

### ESTIMATE

Name of the Work :		Construction of RCC Pillars for the Demarcation of Surveyd Boundary of "Reserve Forest" during the year 2026-27														
Name of the Forest:		Ramachandrapura RF APAJI 51					Legal Status:		Reserve Forest							
Budget Head:		4406-0-101-0-01-132 (D&P)														
Location:		Ramachandrapura RF APAJI 51		RFO Unit :		7		Estimated Amount:		177000.00						
Range:		Nagara		Subdivision:		Hosanagara		Division:		Sagara						
District:		Shivamogga		Taluk:		Hosanagara		LA Constituency:		Sagara						
GPS Reading:		N 13.882961 E 75.0747480		D Line in Kms:		11.65		No RCC Pillars:		20						
Rate :		As per PWD CSR 2023-24														
Specification:		As per OM issued by the O/o The PCCF(HOFF), Bangalore vide OM No:KFD/WP/A1(BUD)/5/2024 Dated:22.07.2024 & KFD/DEV/B1/SSR/1/2026-DEV-KFD E-2185876 Dated: 01.04.2026														
Sl. No	Particulars	Unit	Box	No	L	B	D	Qty/Unit	Rate in Rs.	Amount in Rs.						
1	2	3	4	5	6	7	8	9	10	11						
PART-A																
1	1.5 Earth work excavation by manual means for drains, canals, waste weir draft, approach channels. key trench, foundation of Bridges and such similar works, as per drawing and technical specifications including setting out, shoring, strutting, barricading, caution lights, excavated surface leveled and sides neatlydressed disposing off or leveling the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage & other appurtenances required to complete the work. In ordinary/soft rock without blasting upto 1.5 m depth. (PWD Schedule of Rates 2023-2024 Vol No.1, Page No:6, Item No:1.5.1)															
	Pit			1	x	0.80	x	0.80	x	0.6		=	0.384			
		cum	1										0.384			
		Nos		20									7.680	Cum	334.88	2572.00
	Basic Rate	AW @ 12%		Total												
	299.00	35.88		334.88												
2	2.1.3 Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates. (PWD Common SR 2023-24Vol-1 Pg.No.15 It.No.2.1.3 )															
	Bed			1	x	0.80	x	0.80	x	0.075		=	0.048			
		cum	1										0.048			
		Nos		20									0.960	Cum	6707.68	6439.00
	Basic Rate	AW @ 12%		Total												
	5918.00	710.16		6628.16												



Sl. No	Particulars	Unit	Box	No	L	B	D	Qty/Unit	Rate in Rs.	Amount in Rs.					
1	2	3	4	5	6	7	8	9	10	11					
3	2.2.1. Providing and laying in position Reinforced cement concrete for all Foundation works. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticizers laid in finished layers, well compacted using needle vibrators, including all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates. (PWD Schedule of Rates 2023-2024 Vol No.1, Page No:15, Item No:2.2.1)														
	Footing			1	x	0.50	x	0.50	x	0.575	=	0.14375			
		cum	1									0.14375			
		Nos		20								2.87500	cum	7323.10	21054.00
	Basic Rate	Scaffolding @4%			Total		AW @ 12%		Total						
	6184.00	251.48			6435.48		784.6176		7220.10						
4	2.4.2 Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M20Design Mix Using 20 mm nominal size graded crushed coarse aggregates. (PWD Schedule of Rates 2023-2024 Vol No.1, Page No:16, Item No:2.4.2)														
	Column			1	x	(0.35+0.25)/2	x	(0.35+0.25)/2	x	1	=	0.09000			
	Cap			1/3		0.25	x	0.25	x	0.05		0.00104			
		cum	1									0.09104			
		Nos		20								1.82083	cum	7789.94	14184.00
	Basic Rate	Scaffolding @10%			Total		AW @ 12%		Total						
	6221.00	622.1			6843.10		821.172		7664.27						
5	2.11 Steel Fabrication Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancillary operations complete as per drawing and technical specification. (PWD Schedule of Rates 2023-2024 Vol No.1 Page No:18, Item No: 2.11h)														
Calculation Sheet for Steel															
Calculation Sheet for Pillar	a) 10mm dia vertical bars		4	Nos.	Total length from Top to Bottom + Bent				Calculation Sheet for Rings (RMTR)						
				=	1.6 + 0.08				8 mm dia meter 130 mm c/c bars 12 nos.	Details	Particular	Nos.	RMTR		
				=	1.68 RMTR										
				=	4 X 1.68 =6.72 RMTR										
				=	6.72 X 0.62 kg/m										
	Total			=	4.17 kg										
	b) 8 mm dia Rings		12	Nos.	Total RMTR of 12 Rings + Bent for Rings										
				=	13.192 + 0.768										
				=	13.96 RMTR										
				=	13.96 X 0.39 kg/m										
	Total			=	5.44 kg										
Grand Total (a+b)			=	9.61 Kg	tonne	0.00961									
Pillar	tonne		1						0.00961						
	Nos		20						0.19220	tonne	89621.28		17225.00		
Basic Rate	AW @ 12%			Total											
	80019.00	9602.28			89621.28										



Sl. No	Particulars	Unit	Box	No	L	B	D	Qty/Unit	Rate in Rs.	Amount in Rs.	
1	2	3	4	5	6	7	8	9	10	11	
6	2.11 Steel Fabrication Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancillary operations complete as per drawing and technical specification. (PWD Schedule of Rates 2023-2024 Vol No.1 Page No:18, Item No: 2.11h)										
Calculation Sheet for Footing											
Footing including Jali at the bottom	a) 10mm dia corner vertical bars		4	Nos.	Total RMTS + Bent						
				=	0.55+0.08						
				=	0.63 RMTR						
				=	4 X 0.63						
				=	2.52 RMTR						
				=	2.52 X 0.62						
	Total			=	1.56 kg						
	b) 10 mm dia Bars for Jali (Border)		4	Nos.	Total RMTR + Bent						
				=	4(0.45)+0.08						
				=	1.8+0.08						
				=	1.88 RMTR x 0.62 =1.17 kg.						
	Bars for jali Bottom		4	Nos.							
	For Top		2	Nos.							
	Total		6	Nos.							
				=	6 x 0.45						
				=	2.7 RMTR x 0.62 =1.674/kg						
	c) 10mm dia corner vertical bars		3	Nos.	Total RMTS + Bent						
				=	1.8 +0.0064						
				=	1.864						
				=	3 X 1.864						
				=	5.592 RMTR x 0.39 kg/m						
				=	2.18 kg						
	Grand Total Steel for Footing			=	1.56+1.17 + 1.674 +2.18						
				=	6.58 kg				tonne	0.00658	
Pillar	tonne		1						0.00658		
	Nos		20						0.13160	tonne 89621.28 11794.00	
Basic Rate	AW @ 12%		Total								
80019.00	9602.28		89621.28								
7	12.3A Refilling available earth around trenches/pipelines, cables in layers not exceeding 20 cms in depth. Compacting each deposited layer by ramming after watering with a lead upto 50m, and lift upto 1.5m including cost of all labour complete as per specifications. (PWD Schedule of Rates 2023-2024 Vol No.I, Page No:7, Item No:1.10)										
Earth Work			1	x	0.80	x	0.80	x	0.6	= 0.38400	
Deduction					0.80	x	0.80	x	0.075	= 0.04800	
					0.50	x	0.50	x	0.525	= 0.13125	
	cum	1								= 0.20475	
	Nos		20							= 4.09500	
Basic Rate	AW @ 12%		Total								
160.00	19.2		179.20								
8	8.10 Providing 6 mm cement plaster with cement mortar 1:3 (1 cement: 3 fine sand) on concrete surface/ceilings including rounding off corners wherever required smooth rendering. Providing and removing scaffolding. Including cost of materials, labour; curing complete as per specifications and as per directions of Engineer-in-charge.(PWD Schedule of Rates 2023-2024 Vol No.2, Page No:43, Item No:8.10)										
Calculation Sheet											
Cap		1/2 x base x slant ht x 4 nos.									
		0.5 x 0.25 x 0.135 x 4 nos.									
		0.0670 sq.mtr.						0.0670	sqm		
Column		(0.35 + 0.25)/2 x 1 x 4 nos.									
		0.30 x 1 x 4 nos									
		1.20 sq.mtr.						1.2000	sqm		
Footing Upper surface		(0.5 + 0.5) - (0.35 x 0.35)									
		= 0.25 - 0.1225 = 0.1275									
		0.128 sq.mtr.						0.1280	sqm		
Footing Side surface		0.5 x 0.5 x 4									
		0.100 sq.mtr						0.1000	sqm		
	sq.m	1							1.4950	sqm	
	Nos		20						29.9000	236.32 7066.00	
Basic Rate	AW @ 12%		Total								
210.00	25.2		235.20								



