 6 sand)									
				Toe Wall	1	54	1.2	0.9	58.32	Cum	4,147.00	2,41,853.04	
23	28.2		Supplying and stacking of good earth	Supplying and stacking of good earth specific useful for plantation at site including royalty if any and carriage (earth measured in stacks will be reduced by 20% for payment).									
				Landscape	1.00	50.00	2.50	0.6	75	Cum	511.00	38,325.00	
24	28.3		Supplying and stacking sludge	Supplying and stacking at site dump manure from approved source, including carriage (manure measured in stacks will be reduced by 8% for payment) :									
				Landscape	1.00	50.00	2.50	0.6	75	Cum	734.00	55,050.00	
25	28.8		Spreading of sludge, dung manure and / or good earth	Spreading of sludge, dump manure and / orgood earth in required thickness as per direction of Engineer-in-charge (Cost of sludge, dump manure and / or good earth to be paid separately).					75	Cum	16.00	1,200.00	
26	28.9		Mixing earth and sludge or manure (fym) farm yard manure	Mixing earth and sludge or manure in the required proportion specified or directed by the Engineer-in-charge.					75	Cum	11.00	825.00	
	28.10		Planting of Grass	Grassing with Selection No.1 grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth, if needed (the grass and good earth shall be paid for separately):									
27		28.10.5	Grassing with selected grass turf	Providing and laying Selected type of Grassturf with earth 50mm to 60mm thickness on existing ground prepared with proper level and ramming with required tools wooden and than rolling the surface with light roller, making the surface smoothen and light watering the same, as per direction of Engineer-in-Charge									
				Landscape	1.00	22.00	4.00		88				
					1.00	18.00	2.60		46.8				
					1.00	9.00	5.00		45				
					1.00	14.00	2.00		28				
					1.00	14.00	6.00		84				
					1.00	22.00	12.00		264				
									555.8	Sqm	99.00	55,024.20	
28	28.13		Preparatio n of beds for hedging and shrubby	Preparation of beds for hedging and shrubbery by excavating further 30cm deep of already prepared trench, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manureafter reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, levelling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and levelling as directed, within a lead of 50mlift upto 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately)									
				Landscape	1.00	22.00	6.00	0.3	39.6	Cum	67.00	2,653.20	
29	28.14		Digging holes refilling mixed with manure or sludge	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% : 1 part of stacked volume of manure after reduction by 8%) flooding with water, dressing including removal of rubbishand surplus earth, if any with all leads and lifts (cost of manure, sludge or extra good earth if needed to be paid for separately) :									
		28.14.1	120 cm dia	Holes 120 cm dia and 120 cm deep.	10.00				50	Each	141.00	7,050.00	
		28.14.2	60 cm dia	Holes 60 cm dia and 60 cm deep.	10.00				40	Each	61.00	2,440.00	
		28.14.3	45 cm dia	Holes 45 cm dia and 45 cm deep.	10.00				40	Each	19.00	760.00	

30	28.15		Planting different variety of plants	Providing and planting different variety of plants of approved quality and sizes as mentioned including making pits of required size at site, refilled with B.C. Soil mixture manuring and pesticide etc. complete (to be paid separately) including watering and 90 days maintenance from the date of final bill as per direction of Engineer-in-Charge complete in all respect (B.C. Mixture paid separately).								
31	28.15.1		Shrubs (75-90 cm height)	Bahunia Tomentosa, Beloperone Species, Caselpinnia Pulcherima, Bird of Paradise, Callandra Emarginata, Callandra Hybrida, Cassia Bi flora, Cassia Laevigata, Cestrum Nocturnum, Dombeya Mastersii, Euphorbia Caracasana, Euphorbia Pulcherima, Excorea bi color, Excorea tri color, Ficus Blackii, Ficus Reginold, Ficus Panda, Gardenia, Gulphinia, Jasminoides, Hamelia Pattens, Heliconia, Hibiscus Rosasinensis, Hibiscus Verigated, Hibiscus Viceroy, Jatropa Multifida, Largestomia Indica, Malpighia Coccigera, Murraya Exotica, Murraya Koeniggi, Murraya Sambucum, Mussaenda Erythrophylla, Nerium Oleander, Nyctanthus Arbortristis, Plumbago Capensis, Putranjeeva Roxburghii, Tabernaemontana Coronaria, Tabernaemontana Divaricata, Tecoma Gaudi Chaudi, Tecoma Stans, Thevetia Nerifolia, Thuja Compacta and equivalent plants.	40.00				40	Sqm	80.00	3,200.00
32	28.15.2		Creepers plants (height :30cm to 45 cm)	Allamanda Cathartica, Allamanda Grandiflora, Allamanda Violacea, Begonia Venusta, Boughan Villas (Variety : Butiana, Lady Mary Bearing, Mahaara, Mohan, Scarlet Queen Variagata, Glabra Formosa, Peruviana Odissi, Partha, Shubhra, Thimma, Spectabilis, L.N. Birla, Refulgens), Clerodendrum Splendens, Clerodendrum Thompsonae, Ipomea Purpurea, Jasminum Grandiflorum, Jasminum Humile (Yellow), Passiflora Caerulea (Rakhi Bel), Petrea Volubilis, Quis Qualis Indica, Tecoma Grandiflora, Veronia Elaegnifolia (Curtain Creeper), Mandvella, Garlic Creeper, Callimitis	40.00				40	each	50.00	2,000.00
33	28.15.3		Ground cover plants height: 30cm-45cm	Alpinia Verigated, Alternanthera species, Aspyragus Myerri, Aspyragus Springenii, Aspidistra, Canna (regular, Dwarf), Chlorodendron Inermii, Chlorophytum (Green), Chlorophytum verigated, Coffea Chinensis, Dianella Verigated, Durranta (Goldiana, Green, Verigated), Euphorbia Milli hybrid, Ipomea (Golden leaves), Iresine herbstii, Juniper Prostata, Juniper Africana, Ophiopogon plant, Ophiopogon jaburan, Portulacaria Afra (jade Plant), Schefflera Green, Schefflera verigated, Setcreasea Purpurea, Syngonium (Butterfly) species, Syngonium miniature, Syngonium Dwarf, Syngonium variegated, Tradescantia, Wadelia Trilobata, Zebrina Tradescantia, Pendanas, Spider Lily Black, Spider Lily verigated, Aclypa (Red, Green, Mini), Lantana (Red, Yellow, Purple, White, verigated), Haemalia Mini and similar plants.	20.00				20	each	50.00	1,000.00
34	28.19		Excavation in dumped stones or malba	Excavation in dumped stones or malba including stacking of serviceable and unserviceable material separately and disposal of unserviceable material lead upto 50 m and lift upto 1.5 m disposed material to be neatly dressed.	1.00	21.00	6.00		37.8	Cum	155.00	5,859.00
35	28.32		Anti termite treatment of grass	Anti Termite treatment of Lawn area through premise 30.5%l.P, one liter premise diluted in 499 litres water and applying solution @1.00 liter solution per sq.m lawn or bed area. (Two application) i/c cost of chemical and as per direction of Engineer-in-Charge.					555.8	Sqm	10.00	5,558.00
				Total Civil								11,70,536.98
B				Part- B Non SOR Civil								
19		NSOR	cobble sand	Providing and laying shaped cobble sand stone 80 -100 mm thick average thickness size of cobal stone 150x150 mm as directed laid on average 25-30 mm thick motor base 1:3 1 (1cement : 3 sand) with admixture of cement hardener of approve make like pidilite, Fosroc or equivalent including compaction and proper embedding/ laying of shaped cobble stone in design with gap of 8 -10 mm all around the stone as directed and filling of the joints with cement motor 1:2 (1 cement:2 send) with pigment to much the colour and shade looking edge with cc (M-20) top cleaning with hard wire brush, finished etc. with all respect including all wastages, transportation etc. complete								
				Pathway	1.00	20.00	20.00		400	Sqm	2240.97	8,96,388.00
20		NSOR	Kerb Stone	Providing and Fixing fine dressed "kerb stone (sand stone) along with path way /gardening, tapper/round with top edges in cement sand mortar 1:3 including pointing with white cement an admixture of pigment complete in all respect as per direction of Engineer incharge. Size 100 x 450 mm								
				Pathway	2.00	125.00			250	RMT	1550.00	3,87,500.00
21		NSOR	Bench	Providing and fixing sand stone bench of size 1900x 450mm and 650mm high. The bench to be made using 100mm thick red/white sand stone slabs with carving and 2 No's carved supports size of 200x450x650mm of approved type using relevant fixing details as required or as directed by the Architect Item to include necessary fixing details fixing of bench on floor if required cleaning and hand polishing of sand stone surfaces etc. complete.								
				Landscape	8.00				8	Each	33,400.00	2,67,200.00
22		NSOR	Dustbin	Providing & Fixing of Stone Dustbin as per traditional design made out of red/ white sand stone overall size 600(L)x380(D)x700(H)mm . 40 mm thick sand stone as per approved design jali fixed on 4 pillar size 100x100 thick 700mm height, inside 1 stainless steel container (4mm thick) of size 360 mm bottom, 470 mm top and 530 mm height fixed with pivot system supported with stone pillar fixed in ground 200 mm embedded in ground with necessary earthwork and concreting etc. Complete as per details and drawings and as directed by engineer incharge.	2.00				2	Each	27,500.00	55,000.00
				Total								16,06,088.00
C				Part-C Based on Electrical SOR -2024								

40	41.1			Supply of XLPE insulated power cable (conforming IS -7098 PART-I) 1100 volts grade , 1 core2 core 31/2 core 4 core ISI marked with alu . Stranded / solid conductor								
		41.1.10	4 core armoured	4 core armoured								
		41.1.10.1	6 sq mm	6 sq mm	1,000.00				1000	mtr	151.00	1,51,000.00
		41.1.10.2	10 sq. mm.	10 sq. mm.	1,000.00				1000	mtr	181.00	1,81,000.00
41	41.14		Double wall corrugated pipes (DWC) of HDPE	Supplying and installation double wall corrugated pipes (DWC) of HDPE (IS 14930 PART II - marked) for cable laid underground with necessary material and at required depth upto 90cm . Below road/ ground surface , excluding excavation , back filling with excavated material , ramming and making sthe surface good								
		41.14.1	50.00mm outside dia.	50mm outside dia	800.00				800	mtr	133.00	1,06,400.00
		41.14.4	110.00mm outside dia	110mm outside dia	500.00				500	mtr	252.00	1,26,000.00
42	41.15		Cable laying	Cable laying								-
		41.15.1	Laying, 1.1KV grade of size not exceeding 25 sq. mm	Laying of one number armoured / unarmoured power cable 1.1KV grade of size not exceeding 25sq mm direct in ground including excavation in all soil / murrum / soft rock / sand cushioning , protective covering and refilling the pit etc as required	1,500.00				1500	mtr	230.00	3,45,000.00
43	41.8		Pin terminal lugs	Supplying & fixing pin terminal lugs as per ISS specification suitable for cable evenly cramped with high pressure tool & connection to switch gear terminal as required complete								
		41.8.1	Aluminum lugs pin type	Aluminium lugs pin type								
		41.8.2	upto 16sq mm conductor	upto 16sq mm conductor	300.00				300	each	19.00	5,700.00
44	29.27		LT panel	Supply, fixing, testing and commissioning wall/ floor mounted LT panel primer coated with power coated paint & provided with required gasket for dust /vermin proof with degree of protection IP42 suitable for 415V 3 phase 50hz, 4 wire system fabricated out of CRCA sheet upto 2mm thick (1.6mm for doors) duly comaprtmentalized for incomer, bus section, outgoing, cable alleys & CT PT ampere meter, volt meter, selector switches, frequency meter phase indicating , energy meter complete including cost of bus bars supports deattachable cable glands plates, 2 earthing terminals, internal wiring & fixing of spearately supplied MCBs. MCCBs, ACBs panel mounted changeover switches/ SFU s etc as required but excluding cost of bus bar strips. Ampere meter, voltmeter, selecor switch as per approved design & specification .	500.00				500	kg	397.00	1,98,500.00
45	29.28		LT Panel Accessories	supply and fixing of LT panel accessories of approved make in existing LT panel including connections etc as required as per specification								-
		29.28.4	multifunction meter	multifunction meter	1.00				1	nos	2,587.00	2,587.00
		29.28.5	Aluminium bus bar strips	Aluminium bus bar strips with PVC sleeves	100.00				100	kg	284.00	28,400.00
46	27.3		MCCB 3Ph & N, 4Pole, 50Hz, 415V (thermal - magnetic release)	Supply of ISI marked and approved make of moulded case circuit breaker (MCCB) suitable for 3 phase & N 4 pole 50HZ ,415V (Ics= 100%Icu)AC supply with TM based having respective breaking capacity (KA) at 415V cited against their range standard conforming to IS /IEC 60947-2								-
		27.3.1	MCCB 63 to 100A, 25kA, 4P	MCCB 63 to 100A ,25KA , 4P adjustable overload setting 80%-100% of In , adjustable short circuit setting 6-10 In 4pole	2.00				2	Nos	9,781.00	19,562.00
		27.3.3	MCCB 160A, 25kA, 4P	MCCB 160A 25KA 4P adjustable overload setting 80%-100% of In , adjustable short circuit setting 6-10 In 4pole	2.00				2	Nos	15,835.00	31,670.00
47	27.8		MCB 'C' Series, 240/415V, 50 Cycle, 10kA/15kA	Supply of ISI marked and accepted standard of miniature circuit breaker (MCB) of C series with short circuit , indication , suitable for 240/415V Volts , 50 cycle , 10KA / 15KA value AC supply conforming to IS 8828: 1996 IEC : 60898: 2002 & 60947-2 but without enclosure								
		27.8.1	Single pole	Single pole								
		27.8.1.2	MCB SP 6A to 32A, 10kA	MCB SP 6A to 3A 10KA rating	40.00				40	Nos	263.00	10,520.00
		27.8.2	Double pole	Double pole								
		27.8.2.2	MCB DP 6A to 32A 10KA rating	MCB DP 6A to 32A 10KA rating	20.00				20	Nos	887.00	17,740.00

		27.8.3	Three pole	Three pole								
		7.8.3.2	MCB TP 6A to 32A 10KA rating	MCB TP 6A to 32A 10KA rating	6.00				6	Nos	1,411.00	8,466.00
				Total								12,32,545.00
D				Part- D Non SOR Electrical								
48		Nsor	EV Charging station	Supply , installation , testing and commissioning of EV Charging station 9.9KW capacity(3X3.3 KW), AC universal Charger complete with following specification. 9.9kW ACWallbox Charger composed of main control unit, protection and metering including power wiring, cables and other electrical accessories	3.00				3	Each	3,50,000.00	10,50,000.00
49		Nsor	EV Charging station	Supply , installation , testing and commissioning of EV Charging station 60 KW capacity, DC fast Charger with dual gun output complete with following specification. including power wiring, cables and other electrical accessories	1.00				1	Each	22,50,000.00	22,50,000.00
36		Nsor	pole	SITC of architecturally designed pole (all designs to be approved by department) of Height 6 mtr with flower basket .Bracket with two arm . Pole Thickness approx- 2.9 / 2.9 / 2.5/ 2.5 thickness, is designed for street lighting, suitable for various pendant type street light luminaires.This architecturally designed pole is structurally sound. Pole design parameters vary depending on the type of bracket and loading factor. Pole sections are swaged and joint together using special v groove technique by certified welders using high end MIG welding processes Coated with epoxy zinc phosphate primer and finished using environmentally stable polyurethane based paint Shot blasting using steel shots (grade -S280) + grid (grade GP-25) material. Ratio to be used- 2:1 ratio (for ex: 2 tones of shots we have to add 1 ton grid) Built-in control box with cast aluminium service door and safety rope. The control gear tray is prewired with MCB, terminal connectors for loop-in loop-out arrangement. CE-Conformity mark. Electrical Junction box 325 x 90 Base plate 7250 x 12thk, J Bolt with 4 nos. of M16 Nut 2 nos of Plain washer with 500mm depth. 4 Elongated holes to suit M16 bolts at CC 180, Cable entry hole Ø70. Wind speed consideration (m/Sec) 50m/sec IS 875 part 3:1987, Material for tubes Steet of Grade	15				15	EACH	77,200.00	11,58,000.00
37		Nsor	post top luminaire	Supply , installation testing and commissioning of modern heritage post top luminaire to be as per approved architectural design theme [approved by department and architects 1 x 60W LED WW,CW,NW, upgraded with high performance light engines. Aesthetically designed sturdy construction ensures a long life against all weather conditions, maintaining initial performances through the lifetime of the installation. Designed for highest efficiency in terms of more lumens at reduced wattages WW type II LED lens Product offered asymmetrical light distribution. The luminaire comprises of die cast aluminium top cover with decorative supporting arms. Finished as per architectural design. The luminaire to include driver, connectors and surge protection devices . Make: klite /neri/Philips/legman	15				15	EACH	15,600.00	2,34,000.00
38		Nsor	spike Light	SITC of IP65 & IK06 6W spike / surface mounted compact spot light designed to provide directional light with beam angle 15° / 25° / 40°. Luminaire must be made of pressure die cast aluminium alloy of high corrosion resistance and non corrosive A2 stainless steel fasteners with clear toughened glass of atleast 4mm thickness. Surface mounting spike made of polypropylene black. Hybrid optics with lens & mirror finish pure aluminium reflector combination for higher efficiency, lower optical losses with optimum glare suppression. Swivel range of 0° - 90°. Single cable entrance M10 cable gland. Must have pure polyester powder coated graphite grey / anthracite grey / jet black and available in 3000K / 4000K / 5700K colour temperature, colour render index (CRI)>80, SDCM-3 MacAdam ,LED module with expected service life of at least 60,000 operating hours. Prewired with LED driver and suitable for operating on 240V, 50Hz single phase ac supply. CE & BIS Certified. As per Architectural design requirement and complete in all respects. Inhouse NABL Certified laboratory Make : Abby/ Osram/Philips /K-lite	20.00				20	Nos	7,498.00	1,49,960.00
39		Nsor		Supply, Installation testing and Commissioning of adjustable fixture IP65 Made of die cast aluminium, lens protected by tempered Glass Visior , powdered painted grey,white, CRI-80 , 2 step MacAdam ,L70/ B10 >50,000 hours having atleast 3W. Complete with power supply , mounting arrangement ,as per architectural design requirement .Make : Abby, Philips, Osram /K-lite	20.00				20	Nos	5,921.00	1,18,420.00
												49,60,380.00

Madhya Pradesh State Tourism Development Corporation (MPSTDC)													
Orchha: A Medieval Splendour 2.0													
Measurement Book: Orchha City Experience													
S.no	Item No.	Sub Item No	Item Name	ITEMS / DESCRIPTION	NO	L	B	H	Qty.	Unit	Rate	Amount	
A				Part-A- Based on Archaeology, Archives and Museums SOR 2022									
1	2.2			Removal of rust, existing coatings, mild scale, dirt, oil, grease, and other contaminants from steel sections using Micro sand with the help of pressure pump. (The rate is inclusive of all materials & labours involved except scaffolding).									
				Front side of toilet railing	2	8.7		1	17.40				
					2	12.6		1	25.20				
					2	4.5		1	9.00				
				Sharma Guest house	2	7.2		0.9	12.96				
				Hospital Gate	1	4.5		2	9.00				
				Judicial Magistrate Gate	4	6		2.75	66.00				
				Municipality	2	5.3		2	21.20				
					4	3.9		1.7	26.52				
				Gates	8	4		2.4	76.80				
				Railing	6	25		1.2	180.00				
									444.08				
									444.00	Sqm	277.00		1,22,988.00
2	2.4			Cleaning the sand stone surface and removing dirt, dust, bird dropping, grease, oil, algae, fungus, monkey beats, vegetable growth etc., including providing, applying and of 5% by washing the surface with liquid Ammonia chemical solution and other chemical cleaning agent as approved by Engineer-in charge, of approved brand and manufacturer, with the help of required scrubbers and also cleaning with machine operated water jet mixed with desired quantity of fine silica where ever required, without causing any scratching/ damage to the stone surface and finally washing the surface with clean water with the help of pressure jet machine, complete in all respect, including taking all precautions to safeguard ventilators, windows, doors etc. by suitable covering so as to avoid any damage to the building/ structure, all as per direction of Engineer-in-charge (The rate is inclusive of all materials & labours involved except scaffolding).									
				Toilet Wall	1	6.15		2.1	12.92				
					1	6.2		2.1	13.02				
				Municipality	1	30.5		3.6	109.80				
				Façade	1	42		4.5	189.00				
									324.74				
									325.00	Sqm	76.00		24,700.00
3	4.7			Stitching/repairing of structural cracks in the brick masonry using local brick & lime mortar matching the traditional lime mortar and bricks as existing in the historic structure after raking, cleaning and washing the cracks, as directed by Engineer-in-charge, and including all leads lifts and carriage. All complete.									
				Govt. School	1	10	0.45	3	13.50				
					1	15	0.45	3	20.25				
									33.75				
									34.00	Cum	5,617.00		1,90,978.00
8	5.7			Restoration and repairs of Lakhori/country brick masonry of Walls in lime surkhi mortar 1:2 or as colour matching mix and brick work match to the existing structure as original and including curing , Scaffolding where required and 5.0 m Lift from plinth level.									
	5.7.1			Lakhori Bricks of Size 200mmX100mmX40-50mm									
					1.00	15.00	0.45	2.20	14.85				
					1.00	15.00	0.45	2.20	14.85				
									29.70				
									30.00	Cum	11,455.00		3,43,650.00
10	5.3			Traditional Brick work in gauged arches in lime mortar 1:1:1 (1 lime : 1 coarse sand:1 surkhi) and including curing ,centering shuttering, Scaffolding where required and 5.0 m Lift from plinth level									
	5.3.3			Lakhori Bricks of Size 200mmX200mmX40-50mm									
				Arches	16.00	1.80	0.45	1.50	19.44				
					10.00	1.50	0.45	1.80	12.15				
									31.59				
									32.00	Cum	18,257.00		5,84,224.00
11	6.2			Providing & fixing 50 to 75 mm thick stone chajja in lime sand mortar 1:2 including making gola at junction with wall in lime concrete, 40% lime mortar & 20mm brick aggregate nominal size graded aggregates, drip course etc complete including 20mm thick plastering in Lime Surkhi Mortar 1:2 (1 Lime Putty: 2 Surkhi) where ever required, racking of joints, curing etc complete									
				Chajja	1.00	35.00	0.75		26.25	Sqm	1,443.00		37,878.75
12	6.6			Removal & refixing of stone chajja 50 to 75mm thick, stone used to be similar to the existing ones at the site, cutting in proper shape & providing interlocking keys in the new as well as old stone for proper bonding including finishing the edges in all respects in lime surkhi (1 lime putty:2 surkhi)									
				Chajja	1.00	35.00	0.75		26.25	Sqm	1,332.00		34,965.00

13	6.12		Providing new/ restoration of decorative red sandstone brackets as per the original details found on site. The damaged portions of the original bracket to be carefully dismantled without damaging the adjacent areas, and replacing the same with new detail of the same size and design. Sample of the terra cotta bracket to be shown to the Engineer-in-charge for approvals before procuring and fixing the same on site. Item to include all necessary anchoring details, scaffolding if required to be paid separately etc complete. Mode of Measurement: Item to be paid only for the part of the bracket made new and not the entire bracket.									
			Bracket	25.00	0.60	0.75	0.10	1.13	Cum	42,537.00	47,854.13	
14	6.14		Providing and fixing decorative red sandstone columns as per the original details found on site of . The damaged portions of the original column to be carefully dismantled without damaging the adjacent areas, & replacing the same with new detail of the same size & design. Sample of the terra cotta column to be shown to the Engineer-in-charge for approvals before procuring & fixing the same on site. Item to include all necessary anchoring details, scaffolding if required etc complete. Mode of Measurement: Item to be paid only for the part of column made new or restored & not the entire column unless the same is made completely new.									
			Columns	20.00	0.30	0.30	1.50	2.70	Cum	20,108.00	54,291.60	
15	6.15		Providing & Fixing fine finished matching Stone Jali as per design/pattern matching with the existing and 50 mm to 75 mm thick									
	6.15.3		Using Shipuri Red sand stone									
			Columns	20.00	1.20		1.50	36.00	Sqm	10,000.00	3,60,000.00	
16	6.17		P/F matching stone dasa in 18" x 4" with gola on one edge as per design in Lime Surkhi mortar 1:2.									
			Municipality	1	71			71.00				
			School	1	201			201.00				
								272.00	Rmt.	1,004.00	2,73,088.00	
18	8.21		Repairing ornamental plaster works to match with the existing design using lime plaster (1 lime putty:1 surkhi)									
			Building	1	90		1.5	135.00	Sqm	1,641.00	2,21,535.00	
19	8.22		Stucco work in lime, surkhi(1:2) as per traditional practices and design, the mortar should be prepared by grinding mill only. The thickness varies from 10mm to 100mm as per design.									
				1	70		1.2	84.00	Sqm	1,460.00	1,22,640.00	
	8.28		Flush/Ruled/Struck or weathered lime pointing 1:2(1 Lime putty :2 Surkhi).									
	8.28.1		On stonework									
			Toilet Wall	1	22		2.5	55.00				
			Municipality	1.00	29.00		2.90	84.10				
								139.10	Sqm	231.00	32,132.10	
20	8.35		Providing and applying pigmented lime wash in 3 coats to internal plaster surfaces with careful mixing of pigments to match existing/proposed colour scheme as per Architect's instructions, Item to include providing test patches for approval of colour and finish by the Architect or Engineer-in-Charge before applying the same									
			Hospital Wall outer	1	57.2		2	114.40				
				1	16.4		5.2	85.28				
				1	22		3.2	70.40				
			Municipality	1	120		3.2	384.00				
			Government Higher Secondary School	1	130		2.5	325.00				
			Power Grid	1	110		2.6	286.00				
								1,265.08				
								1,265.00	Sqm	85.00	1,07,525.00	
21	8.16		Lime punning with lime putty mixed with Gur,bhel,Urd and other ingredients followed by grinding to fine paste for smooth finish as per direction of Engineer-In-charge inclusive up to 4.5m high and scaffolding etc complete.									
				1	80		3.4	272.00	Sqm	442.00	1,20,224.00	
22	8.37		Scraping & Removing of white wash/ distemper/oil paint /algae etc from plain plaster & surfaces gently with carefully to keep intact the old designs with the help of chemicals as required.									
			Toilet Front	1	23.1		0.7	16.17				
				1	5		0.7	3.50				
			Judicial Magistrate	1	118		2.9	342.20				
			Municipality	1	46.9		2.9	136.01				
			Near Municipality	1	41.1		1.8	73.98				
			Government Higher Secondary School	1	130		2.5	325.00				
			Power Grid	1	110		2.6	286.00				
								1,182.86				
								1,183.00	Sqm	62.00	73,346.00	
23	8.25		Repairs to plaster of thickness 10 mm to 30 mm in patches of area 2.5 sq. meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, preparation of mortar by traditional practice (by hand grinder) in 3 course & loi, tamping, beating, till the shrinkage cracks are disappear disposal of rubbish to the dumping ground within 50 metres lead with lime									
			Municipality	1	25		2.9	72.50	Sqm	339.00	24,577.50	
24	8.29		Ruled Pointing on brickwork with lime surkhi mortar 1:2 (1 lime putty :2 Surkhi)									
			Municipality	1	25		2.9	72.50				
				1	35		3.2	112.00				
								184.50				
								185.00	Sqm	301.00	55,685.00	

25	8.31			Repointing of raked out joints of Random rubble masonry by using lime mortar 1:1:1(1 Lime:1 coarse sand:1 Brick jeera)									
				Topachi Haveli Wall	1	65.4		4.9	320.46				
				Judicial Magistrate	1	16.4		0.9	14.76				
				Municipality	1	25.1		4.1	102.91				
				Near Municipality	1	25.1		4.1	102.91				
									541.04				
									541.00	Sqm	415.00	2,24,515.00	
26	8.33			Khamira colour washing as per traditional practice to prepare the khamira the lime should be slaked for atleast 7- 10 days and regularly it should be stirred by adding curd, gugal, and filtered properly before application to the surface									
				Near Municipality	1	38		1.8	68.40				
				Government Higher Secondary School	1	45		2.5	112.50				
									180.90				
									181.00	Sqm	43.00	7,783.00	
27	8.39			Lime Surkhi Plaster 1:2 (1 Lime : 2 Surkhi) including preparation of mortar by traditional practice (by grinding) in 3 course for base coarse and subsequent course & Loi, tamping, beating, till the shrinkage cracks disappear. The work is to be done with all leads and lift as the work is of restoration nature as per Archaeology practice on old walls and other surface including removal of old loose and decayed plaster, each coat to be done after 3 days of previous coat.									
	8.39.1			25 mm thick (in 3 Coats)									
				Hospital Wall inside	1	57.2		2	114.40				
				Municipality	1	120		3.2	384.00				
									498.40	Sqm	453.00	2,25,775.20	
	8.39.2			45 mm thick (in 5 coats)									
				Hospital Wall outer	1	16.4		5.2	85.28				
					1	22		3.2	70.40				
				Topachi Haveli Wall	1	14		4.3	60.20				
									215.88				
									216.00	Sqm	815.00	1,76,040.00	
29	11.2			Providing and fixing horizontal chajja of stone 40 mm thick and upto 80 cm wide projection in lime mortar 1:3 (1 lime : 3 coarse sand) including pointing in lime mortar 1:2 (1 lime cement : 2 stone dust) with an admixture of pigment matching the stone shade.									
	11.2.1.2			Red Sand stone 41mm to 50 mm thick					35.00	Sqm	1,110.00	38,850.00	
	12.4			Stone consolidation-removing the loose/damaged stone and reconsolidating with new stone/reusable stone with lime mortar(1:3) wherever necessary									
				Topachi Haveli Wall	1	10	0.45	3.2	14.40				
									14.40	Cum	5,839.00	84,081.60	
32	13.2			Careful removal of existing deteriorated/ damaged/ weathered lime plaster without damaging the below surfaces and including safety precaution, scaffolding and efficient precise tools for removing of plaster as directed by Engineer-in-charge.									
				Hospital Wall outer	1	16.4		5.2	85.28				
					1	22		3.2	70.40				
					1	57.2		2	114.40				
				Municipality	1	120		3.2	384.00				
									568.80				
									569.00	Sqm	225.00	1,28,025.00	
33	13.4			Raking out joints of brick masonry surface to the required width and depth, with due care and precaution, by mechanical / manual means, including preparing and cleaning the surface for re-pointing/refilling of joints, including disposal of rubbish to the dumping ground within 50 metre lead.	1	35		5.2	182.00				
										Sqm	199.00	36,218.00	
35	15.1			Erecting double scaffolding system (cup lock type) on the exterior side of building/structure, up to 25 metre height, above ground level, including additional rows of scaffolding in stepped manner as per requirement of site, made with 40mm dia M.S. tube, placed 1.5 metre centre to centre, horizontal & vertical tubes joint with cup & lock system with M.S. Tubes, M.S. tube chalis, M.S. clamps and staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for execution of work of cleaning and/ or pointing and/ or applying chemical and removing it thereafter. The scaffolding system shall be stiffened with bracings, runners, connecting with the building etc wherever required, with essential safety features for the workmen/officials etc, complete as per directions and approval of Engineer-in-charge.	1	95		6	570.00				
				Note:- (1) The elevational area of the scaffolding shall be measured for payment purpose.									
				Note:- (1) The elevational area of the scaffolding shall be measured for payment purpose.									
36	15.5			Providing and Fixing salt galazed stoneware pipe for drain and spout for rain water including face cover like lion , duck , cow etc, making required hole in masonry for fixing the pipe, necessary repair making good the same. matching existing style and design as approved by Engineer-In-Charge etc complete.									
				b. 75mm to 100mm	25	5			125.00	Rmt.	3,507.00	4,38,375.00	
37	15.6			Providing and fixing in position Cast Iron grills or railings of any pattern shapes design including cutting and line welding of iron and necessary bolting with nut, bolts & fastener wherever required etc including all material complete.									
				Facade Railing	1	20	12.5		250.00				
				New pathway Railing	2	310	12.5		7,750.00				
									8,000.00	Kg	146.00	11,68,000.00	

48	4.5			Providing and laying lime concrete in foundation and plinth with 20mm down graded graded brick bats nominal size and lime mortar comprising of 1 lime putty : 1 Surkhi : 1 coarse sand rammed and finished with gur and belgiri treatment including scaffolding if necessary complete	1	25	2.1	0.15	7.88	Cum	4,790.00	37,721.25
				Total								54,80,886.13
Part-B Based on PWD SOR -2024												
1	2.1		Surface dressing	Surface dressing of the ground including removing vegetation and in- equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m. in all kinds of soil.								
				'New Paving walkways/ pavements								
				Near Pratham Darwaza	2.00	430.00	1.50		1,290.00			
				Near Ganesh Darwaza	1.00	317.00	1.50		475.50			
					1.00	117.00	1.50		175.50			
				Gundrai Darwaza	2.00	113.00	1.50		339.00			
					2.00	132.00	1.50		396.00			
					1.00	219.00	1.50		328.50			
					1.00	41.00	1.50		61.50			
									3,066.00			
									3,066.00	100 Sqm	803.00	24,619.98
2	2.6		Excavation soil	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soi								
				Near Pratham Darwaza	2.00	430.00	1.50	0.60	774.00			
				Near Ganesh Darwaza	1.00	317.00	1.50	0.60	285.30			
					1.00	117.00	1.50	0.60	105.30			
				Near Topchi Haveli	1.00	650.00	1.50	0.60	585.00			
					1.00	670.00	1.50	0.60	603.00			
				Near Betwa Ghat	1.00	120.00	1.50	0.60	108.00			
					1.00	123.00	1.50	0.60	110.70			
					1.00	119.00	1.50	0.60	107.10			
					1.00	160.00	1.50	0.60	144.00			
				Gundrai Darwaza	2.00	113.00	1.50	0.60	203.40			
					2.00	132.00	1.50	0.60	237.60			
					1.00	219.00	1.50	0.60	197.10			
					1.00	41.00	1.50	0.60	36.90			
					1.00	287.00	1.50	0.60	258.30			
					1.00	390.00	1.50	0.60	351.00			
				Near Ram Raja Temple	1.00	125.00	1.50	0.60	112.50			
					1.00	100.00	1.50	0.60	90.00			
					1.00	170.00	1.50	0.60	153.00			
					1.00	340.00	1.50	0.60	306.00			
					1.00	410.00	1.50	0.60	369.00			
				Near Kanchana Ghat	1.00	130.00	1.50	0.60	117.00			
									5,254.20			
				70 % of Soi					3,677.94			
									3,678.00	cum	147.00	5,40,666.00
3	2.7		Ordinary rock	Earth work in excavation/ by mechanical means (Hydraulic Excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed								
		2.7.1	OR	Ordinary rock					1,800.00			
				30% of Rock					1,576.26			
									1,576.00	cum	287.00	4,52,312.00
4	2.24		Filling available excavated earth	Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.								
				70 % of Soi					3,678.00	cum	95.00	3,49,410.00
5	2.26		Under floor filling stone dust	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming and compacting in layers not exceeding 20cm in depth and dressing complete Note: - Maximum thickness of this layer shall be 20 cm.								
				Near Pratham Darwaza	2.00	430.00	1.50	0.15	193.50			
				Near Ganesh Darwaza	1.00	317.00	1.50	0.15	71.33			
					1.00	117.00	1.50	0.15	26.33			
				Near Topchi Haveli	1.00	650.00	1.50	0.15	146.25			
					1.00	670.00	1.50	0.15	150.75			
				Near Betwa Ghat	1.00	120.00	1.50	0.15	27.00			
					1.00	123.00	1.50	0.15	27.68			
					1.00	119.00	1.50	0.15	26.78			
					1.00	160.00	1.50	0.15	36.00			
				Gundrai Darwaza	2.00	113.00	1.50	0.15	50.85			
					2.00	132.00	1.50	0.15	59.40			
					1.00	219.00	1.50	0.15	49.28			
					1.00	41.00	1.50	0.15	9.23			
					1.00	287.00	1.50	0.15	64.58			
					1.00	390.00	1.50	0.15	87.75			
				Near Ram Raja Temple	1.00	125.00	1.50	0.15	28.13			
					1.00	100.00	1.50	0.15	22.50			
					1.00	170.00	1.50	0.15	38.25			

					1.00	340.00	1.50	0.15	76.50			
					1.00	410.00	1.50	0.15	92.25			
				Near Kanchana Ghat	1.00	130.00	1.50	0.15	29.25			
									1,313.55			
									1,314.00	cum	672.00	8,83,008.00
6	2.27		Under floor filling	Supplying and filling in plinth under floors including watering ramming consolidating in layers not exceeding 20cm in depth and dressing complete.								-
7		2.27.1	Hard murrum hard copra	With hard muram having CBR >12 % at under floors including watering, ramming and compacting (minimum compaction 95% of MDD) in layers not exceeding 20cm in thickness and dressing complete. (Note:- maximum thickness of this layer to be provided shall be 30cm								
				Near Pratham Darwaza	2.00	430.00	1.50	0.30	387.00			
				Near Ganesh Darwaja	1.00	317.00	1.50	0.30	142.65			
					1.00	117.00	1.50	0.30	52.65			
				Near Topchi Haveli	1.00	650.00	1.50	0.30	292.50			
					1.00	670.00	1.50	0.30	301.50			
				Near Betwa Ghat	1.00	120.00	1.50	0.30	54.00			
					1.00	123.00	1.50	0.30	55.35			
					1.00	119.00	1.50	0.30	53.55			
					1.00	160.00	1.50	0.30	72.00			
				Gundrai Darwaza	2.00	113.00	1.50	0.30	101.70			
					2.00	132.00	1.50	0.30	118.80			
					1.00	219.00	1.50	0.30	98.55			
					1.00	41.00	1.50	0.30	18.45			
					1.00	287.00	1.50	0.30	129.15			
					1.00	390.00	1.50	0.30	175.50			
				Near Ram Raja Temple	1.00	125.00	1.50	0.30	56.25			
					1.00	100.00	1.50	0.30	45.00			
					1.00	170.00	1.50	0.30	76.50			
					1.00	340.00	1.50	0.30	153.00			
					1.00	410.00	1.50	0.30	184.50			
				Near Kanchana Ghat	1.00	130.00	1.50	0.30	58.50			
									2,627.10			
									2,627.00	cum	393.00	10,32,411.00
50	4.1		C.C. upto plinth level	Providing and laying in position cement concrete of specified grade excluding the cost of cantering and shuttering - All work upto plinth level								
		4.1.1	With 20mm metal	With 20mm nominal size graded stone aggregate.								
		4.1.1.3	M-15	M-15 – Grade concrete								
				Near Pratham Darwaza	2.00	430.00	1.50	0.15	193.50			
				Near Ganesh Darwaja	1.00	317.00	1.50	0.15	71.33			
					1.00	117.00	1.50	0.15	26.33			
				Near Topchi Haveli	1.00	650.00	1.50	0.15	146.25			
					1.00	670.00	1.50	0.15	150.75			
				Near Betwa Ghat	1.00	120.00	1.50	0.15	27.00			
					1.00	123.00	1.50	0.15	27.68			
					1.00	119.00	1.50	0.15	26.78			
					1.00	160.00	1.50	0.15	36.00			
				Gundrai Darwaza	2.00	113.00	1.50	0.15	50.85			
					2.00	132.00	1.50	0.15	59.40			
					1.00	219.00	1.50	0.15	49.28			
					1.00	41.00	1.50	0.15	9.23			
					1.00	287.00	1.50	0.15	64.58			
					1.00	390.00	1.50	0.15	87.75			
				Near Pratham pathway kerb Stone	2.00	430.00	1.50	0.15	193.50			
				Near Ganesh Darwaja	1.00	317.00	0.30	0.15	14.27			
					1.00	117.00	0.30	0.15	5.27			
				Near Topchi Haveli	1.00	650.00	0.30	0.15	29.25			
					1.00	670.00	0.30	0.15	30.15			
				Near Betwa Ghat	1.00	120.00	0.30	0.15	5.40			
									1,304.51			
									1,305.00	cum	4,471.00	58,34,655.00
		4.1.2.2	M-10	M-10Nominal (Mix-1 Cement : 3 sand : 6 graded stone aggregate)								
				'New Paving walkways/ pavements								
				'Repair Existing Pavement/Pathway								
				Near Ram Raja Temple	1.00	125.00	1.50	0.15	28.13			
					1.00	100.00	1.50	0.15	22.50			
					1.00	170.00	1.50	0.15	38.25			
					1.00	340.00	1.50	0.15	76.50			
					1.00	410.00	1.50	0.15	92.25			
				Near Kanchana Ghat	1.00	130.00	1.50	0.15	29.25			
									286.88			
									287.00	cum	3,808.00	10,92,896.00
	4.2		C.C. upto floor two level	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets etc. upto floor two level, excluding the cost of centering, shuttering and finishing :								
		4.2.1	With 20mm metal	With 20mm nominal size graded stone aggregate								
		4.2.1.3	M-15	M 15 – Grade concrete								
				Judicial Magistrate	2	90	0.6	0.1	10.80			
									10.80		4,714.00	50,911.20

9	5.3		RCC in beams, floors, staircases etc	Reinforced cement concrete work (with 20 mm nominal size graded stone aggregate) in beams, suspended floors, roofs having slope of any degree landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral staircases above plinth level and upto floor two level excluding the cost of cantering, shuttering, finishing and reinforcement in concrete grade.									
				M-20 Grade Concrete									
				Pathway Beam	610.00	1.50	0.3	0.3	82.35				
									82.40	Cum	6,541.00	5,38,978.40	
10	5.9		Centering and Shuttering	Centering and shuttering including strutting, propping etc. and removal of form for:									
		5.91	Upto plinth	Foundations, footings, bases of columns, etc. for concrete upto plinth level									
				Pathway Beam	2.00	610.00		0.3	366.00				
									366.00	Sqm	190.60	69,759.60	
11	5.16		Reinforcement	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detailing IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete . (Note:- 1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge. 2. No extra payment shall be done for overlaps and/or couplers. 3. Couplers shall be conforming to IS code on "Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification")									
		5.16.6	TMT/TMX	Thermo-Mechanically Treated bars. (TMT/TMX) FE 500 or more conforming to IS 1786			82.40	120.00	9,888.00	Kg	80.00	7,91,040.00	
12	7.1		RR masonry in foundation and plinth	Random rubble masonry with hard stone in foundation and plinth including leveling up with cement concrete 1:6:12 (1 cement :6 sand : 12 graded stone aggregate 20mm nominal size) at plinth level with :									
		7.1.1	Cement mortar 1:6	Cement mortar 1:6 (1 cement : 6 sand)									
				Near Pratham Darwaza for Toe Wall	1.00	430.00	0.60	0.75	193.50				
									194.00	Cum	4,147.00	8,04,518.00	
38	9.1		Wood work in frames of doors, windows	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 and length (hold fast lugs or dash fastener shall be paid for separately)									
		9.1.1	2nd class teak wood	Second class teak wood	15	5.4	0.1	0.15	1.22	Cum	90,618.00	1,10,100.87	
39	9.5		Paneled wooden shutters excluding, panelling/ glazing	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws excluding, panelling/glazing which will be paid for separately, all complete as per direction of Engineer-in-charge.									
		9.5.1.1	2nd class teak wood	Second class teak wood									
		9.5.1.1	35 mm	35 mm thick shutters	15	1.05		2.1	33.08	Sqm	2,776.00	91,816.20	
40	9.6		Panelling, glazing and wire mesh in shutters	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick:									
		9.6.1	2nd class teak wood	Second class teak wood	15	1.05		2.1	33.08	Sqm	2,215.00	73,261.13	
		9.6.7.2	5 mm	5 mm thick glass pane (weight not less than 12.5 kg/sqm)	15	1.05		2.1	33.08	Sqm	1,046.00	34,596.45	
41	9.8		Glazed shutters using 4 mm thick float glass	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws.									
		9.8.1	2nd class teak wood	Second class teak wood	5	1.2		1.8	10.80	Sqm	3,408.00	36,806.40	
42	9.1		Extra for heavy glass panes	Extra for providing heavy sheet float glass panes instead of ordinary float glass in glazed doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured)									
		9.10.3	5.5 mm safety glass	5.5 mm safety glass	5	1.2		1.8	10.80	Sqm	400.00	4,320.00	
43	9.79		Brass tower bolts	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete									
		9.79.3	200mm	200x10 mm	30				30.00	Each	261.00	7,830.00	
44	9.80		Brass door latch	Providing and fixing bright finished brass door latch with necessary screws etc. complete.									
		9.80.2	250mm	250x16x5 mm	15				15.00	Each	225.00	3,375.00	
45	9.81		Brass handles	Providing and fixing bright finished brass handles with necessary screws etc. complete.									
		9.81.1	125 mm	125 mm	15				15.00	Each	181.00	2,715.00	
51	13.76		Mealamine polishing	Mealamine polishing on wood work by preparing the surface applying putty base course. Prepare the surface smooth by sand papering and then applying Mealamine polish with air compressor. One or more coats on old work.									
				Door	30	1.05		2.1	66.15				
				Window	5	1.2		1.8	10.80				
									76.95				
									77.00	Sqm	807.00	62,139.00	
53	13.78		Lettering	Lettering with black Japan paint of approved brand and manufacture.					500.00	per letter per cm height	1.45	725.00	

5	27.3		MCCB 3Ph & N, 4Pole, 50Hz, 415V (thermal - magnetic)	Supply of ISI marked and approved make of moulded case circuit breaker (MCCB) suitable for 3 phase & N 4 pole 50HZ /415V (Ics= 100%Icu)AC supply with TM based having respective breaking capacity (KA) at 415V cited against their range standard conforming to IS /IEC 60947-2									-
5.1		27.3.1	MCCB 63 to 100A, 25kA, 4P	MCCB 63 to 100A ,25KA , 4P adjustable overload setting 80%-100% of In , adjustable short circuit setting 6-10 In 4pole					40.00	Nos	9,781.00	3,91,240.00	
5.2		27.3.3	MCCB 160A, 25kA, 4P	MCCB 160A 25KA 4P adjustable overload setting 80%-100% of In , adjustable short circuit setting 6-10 In 4pole					4.00	Nos	15,835.00	63,340.00	
6	27.8		MCB 'C' Series, 240/415V, 50 Cycle, 10kA/15kA	Supply of ISI marked and accepted standard of miniature circuit breaker (MCB) of C series with short circuit , indication , suitable for 240/415V Volts , 50 cycle , 10KA / 15KA value AC supply conforming to IS 8828: 1996 IEC : 60898: 2002 & 60947-2 but without enclosure									-
6.1		27.8.1	Single pole	Single pole									-
6.2		27.8.1.2	MCB SP 6A to 32A, 10kA	MCB SP 6A to 3A 10KA rating					250.00	Nos	263.00	65,750.00	
6.3		27.8.2	Double pole	Double pole									-
6.4		27.8.2.2	MCB DP 6A to 32A 10KA rating	MCB DP 6A to 32A 10KA rating					40.00	Nos	887.00	35,480.00	
6.5		27.8.3	Three pole	Three pole									
6.6		7.8.3.2	MCB TP 6A to 32A 10KA rating	MCB TP 6A to 32A 10KA rating					20.00	Nos	1,411.00	28,220.00	
7	21.1		Sub-mains in recessed/concealed rigid steel conduit	Wiring of sub mains with PVC insulated cable FRLS with copper multi strand conductor ISI marked in recessed / concealed rigid steel ISI marked conduit of suitable size (conduit included) including accessories long neck threaded type , connection painting etc as required as per specification									-
7.1		21.1.2	3 Wire	3wire sub main									-
7.2		21.1.2.1		2.5sq mm cable					7,000.00	mtr	270	18,90,000.00	
				Total									1,01,13,678.00
D				Part-D Based on PWD Road SOR -2025									
15	2.3			Dismantling of Structures Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood, steel, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead upto 1000 metres.									
		(i)		Lime /Cement Concrete									
		B		Cement Concrete Grade M-15 &M-20									
				Old pathway dismental									
				Near Pratham Darwaza	2.00	430.00	1.50	0.30	387.00				
				Near Ganesh Darwaja	1.00	317.00	1.50	0.30	142.65				
					1.00	117.00	1.50	0.30	52.65				
				Near Topchi Haveli	1.00	650.00	1.50	0.30	292.50				
					1.00	670.00	1.50	0.30	301.50				
				Near Betwa Ghat	1.00	120.00	1.50	0.30	54.00				
					1.00	123.00	1.50	0.30	55.35				
					1.00	119.00	1.50	0.30	53.55				
					1.00	160.00	1.50	0.30	72.00				
				Gundrai Darwaza	2.00	113.00	1.50	0.30	101.70				
					2.00	132.00	1.50	0.30	118.80				
					1.00	219.00	1.50	0.30	98.55				
					1.00	41.00	1.50	0.30	18.45				
					1.00	287.00	1.50	0.30	129.15				
					1.00	390.00	1.50	0.30	175.50				
				Near Ram Raja Temple	1.00	125.00	1.50	0.30	56.25				
					1.00	100.00	1.50	0.30	45.00				
					1.00	170.00	1.50	0.30	76.50				
					1.00	340.00	1.50	0.30	153.00				
					1.00	410.00	1.50	0.30	184.50				
				Near Kanchana Ghat	1.00	130.00	1.50	0.30	58.50				
									2,627.10				
									2,627.00	Cum	628.00	16,49,756.00	
		(iii)		Dismantling Stone Masonry									
		E		Dismantling stone pitching/ dry stone spalls									
				Near Pratham Darwaza	1.00	430.00	1.50	0.30	193.50				
				Near Ganesh Darwaja	1.00	317.00	1.50	0.30	142.65				
					1.00	117.00	1.50	0.30	52.65				
				Near Topchi Haveli	1.00	650.00	1.50	0.30	292.50				
					1.00	670.00	1.50	0.30	301.50				
				Near Betwa Ghat	1.00	120.00	1.50	0.30	54.00				
					1.00	123.00	1.50	0.30	55.35				
					1.00	119.00	1.50	0.30	53.55				
					1.00	160.00	1.50	0.30	72.00				
				Gundrai Darwaza	1.00	113.00	1.50	0.30	50.85				
					1.00	132.00	1.50	0.30	59.40				
					1.00	219.00	1.50	0.30	98.55				
					1.00	41.00	1.50	0.30	18.45				
					1.00	287.00	1.50	0.30	129.15				
					1.00	390.00	1.50	0.30	175.50				
				Near Ram Raja Temple	1.00	125.00	1.50	0.30	56.25				
					1.00	100.00	1.50	0.30	45.00				
									1,850.85				

										1,851.00	Cum	272.00	5,03,472.00
2				Steel work in all types of sections upto a height of 5 m above plinth level.									
				Including dismembering						5.00	tonne	1,897.00	9,485.00
3	2.4			Dismantling of Flexible Pavements Dismantling of flexible pavements thickness more than 100 mm and disposal of dismantled materials up to a lead of 1000 meters, stacking serviceable and unserviceable materials separately						2,627.00	Cum	323.00	8,48,521.00
				Total									30,11,234.00
E				Part-D Non SOR Civil									
			Red sandstone flooring	40 mm thick machine-cut rubbed Sand stone (Red Shivpuri/ Basodha or local stone matching colour and hardness properties) on steps/ tread/ riser/ Landing/ Flooring, Best Quality Stone, as approved by Engineer-in-charge, with specific design and as per drawing up to any height, with necessary scaffolding/ centering etc., over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 sand) including pointing with cement mortar 1:2 (1 cement : 2 sand) with an admixture of pigment to match the shade of stone. For protection of stone, from weathered action coats of protection layer shall be apply on whole stone surface area, Stonework should have coated of water repellent silicone free (transparent in colour) in two or more coats of clear coat of make Killick Gaurd pidilite / k2 / Nippon/ equivalent. The process of coating should be followed: (i) cleaning of stone (ii) rubbing and polishing of stone (iii) first coat of clear algae and after drying of this coat, (iv) second coat of clear HD shall be applied. All this coating shall be done with spray paint machine until complete impregnation. All work shall be done in satisfactory manner and as per instructions of Engineer-in-charge.									
				Toilet Front & other area	15.0	1.20	18.0			325.73			
				'Old Pathway repair	2.00	103.50	1.2			248.40			
										574.13			
										574.00	sqm	2680.00	15,38,320.00
52		NSOR	shingles	Providing and fixing COUN IRY AR collection of double-layer roofing shingles comprises incredible color solutions that imitate diverse nature's shades and nuances. Vibrant color blends and expressive shadow lines create a wonderful dimensional visual image. Copper-containing basalt granules present algae growth on the roof Base : Fibre Glass. Type of bitumen oxidized. Flow resistance at etcnated temperature. °C, 110 degree. thickness per layer : 2.7mm+ 0.2mm. with Asian smart care waterproofing membrane thickness 2 mm . as directed by architect or as directed by engineer incharge including all labour and material complete. Make: Saintgobin/Technicol/Docke or Equivlent									
				Shop	13.00	3.00	1.5			58.50	Sqm	2,550.00	1,49,175.00
		NSOR	cobble sand Stone	Providing and laying shaped cobble sand stone 80 -100 mm thick average thickness size of cobal stone 150x150 mm as directed laid on average 25-30 mm thick motor base 1:3 1 (1cement : 3 sand) with admixture of cement hardener of approve make like pidilite, Fosroc or equivalent including compaction and proper embedding/ laying of shaped cobble stone in design with gap of 8 -10 mm all around the stone as directed and filling of the joints with cement motor 1:2 (1 cement:2 send) with pigment to much the colour and shade looking edge with cc (M-20) top cleaning with hard wire brush, finished etc. with all respect including all wastages, transportation etc. complete									
				Near Pratham Darwaza	1.00	140.00	1.20			168.00			
				Near Ganesh Darwaja	1.00	117.00	1.20			140.40			
					1.00	117.00	1.20			140.40			
				Near Topchi Haveli	1.00	220.00	1.20			264.00			
					1.00	160.00	1.20			192.00			
				Near Betwa Ghat	1.00	120.00	1.20			144.00			
					1.00	123.00	1.20			147.60			
					1.00	119.00	1.20			142.80			
					1.00	160.00	1.20			192.00			
				Gundrai Darwaza	1.00	113.00	1.20			135.60			
					1.00	132.00	1.20			158.40			
					1.00	150.00	1.20			180.00			
					1.00	41.00	1.20			49.20			
					1.00	147.00	1.20			176.40			
					1.00	175.00	1.20			210.00			
				Near Ram Raja Temple	1.00	125.00	1.20			150.00			
					1.00	100.00	1.20			120.00			
					1.00	170.00	1.20			204.00			
					1.00	160.00	1.20			192.00			
					1.00	160.00	1.20			192.00			
				Near Kanchana Ghat	1.00	130.00	1.20			156.00			
										3,454.80	Sqm	2240.97	77,42,103.16
		NSOR	Kerb stone	Providing and Fixing fine dressed "kerb stone (Sand stone) along with path way /gardening, taper/round with top edges in cement sand mortar 1:3 including pointing with white cement an admixture of pigment complete in all respect as per direction of Engineer incharge. Size 100 x 450 mm									
				Near Pratham Darwaza	2.00	140.00				280.00			
				Near Ganesh Darwaja	2.00	117.00				234.00			
					2.00	117.00				234.00			
				Near Topchi Haveli	2.00	220.00				440.00			
					2.00	160.00				320.00			
				Near Betwa Ghat	2.00	120.00				240.00			
					1.00	123.00				123.00			
					2.00	119.00				238.00			
					1.00	160.00				160.00			
				Gundrai Darwaza	2.00	113.00				226.00			
					2.00	132.00				264.00			
					1.00	150.00				150.00			
					2.00	41.00				82.00			
					1.00	147.00				147.00			

					1.00	175.00			175.00				
				Near Ram Raja Temple	2.00	125.00			250.00				
					2.00	100.00			200.00				
					2.00	170.00			340.00				
					2.00	160.00			320.00				
					2.00	160.00			320.00				
				Near Kanchana Ghat	2.00	130.00			260.00				
									5,003.00	RMT	1550.00	77,54,650.00	
1				Providing, carving and Fixing of interpretive signages in red/ white sand stone of size 1000x200x100 mm on inclined stone plane engraved map with bottom side carving, top side 2 no. bracket design size 380x305mm. Engraving of letters & Painting with black enamel paint & size of latter complete as per drawing and design. The signage stone shall be fixed on the post of same stone of size 1000x 600 x 100 above ground with necessary earthwork and concreting etc. Complete as per details and drawings and as directed by engineer incharge.	20.00				20.00	Each	67,060.00	13,41,200.00	
2				Providing & Fixing of interpretive signages made out of red/ white sand stone of trapezoidal shape having back height 600 mm & front height 280 mm & width on top 50 mm & bottom 300 mm etc. Engraving of letters & painting with black enamel paint & size of letters complete as per details and drawings and as directed by engineer incharge.	40.00				40.00	Each	9,800.00	3,92,000.00	
6				Providing and fixing sand stone bench of size 1900x 450mm and 650mm high. The bench to be made using 100mm thick red/white sand stone slabs with carving and 2 No's carved supports size of 200x450x650mm of approved type using relevant fixing details as required or as directed by the Architect Item to include necessary fixing details fixing of bench on floor if required cleaning and hand polishing of sand stone surfaces etc. complete.	60.00				60.00	Each	33,400.00	20,04,000.00	
7				Providing & Fixing of Stone Dustbin as per traditional design made out of red/ white sand stone overall size 600(L)x380(D)x700(H)mm. 40 mm thick sand stone as per approved design jali fixed on 4 pillar size 100x100 thick 700mm height, inside 1 stainless steel container (4mm thick) of size 360 mm bottom, 470 mm top and 530 mm height fixed with pivot system supported with stone pillar fixed in ground 200 mm embedded in ground with necessary earthwork and concreting etc. Complete as per details and drawings and as directed by engineer incharge.	60.00				60.00	Each	27,500.00	16,50,000.00	
46				Repairing of existing historic window/doors for hardware, rotten/ deteriorated parts. Proper fixing and making it operational with locking possibility including moulding, carving and polishing. Refer drawings for window types.	30.00	1.2		1.8	64.80	Sqm	1,150.00	74,520.00	
47				Labour charges for Removal & refixing of electrical wires/cables internal elevations in facade of Orchha including scaffolding as directed by Engineer in charge/ Architect, and including all leads, lifting of material in store. All complete.	1.00				1.00	Job	5,00,000.00	5,00,000.00	
				Painting & lining Work on wall with approved paint including base coat of primer as per drawing & design and direction of Engineer-in - charge.	1	120		2.4	288.00	Sqm	4,000.00	11,52,000.00	
				Festivals and Events									
1				Orchha Ram Leela Festival for 3 days(Annually conducted before Dussehera)									
				Stage and props					Day	3.00	1,25,000.00	3,75,000.00	
				Honorarium for artists					Each	20.00	50,000.00	10,00,000.00	
				Rental for equipments(sound and light)					Day	3.00	1,00,000.00	3,00,000.00	
				Travel and Stay of guests					Each	30.00	20,000.00	6,00,000.00	
				Marketing, branding, promotion and printing					Day	15.00	50,000.00	7,50,000.00	
												30,25,000.00	
2				Folk Dance Festival for 2 days (Annually conducted in spring)									
				Stage and props					Day	2.00	80,000.00	1,60,000.00	
				Honorarium for artists					Each	20.00	50,000.00	10,00,000.00	
				Rental for equipments(sound and light)					Day	2.00	1,00,000.00	2,00,000.00	
				Travel and Stay of guests					Each	10.00	20,000.00	2,00,000.00	
				Marketing, branding, promotion and printing					Day	10.00	50,000.00	5,00,000.00	
												20,60,000.00	
3				Orchha Cultural Festival for 3-4 days (conducted every alternate year)									
				Stage and props					Day	4.00	1,25,000.00	5,00,000.00	
				Honorarium for artists					Each	50.00	50,000.00	25,00,000.00	
				Rental for equipments(sound and light)					Day	4.00	1,00,000.00	4,00,000.00	
				Travel and Stay of guests					Each	30.00	20,000.00	6,00,000.00	
				Marketing, branding, promotion and printing					Day	30.00	50,000.00	15,00,000.00	
												55,00,000.00	
				Total								3,48,82,968.16	
F				Part- F Non SOR Electrical									
1				Labour charges for Removal & refixing of electrical wires/cables internal elevations in facade of Orchha including scaffolding as directed by Engineer in charge/ Architect, and including all leads, lifting of material in store. All complete.					1.00	Job	8,00,000.00	8,00,000.00	
2				Supply, installation testing and commissioning of signage pole tube made of steel grade of YS t 210. Base plate made of steel grade of E250. Pole quoted of epoxy zinc phosphate primer and finished using environmental stable polyuthreane based paint. height is 3277mm as per architectural design requirement for 2 poles or couple poles, Signage board is not part of this. Make :-K-lite / Osram /Philiphs / Bajaj					30.00	Nos	60,657.00	18,19,710.00	
3				Supply, installation testing and commissioning of signage pole tube made of steel grade of YS t 210. Base plate made of steel grade of E250. Pole quoted of epoxy zinc phosphate primer and finished using environmental stable polyuthreane based paint. height is 3200mm as per architectural design requirement. Signage board is not part of this .Make :-K-lite / Osram /Philiphs / Bajaj					30.00	Nos	31,278.00	9,38,340.00	

4				Supply , installation testing and commissioning of signage pole tube made of steel grade of YS t 210 . Base plate made of steel grade of E250 .Pole quoted of epoxy zinc phosphate primer and finished using environmental stable polyuthreane based paint . height is 2900mm as per architectural design requirement .Signage board is not part of this . Make :-K-lite / Osram /Philiphs / Bajaj					30.00	Nos	33,418.00	10,02,540.00
5				SITC of architecturally designed pole (all designs to be approved by department) of Height 6 mtr with flower basket .Bracket with two arm . Pole Thickness approx- 2.9 / 2.9 / 2.5/ 2.5 thickness, is designed for street lighting, suitable for various pendant type street light luminaires.This architecturally designed pole is structurally sound. Pole design parameters vary depending on the type of bracket and loading factor. Pole sections are swaged and joint together using special v groove technique by certified welders using high end MIG welding processes Coated with epoxy zinc phosphate primer and finished using environmentally stable polyurethane based paint Shot blasting using steel shots (grade - S280) + grid (grade GP-25) material. Ratio to be used - 2:1 ratio (for ex: 2 tones of shots we have to add 1 ton grid) Built-in control box with cast aluminium service door and safety rope. The control gear tray is prewired with MCB, terminal connectors for loop-in loop-out arrangement. CE - Conformity mark. Electrical Junction box 325 x 90 Base plate 7250 x 12thk, J Bolt with 4 nos. of M16 Nut 2 nos of Plain washer with 500mm depth. 4 Elongated holes to suit M16 bolts at CC 180, Cable entry hole Ø70. Wind speed consideration (m/Sec) 50m/sec IS 875 part 3-1987. Material for tubes Steel of Grade					210.00	EACH	77,200.00	1,62,12,000.00
6				Supply , installation testing and commissioning of modern heritage post top luminaire to be as per approved architectural design theme [approved by department and architects 1 x 60W LED WW,CW,NW, upgraded with high performance light engines. Aesthetically designed sturdy construction ensures a long life against all weather conditions, maintaining initial performances through the lifetime of the installation. Designed for highest efficiency in terms of more lumens at reduced wattages WW type II LED lens Product offered asymmetrical light distribution. The luminaire comprises of die cast aluminium top cover with decorative supporting arms. Finished as per architectural design. The luminaire to include driver, connectors and surge protection devices . Make: klite /neri/Philips/legman					210.00	EACH	15,600.00	32,76,000.00
				Total								2,40,48,590.00

Madhya Pradesh State Tourism Development Corporation (MPSTDC)					
Orchha: A Medieval Splendour 2.0					
Measurement Book: Hop-On-Hop-Off Service					
Sno	ITEMS / DESCRIPTION	Unit	Qty.	Rate	Amount
A	Part- A Non SOR Electrical				
1	Traditional Themed Transportation				
	12-15 Seater Electric Sightseeing Bus	10	Nos	12,50,000.00	1,25,00,000.00
	Supply and customization as per design of 14 Seater with fully covered body (electric bus as per the specifications 'Fully electric, Maximum speed 30-35 kmph , Range 70-80 km (minimum), Operating Voltage- 72V, Battery-Lead acid (or) Lithium ,Motor-7.5kW AC Motor, Controller-72V/450A Controller, Turning Radius-<6m, Braking Distance- <3m, Minimum Ground Clearance- 180 mm , Braking System- Four wheel brake system - Front hydraulic disc brakes + rear hydraulic drum brakes + hand operated parking brake + booster braking Electric braking system - Automatic slowd Accelerator-Electronic accelerator, Front Suspension- Helical coil spring with hydraulic shock absorbers on both sides Rear Suspension- Load bearing leaf springs with hydraulic shock absorbers on both sides Tyre size/Wheel size- 155-70 R13 or higher (tubeless) - MRF, CEAT or Equivalent Chassis-Seamless ladder type high tensile tubular steel with anti corrosive,electro deposited epoxy base coating for rust prevention Body-ABS 747 injection molded P.P.Panels infused with automotive grade U.V. resistant gloss color finish, Rooftop using high quality FRP Windshield-Sandwich glass laminated windshield with automotive finish and wiper Seat Material- Artificial leather seats with high quality foam cushions Dashboard- Analog/Digital instrument cluster, combination switch, battery display indicator, Seating Capacity-14 including driver, Number of Tyre-4, colour & design as per approved by consultant				
2	Signages at Stops for HOHO Services				
3	Supply , installation testing and commissioning of signage pole tube made of steel grade of YS t 210 . Base plate made of steel grade of E250 .Pole quoted of epoxy zinc phosphate primer and finished using environmental stable polyurethane based paint . height is 3277mm as per architectural design requirement for 2 poles or couple poles, Signage board is not part of this . Make :-K-lite / Osram /Philiphs / Bajaj	13.00	Nos	60,657.00	7,88,541.00
4	Supply , installation testing and commissioning of signage pole tube made of steel grade of YS t 210 . Base plate made of steel grade of E250 .Pole quoted of epoxy zinc phosphate primer and finished using environmental stable polyurethane based paint . height is 3200mm as per architectural design requirement . Signage board is not part of this .Make :-K-lite / Osram /Philiphs / Bajaj	10.00	Nos	31,278.00	3,12,780.00
	Total				1,36,01,321.00

Madhya Pradesh State Tourism Development Corporation (MPSTDC)					
Orchha: A Medieval Splendour 2.0					
Measurement Book: Website					
Sno	ITEMS / DESCRIPTION	Unit	Qty.	Rate	Amount
A	Part- A Non SOR Electrical				
1	Content Development for Website				
	360 Degree Photo Shoot, Audio Video Content creation on Historic significance (QR Code based) -360degree shoot -Final stitched HDRI Panoramic Images -To be delivered as per website requirement -Up-to 2 min audio video content on related subject including:- concept, scripting, storyboarding, shooting editing, and delivery of final video as per application/ website development approved format				
1.1	Both outside and inside of building areas (Building interior)	5	Location	4,43,690.00	22,18,450.00
1.2	Only Outside areas (building Façade)	25	Location	3,36,840.00	84,21,000.00
2	Audio Guided Systems for Attractions QR based App for Tracking and Feedback	1	Nos	25,43,690.00	25,43,690.00
	Total				1,31,83,140.00

Madhya Pradesh State Tourism Development Corporation (MPSTDC)					
Orchha: A Medieval Splendour 2.0					
Measurement Book: Skill Development Training					
Sno	Training	Number of Participants	No of sessions (training days)	Cost per person	Total Cost (per training session) (In Rs Lakhs)
1	E-rickshaw driver	15	1	12,000.00	1,80,000.00
2	Bundeli painting	100	16	12,000.00	12,00,000.00
3	Refresher course for Local Guide/ Tourist Escorts	35	5	15,000.00	5,25,000.00
4	Training Program for Housekeeping executive/ House Steward	40	3	12,600.00	5,04,000.00
5	Training Program for Nature / Eco Tourism Guides	15	6	25,600.00	3,84,000.00
6	Tourism Sensitization Program for Security Guards/ Tourism Police	30	3	6,700.00	2,01,000.00
	Total				29,94,000.00

Madhya Pradesh State Tourism Development Corporation (MPSTDC)					
Orchha: A Medieval Splendour 2.0					
Measurement Book: Tourism MSME Training					
Sno	Training	Number of Participants	No of sessions (training days)	Cost per person	Total Cost (per training session) (In Rs Lakhs)
1	Certification course for Local Guide	15	25	35,000.00	5,25,000.00
2	Refresher course for Local Guide/ Tourist Escorts	35	5	11,000.00	3,85,000.00
3	Sensitization workshops	100	5	12,000.00	12,00,000.00
4	Food vendors sensitization	35	5	30,000.00	10,50,000.00
5	Local product (Souvenir Handlooms, Cuisine)	20	1	5,000.00	1,00,000.00
6	Travel & Tour operator's workshops	40	1	8,000.00	3,20,000.00
7	Homestays workshops	25	5	15,000.00	3,75,000.00
8	Hospitality training of registered Homestay owners	40	1	8,000.00	3,20,000.00
9	Safe tourism job rolls training	102	6	15,000.00	15,30,000.00
	Total				58,05,000.00

Madhya Pradesh State Tourism Development Corporation (MPSTDC)						
Orchha: A Medieval Splendour 2.0						
Rate Analysis: Website and QR App						
S. No.	Item Description	Unit	Basic Cost (Rs.) of Market Rate	Contractor Profit on (4+5+6)@ 15%	Labour Cess on (4+5+6+7) @1%	Final Cost for Approval (4+5+6+7+8)
1	2	3	3	4	5	6
1	Content Development					
	360 Degree Photo Shoot, Audio Video Content creation on Historic significance (QR Code based) -360degree shoot -Final stitched HDRI Panoramic Images -To be delivered as per website requirement - Up-to 2 min audio video content on related subject including:- concept, scripting, storyboarding, shooting editing, and delivery of final video as per application/ website development approved format					
1.1	Both outside and inside of building areas (Building interior)	Nos	3,82,000.00	57300.00	4393.00	4,43,690.00
1.2	Only Outside areas (building Façade)	Nos	2,90,000.00	43500.00	3335.00	3,36,840.00
2	Audio Guided Systems for Attractions QR based App for Tracking and Feedback	Job	21,90,000.00	328500.00	25185.00	25,43,690.00

Madhya Pradesh State Tourism Development Corporation (MPSTDC)

Orchha: A Medieval Splendour 2.0

Rate Analysis: Lighting

S. No.	Item Description	Unit	Basic Cost (Rs.) of Market Rate	Carriage, Packing, Cost on 4@ 1%	Labour/I TC cost on 4@ 5%	Contract or Profit on (4+5+6) @ 15%	Labour Cess on (4+5+6 +7) @1%	Final Cost for Approval (4+5+6+7 +8)
1	2	3	4	5	6	7	8	9
1	SITC of LED Track light fixture in Die cast aluminium body in cylindrical shape. This spotlight ideally helps in precision of the beam light is useful for museum/ exhibition or accent lighting application.The fixtures comes in (10-12) w which also includes the driver.System /Luminaire Efficacy should be 90 lpw or better. THD< 10 % with in built Driver Protection against short circuit, Miswiring and Surge Protection of upto 3kV.The fixture comes with multiple beam angle to choose from from 10 deg to as wide as 60 deg. CCT - (2700/ 3000/ 4000)k with CRI>90.RAL Colour finish as per approval from Department /Architect. Input voltage is 220/ 240v. the fixture comes with a Rotation range of 355 deg and tilt angle of 90 deg.Fixture Life of 50,000 burning Hours. Ingress Protection of IP 20.	Nos	13250	132.50	662.50	2106.75	161.52	16310.00
2	SITC of Surface Mounted Track for Above Luminaires. Length of the track shall be 1 Mtr suitable for the above track spot luminaires. The track system shall be complete with live feed ends and endcap inclusive of all accessories	Nos	4800	48.00	240.00	763.20	58.51	5910.00

Madhya Pradesh State Tourism Development Corporation (MPSTDC)								
Orchha: A Medieval Splendour 2.0								
Rate Analysis: AV								
S. No.	Item Description	Unit	Basic Cost (Rs.) of Market Rate	Carriage, Packing, Cost on 4@ 1%	Labour/ITC cost on 4@ 5%	Contractor Profit on (4+5+6)@ 15%	Labour Cess on (4+5+6+7) @1%	Final Cost for Approval (4+5+6+7+8)
1	2	3	4	5	6	7	8	9
1	Supply, Installation, Testing & Commissioning of 32 "touchscreen kiosk: One single unit along with Metal Frame indoor housing from the same covering with 12mm Low Voc BWP Ply finish with 6 mm thick high density bendable acrylic solid surface approved colour , Touch screen specifications:- Full HD resolution, Brightness :400 cd2 or higher, Native Contrast Ration 4,000 : 1 or higher, 10 touch or more, capacitive touch, Response time 10 MS or more, In-Built Factory Fitted Speaker 10W x 2, Auto Cooling, Auto Heating, Anti Vandal Glass(8mm or better), Anti Reflection Coating, Auto Brightness Sensor, Powder Coated, Air Looping System, Temperature Operation (°C) -30 to 50, Temperature Operation (°C) -30 to 50, Humidity Non-condensing (%) 20 to 80. Certifications of LED : BIS, FCC, CE and UL. including software with mounting and accessories. (Approved makes : Samsung, LG and Panasonic	nos	1,01,400.00	1014.00	5070.00	16122.60	1236.07	1,24,840.00
2	Intel® NUC Mini PC with 12th Generation Intel® Core™ Processors,Intel® Core™ i7 Processor),Windows 11 Pro*,2x 8GB DDR4-3200 SODIMMs,500GB Gen 4 NVMe SSD,Dual HDMI 2.0b w/HDMI CEC,Front: 2x USB 3.2, Rear: 1x USB 3.2, 1x USB 2.0, Internal: 1x USB 3.2 on m.2 22x42 (pins), 2x USB 2.0 (headers),Front panel: 3.5mm headphone/mic jack, with 3 year warranty.	nos	77,000.00	770.00	3850.00	12243.00	938.63	94,800.00
3	SITC of 1-chip DLP LASER Phosphor Multimedia Projection system having, min 9500 Lumens 20000 hours lamp life, 1920 x 1200 WUXGA Native Resolution, Inbuilt blending and warping with automatic calibration software, 3D ready, 4000000:1 Contrast Ratio, inputs: HDBaseT,HDMI2.0, DVI-D, Active 3D, Motorised zoom and focus, alongwith 0.65-0.75 lens & projector mountin bracket etc. complete with installation as per the site requirement. including software and accessories , Approved Make- Christie , NEC, Barco	Nos	9,14,500.00	9145.00	45725.00	145405.50	11147.76	11,25,923.00
4	3D Projection mapping software, Playback control System to manage, schedule and control the media severs. It should have direct control on inputs and media timelines. It should have an option of being controlled by an external unit integrated with the software. to complete the job with all respects Make- Dataton/Coolux/Pixera/Vioso Equivalent	Nos	1,40,000.00		7000.00	22050.00	1690.50	1,70,741.00
5	Display media server/Workstation with 4K outputs as required , synced together. It should be capable of capturing content.Intel® i9 10th Gen, Rack Mountable workstation with 5 Year Onsite Warranty RAM- 32GB DDR4,SSD- 1TB(For WINDOWS BOOT), HDD: 2 TB , Nvidia Quadro GFX, 8GB, 3DP, Windows 10 Pro 64 Bi or higher config.It should also have genlock and framelock capability. Should also have Art-net Ethernet in/out. to complete the job with all respects. APPROVED MAKES:-HP, Dell, Asus	Nos	3,80,000.00	3800.00	19000.00	60420.00	4632.20	4,67,852.00
6	Supply, Installation, Testing, and Commissioning ofSITC of 2-way ceiling mounted music loudspeaker. The louspeaker shall meet the following criteria: Frequency range (-10dB) of 65Hz to 20kHz; Power handling of 200Watt peak; Nominal dispersion of 155° Conical; Sensitivity of 86 dB SPL and Max SPL of 109 dB SPL peak; Nominal impedance of 8 Ohms with an Integral multi-tap Transformer with selectable tap settings of 6/12/25/50W@100V or better. The loudspeaker system shall be comprised of a powder-coated magnetic steel grill; 5.25-inch woofer and 1" coaxial Dome tweeter enclosed in engineered-plastics with integrated steel backcan and an In-built waveguide designed to provide uniform frequency coverage across the loudspeakers dispersion. UL-1480A rated and UL2043 rated for plenum-space installation. Make-Bose/amline/EAW	Nos	47,270.00	472.70	2363.50	7515.93	576.22	58,198.00
7	SITC of Ceiling mounted Subwoofer. The louspeaker shall meet the following performance criteria: Frequency range (-10dB) of 38Hz to 155Hz; Power handling of 600Watt peak; Nominal dispersion Shall be omnidirectional; Sensitivity of 89dB SPL and Max SPL of 117dB SPL peak; Nominal impedance of 8 Ohms with an Integral multi-tap Transformer with selectable tap settings of 40/80W/150@100V or better. The loudspeaker system shall be comprised of a powder-coated magnetic steel grill; 8-inch woofer enclosed in engineered-plastics with integrated steel backcan. UL-1480A rated and UL2043 rated for plenum-space installation. Make-Bose/amline/EAW	Nos	1,03,120.00	1031.20	5156.00	16396.08	1257.03	1,26,960.00
8	SITC of Class D configurable amplifier with a digital signal processing architecture running at 48 kHz / 24 bit .The Amplifier shall have 600 watts output power asymmetrically distributed across 4 output channels with selectable 4/8ohms, 70/100 Volt or mixed use operation. The amplifier shall have four analog and dante channels ; Frequency Response : 20Hz - 20kHz ; S/N Ratio > 100db and THD < 0.04% at rated output. Built in DSP for Matrix routing, Speaker EQs, delays etc. Phoenix Input and output terminals,Built in DSP for Matrix routing, Speaker EQs,PEQ,bandpass, delays etc Approved makes: Bose, Aimline, EAW	Nos	2,88,740.00	2887.40	14437.00	45909.66	3519.74	3,55,494.00
9	Development of a projection show duration 2-3 mins. The film will have mixed media content including information graphics, illustrations, 2D animation/Motion Graphics/3D animation, and models with live action shoot wherever required as per the theme and storyline of the film. The content should be supported by sound design and voiceover in 2 languages - Hindi and English. All necessary photoshoots and video shoot to be included in the cost. The cost for any resources such as music composers, singers, artists, instrumentalists, sound engineers, recording studio charges, etc. required to be included in the cost. The content should be made in appropriate resolution as per screen size. Rate to include the choreography design of syncing the visuals, audio and lighting in the room will be synced with the choice of music and will be triggered accordingly. All user interface design, wireframing and user experience design and development to be includes in item rate.	Job	9,05,000.00			135750.00	10407.50	10,51,158.00

10	The application software to be developed in enterprise version / commercial version of the gaming engines including content (Unity3D, Unreal etc.) which supports real time 3d rendering and texture/ light baking. All the API Communication with any kind of server if need to be done in PHP/ MySQL as backend if needed. The developed application should have perpetual license and no subscription at any given point of time. Application/Software development cost to be inclusive of SRS, UI/UX, 2D design, 3D design or anything else needed to run the application. Application flow and UI/UX to be finalised once approved by the museum consultant/ authorities. Bidder will be responsible for submission of application source code technical documents and user manuals. All submitted documents to be digitally signed by the authorised signatory from the bidder.	Job	5,07,535.00			76130.25	5836.65	5,89,500.00
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