

Foundations

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
1		Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material.										
		As per MoRT&H Specification 304										
		In Ordinary soil										
			Unit	1	cum							
		taking output	10		cum							
A		Manual Means										
a		Depth upto 3 m										
II		Labour										
(i)	L-29	Mate			day	0.14	151.44	21.20				
(ii)	L-35	Mazdoor			day	3.50	136.69	478.42				
		Total-II						499.62				
		sundries @ 3% on 499.62						14.99				
		Contractor's profit and overhead charges @ 21.50% on 514.61						110.64				
		Labour cess @ 1% on 625.25						6.25				
		Cost	10		cum			631.50				
		Rate	1		cum			63.15	63.15			63.15
		sub mountainous @ 10% on 63.15										6.32
		Cost	1		cum				63.15			69.47
	Note	1. Cost of dewatering may be added where required upto 10 per cent of labour cost Assessment for dewatering shall be made as per site conditions.										
		2.The excavated earth can be used partially for backfilling of foundation pit and partly for road work except for marshy soil. Hence cost of disposal has not been added except for marshy soil. This remark is common to all cases excluding marshy soil.										
		3.The cost of shoring and shuttering, where needed, may be added @ 1 per cent on cost of excavation for open foundation.										

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
b		Depth 3 m to 6 m										
			Unit	1	cum							
		Taking output		10	cum							
II		Labour										
(i)	L-29	Mate/Supervisor			day	0.18	151.44	27.26				
(ii)	L-35	Mazdoor			day	4.50	136.69	615.11				
		Total-II						642.37				
		sundries @ 3% on 642.37						19.27				
		Contractor's profit and overhead charges @ 21.50% on 661.64						142.25				
		Labour cess @ 1% on 803.89						8.04				
		Cost	10	cum				811.93				
		Rate	1	cum				81.19	81.19			81.19
		sub mountainous @ 10% on 81.19										8.12
		Cost	1	cum					81.19			89.31
	Note	Cost of dewatering may be added where required upto 15 per cent of labour cost. Assessment for dewatering shall be done as per actual ground conditions.										

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
c		Depth above 6 m									
II		Labour									
(i)	L-29	Mate/Supervisor			day	0.24	151.44	36.35			
(ii)	L-35	Mazdoor			day	6.00	136.69	820.14			
		Total-II						856.49			
		sundries @ 3% on 856.49						25.69			
		Contractor's profit and overhead charges @ 21.50% on 882.18						189.67			
		Labour cess @ 1% on 1071.85						10.72			
		Cost	10	cum				1082.57			
		Rate	1	cum				108.26	108.26		108.26
		sub mountainous @ 10% on 108.26									10.83
		Cost	1	cum					108.26		119.09
	Note	1. Cost of dewatering may be added where required upto 20 per cent of labour cost. Assessment for dewatering shall be made as per site conditions..									

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
B		Mechanical Means										
a		Depth upto 3 m										
			Unit	1	cum							
		Taking output	240		cum							
II		Labour										
(i)	L-29	Mate			day	0.32	151.44	48.46				
(ii)	L-35	Mazdoor			day	8.00	136.69	1093.52				
		Total-II						1141.98				
III		Hiring charges of Machinery										
(i)	2.32	Hydraulic excavator 1.0 cum bucket capacity			hour	6.00	1260.00	7560.00				
		Total-II+III						8701.98				
		sundries @ 3% on 8701.98						261.06				
		Contractor's profit and overhead charges @ 21.50% on 8963.04						1927.05				
								10890.09				
		Labour cess @ 1% on 10890.09						108.90				
		Cost	240		cum			10998.99				
		Rate	1		cum			45.83	45.83			45.83
		sub mountainous @ 10% on 45.83										4.58
		Cost	1		cum				45.83			50.41
Note		Cost of dewatering upto 5 per cent may be added, where required. Assessment for dewatering shall be made as per site conditions..										

Sr No	Code No.	Description		Unit	Plain			Sub mountainous Region			
					Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
b		Depth 3 m to 6 m									
			Unit	1	cum						
		Taking output	210	cum							
II		Labour									
(i)	L-29	Mate		day	0.32	151.44	48.46				
(ii)	L-35	Mazdoor		day	8.00	136.69	1093.52				
		Total-II					1141.98				
III		Hiring charges of Machinery									
(i)	2.32	Hydraulic excavator 1.0 cum bucket capacity		hour	6.00	1260.00	7560.00				
		Total-II+III					8701.98				
		sundries @ 3% on 8701.98					261.06				
		Contractor's profit and overhead charges @ 21.50% on 8963.04					1927.05				
							10890.09				
		Labour cess @ 1% on 10890.09					108.90				
		Cost	210	cum			10998.99				
		Rate	1	cum			52.38	52.38			52.38
		sub mountainous @ 10% on 52.38									5.24
		Cost	1	cum				52.38			57.62
	Note	Cost of dewatering upto 7.5 per cent may be added, where required. Assessment for dewatering shall be made as per site conditions..									

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
c		Depth above 6m										
		Unit	1		cum							
		Taking output	180		cum							
II		Labour										
(i)	L-29	Mate			day	0.40	151.44	60.58				
(ii)	L-35	Mazdoor			day	10.00	136.69	1366.90				
		Total-II						1427.48				
III		Hiring charges of Machinery										
(i)	2.32	Hydraulic excavator 1.0 cum bucket capacity			hour	6.00	1260.00	7560.00				
		Total-II+III						8987.48				
		sundries @ 3% on 8987.48						269.62				
		Contractor's profit and overhead charges @ 21.50% on 9257.1						1990.28				
								11247.38				
		Labour cess @ 1% on 11247.38						112.47				
		Cost	180		cum			11359.85				
		Rate	1		cum			63.11	63.11			63.11
		sub mountainous @ 10% on 63.11										6.31
		Cost	1		cum				63.11			69.42
		1. Cost of dewatering upto 10 per cent. or may be added, where required. Assessment for dewatering shall be made as per site conditions.										
		2. Labour provided for excavation by mechanical means includes that required for trimming of bottom and side slopes.										

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
C		Ordinary Rock (not requiring blasting)									
		Manual Means									
a)		Depth upto 3 m									
			Unit	1	cum						
			Taking output	10	cum						
II		Labour									
(i)	L-29	Male			day	0.20	151.44	30.29			
(ii)	L-35	Mazdoor			day	5.00	136.69	683.45			
		Total-II						713.74			
		sundries @ 3% on 713.74						21.41			
		Contractor's profit and overhead charges @ 21.50% on 735.15						158.06			
								893.21			
		Labour cess @ 1% on 893.21						8.93			
			Cost	10	cum			902.14			
			Rate	1	cum			90.21	90.21		90.21
		sub mountainous @ 10% on 90.21									9.02
			Cost	1	cum				90.21		99.23
	Note	Cost of dewatering upto 10 per cent of labour cost may be added, where required. Assessment for dewatering shall be made as per site conditions..									

Sr No	Code No.	Description		Unit	Plain			Sub mountainous Region		
					Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)
b		Mechanical Means								
		Unit	1	cum						
		Taking output	180	cum						
II		Labour								
(i)	L-29	Mate		day	0.24	151.44	36.35			
(ii)	L-35	Mazdoor		day	6.00	136.69	820.14			
		Total-II					856.49			
III		Hiring charges of Machinery								
(i)	2.32	Hydraulic excavator 1.0 cum bucket capacity		hour	6.00	1260.00	7560.00			
		Total-II+III					8416.49			
		sundries @ 3% on 8416.49					252.49			
		Contractor's profit and overhead charges @ 21.50% on 8668.98					1863.83			
							10532.81			
		Labour cess @ 1% on 10532.81					105.33			
		Cost	180	cum			10638.14			
		Rate	1	cum			59.10	59.10		59.10
		sub mountainous @ 10% on 59.1								5.91
		Cost	1	cum				59.10		65.01
	Note	1.Cost of dewatering upto 10 per cent. may be added, where required Assessment for dewatering shall be made as per site conditions.								
		2.In case of rock, foundation beyond 3 m is not dug and hence not included.								

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
D		Hard Rock (requiring blasting)									
		Manual Means									
			Unit	1	cum						
		Taking output	10		cum						
I		Material									
(i)	0.00	Blasting Material			kg	3.50	100.00	350.00			
(ii)	0.00	Detonator electric			each	14.00	7.50	105.00			
		Total-I						455.00			
		Contractor's profit @ 10% on 455						45.50			
			Cost	10	cum			500.50			
			Rate	1	cum			50.05			
		Labour cess @ 1% on 50.05						0.50			
		Total						50.55	50.55		50.55
II		Labour									
(i)	L-29	Mate			day	0.35	151.44	53.00			
(ii)	L-9	Driller			day	0.50	151.44	75.72			
(iii)	L-7	Blaster			day	0.25	151.44	37.86			
(iv)	L-35	Mazdoor			day	8.00	136.69	1093.52			
		Total-II						1260.10			
III		Hiring charges of Machinery									
(i)	2.10	Air Compressor 250 cfm with 2 jack hammer for drilling.			hour	1.00	309.00	309.00			
		Total-II+III						1569.10			
		sundries @ 3% on 1569.1						47.07			
		Contractor's profit and overhead charges @ 21.50% on 1616.17						347.48			
								1963.65			
		Labour cess @ 1% on 1963.65						19.64			
			Cost	10	cum			1983.29			
			Rate	1	cum			198.33	198.33		198.33
		sub mountainous @ 10% on 198.33									19.83
											218.16
			Cost	1	cum			248.88			268.71
Note		Cost of dewatering @ 10 per cent may be added, where required Assessment for dewatering shall be made as per site conditions.									

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
E		Hard Rock (blasting prohibited)									
			Unit	1	cum						
			Taking output	10	cum						
a		Mechanical Means									
II		Labour									
(i)	L-29	Mate			day	0.20	151.44	30.29			
(ii)	L-35	Mazdoor			day	5.00	136.69	683.45			
		Total-I						713.74			
III		Machinery									
(i)	2.10	Air Compressor 250 cfm with 2 leads of pneumatic breaker			hour	6.00	309.00	1854.00			
		Total-II+III						2567.74			
		sundries @ 3% on 2567.74						77.03			
		Contractor's profit and overhead charges @ 21.50% on 2644.77						568.63			
								3213.40			
		Labour cess @ 1% on 3213.4						32.13			
		Cost	10	cum				3245.53			
		Rate	1	cum				324.55	324.55		324.55
		sub mountainous @ 10% on 324.55									32.46
		Cost	1	cum				324.55			357.01
	Note	Cost of dewatering @ 10 per cent may be added, where required Assessment for dewatering shall be made as per site conditions.									
		In case of rock, foundation beyond 3 m is not dug and hence not included.									

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
F		Marshy Soil									
		Unit	1	cum							
		Taking output	10	cum							
		Depth upto 3 m									
a		Manual means									
II		Labour									
(i)	L-29	Mate/Supervisor			day	0.40	151.44	60.58			
(ii)	L-35	Mazdoor			day	10.00	136.69	1366.90			
		Total -II						1427.48			
III		Machinery									
(i)	2.59	Tractor-trolley for removal.			hour	2.67	351.00	937.17			
		Total-II+III						2364.65			
		sundries @ 3% on 2364.65						70.94			
		Contractor's profit and overhead charges @ 21.50% on 2435.59						523.65			
								2959.24			
		Labour cess @ 1% on 2959.24						29.59			
		Cost	10	cum				2968.83			
		Rate	1	cum				298.88	298.88		298.88
		sub mountainous @ 10% on 298.88									29.89
		Cost	1	cum				298.88			328.77
	Note	1. Cost of dewatering @ 30 per cent of (II), may be added, where required Assessment for dewatering shall be made as per site conditions.									
		2. Shoring & strutting 15 per cent of (II), where required may be added									
		3. It is assumed that Marshy Soil will be available upto 3 m depth only. For deeper excavation below 3 m depth, refer analysis for ordinary soil									

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
b		Mechanical Means									
			Unit	1	cum						
		Taking output	10	cum							
II		Labour									
(i)	L-29	Mate			day	0.08	151.44	12.12			
(ii)	L-34	Mazdoor for dressing sides, bottom and backfilling			day	2.00	143.81	287.62			
		Total -II						299.74			
III		Hiring charges of Machinery									
(i)	2.32	Hydraulic excavator 1.0 cum bucket capacity @ 60 cum per hour			hour	0.17	1260.00	214.20			
(ii)	2.56	Tipper 5.5 cum capacity, 4 trips per hour.			hour	0.45	300.00	135.00			
		Total -III						349.20			
		Total -II+III						648.94			
		sundries @ 3% on 648.94						19.47			
		Contractor's profit and overhead charges @ 21.50% on 668.41						143.71			
								812.12			
		Labour cess @ 1% on 812.12						8.12			
		Cost	10	cum				820.24			
		Rate	1	cum				82.02	82.02		82.02
		sub mountainous @ 10% on 82.02									8.20
		Cost	1	cum				82.02			90.22
Note		1. Cost of dewatering @ 20 per cent may be added, where required									
		2. Shoring & strutting @ 10 per cent where required may be added									
		3. It is assumed that Marshy Soil will be available upto 3 m depth only. For deeper excavation below 3 m depth, refer analysis for ordinary soil									

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
G		Back Filling in Marshy Foundation Pits										
		Unit	1	cum								
		Taking output	6	cum								
II		Labour										
(i)	L-29	Mate			day	0.12	151.44	18.17				
(ii)	L-34	Mazdoor for dressing sides, bottom and backfilling			day	3.00	143.81	431.43				
		Total-II						449.60				
III		Machinery										
(i)	2.59	Tractor-trolley for transportation			hour	2.00	351.00	702.00				
		Total-II+III						1151.60				
		sundries @ 3% on 1151.6						34.55				
		Contractor's profit and overhead charges @ 21.50% on 1186.15						255.02				
								1441.17				
		Labour cess @ 1% on 1441.17						14.41				
		Cost	6	cum				1455.58				
		Rate	1	cum				242.60	242.60			242.60
		sub mountainous @ 10% on 242.6										24.26
		Cost	1	cum					242.60			266.86

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)
2		Filling Annular Space Around Footing in Rock									
		As per MoRT&H Specification 304									
		Unit	1		cum						
		Taking output	1		cum						
		Rate may be taken as Lean cement concrete 1:3:6 nominal mix.							2425.06		2476.98

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
3		Sand Filling in Foundation Trenches as per Drawing & Technical Specification									
		As per MoRT&H Specification 304									
			Unit	1	cum						
		taking output	1	cum							
		Material									
(i)	0.00	Sand (assuming 20 per cent voids)			cum	1.20	200.59	240.71			
		Total-I						240.71			
		Contractor's profit @ 10% on 240.71						24.07			
			Cost	1	cum			264.78			
			Rate	1	cum			264.78			
		Labour cess @ 1% on 264.78						2.65			
		Total						267.43	267.43		267.43
		Labour									
(i)	L-29	Mate			day	0.01	151.44	1.51			
(ii)	L-35	Mazdoor			day	0.30	136.69	41.01			
		Total-II						42.52			
		sundries @ 3% on 42.52						1.28			
		Contractor's profit and overhead charges @ 21.50% on 43.8						9.42			
								53.22			
		Labour cess @ 1% on 53.22						0.53			
			Cost	1	cum			53.75			
			Rate	1	cum			53.75	53.75		53.75
		sub mountainous @ 10% on 53.75									5.38
											59.13
			Cost	1	cum				321.18		326.56

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
4		PCC 1:3:6 in Foundation									
		Plain cement concrete 1:3:6 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.									
		As per MoRT&H Specification 2100									
		Unit	1	cum							
		Taking output	15	cum							
I		Material									
(i)	0.00	40 mm Aggregate			cum	13.50	425.22	5740.47			
(ii)	0.00	coarse Sand			cum	6.75	280.73	1894.93			
(iii)	0.00	cement			tonne	3.45	5245.35	18096.46			
		Total-I						25731.86			
		Contractor's profit @ 10% on 25731.86						2573.19			
		Cost	15	cum				28305.05			
		Rate	1	cum				1887.00			
		Labour cess @ 1% on 1887						18.87			
		Total						1905.87	1905.87		1905.87
II		Labour									
(i)	L-29	Mate			day	0.64	151.44	96.92			
(ii)	L-10	Mason			day	1.00	223.36	223.36			
(iii)	L-35	Mazdoor			day	15.00	136.69	2050.35			
		Total -II						2370.63			
III		Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
(iii)	2.67	Water tanker 6 KL capacity			hour	2.00	140.40	280.80			
		Total -III						3790.80			
		Total -II+III						6161.43			
		sundries @ 3% on 6161.43						184.84			
		Contractor's profit and overhead charges @ 21.50% on 6346.27						1364.45			
								7710.72			
		Labour cess @ 1% on 7710.72						77.11			
		Cost	15	cum				7787.83			
		Rate	1	cum				519.19	519.19		519.19
		sub mountainous @ 10% on 519.19									51.92
											571.11
									2425.06		2476.98
	Note	Vibrator is a part of minor I & P which is already included in overhead charges of the contractor.									

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
5		Brick Masonry Work in Cement Mortar 1:3 in Foundation complete excluding Pointing and Plastering, as per Drawing and Technical Specifications.									
		As per MoRTH Specification 1300									
		Unit 1			cum						
		Taking output 5			cum						
I		Material									
(i)	0.00	Bricks 1st class			each	2500.00	3.130	7825.00			
(ii)		Cement mortar 1:3 (Rate as sub-analysis)			cum	1.20	2969.90	3563.88			
		Total -I						11388.88			
		Contractor's profit @ 10% on 11388.88						1138.88			
		Cost 5			cum			12527.77			
		Rate 1			cum			2505.55			
		Labour cess @ 1% on 2505.55						25.06			
		Total						2530.61	2530.61		2530.61
II		Labour									
(i)	L-29	Mate			day	0.48	151.44	72.69			
(ii)	L-10	Mason			day	4.00	223.36	893.44			
(iii)	L-35	Mazdoor			day	8.00	136.69	1093.52			
(iv)		Labour for Cement mortar 1:3 (Rate as sub-analysis)			cum	1.20	129.08	154.90			
		Total-II						2214.55			
		sundries @ 3% on 2214.55						66.44			
		Contractor's profit and overhead charges @ 21.50% on 2280.99						490.41			
								2771.40			
		Labour cess @ 1% on 2771.4						27.71			
		Cost 5			cum			2799.11			
		Rate 1			cum			559.82	559.82		559.82
		sub mountainous @ 10% on 559.82									55.98
											615.80
									3090.43		3146.41
		sub analysis									
		Cement Mortar 1:3 (1 cement : 3 sand)									
		Unit 1			cum						
		Taking output 1			cum						
I		Materials									
(i)	0.00	Cement			tonne	0.51	5245.35	2675.13			
(ii)	0.00	Sand			cum	1.05	280.73	294.77			
		Total I						2969.90			
II		Labour									
(i)	L-29	Mate			day	0.04	151.44	6.06			
(ii)	L-35	Mazdoor			day	0.90	136.69	123.02			
		Total II						129.08			

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
6		Stone Masonry Work in Cement Mortar 1:3 in Foundation complete as per Drawing and Technical Specifications.									
		As per MoRT&H Specification 1400									
		Unit	1		cum						
		Taking output	5		cum						
		(A) Square Rubble Coursed Rubble Masonry (first sort)									
I		Material									
(i)	0.00	Stone			cum	5.50	491.92	2705.56			
(ii)	0.00	Through and bond stone			each	35.00	9.37	328.00			
		(35no.x0.24mx0.24mx0.39m = 0.79 cu.m)									
		Cement mortar 1:3 (Rate as sub-analysis)			cum	1.50	2969.90	4454.85			
		Total-I						7488.41			
		Contractor's profit @ 10% on 7488.41						748.84			
		Cost	5		cum			8237.25			
		Rate	1		cum			1647.45			
		Labour cess @ 1% on 1647.45						16.47			
		Total						1663.92	1663.92		1663.92
II		Labour									
(i)	L-29	Mate			day	0.66	151.44	99.95			
(ii)	L-10	Mason			day	7.50	223.36	1675.20			
(iii)	L-35	Mazdoor			day	9.00	136.69	1230.21			
		Labour for Cement mortar 1:3 (Rate as sub-analysis)			cum	1.50	129.08	193.62			
		Total-II						3198.98			
		sundries @ 3% on 3198.98						95.97			
		Contractor's profit and overhead charges @ 21.50% on 3294.95						708.41			
								4003.36			
		Labour cess @ 1% on 4003.36						40.03			
		Cost	5		cum			4043.39			
		Rate	1		cum			808.68	808.68		808.68
		sub mountainous @ 10% on 808.68									80.87
											889.55
											2553.47
									2472.60		

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(B)		Random Rubble Masonry									
		(coursed/uncoursed)									
		Unit	1		cum						
		Taking output	5		cum						
I		Material									
	0.00	Stone			cum	5.50	491.92	2705.56			
	0.00	Through and bond stone (35nos.x0.24mx0.24mx0.39m = 0.79 cu.m)			each	35.00	9.37	328.00			
		Cement mortar 1:3 (Rate as sub-analysis)			cum	1.55	2969.90	4603.35			
		Total-I						7636.91			
		Contractor's profit @ 10% on 7636.91						763.69			
		Cost	5		cum			8400.60			
		Rate	1		cum			1680.12			
		Labour cess @ 1% on 1680.12						16.80			
		Total						1696.92	1696.92		1696.92
II		Labour									
	L-29	Mate			day	0.62	151.44	93.89			
	L-10	Mason			day	6.00	223.36	1340.16			
	L-35	Mazdoor			day	9.00	136.69	1230.21			
		Labour for Cement mortar 1:3 (Rate as sub-analysis)			cum	1.55	129.08	200.07			
		Total-II						2864.33			
		sundries @ 3% on 2864.33						85.93			
		Contractor's profit and overhead charges @ 21.50% on 2950.26						634.31			
								3584.57			
		Labour cess @ 1% on 3584.57						35.85			
		Cost	5		cum			3620.42			
		Rate	1		cum			724.08	724.08		724.08
		sub mountainous @ 10% on 724.08									72.41
											796.49
									2421.00		2493.41
	Note	The labour already considered in cement mortar has been taken into account while proposing labour for masonry works.									

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
7		Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications.									
		As per MoRT&H Specification 1500, 1700 & 2100									
A		PCC Grade M15									
		Unit 1			cum						
		Taking output 15			cum						
I		Material									
(i)	0.00	Cement	275	kg	tonne	4.13	5245.35	21637.07			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	8.10	425.22	3444.28			
(iv)	0.00	20 mm Aggregate			cum	4.05	435.24	1762.72			
(v)	0.00	10 mm Aggregate			cum	1.35	461.32	622.78			
		Total-I						29361.78			
		Contractor's profit @ 10% on 29361.78						2936.18			
		Cost 15			cum			32297.96			
		Rate 1			cum			2153.20			
		Labour cess @ 1% on 2153.2						21.53			
		Total						2174.73	2174.73		2174.73
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3199.08			
III		Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
		Total -II+III						6709.08			
IV		Formwork @ 4 per cent. on cost of concrete i.e. cost of material, labour and machinery						1442.83			
		Total -II+III+IV						8151.91			
		sundries @ 3% on 8151.91						244.56			
		Contractor's profit and overhead charges @ 21.50% on 8396.47						1805.24			
								10201.71			
		Labour cess @ 1% on 10201.71						102.02			
		Cost 15			cum			10303.73			
		Rate 1			cum			686.92	686.92		686.92
		sub mountainous @ 10% on 686.92						68.69			68.69
											755.61
									2861.65		2930.34
Note		Needle Vibrator is an item of minor T & P which is already included in overhead charges. Hence not added in rate analysis of cement concrete works.									

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
B		PCC Grade M20									
		Unit	1	cum							
		Taking output	15	cum							
I		Material									
(i)	0.00	Cement	344	Kg	tonne	5.16	5245.35	27066.01			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I						34852.99			
		Contractor's profit @ 10% on 34852.99						3485.30			
		Cost	15	cum				38338.29			
		Rate	1	cum				2555.89			
		Labour cess @ 1% on 2555.89						25.56			
		Total						2581.45	2581.45		2581.45
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3199.08			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
		Total -II+III						6709.08			
IV		Formwork @ 4 per cent on cost of concrete i.e. cost of material, labour and machinery						1662.48			
		Total -II+III+IV						8371.56			
		sundries @ 3% on 8371.56						251.15			
		Contractor's profit and overhead charges @ 21.50% on 8622.71						1853.88			
								10476.59			
		Labour cess @ 1% on 10476.59						104.77			
		Cost	15	cum				10581.36			
		Rate	1	cum				705.42	705.42		705.42
		sub mountainous @ 10% on 705.42									70.54
											775.96
											3357.41
									3286.87		

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
C		RCC Grade M20									
		Case I									
		Using Concrete Mixer									
			Unit	1	cum						
		Taking output	15		cum						
I		Material									
(i)	0.00	Cement	347		kg	tonne	5.21	5245.35	27302.05		
(ii)	0.00	Coarse sand				cum	6.75	280.73	1894.93		
(iii)	0.00	20 mm Aggregate				cum	8.10	435.24	3525.44		
(iv)	0.00	10 mm Aggregate				cum	5.40	461.32	2491.13		
		Total-I							35213.55		
		Contractor's profit @ 10% on 35213.55							3521.36		
		Cost	15		cum				38734.91		
		Rate	1		cum				2582.33		
		Labour cess @ 1% on 2582.33							25.82		
		Total							2608.15	2608.15	2608.15
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II							3199.08		
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
		Total-III							3510.00		
		Total -II+III							6709.08		
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III)				2794.84					
		Total -II+III							6709.08		
		sundries @ 3% on 6709.08							201.27		
		Contractor's profit and overhead charges @ 21.50% on 6910.35							1485.73		
									8396.08		
		Labour cess @ 1% on 8396.08							83.96		
		Cost	15		cum				8480.04		
		Rate	1		cum				565.34		565.34
		sub mountainous @ 10% on 565.34									56.53
		Labour cost							565.34		621.87
		cost of concrete							3173.49		3230.02
IV		Formwork @	4%					111.79			
		sundries @ 3% on 111.79						3.35			
		Contractor's profit and overhead charges @ 21.50% on 115.14						24.76			
								139.90			
		Labour cess @ 1% on 139.9						1.40			
		Rate	1		cum			141.30	141.30		141.30
		sub mountainous @ 10% on 141.3									14.13
									706.64		777.30
									3314.79		3385.45

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		With Batching Plant, Transit Mixer and Concrete Pump									
		Unit 1			cum						
		Taking output	120		cum						
		Material									
(i)	0.00	Cement	347		kg	tonne	41.64	5245.35	218416.37		
(ii)	0.00	Coarse Sand				cum	54.00	280.73	15159.42		
(iii)	0.00	20 mm Aggregate				cum	64.80	435.24	28203.55		
(iv)	0.00	10 mm Aggregate				cum	43.20	461.32	19929.02		
		Total-I							281708.36		
		Contractor's profit @ 10% on 281708.36							28170.84		
		Cost	120		cum				309879.20		
		Rate	1		cum				2582.33		
		Labour cess @ 1% on 2582.33							25.82		
		Total							2608.15	2608.15	2608.15
		Labour									
(i)	L-29	Mate			day		0.84	151.44	127.21		
(ii)	L-10	Mason			day		3.00	223.36	670.08		
(iii)	L-35	Mazdoor			day		18.00	136.69	2460.42		
		Total-II							3257.71		
		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour		6.00	2160.00	12960.00		
(ii)	2.22	Generator 100 KVA			hour		6.00	675.00	4050.00		
(iii)	2.19	Loader 1 cum capacity			hour		6.00	780.00	4680.00		
(iv)	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour		15.00	900.00	13500.00		
(v)	2.80	Concrete Pump			hour		6	247.50	1485.00		
		Total-III							36675.00		
		Total -II+III							39932.71		
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III)				2680.34					
		sundries @ 3% on 39932.71							1197.98		
		Contractor's profit and overhead charges @ 21.50% on 41130.69							8843.10		
									49973.79		
		Labour cess @ 1% on 49973.79							499.74		
		Cost	120		cum				50473.53		
		Rate	1		cum				420.61		420.61
		sub mountainous @ 10% on 420.61									42.06
									420.61		462.67
									3028.76		3070.82
IV		Formwork @	4%						107.21		
		sundries @ 3% on 107.21							3.22		
		Contractor's profit and overhead charges @ 21.50% on 110.43							23.74		
									134.17		
		Labour cess @ 1% on 134.17							1.34		
		Rate	1		cum				135.51	135.51	135.51
		sub mountainous @ 10% on 135.51									13.55
									556.12		611.73
									3164.27		3219.88

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
D		PCC Grade M25									
		Case I									
		Using Concrete Mixer									
		Unit	1	cum							
		Taking output	15	cum							
I		Material									
(i)	0.00	Cement	399	kg	tonne	5.99	5245.35	31393.42			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I						39180.40			
		Contractor's profit @ 10% on 39180.4						3918.04			
		Cost	15	cum				43098.44			
		Rate	1	cum				2873.23			
		Labour cess @ 1% on 2873.23						28.73			
		Total						2901.96	2901.96		2901.96
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3199.08			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
		Total -II+III						6709.08			
IV		Formwork @ 3.75 per cent on cost of concrete i.e. cost of material, labour and machinery						1720.86			
		Total -II+III+IV						8429.94			
		sundries @ 3% on 8429.94						252.90			
		Contractor's profit and overhead charges @ 21.50% on 8682.84						1866.81			
								10549.65			
		Labour cess @ 1% on 10549.65						105.50			
		Cost	15	cum				10655.15			
		Rate	1	cum				710.34	710.34		710.34
		sub mountainous @ 10% on 710.34									71.03
											781.37
											3612.30
											3683.33

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		With Batching Plant, Transit Mixer and Concrete Pump									
		Unit	1	cum							
		Taking output	120	cum							
		Material									
(i)	0.00	Cement	399	kg	tonne	47.88	5245.35	251147.36			
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42			
(iii)	0.00	40 mm Aggregate			cum	43.20	425.22	18369.50			
(iv)	0.00	20 mm Aggregate			cum	43.20	435.24	18802.37			
(v)	0.00	10 mm Aggregate			cum	21.60	461.32	9964.51			
		Total-I						313443.16			
		Contractor's profit @ 10% on 313443.16						31344.32			
		Cost	120	cum				344787.48			
		Rate	1	cum				2873.23			
		Labour cess @ 1% on 2873.23						28.73			
		Total						2901.96	2901.96		2901.96
II		Labour									
(i)	L-29	Mate			day	0.84	151.44	127.21			
(ii)	L-10	Mason			day	3.00	223.36	670.08			
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42			
		Total-II						3257.71			
III		Hiring charges of Machinery									
	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00			
	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00			
	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00			
	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour	15.00	900.00	13500.00			
	2.80	Concrete Pump			hour	6	247.50	1485.00			
		Total-III						36675.00			
		Total -II+III						39932.71			
IV		Formwork @ 3.75 per cent of cost of concrete i.e. cost of material, labour and machinery						13251.60			
		Total -II+III+IV						53184.31			
		sundries @ 3% on 53184.31						1595.53			
		Contractor's profit and overhead charges @ 21.50% on 54779.84						11777.67			
								66557.51			
		Labour cess @ 1% on 66557.51						665.58			
		Cost	120	cum				67223.09			
		Rate	1	cum				560.19	560.19		560.19
		sub mountainous @ 10% on 560.19									56.02
											616.21
									3462.15		3518.17

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
E		RCC Grade M25									
		Case I									
		Using Concrete Mixer									
			Unit	1	cum						
		Taking output	15		cum						
I		Material									
(i)	0.00	Cement	403		Kg	tonne	6.05	5245.35	31708.14		
(ii)	0.00	Coarse sand				cum	6.75	280.73	1894.93		
(iii)	0.00	20 mm Aggregate				cum	8.10	435.24	3525.44		
(iv)	0.00	10 mm Aggregate				cum	5.40	461.32	2491.13		
		Total-I						39619.64			
		Contractor's profit @ 10% on 39619.64						3961.96			
		Cost	15		cum			43561.60			
		Rate	1		cum			2905.44			
		Labour cess @ 1% on 2905.44						29.05			
		Total						2934.49	2934.49		2934.49
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3199.08			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
								6709.08			
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III)				3088.58					
		sundries @ 3% on 6709.08						201.27			
		Contractor's profit and overhead charges @ 21.50% on 6910.35						1485.73			
								8396.08			
		Labour cess @ 1% on 8396.08						83.96			
		Cost	15		cum			8480.04			
		Rate	1		cum			565.34			565.34
		sub mountainous @ 10% on 565.34									56.53
								565.34			621.87
								3499.83			3556.36
IV		Formwork @	3.75%					115.82			
		sundries @ 3% on 115.82						3.47			
		Contractor's profit and overhead charges @ 21.50% on 119.29						25.65			
								144.94			
		Labour cess @ 1% on 144.94						1.45			
		Rate	1		cum			146.39	146.39		146.39
		sub mountainous @ 10% on 146.39									14.64
								711.73			782.90
								3646.22			3717.39

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		With Batching Plant, Transit Mixer and Concrete Pump									
		Unit	1	cum							
		Taking output	120	cum							
I		Material									
(i)	0.00	Cement	403	Kg	tonne	48.36	5245.35	253665.13			
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42			
(iii)	0.00	20 mm Aggregate			cum	64.80	435.24	28203.55			
(iv)	0.00	10 mm Aggregate			cum	43.20	461.32	19929.02			
		Total-I						316957.12			
		Contractor's profit @ 10% on 316957.12						31695.71			
		Cost	120	cum				348652.83			
		Rate	1	cum				2905.44			
		Labour cess @ 1% on 2905.44						29.05			
		Total						2934.49	2934.49		2934.49
II		Labour									
(i)	L-29	Mate			day	0.84	151.44	127.21			
(ii)	L-10	Mason			day	3.00	223.36	670.08			
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42			
		Total-II						3257.71			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00			
(ii)	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00			
(iii)	2.19	Loader 1 cum capacity 1 cum			hour	6.00	780.00	4680.00			
(iv)	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour	15.00	900.00	13500.00			
(v)	2.80	Concrete Pump			hour	6.00	247.50	1485.00			
		Total-III						36675.00			
								39932.71			
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III)				2974.08					
		sundries @ 3% on 39932.71						1197.98			
		Contractor's profit and overhead charges @ 21.50% on 41130.69						8843.10			
								49973.79			
		Labour cess @ 1% on 49973.79						499.74			
		Cost	120	cum				50473.53			420.61
		Rate	1	cum				420.61			42.06
		sub mountainous @ 10% on 420.61									42.06
									420.61		420.61
									3355.10		3397.16
IV		Formwork @	3.75%					111.53			
		sundries @ 3% on 111.53						3.35			
		Contractor's profit and overhead charges @ 21.50% on 114.88						24.70			
								139.58			
		Labour cess @ 1% on 139.58						1.40			
		Rate	1	cum				140.98	140.98		140.98
		sub mountainous @ 10% on 140.98									14.10
								561.59			617.75
								3496.08			3552.24

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
F		PCC Grade M30									
		Case I									
		Using Concrete Mixer									
		Unit	1	cum							
		Taking output	15	cum							
I		Material									
(i)	0.00	Cement	405	kg	tonne	6.08	5245.35	31865.50			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I						39652.48			
		Contractor's profit @ 10% on 39652.48						3965.25			
		Cost	15	cum				43617.73			
		Rate	1	cum				2907.85			
		Labour cess @ 1% on 2907.85						29.08			
		Total						2936.93	2936.93		2936.93
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3199.08			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
								6709.08			
IV		Formwork @ 3.50 per cent of cost of concrete i.e. cost of material, labour and machinery						1622.65			
		Total -II+III+IV						8331.73			
		sundries @ 3% on 8331.73						249.95			
		Contractor's profit and overhead charges @ 21.50% on 8581.68						1845.06			
								10426.74			
		Labour cess @ 1% on 10426.74						104.27			
		Cost	15	cum				10531.01			
		Rate	1	cum				702.07	702.07		702.07
		sub mountainous @ 10% on 702.07									70.21
											772.28
											3709.21
								3639.00			3709.21

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		Using Batching Plant, Transit Mixer and Concrete Pump									
		Unit	1	cum							
		Taking output	120	cum							
I		Material									
(i)	0.00	Cement	405	kg	tonne	48.60	5245.35	254924.01			
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42			
(iii)	0.00	40 mm Aggregate			cum	43.20	425.22	18369.50			
(iv)	0.00	20 mm Aggregate			cum	43.20	435.24	18802.37			
(v)	0.00	10 mm Aggregate			cum	21.60	461.32	9964.51			
		Total-I						317219.81			
		Contractor's profit @ 10% on 317219.81						31721.98			
		Cost	120	cum				348941.79			
		Rate	1	cum				2907.85			
		Labour cess @ 1% on 2907.85						29.08			
		Total						2936.93	2936.93		2936.93
II		Labour									
(i)	L-29	Mate			day	0.84	151.44	127.21			
(ii)	L-10	Mason			day	3.00	223.36	670.08			
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42			
		Total-II						3257.71			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00			
(ii)	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00			
(iii)	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00			
(iv)	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour	15.00	900.00	13500.00			
(v)	2.80	Concrete Pump			hour	6.00	247.50	1485.00			
		Total-III						36675.00			
								39932.71			
IV		Formwork @ 3.50 per cent of cost of concrete i.e. cost of material, labour and machinery						12500.34			
		Total -II+III+IV						52433.05			
		sundries @ 3% on 52433.05						1572.99			
		Contractor's profit and overhead charges @ 21.50% on 54006.04						11611.30			
								65617.34			
		Labour cess @ 1% on 65617.34						656.17			
		Cost	120	cum				66273.51			
		Rate	1	cum				552.28	552.28		552.28
		sub mountainous @ 10% on 552.28									55.23
											607.51
									3489.21		3544.44

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
G		RCC Grade M30									
		Case I									
		Using Concrete Mixer									
		Unit	1	cum							
		Taking output	15	cum							
I		Material									
(i)	0.00	Cement	407	kg	tonne	6.11	5245.35	32022.86			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	20 mm Aggregate			cum	8.10	435.24	3525.44			
(iv)	0.00	10 mm Aggregate			cum	5.40	461.32	2491.13			
		Total-I						39934.36			
		Contractor's profit @ 10% on 39934.36						3993.44			
		Cost	15	cum				43927.80			
		Rate	1	cum				2928.52			
		Labour cess @ 1% on 2928.52						29.29			
		Total						2957.81	2957.81		2957.81
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3199.08			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
								6709.08			
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III)				3109.56					
		sundries @ 3% on 6709.08						201.27			
		Contractor's profit and overhead charges @ 21.50% on 6910.35						1485.73			
								8396.08			
		Labour cess @ 1% on 8396.08						83.96			
		Cost	15	cum				8480.04			
		Rate	1	cum				565.34			565.34
		sub mountainous @ 10% on 565.34									56.53
								565.34			621.87
								3523.15			3579.68
IV		Formwork @	3.50%					108.83			
		sundries @ 3% on 108.83						3.26			
		Contractor's profit and overhead charges @ 21.50% on 112.09						24.10			
								136.19			
		Labour cess @ 1% on 136.19						1.36			
		Rate	1	cum				137.55	137.55		137.55
		sub mountainous @ 10% on 137.55									13.76
								702.89			773.18
								3660.70			3730.99

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		Using Batching Plant, Transit Mixer and Concrete Pump									
			Unit	1	cum						
		Taking output	120	cum							
I		Material									
(i)	0.00	Cement	407	kg	tonne	48.84	5245.35	256182.89			
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42			
(iii)	0.00	20 mm Aggregate			cum	64.80	435.24	28203.55			
(iv)	0.00	10 mm Aggregate			cum	43.20	461.32	19929.02			
		Total-I						319474.88			
		Contractor's profit @ 10% on 319474.88						31947.49			
		Cost	120	cum				351422.37			
		Rate	1	cum				2928.52			
		Labour cess @ 1% on 2928.52						29.29			
		Total						2957.81	2957.81		2957.81
II		Labour									
(i)	L-29	Mate			day	0.84	151.44	127.21			
(ii)	L-10	Mason			day	3.00	223.36	670.08			
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42			
		Total-II						3257.71			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00			
(ii)	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00			
(iii)	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00			
(iv)	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour	15.00	900.00	13500.00			
(v)	2.80	Concrete Pump			hour	6.00	247.50	1485.00			
		Total-III						36675.00			
								39932.71			
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III)				2995.06					
		sundries @ 3% on 39932.71						1197.98			
		Contractor's profit and overhead charges @ 21.50% on 41130.69						8843.10			
								49973.79			
		Labour cess @ 1% on 49973.79						499.74			
		Cost	120	cum				50473.53			420.61
		Rate	1	cum				420.61			42.06
		sub mountainous @ 10% on 420.61									42.06
									420.61		420.61
									3378.42		3420.48
IV		Formwork @	3.50%					104.83			
		sundries @ 3% on 104.83						3.14			
		Contractor's profit and overhead charges @ 21.50% on 107.97						23.21			
								131.18			
		Labour cess @ 1% on 131.18						1.31			
		Rate	1	cum				132.49	132.49		132.49
		sub mountainous @ 10% on 132.49									13.25
									553.10		608.41
									3510.91		3566.22

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
H		RCC Grade M35									
		Case I									
		Using Concrete Mixer									
			Unit	1	cum						
		Taking output	15		cum						
I		Material									
(i)	0.00	Cement	422	kg	tonne	6.33	5245.35	33203.07			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	20 mm Aggregate			cum	8.10	435.24	3525.44			
(iv)	0.00	10 mm Aggregate			cum	5.40	461.32	2491.13			
		Total-I						41114.57			
		Contractor's profit @ 10% on 41114.57						4111.46			
		Cost	15		cum			45226.03			
		Rate	1		cum			3015.07			
		Labour cess @ 1% on 3015.07						30.15			
		Total						3045.22	3045.22		3045.22
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3199.08			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
								6709.08			
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III)				3188.24					
		sundries @ 3% on 6709.08						201.27			
		Contractor's profit and overhead charges @ 21.50% on 6910.35						1485.73			
								8396.08			
		Labour cess @ 1% on 8396.08						83.96			
		Cost	15		cum			8480.04			
		Rate	1		cum			565.34			565.34
		sub mountainous @ 10% on 565.34									56.53
								565.34			621.87
								3610.56			3667.09
IV		Formwork @						95.65			
		sundries @ 3% on 95.65						2.87			
		Contractor's profit and overhead charges @ 21.50% on 98.52						21.18			
								119.70			
		Labour cess @ 1% on 119.7						1.20			
		Rate	1		cum			120.90	120.90		120.90
		sub mountainous @ 10% on 120.9									12.09
								686.24			754.86
								3731.46			3800.08

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		Using Batching Plant, Transit Mixer and Concrete Pump									
			Unit	1	cum						
		Taking output	120	cum							
		Material									
(i)	0.00	Cement	422	kg	tonne	50.64	5245.35	265624.52			
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42			
(iii)	0.00	20 mm Aggregate			cum	64.80	435.24	28203.55			
(iv)	0.00	10 mm Aggregate			cum	43.20	461.32	19929.02			
		Total-I						328916.51			
		Contractor's profit @ 10% on 328916.51						32891.65			
		Cost	120	cum				361808.16			
		Rate	1	cum				3015.07			
		Labour cess @ 1% on 3015.07						30.15			
		Total						3045.22	3045.22		3045.22
II		Labour									
(i)	L-29	Mate			day	0.84	151.44	127.21			
(ii)	L-10	Mason			day	3.00	223.36	670.08			
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42			
		Total-II						3257.71			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00			
(ii)	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00			
(iii)	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00			
(iv)	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour	15.00	900.00	13500.00			
(v)	2.80	Concrete Pump			hour	6.00	247.50	1485.00			
		Total-III						36675.00			
								39932.71			
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III)				3073.74					
		sundries @ 3% on 39932.71						1197.98			
		Contractor's profit and overhead charges @ 21.50% on 41130.69						8843.10			
								49973.79			
		Labour cess @ 1% on 49973.79						499.74			
		Cost	120	cum				50473.53			420.61
		Rate	1	cum				420.61			42.06
		sub mountainous @ 10% on 420.61									42.06
									420.61		420.61
									3465.83		3507.89
IV		Formwork @	3.00%					92.21			
		sundries @ 3% on 32.21						2.77			
		Contractor's profit and overhead charges @ 21.50% on 94.98						20.42			
								115.40			
		Labour cess @ 1% on 115.4						1.15			
		Rate	1	cum				116.55	116.55		116.55
		sub mountainous @ 10% on 116.55									11.66
									537.16		590.88
									3582.38		3636.10

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		WELL FOUNDATION									
8		Providing and Constructing Temporary Island 16 m diameter for Construction of Well Foundation for 8m dia. Well.									
		As per MoRT&H Specification 1200									
A		Assuming depth of water 1.0 m and height of island to be 1.25 m.									
		Unit	1	No							
		Taking output	1	No							
I		Material									
(i)	0.0	Earth (compacted)			cum	251.20	37.0	9299.42			
(ii)	CSR ITEM No 23.27	Sand bags			each	750.00	8.47	6352.50			
		Total-I						15651.92			
		Contractor's profit @ 10% on 15651.92						1565.19			
		Cost	1	No				17217.11			
		Rate	1	No				17217.11			
		Labour cess @ 1% on 17217.11						172.17			
		Total						17389.28	17389.28		17389.28
II		Labour									
(i)	L-29	Mate			day	0.40	151.44	60.58			
(ii)	L-34	Mazdoor for filling sand bags, stitching and placing			day	15.00	143.81	2157.15			
		Total-II						2217.73			
III		Hiring charges of Machinery									
(i)	2.13	Crane with grab 1 cum capacity			hour	20.00	825.00	16500.00			
(ii)		Consumables @ 2.5 per cent of (III) above	2.50%					412.50			
								16912.50			
		Total -II+III						19069.65			
		sundries @ 3% on 19069.65						572.09			
		Contractor's profit and overhead charges @ 21.50% on 19641.74						4222.97			
								23864.71			
		Labour cess @ 1% on 23864.71						238.65			
		Cost	1	No				24103.36			
		Rate	1	No				24103.36	24103.36		24103.36
		sub mountainous @ 10% on 24103.36									2410.34
											26513.70
								41492.64			43902.98
	Note	It is assumed that earth will be available within the working space of crane with grab bucket.									
	Note	For other well diameters rate can be worked out on the basis of cross-sectional area of well. The diameter of the island shall be in the conformity with clause 1203.2 of MoRTH specifications.									

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
B		Assuming depth of water 4.0 m and height of island 4.5 m.									
		Unit	1	No							
		Taking output	1	No							
I		Material									
(i)	0.0	Earth (compacted)			cum	904.32	37.02	33477.93			
(ii)	CSR ITEM No 23.27	Sand bags			each	6000.00	8.47	50820.00			
(iii)	0.00	Wooden ballies 8" Dia and 9 m long			each	95.00	400.00	38000.00			
(iv)	0.00	Wooden ballies 2" Dia for bracing			metre	190.00	40.00	7600.00			
		Total-I						129897.93			
		Contractor's profit @ 10% on 129897.93						12989.79			
		Cost	1	No				142887.72			
		Rate	1	No				142887.72			
		Labour cess @ 1% on 142887.72						1428.88			
		Total						144316.60	144316.60		144316.60
II		Labour									
(i)	L-29	Mate			day	5.60	151.44	848.06			
(ii)	L-34	Mazdoor for piling 8" dia ballies for piling 8" dia ballies			day	18.00	143.81	2588.58			
(iii)	L-34	Mazdoor for bracing with 2" dia ballies			day	12.00	143.81	1725.72			
(iv)	L-34	Mazdoor for filling sand bags, stitching and placing			day	110.00	143.81	15819.10			
		Total-II						20981.46			
		Hiring charges of Machinery									
(i)	2.13	Crane with grab 1 cum capacity			hour	50.00	825.00	41250.00			
(ii)		Consumables and other arrangements for piling ballies @ 2.5 per cent of (III).	2.50%					1031.25			
		Total -II+III						42281.25			
		sundries @ 3% on 63262.71						63262.71			
		Contractor's profit and overhead charges @ 21.50% on 65160.59						14009.53			
								79170.12			
		Labour cess @ 1% on 79170.12						791.70			
		Cost	1	No				79961.82			
		Rate	1	No				79961.82	79961.82		79961.82
		sub mountainous @ 10% on 79961.82									7996.18
											87958.00
								224278.42			232274.60
	Note	For other well diameters rate can be worked out on the basis of cross-sectional area of well. The diameter of the island shall be in the conformity with clause 1203.2 of MoRTH specifications.									

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
9		Providing and constructing one span service road to reach island location from one pier location to another pier location									
		Assuming span length 30 m, width of service road 10m and depth of water 1m									
		As per MoRT&H Specification 1200									
		Unit	1	m							
		Taking output	30	m							
		Material									
(i)	0.0	Earth			cum	450.00	37.02	16659.00			
(ii)	CSR ITEM No 23.27	Sand bags			each	300.00	8.47	2541.00			
		Total-I						19200.00			
		Contractor's profit @ 10% on 19200						1920.00			
		Cost	30	m				21120.00			
		Rate	1	m				704.00			
		Labour cess @ 1% on 704						7.04			
		Total						711.04	711.04		711.04
		Labour									
I	L-29	Mate			day	0.24	151.44	36.35			
(i)	L-34	Mazdoor for filling sand bags, stitching and			day	6.00	143.81	862.86			
		Total-II						899.21			
		Hiring charges of Machinery									
	2.19	Front end Loader 1 cum capacity			hour	27.00	780.00	21060.00			
	2.56	Tipper 5.5 cum capacity			hour	28.00	300.00	8400.00			
		Total-III						29460.00			
		Total -II+III						30359.21			
		sundries @ 3% on 30359.21						910.78			
		Contractor's profit and overhead charges @ 21.50% on 31269.99						6723.05			
								37993.04			
		Labour cess @ 1% on 37993.04						379.93			
		Cost	30	m				38372.97			
		Rate	1	m				1279.10	1279.10		1279.10
		sub mountainous @ 10% on 1279.1									127.91
											1407.01
		Total						1990.14			2118.05

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
10		Providing and Laying Cutting Edge of Mild Steel weighing 40 kg per metre for Well Foundation complete as per Drawing and Technical Specification.									
		As per MoRTH Specification 1200 & 1900									
		Unit	1		MT						
		Taking output	1		MT						
I		Material									
(i)	0.00	Structural steel in plates, angles, etc including 5 per cent wastage			tonne	1.05	38143.69	40050.87			
(ii)	0.00	Nuts & bolts			Kg	20.00	58.03	1160.50			
		Total-I	1					41211.37			
		Contractor's profit @ 10% on 41211.37						4121.14			
		Cost	1		mt			45332.51			
		Rate	1		mt			45332.51			
		Labour cess @ 1% on 45332.51						453.33			
		Total						45785.84	45785.84		45785.84
II		Labour									
		(for cutting, bending, making holes, joining, welding and erecting in position)									
(i)	L-29	Mate			day	1.32	151.44	199.90			
(ii)	L-20	Fitter			day	5.50	223.36	1228.48			
(iii)	L-5	Blacksmith			day	5.50	223.36	1228.48			
(iv)	L-37	Welder			day	5.50	174.53	959.92			
(v)	L-35	Mazdoor			day	16.50	136.69	2255.39			
		Total-II						5872.17			
		sundries @ 3% on 5872.17						176.17			
		Contractor's profit and overhead charges @ 21.50% on 6048.34						1300.39			
								7348.73			
		Labour cess @ 1% on 7348.73						73.49			
		Cost	1		mt			7422.22			
		Rate	1		mt			7422.22	7422.22		7422.22
		sub mountainous @ 10% on 7422.22									742.22
		Electrodes, cutting gas and other consumables @ 10 per cent of cost of (I) above		10%				4578.58	4578.58		4578.58
		Total						57786.64			8164.44
											58528.86

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
11		Plain/Reinforced Cement Concrete, in Well Foundation complete as per Drawing and Technical Specification.									
		As per MORT&H Specification 1200, 1500 & 1700									
A		Well curb									
(i)		RCC Grade M20									
		Case I									
		Labour cost as per analysis 7 C							565.34		621.87
		cost of concrete as per analysis 7 C							3173.49		3230.02
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 C				2794.84					
IV		Formwork @	20%					558.97			
		sundries @ 3% on 558.97						16.77			
		Contractor's profit and overhead charges @ 21.50% on 575.74						123.78			
								699.52			
		Labour cess @ 1% on 699.52						7.00			
		Rate 1		cum				706.52	706.52		706.52
		sub mountainous @ 10% on 706.52									70.65
								1271.86			1399.04
								3880.01			4007.19

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		With Batching Plant, Transit Mixer and Concrete Pump									
		Labour cost as per analysis 7 C (Case II)							420.61		462.67
		cost of concrete as per analysis 7 C (Case II)							3028.76		3070.82
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 C				2680.34					
IV		Formwork @	20%					536.07			
		sundries @ 3% on 536.07						16.08			
		Contractor's profit and overhead charges @ 21.50% on 552.15						118.71			
								670.86			
		Labour cess @ 1% on 670.86						6.71			
								677.57			677.57
		sub mountainous @ 10% on 677.57									67.76
									1098.18		1208.00
									3706.33		3816.15

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		RCC M25 Grade									
		Case I									
		Using Concrete Mixer									
		Labour cost as per analysis 7 E							565.34		621.87
		cost of concrete as per analysis 7 E							3499.83		3556.36
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 E				3088.58					
IV		Formwork @	20%					617.72			
		sundries @ 3% on 617.72						18.53			
		Contractor's profit and overhead charges @ 21.50% on 636.25						136.79			
								773.04			
		Labour cess @ 1% on 773.04						7.73			
								780.77	780.77		780.77
		sub mountainous @ 10% on 780.77									78.08
									1346.11		1480.72
									4280.60		4415.21

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		With Batching Plant, Transit Mixer and Concrete Pump									
		Labour cost as per analysis 7 E (Case II)							420.61		462.67
		cost of concrete as per analysis 7 E (Case II)							3355.10		3397.16
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 E				2974.08					
IV		Formwork @	20%					594.82			
		sundries @ 3% on 594.82						17.84			
		Contractor's profit and overhead charges @ 21.50% on 612.66						131.72			
								744.38			
		Labour cess @ 1% on 744.38						7.44			
								751.82	751.82		751.82
		sub mountainous @ 10% on 751.82									75.18
									1172.43		1289.67
									4106.92		4224.16

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(iii)		RCC M35 Grade									
		Case I									
		Using Concrete Mixer									
		Labour cost as per analysis 7 h							565.34		621.87
		cost of concrete as per analysis 7 h							3610.56		3667.09
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 h				3188.24					
IV		Formwork @	20%					637.65			
		sundries @ 3% on 637.65						19.13			
		Contractor's profit and overhead charges @ 21.50% on 656.78						141.21			
								797.99			
		Labour cess @ 1% on 797.99						7.98			
								805.97			805.97
		sub mountainous @ 10% on 805.97									80.60
									1371.31		1508.44
									4416.53		4553.66

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		Using Batching Plant, Transit Mixer and Concrete Pump									
		Labour cost as per analysis 7 h (Case II)							420.61		462.67
		cost of concrete as per analysis 7 h (Case II)							3465.83		3507.89
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 h				3073.74					
IV		Formwork @	20%					614.75			
		sundries @ 3% on 614.75						18.44			
		Contractor's profit and overhead charges @ 21.50% on 633.19						136.14			
								769.33			
		Labour cess @ 1% on 769.33						7.69			
								777.02	777.02		777.02
		sub mountainous @ 10% on 777.02									77.70
									1197.63		1317.39
									4242.85		4362.61
		No If curb concrete is carried out within steel liner, cost of te. formwork shall be excluded.									

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
B		Well steining									
(i)		PCC M20 Grade									
			Unit	1	cum						
		Taking output	15		cum						
I		Material									
(i)	0.00	Cement	344	kg	tonne	5.16	5245.35	27066.01			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I						34852.99			
		Contractor's profit @ 10% on 34852.99						3485.30			
		Cost	15		cum			38338.29			
		Rate	1		cum			2555.89			
		Labour cess @ 1% on 2555.89						25.56			
		Total						2581.45	2581.45		2581.45
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3199.08			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
		Total -II+III						6709.08			
IV		Formwork @ 10 per cent on cost of concrete i.e. cost of material, labour and machinery	10%					4156.21			
		Total -II+III+IV						10865.29			
		sundries @ 3% on 10865.29						325.96			
		Contractor's profit and overhead charges @ 21.50% on 11191.25						2406.12			
								13597.37			
		Labour cess @ 1% on 13597.37						135.97			
		Cost	15		cum			13733.34			
		Rate	1		cum			915.56	915.56		915.56
		sub mountainous @ 10% on 915.56									91.56
											1007.12
								3497.01			3588.57

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		RCC Grade M20									
		Case I									
		Labour cost as per analysis 7 C							565.34		621.87
		cost of concrete as per analysis 7 C							3173.49		3230.02
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 C					2794.84				
IV		Formwork @	10%					279.48			
		sundries @ 3% on 279.48						8.38			
		Contractor's profit and overhead charges @ 21.50% on 287.86						61.89			
								349.75			
		Labour cess @ 1% on 349.75						3.50			
		Rate 1	1	cum				353.25	353.25		353.25
		sub mountainous @ 10% on 353.25									35.33
									918.59		1010.45
									3526.74		3618.60

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		With Batching Plant, Transit Mixer and Concrete Pump									
		Case II									
		Labour cost as per analysis 7 C (Case II)							420.61		462.67
		cost of concrete as per analysis 7 C (Case II)							3028.76		3070.82
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 C				2680.34					
IV		Formwork @	10%					268.03			
		sundries @ 3% on 268.03						8.04			
		Contractor's profit and overhead charges @ 21.50% on 276.07						59.36			
								335.43			
		Labour cess @ 1% on 335.43						3.35			
		Rate 1		cum				338.78	338.78		338.78
		sub mountainous @ 10% on 338.78									33.88
									759.39		835.33
									3367.54		3443.48

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(iii)		PCC M25 Grade									
		Case I									
		Using Concrete Mixer									
		Unit	1	cum							
		Taking output	15	cum							
I		Material									
(i)	0.00	Cement	399	kg	tonne	5.99	5245.35	31393.42			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I						39180.40			
		Contractor's profit @ 10% on 39180.4						3918.04			
		Cost	15	cum				43098.44			
		Rate	1	cum				2873.23			
		Labour cess @ 1% on 2873.23						28.73			
		Total						2901.96	2901.96		2901.96
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3199.08			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
		Total -II+III						6709.08			
IV		Formwork @ 10 per cent on cost of concrete i.e. cost of material, labour and machinery						4588.95			
		Total -II+III+IV						11298.03			
		sundries @ 3% on 11298.03						338.94			
		Contractor's profit and overhead charges @ 21.50% on 11636.97						2501.95			
								14138.92			
		Labour cess @ 1% on 14138.92						141.39			
		Cost	15	cum				14280.31			
		Rate	1	cum				952.02	952.02		952.02
		sub mountainous @ 10% on 952.02									95.20
											1047.22
											3949.18
								3853.98			

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		With Batching Plant, Transit Mixer and Concrete Pump									
		Unit	1	cum							
		Taking output	120	cum							
I		Material									
(i)	0.00	Cement	399	kg	tonne	47.88	5245.35	251147.36			
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42			
(iii)	0.00	40 mm Aggregate			cum	43.20	425.22	18369.50			
(iv)	0.00	20 mm Aggregate			cum	43.20	435.24	18802.37			
(v)	0.00	10 mm Aggregate			cum	21.60	461.32	9964.51			
		Total-I						313443.16			
		Contractor's profit @ 10% on 313443.16						31344.32			
		Cost	120	cum				344787.48			
		Rate	1	cum				2873.23			
		Labour cess @ 1% on 2873.23						28.73			
		Total						2901.96	2901.96		2901.96
II		Labour									
(i)	L-29	Mate			day	0.84	151.44	127.21			
(ii)	L-10	Mason			day	3.00	223.36	670.08			
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42			
		Total-II						3257.71			
III		Hiring charges of Machinery									
	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00			
	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00			
	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00			
	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour	15.00	900.00	13500.00			
	2.80	Concrete Pump			hour	6	247.50	1485.00			
		Total-III						36675.00			
		Total -II+III						39932.71			
IV		Formwork @ 10 per cent of cost of concrete i.e. cost of material, labour and machinery						35337.59			
		Total -II+III+IV						75270.30			
		sundries @ 3% on 75270.3						2258.11			
		Contractor's profit and overhead charges @ 21.50% on 77528.41						16668.61			
								94197.02			
		Labour cess @ 1% on 94197.02						941.97			
		Cost	120	cum				95138.99			
		Rate	1	cum				792.82	792.82		792.82
		sub mountainous @ 10% on 792.82									79.28
											872.10
									3694.78		3774.06

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(iv)		RCC M25 Grade									
		Case I									
		Using Concrete Mixer									
		Labour cost as per analysis 7 E							565.34		621.87
		cost of concrete as per analysis 7 E							3499.83		3556.36
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 E				3088.58					
IV		Formwork @	10%					308.86			
		sundries @ 3% on 308.86						9.27			
		Contractor's profit and overhead charges @ 21.50% on 318.13						68.40			
								386.53			
		Labour cess @ 1% on 386.53						3.87			
								390.40	390.40		390.40
		sub mountainous @ 10% on 390.4									39.04
									955.74		1051.31
									3890.23		3985.80

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		With Batching Plant, Transit Mixer and Concrete Pump									
		Labour cost as per analysis 7 E (Case II)							420.61		462.67
		cost of concrete as per analysis 7 E (Case II)							3355.10		3397.16
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 E				2974.08					
IV		Formwork @	10%					297.41			
		sundries @ 3% on 297.41						8.92			
		Contractor's profit and overhead charges @ 21.50% on 306.33						65.86			
								372.19			
		Labour cess @ 1% on 372.19						3.72			
								375.91	375.91		375.91
		sub mountainous @ 10% on 375.91									37.59
								796.52			876.17
								3731.01			3810.66

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(v)		PCC Grade M30										
		Case I										
		Using Concrete Mixer										
			Unit	1	cum							
		Taking output	15	cum								
I		Material										
(i)	0.00	Cement	405	kg	tonne	6.08	5245.35	31865.50				
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93				
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19				
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30				
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56				
		Total-I						39652.48				
		Contractor's profit @ 10% on 39652.48						3965.25				
		Cost	15	cum				43617.73				
		Rate	1	cum				2907.85				
		Labour cess @ 1% on 2907.85						29.08				
		Total						2936.93	2936.93			2936.93
II		Labour										
(i)	L-29	Mate			day	0.86	151.44	130.24				
(ii)	L-10	Mason			day	1.50	223.36	335.04				
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80				
		Total-II						3199.08				
III		Hiring charges of Machinery										
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00				
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00				
		Total-III						3510.00				
								6709.08				
IV		Formwork @ 10 per cent of cost of concrete i.e. cost of material, labour and machinery						4636.16				
		Total -II+III+IV						11345.24				
		sundries @ 3% on 11345.24						340.36				
		Contractor's profit and overhead charges @ 21.50% on 11685.6						2512.40				
								14198.00				
		Labour cess @ 1% on 14198						141.98				
		Cost	15	cum				14339.98				
		Rate	1	cum				956.00	956.00			956.00
		sub mountainous @ 10% on 956										95.60
												1051.60
									3892.93			3988.53

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		Using Batching Plant, Transit Mixer and Concrete Pump									
		Unit	1	cum							
		Taking output	120	cum							
I		Material									
(i)	0.00	Cement	405	kg	tonne	48.60	5245.35	254924.01			
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42			
(iii)	0.00	40 mm Aggregate			cum	43.20	425.22	18369.50			
(iv)	0.00	20 mm Aggregate			cum	43.20	435.24	18802.37			
(v)	0.00	10 mm Aggregate			cum	21.60	461.32	9964.51			
		Total-I						317219.81			
		Contractor's profit @ 10% on 317219.81						31721.98			
		Cost	120	cum				348941.79			
		Rate	1	cum				2907.85			
		Labour cess @ 1% on 2907.85						29.08			
		Total						2936.93	2936.93		2936.93
II		Labour									
(i)	L-29	Mate			day	0.84	151.44	127.21			
(ii)	L-10	Mason			day	3.00	223.36	670.08			
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42			
		Total-II						3257.71			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00			
(ii)	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00			
(iii)	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00			
(iv)	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour	15.00	900.00	13500.00			
(v)	2.80	Concrete Pump			hour	6.00	247.50	1485.00			
		Total-III						36675.00			
								39932.71			
IV		Formwork @ 10 per cent of cost of concrete i.e. cost of material, labour and machinery						35715.25			
		Total -II+III+IV						75647.96			
		sundries @ 3% on 75647.96						2269.44			
		Contractor's profit and overhead charges @ 21.50% on 77917.4						16752.24			
								94669.64			
		Labour cess @ 1% on 94669.64						946.70			
		Cost	120	cum				95616.34			
		Rate	1	cum				796.80	796.80		796.80
		sub mountainous @ 10% on 796.8									79.68
											876.48
									3733.73		3813.41

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(vi)		RCC Grade M30									
		Case I									
		Labour cost as per analysis 7 g							565.34		621.87
		cost of concrete as per analysis 7 g							3523.15		3579.68
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 g				3109.56					
IV		Formwork @	10%					310.96			
		sundries @ 3% on 310.96						9.33			
		Contractor's profit and overhead charges @ 21.50% on 320.29						68.86			
								389.15			
								3.89			
		Rate 1	cum					393.04	393.04		393.04
		sub mountainous @ 10% on 393.04									39.30
								958.38			1054.21
								3916.19			4012.02

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		Using Batching Plant, Transit Mixer and Concrete Pump									
		Labour cost as per analysis 7 G (Case II)							420.61		462.67
		cost of concrete as per analysis 7 G (Case II)							3378.42		3420.48
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 G				2995.06					
IV		Formwork @	10%					299.51			
		sundries @ 3% on 299.51						8.99			
		Contractor's profit and overhead charges @ 21.50% on 308.5						66.33			
								374.83			
		Labour cess @ 1% on 374.83						3.75			
								378.58	378.58		378.58
		sub mountainous @ 10% on 378.58									37.86
								799.19			879.11
								3757.00			3836.92

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(vii)		RCC Grade M35									
		Case I									
		Using Concrete Mixer									
		Labour cost as per analysis 7 H (Case I)							565.34		621.87
		cost of concrete as per analysis 7H (Case I)							3610.56		3667.09
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 H				3188.24					
IV		Formwork @	10%					318.82			
		sundries @ 3% on 318.82						9.56			
		Contractor's profit and overhead charges @ 21.50% on 328.38						70.60			
								398.98			
		Labour cess @ 1% on 398.98						3.99			
								402.97	402.97		402.97
		sub mountainous @ 10% on 402.97									40.30
									968.31		1065.14
									4013.53		4110.36

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		Using Batching Plant, Transit Mixer and Concrete Pump									
		Labour cost as per analysis 7 H (Case II)							420.61		462.67
		cost of concrete as per analysis 7H (Case II)							3465.83		3507.89
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 H				3073.74					
IV		Formwork @	10%					307.37			
		sundries @ 3% on 307.37						9.22			
		Contractor's profit and overhead charges @ 21.50% on 316.59						68.07			
								384.66			
		Labour cess @ 1% on 384.66						3.85			
								388.51	388.51		388.51
		sub mountainous @ 10% on 388.51									38.85
									809.12		890.03
									3854.34		3935.25

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(viii)		RCC M40 Grade									
		Using Batching Plant, Transit Mixer and Concrete Pump									
		Unit	1	cum							
		Taking output	120	cum							
I		Material									
(i)	0.00	Cement	440	kg	tonne	52.80	5245.35	276954.48			
(ii)	0.00	Coarse Sand			cum	54.00	280.73	15159.42			
(iii)	0.00	20 mm Aggregate			cum	64.80	435.24	28203.55			
(iv)	0.00	10 mm Aggregate			cum	43.20	461.32	19929.02			
		Total-I						340246.47			
		Contractor's profit @ 10% on 340246.47						34024.65			
		Cost	120	cum				374271.12			
		Rate	1	cum				3118.93			
		Labour cess @ 1% on 3118.93						31.19			
		Total						3150.12	3150.12		3150.12
II		Labour									
(i)	L-29	Mate			day	0.84	151.44	127.21			
(ii)	L-10	Mason			day	3.00	223.36	670.08			
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42			
		Total-II						3257.71			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant			hour	6.00	2160.00	12960.00			
(ii)	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00			
(iii)	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00			
(iv)	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour	15.00	900.00	13500.00			
(v)	2.80	Concrete Pump			hour	6.00	247.50	1485.00			
		Total-III						36675.00			
		Total-I+II+III						39932.71			
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III)				3168.16					
		sundries @ 3% on 39932.71						1197.98			
		Contractor's profit and overhead charges @ 21.50% on 41130.69						8843.10			
								49973.79			
		Labour cess @ 1% on 49973.79						499.74			
		Cost	120	cum				50473.53			
		Rate	1	cum				420.61			420.61
		sub mountainous @ 10% on 420.61									42.06
									420.61		462.67
									3570.73		3612.79
IV		Formwork @	10%					316.82			
		sundries @ 3% on 316.82						9.50			
		Contractor's profit and overhead charges @ 21.50% on 326.32						70.16			
								396.48			
		Labour cess @ 1% on 396.48						3.96			
		Rate	1	cum				400.44	400.44		400.44
		sub mountainous @ 10% on 400.44									40.04
									821.05		903.16
									3971.17		4053.28

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
C		Bottom Plug									
		Concrete to be placed using tremie pipe									
		Note: 10% extra cement to be added where under water concreting is involved									
(i)		PCC Grade M20									
		Case I									
		Using Concrete Mixer									
		Unit 1			cum						
		Taking output 15			cum						
I		Material									
(i)	0.00	Cement	378.4	kg	tonne	5.676	5245.35	29772.61			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I						37559.59			
		Contractor's profit @ 10% on 37559.59						3755.96			
		Cost 15			cum			41315.55			
		Rate 1			cum			2754.37			
		Labour cess @ 1% on 2754.37						27.54			
		Total						2781.91	2781.91		2781.91
II		Labour									
(i)	L-29	Mate			day	0.90	151.44	136.30			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3205.14			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
(iii)	2.14	Light Crane 3 tonnes capacity for handling tremie pipe			hour	6.00	345.00	2070.00			
		Total-III						5580.00			
		Total-II+III						8785.14			
(IV)		Add 5 per cent of cost of material and labour towards cost of forming sump, protective bunds, chiselling and making arrangements for under water concreting with tremie pipe..						2038.24			
		Total -II+III+IV						10823.38			
		sundries @ 3% on 10823.38						324.70			
		Contractor's profit and overhead charges @ 21.50% on 11148.08						2396.84			
								13544.92			
		Labour cess @ 1% on 13544.92						135.45			
		Cost 15			cum			13680.37			
		Rate 1			cum			912.02	912.02		912.02
		sub mountainous @ 10% on 912.02									91.20
											1003.22
								3693.93			3785.13

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		Using Batching Plant, Transit Mixer and Crane/concrete pump									
		Unit	1	cum							
		Taking output	120	cum							
		Material									
(i)	0.00	Cement	378.4	kg	tonne	45.408	5245.35	238180.85			
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42			
(iii)	0.00	20 mm Aggregate			cum	64.80	435.24	28203.55			
(iv)	0.00	10 mm Aggregate			cum	43.20	461.32	19929.02			
		Total-I						301472.84			
		Contractor's profit @ 10% on 301472.84						30147.28			
		Cost	120	cum				331620.12			
		Rate	1	cum				2763.50			
		Labour cess @ 1% on 2763.5						27.64			
		Total						2791.14	2791.14		2791.14
		Labour									
(i)	L-29	Mate			day	0.88	151.44	133.27			
(ii)	L-10	Mason			day	3.00	223.36	670.08			
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42			
		Total-II						3263.77			
		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00			
(ii)	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00			
(iii)	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00			
(iv)	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour	15.00	900.00	13500.00			
(v)	2.80	Concrete Pump			hour	6.00	247.50	1485.00			
		Total-III						36675.00			
		Total-I+II+III						39938.77			
(IV)		Add 5 per cent of cost of material and labour towards cost of forming sump, protective bunds, chiselling and making arrangements for under water concreting with tremie pipe..						15236.83			
		Total -II+III+IV						55175.60			
		sundries @ 3% on 55175.6						1655.27			
		Contractor's profit and overhead charges @ 21.50% on 56830.87						12218.64			
								69049.51			
		Labour cess @ 1% on 69049.51						690.50			
		Cost	120	cum				69740.01			
		Rate	1	cum				581.17	581.17		581.17
		sub mountainous @ 10% on 581.17									58.12
											639.29
									3372.31		3430.43

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		PCC Grade M25									
		Case I									
		Using Concrete Mixer									
			Unit	1	cum						
		Taking output	15	cum							
I		Material									
(i)	0.00	Cement	438.9	kg	tonne	6.584	5245.35	34532.76			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I						42319.74			
		Contractor's profit @ 10% on 42319.74						4231.97			
		Cost	15	cum				46551.71			
		Rate	1	cum				3103.45			
		Labour cess @ 1% on 3103.45						31.03			
		Total						3134.48	3134.48		3134.48
II		Labour									
(i)	L-29	Mate			day	0.90	151.44	136.30			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3205.14			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
(iii)	2.14	Light Crane of 3 tonnes capacity for handling tremie pipe			hour	6.00	345.00	2070.00			
		Total-III						5580.00			
								8785.14			
(IV)		Add 5 per cent of cost of material and labour towards cost of forming sump, protective bunds, chiselling and making arrangements for under water concreting with tremie pipe..						2276.24			
		Total -II+III+IV						11061.38			
		sundries @ 3% on 11061.38						331.84			
		Contractor's profit and overhead charges @ 21.50% on 11393.22						2449.54			
								13842.76			
		Labour cess @ 1% on 13842.76						138.43			
		Cost	15	cum				13981.19			
		Rate	1	cum				932.08	932.08		932.08
		sub mountainous @ 10% on 932.08									93.21
											1025.29
								4066.56			4159.77

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		Using Batching Plant, Transit Mixer and Crane/concrete pump									
			Unit	1	cum						
			Taking output	120	cum						
I		Material									
(i)	0.00	Cement	438.9		tonne	52.668	5245.35	276262.09			
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42			
(iii)	0.00	20 mm Aggregate			cum	64.80	435.24	28203.55			
(iv)	0.00	10 mm Aggregate			cum	43.20	461.32	19929.02			
		Total-I						339554.08			
		Contractor's profit @ 10% on 339554.08						33955.41			
		Cost	120		cum			373509.49			
		Rate	1		cum			3112.58			
		Labour cess @ 1% on 3112.58						31.13			
		Total						3143.71	3143.71		3143.71
II		Labour									
(i)	L-29	Mate			day	0.88	151.44	133.27			
(ii)	L-10	Mason			day	3.00	223.36	670.08			
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42			
		Total-II						3263.77			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00			
(ii)	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00			
(iii)	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00			
(iv)	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour	15.00	900.00	13500.00			
(v)	2.80	Concrete Pump			hour	6.00	247.50	1485.00			
		Total-III						36675.00			
								39938.77			
(IV)		Add 5 per cent of cost of material and labour towards cost of forming sump, protective bunds, chiselling and making arrangements for under water concreting with tremie pipe..						17140.89			
		Total -II+III+IV						57079.66			
		sundries @ 3% on 57079.66						1712.39			
		Contractor's profit and overhead charges @ 21.50% on 58792.05						12640.29			
								71432.34			
		Labour cess @ 1% on 71432.34						714.32			
		Cost	120		cum			72146.66			
		Rate	1		cum			601.22	601.22		601.22
		sub mountainous @ 10% on 601.22									60.12
											661.34
									3744.93		3805.05

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(iii)		PCC Grade M30									
		Case I									
		Using Concrete Mixer									
			Unit	1	cum						
		Taking output	15	cum							
I		Material									
(i)	0.00	Cement	445.5		tonne	6.683	5245.35	35052.05			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I						42839.03			
		Contractor's profit @ 10% on 42839.03						4283.90			
		Cost	15	cum				47122.93			
		Rate	1	cum				3141.53			
		Labour cess @ 1% on 3141.53						31.42			
		Total						3172.95	3172.95		3172.95
II		Labour									
(i)	L-29	Mate			day	0.90	151.44	136.30			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3205.14			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
(iii)	2.14	Light Crane of 3 tonnes capacity for handling tremie pipe			hour	6.00	345.00	2070.00			
		Total-III						5580.00			
								8785.14			
(IV)		Add 5 per cent of cost of material and labour towards cost of forming sump, protective bunds, chiselling and making arrangements for under water concreting with tremie pipe..						2302.21			
		Total -II+III+IV						11087.35			
		sundries @ 3% on 11087.35						332.62			
		Contractor's profit and overhead charges @ 21.50% on 11419.97						2455.29			
								13875.26			
		Labour cess @ 1% on 13875.26						138.75			
		Cost	15	cum				14014.01			
		Rate	1	cum				934.27	934.27		934.27
		sub mountainous @ 10% on 934.27									93.43
											1027.70
								4107.22			4200.65

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		Using Batching Plant, Transit Mixer and Crane/concrete pump									
			Unit	1	cum						
		Taking output	120	cum							
		Material									
(i)	0.00	Cement	445.5		tonne	53.460	5245.35	280416.41			
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42			
(iii)	0.00	20 mm Aggregate			cum	64.80	435.24	28203.55			
(iv)	0.00	10 mm Aggregate			cum	43.20	461.32	19929.02			
		Total-I						343708.40			
		Contractor's profit @ 10% on 343708.4						34370.84			
		Cost	120	cum				378079.24			
		Rate	1	cum				3150.66			
		Labour cess @ 1% on 3150.66						31.51			
		Total						3182.17	3182.17		3182.17
		Labour									
(i)	L-29	Mate			day	0.88	151.44	133.27			
(ii)	L-10	Mason			day	3.00	223.36	670.08			
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42			
		Total-II						3263.77			
		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00			
(ii)	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00			
(iii)	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00			
(iv)	2.57	Transit Mixer 4 cum			hour	15.00	900.00	13500.00			
(v)	2.80	Concrete Pump			hour	6.00	247.50	1485.00			
		Total-III						36675.00			
								39938.77			
(IV)		Add 5 per cent of cost of material and labour towards cost of forming sump, protective bunds, chiselling and making arrangements for under water concreting with tremie pipe..						17348.61			
		Total -II+III+IV						57287.38			
		sundries @ 3% on 57287.38						1718.62			
		Contractor's profit and overhead charges @ 21.50% on 59006						12686.29			
								71692.29			
		Labour cess @ 1% on 71692.29						716.92			
		Cost	120	cum				72409.21			
		Rate	1	cum				603.41	603.41		603.41
		sub mountainous @ 10% on 603.41									60.34
											663.75
								3785.58			3845.92

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(iv)		PCC Grade M35									
		Case I									
		Using Concrete Mixer									
			Unit	1	cum						
		Taking output	15		cum						
I		Material									
(i)	0.00	Cement	451		tonne	6.765	5245.35	35484.79			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I						43271.77			
		Contractor's profit @ 10% on 43271.77						4327.18			
		Cost	15		cum			47598.95			
		Rate	1		cum			3173.26			
		Labour cess @ 1% on 3173.26						31.73			
		Total						3204.99	3204.99		3204.99
II		Labour									
(i)	L-29	Mate			day	0.90	151.44	136.30			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3205.14			
III		Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
(iii)	2.14	Light Crane of 3 tonnes capacity for handling tremie pipe			hour	6.00	345.00	2070.00			
		Total-III						5580.00			
								8785.14			
(IV)		Add 5 per cent of cost of material and labour towards cost of forming sump, protective bunds, chiselling and making arrangements for under water concreting with tremie pipe..						2323.85			
		Total -II+III+IV						11108.99			
		sundries @ 3% on 11108.99						333.27			
		Contractor's profit and overhead charges @ 21.50% on 11442.26						2460.09			
								13902.35			
		Labour cess @ 1% on 13902.35						139.02			
		Cost	15		cum			14041.37			
		Rate	1		cum			936.09	936.09		936.09
		sub mountainous @ 10% on 936.09									93.61
											1029.70
								4141.08			4234.69

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
		Case II										
		Using Batching Plant, Transit Mixer and Crane/concrete pump										
			Unit	1	cum							
		Taking output	120	cum								
I		Material										
(i)	0.00	Cement	451		tonne	54.120	5245.35	283878.34				
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42				
(iii)	0.00	20 mm Aggregate			cum	64.80	435.24	28203.55				
(iv)	0.00	10 mm Aggregate			cum	43.20	461.32	19929.02				
		Total-I						347170.33				
		Contractor's profit @ 10% on 347170.33						34717.03				
		Cost	120	cum				381887.36				
		Rate	1	cum				3182.39				
		Labour cess @ 1% on 3182.39						31.82				
		Total						3214.21	3214.21			3214.21
II		Labour										
(i)	L-29	Mate			day	0.88	151.44	133.27				
(ii)	L-10	Mason			day	3.00	223.36	670.08				
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42				
		Total-II						3263.77				
III		Hiring charges of Machinery										
(i)	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00				
(ii)	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00				
(iii)	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00				
(iv)	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour	15.00	900.00	13500.00				
(v)	2.80	Concrete Pump			hour	6.00	247.50	1485.00				
		Total-III						36675.00				
								39938.77				
(IV)		Add 5 per cent of cost of material and labour towards cost of forming sump, protective bunds, chiselling and making arrangements for under water concreting with tremie pipe..						17521.71				
		Total -II+III+IV						57460.48				
		sundries @ 3% on 57460.48						1723.81				
		Contractor's profit and overhead charges @ 21.50% on 59184.29						12724.62				
								71908.91				
		Labour cess @ 1% on 71908.91						719.09				
		Cost	120	cum				72628.00				
		Rate	1	cum				605.23	605.23			605.23
		sub mountainous @ 10% on 605.23										60.52
												665.75
									3819.44			3879.96

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
D		Intermediate plug									
(i)		Grade M20 PCC									
		Same as in bottom plug concrete, excluding cost of forming sump, protective bunds, chiseling etc.									
		Case I									
		Using Concrete Mixer									
		Unit	1		cum						
		Taking output	15		cum						
I		Material									
(i)	0.00	Cement	378.4		tonne	5.676	5245.35	29772.61			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I						37559.59			
		Contractor's profit @ 10% on 37559.59						3755.96			
		Cost	15		cum			41315.55			
		Rate	1		cum			2754.37			
		Labour cess @ 1% on 2754.37						27.54			
		Total						2781.91	2781.91		2781.91
II		Labour									
(i)	L-29	Mate			day	0.90	151.44	136.30			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3205.14			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
(iii)	2.14	Light Crane 3 tonnes capacity for handling tremie pipe			hour	6.00	345.00	2070.00			
		Total-III						5580.00			
		Total-II+III						8785.14			
		sundries @ 3% on 8785.14						263.55			
		Contractor's profit and overhead charges @ 21.50% on 9048.69						1945.47			
								10994.16			
		Labour cess @ 1% on 10994.16						109.94			
		Cost	15		cum			11104.10			
		Rate	1		cum			740.27	740.27		740.27
		sub mountainous @ 10% on 740.27									74.03
											814.30
								3522.18			3596.21

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		Using Batching Plant, Transit Mixer and Crane/concrete pump									
			Unit	1	cum						
		Taking output	120		cum						
I		Material									
(i)	0.00	Cement	378.4		tonne	45.408	5245.35	238180.85			
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42			
(iii)	0.00	20 mm Aggregate			cum	64.80	435.24	28203.55			
(iv)	0.00	10 mm Aggregate			cum	43.20	461.32	19929.02			
		Total-I						301472.84			
		Contractor's profit @ 10% on 301472.84						30147.28			
		Cost	120		cum			331620.12			
		Rate	1		cum			2763.50			
		Labour cess @ 1% on 2763.5						27.64			
		Total						2791.14	2791.14		2791.14
II		Labour									
(i)	L-29	Mate			day	0.88	151.44	133.27			
(ii)	L-10	Mason			day	3.00	223.36	670.08			
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42			
		Total-II						3263.77			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00			
(ii)	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00			
(iii)	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00			
(iv)	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour	15.00	900.00	13500.00			
(v)	2.80	Concrete Pump			hour	6.00	247.50	1485.00			
		Total-III						36675.00			
		Total-I+II+III						39938.77			
		Total -II+III						39938.77			
		sundries @ 3% on 39938.77						1198.16			
		Contractor's profit and overhead charges @ 21.50% on 41136.93						8844.44			
								49981.37			
		Labour cess @ 1% on 49981.37						499.81			
		Cost	120		cum			50481.18			
		Rate	1		cum			420.68	420.68		420.68
		sub mountainous @ 10% on 420.68									42.07
											462.75
									3211.82		3253.89

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		PCC Grade M25									
		Case I									
		Using Concrete Mixer									
		Unit	1	cum							
		Taking output	15	cum							
I		Material									
(i)	0.00	Cement	438.9	tonne		6.584	5245.35	34532.76			
(ii)	0.00	Coarse sand		cum		6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate		cum		5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate		cum		5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate		cum		2.70	461.32	1245.56			
		Total-I						42319.74			
		Contractor's profit @ 10% on 42319.74						4231.97			
		Cost	15	cum				46551.71			
		Rate	1	cum				3103.45			
		Labour cess @ 1% on 3103.45						31.03			
		Total						3134.48	3134.48		3134.48
II		Labour									
(i)	L-29	Mate		day		0.90	151.44	136.30			
(ii)	L-10	Mason		day		1.50	223.36	335.04			
(iii)	L-35	Mazdoor		day		20.00	136.69	2733.80			
		Total-II						3205.14			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)		hour		6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA		hour		6.00	360.00	2160.00			
(iii)	2.14	Light Crane of 3 tonnes capacity for handling tremie pipe		hour		6.00	345.00	2070.00			
		Total-III						5580.00			
		Total -II+III						8785.14			
		sundries @ 3% on 8785.14						263.55			
		Contractor's profit and overhead charges @ 21.50% on 9048.69						1945.47			
								10994.16			
		Labour cess @ 1% on 10994.16						109.94			
		Cost	15	cum				11104.10			
		Rate	1	cum				740.27	740.27		740.27
		sub mountainous @ 10% on 740.27									74.03
											814.30
								3874.75			3948.78

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
		Case II										
		Using Batching Plant, Transit Mixer and Crane/concrete pump										
			Unit	1	cum							
		Taking output	120	cum								
I		Material										
(i)	0.00	Cement	438.9		tonne	52.668	5245.35	276262.09				
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42				
(iii)	0.00	20 mm Aggregate			cum	64.80	435.24	28203.55				
(iv)	0.00	10 mm Aggregate			cum	43.20	461.32	19929.02				
		Total-I						339554.08				
		Contractor's profit @ 10% on 339554.08						33955.41				
		Cost	120	cum				373509.49				
		Rate	1	cum				3112.58				
		Labour cess @ 1% on 3112.58						31.13				
		Total						3143.71	3143.71			3143.71
II		Labour										
(i)	L-29	Mate			day	0.88	151.44	133.27				
(ii)	L-10	Mason			day	3.00	223.36	670.08				
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42				
		Total-II						3263.77				
III		Hiring charges of Machinery										
(i)	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00				
(ii)	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00				
(iii)	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00				
(iv)	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.			hour	15.00	900.00	13500.00				
(v)	2.80	Concrete Pump			hour	6.00	247.50	1485.00				
		Total-III						36675.00				
								39938.77				
		Total -II+III						39938.77				
		sundries @ 3% on 39938.77						1198.16				
		Contractor's profit and overhead charges @ 21.50% on 41136.93						8844.44				
								49981.37				
		Labour cess @ 1% on 49981.37						499.81				
		Cost	120	cum				50481.18				
		Rate	1	cum				420.68	420.68			420.68
		sub mountainous @ 10% on 420.68										42.07
												462.75
								3564.39				3606.46

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(iii)		PCC Grade M30									
		Case I									
		Using Concrete Mixer									
			Unit	1	cum						
		Taking output	15	cum							
I		Material									
(i)	0.00	Cement	445.5		tonne	6.683	5245.35	35052.05			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I	1					42839.03			
		Contractor's profit @ 10% on 42839.03						4283.90			
		Cost	15	cum				47122.93			
		Rate	1	cum				3141.53			
		Labour cess @ 1% on 3141.53						31.42			
		Total						3172.95	3172.95		3172.95
II		Labour									
(i)	L-29	Mate			day	0.90	151.44	136.30			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3205.14			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
(iii)	2.14	Light Crane of 3 tonnes capacity for handling tremie pipe			hour	6.00	345.00	2070.00			
		Total-III						5580.00			
		Total -II+III						8785.14			
		sundries @ 3% on 8785.14						263.55			
		Contractor's profit and overhead charges @ 21.50% on 9048.69						1945.47			
								2209.02			
		Labour cess @ 1% on 2209.02						22.09			
		Cost	15	cum				2231.11			
		Rate	1	cum				148.74	148.74		148.74
		sub mountainous @ 10% on 148.74									14.87
											163.61
											3336.56
									3321.69		3336.56

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		Using Batching Plant, Transit Mixer and Crane/concrete pump									
			Unit	1	cum						
		Taking output	120		cum						
I		Material									
(i)	0.00	Cement	445.5		tonne	53.460	5245.35	280416.41			
(ii)	0.00	Coarse sand			cum	54.00	280.73	15159.42			
(iii)	0.00	20 mm Aggregate			cum	64.80	435.24	28203.55			
(iv)	0.00	10 mm Aggregate			cum	43.20	461.32	19929.02			
		Total-I						343708.40			
		Contractor's profit @ 10% on 343708.4						34370.84			
		Cost	120		cum			378079.24			
		Rate	1		cum			3150.66			
		Labour cess @ 1% on 3150.66						31.51			
		Total						3182.17	3182.17		3182.17
II		Labour									
(i)	L-29	Mate			day	0.88	151.44	133.27			
(ii)	L-10	Mason			day	3.00	223.36	670.08			
(iii)	L-35	Mazdoor			day	18.00	136.69	2460.42			
		Total-II						3263.77			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	6.00	2160.00	12960.00			
(ii)	2.22	Generator 100 KVA			hour	6.00	675.00	4050.00			
(iii)	2.19	Loader 1 cum capacity			hour	6.00	780.00	4680.00			
(iv)	2.57	Transit Mixer 4 cum			hour	15.00	900.00	13500.00			
(v)	2.80	Concrete Pump			hour	6.00	247.50	1485.00			
		Total-III						36675.00			
								39938.77			
		Total -II+III						39938.77			
		sundries @ 3% on 39938.77						1198.16			
		Contractor's profit and overhead charges @ 21.50% on 41136.93						8844.44			
								49981.37			
		Labour cess @ 1% on 49981.37						499.81			
		Cost	120		cum			50481.18			
		Rate	1		cum			420.68	420.68		420.68
		sub mountainous @ 10% on 420.68									42.07
											462.75
								3602.85			3644.92

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
E		Top plug									
(i)		Grade M15 PCC									
		Same as Plain/RCC in open foundaion excluding formwork									
		Unit	1	cum							
		Taking output	15	cum							
I		Material									
(i)	0.00	Cement	275	tonne		4.13	5245.35	21637.07			
(ii)	0.00	Coarse sand		cum		6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate		cum		8.10	425.22	3444.28			
(iv)	0.00	20 mm Aggregate		cum		4.05	435.24	1762.72			
(v)	0.00	10 mm Aggregate		cum		1.35	461.32	622.78			
		Total-I						29361.78			
		Contractor's profit @ 10% on 29361.78						2936.18			
		Cost	15	cum				32297.96			
		Rate	1	cum				2153.20			
		Labour cess @ 1% on 2153.2						21.53			
		Total						2174.73	2174.73		2174.73
II		Labour									
(i)	L-29	Mate		day		0.86	151.44	130.24			
(ii)	L-10	Mason		day		1.50	223.36	335.04			
(iii)	L-35	Mazdoor		day		20.00	136.69	2733.80			
		Total-II						3199.08			
III		Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)		hour		6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA		hour		6.00	360.00	2160.00			
		Total-III						3510.00			
		Total -II+III						6709.08			
		Total -II+III						6709.08			
		sundries @ 3% on 6709.08						201.27			
		Contractor's profit and overhead charges @ 21.50% on 6910.35						1485.73			
								8396.08			
		Labour cess @ 1% on 8396.08						83.96			
		Cost	15	cum				8480.04			
		Rate	1	cum				565.34	565.34		565.34
		sub mountainous @ 10% on 565.34									56.53
											621.87
									2740.07		2796.60
	Note	Needle Vibrator is an item of minor I & P which is already included in overhead charges. Hence not added in rate analysis of cement concrete works.									

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(i)		PCC Grade M20									
			Unit	1	cum						
			Taking output	15	cum						
I		Material									
(i)	0.00	Cement	344		tonne	5.16	5245.35	27066.01			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I						34852.99			
		Contractor's profit @ 10% on 34852.99						3485.30			
		Cost	15		cum			38338.29			
		Rate	1		cum			2555.89			
		Labour cess @ 1% on 2555.89						25.56			
		Total						2581.45	2581.45		2581.45
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3199.08			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
		Total -II+III						6709.08			
		Total -II+III						6709.08			
		sundries @ 3% on 6709.08						201.27			
		Contractor's profit and overhead charges @ 21.50% on 6910.35						1485.73			
								8396.08			
		Labour cess @ 1% on 8396.08						83.96			
		Cost	15		cum			8480.04			
		Rate	1		cum			565.34	565.34		565.34
		sub mountainous @ 10% on 565.34									56.53
											621.87
								3146.79			3203.32

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(iii)		Grade M25 PCC									
		Same as Plain/RCC in open foundation excluding formwork									
		Case I									
		Using Concrete Mixer									
			Unit		cum						
		Taking output	15		cum						
I		Material									
(i)	0.00	Cement	399		tonne	5.99	5245.35	31393.42			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I	1					39180.40			
		Contractor's profit @ 10% on 39180.4						3918.04			
		Cost	15		cum			43098.44			
		Rate	1		cum			2873.23			
		Labour cess @ 1% on 2873.23						28.73			
		Total						2901.96	2901.96		2901.96
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3199.08			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
		Total -II+III						6709.08			
		Total -II+III						6709.08			
		sundries @ 3% on 6709.08						201.27			
		Contractor's profit and overhead charges @ 21.50% on 6910.35						1485.73			
								8396.08			
		Labour cess @ 1% on 8396.08						83.96			
		Cost	15		cum			8480.04			
		Rate	1		cum			565.34	565.34		565.34
		sub mountainous @ 10% on 565.34									56.53
											621.87
								3467.30			3523.83

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		With Batching Plant, Transit Mixer and Concrete Pump									
		Unit	1	cum							
		Taking output	120	cum							
I		Material									
(i)	0.00	Cement	399	tonne		47.88	5245.35	251147.36			
(ii)	0.00	Coarse sand		cum		54.00	280.73	15159.42			
(iii)	0.00	40 mm Aggregate		cum		43.20	425.22	18369.50			
(iv)	0.00	20 mm Aggregate		cum		43.20	435.24	18802.37			
(v)	0.00	10 mm Aggregate		cum		21.60	461.32	9964.51			
		Total-I						313443.16			
		Contractor's profit @ 10% on 313443.16						31344.32			
		Cost	120	cum				344787.48			
		Rate	1	cum				2873.23			
		Labour cess @ 1% on 2873.23						28.73			
		Total						2901.96	2901.96		2901.96
II		Labour									
(i)	L-29	Mate		day		0.84	151.44	127.21			
(ii)	L-10	Mason		day		3.00	223.36	670.08			
(iii)	L-35	Mazdoor		day		18.00	136.69	2460.42			
		Total-II						3257.71			
III		Hiring charges of Machinery									
	2.30	Batching Plant @ 20 cum/hour		hour		6.00	2160.00	12960.00			
	2.22	Generator 100 KVA		hour		6.00	675.00	4050.00			
	2.19	Loader 1 cum capacity		hour		6.00	780.00	4680.00			
	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.		hour		15.00	900.00	13500.00			
	2.80	Concrete Pump		hour		6	247.50	1485.00			
		Total-III						36675.00			
		Total -II+III						39932.71			
		Total -II+III						39932.71			
		sundries @ 3% on 39932.71						1197.98			
		Contractor's profit and overhead charges @ 21.50% on 41130.69						8843.10			
								49973.79			
		Labour cess @ 1% on 49973.79						499.74			
		Cost	120	cum				50473.53			420.61
		Rate	1	cum				420.61	420.61		42.06
		sub mountainous @ 10% on 420.61									462.67
											3364.63
								3322.57			3364.63

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(iv)		Grade M30 PCC									
		Same as Plain/RCC in open foundation excluding formwork									
		Case I									
		Using Concrete Mixer									
			Unit		cum						
		Taking output	15		cum						
I		Material									
(i)	0.00	Cement	405		tonne	6.08	5245.35	31865.50			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm Aggregate			cum	5.40	425.22	2296.19			
(iv)	0.00	20 mm Aggregate			cum	5.40	435.24	2350.30			
(v)	0.00	10 mm Aggregate			cum	2.70	461.32	1245.56			
		Total-I						39652.48			
		Contractor's profit @ 10% on 39652.48						3965.25			
		Cost	15		cum			43617.73			
		Rate	1		cum			2907.85			
		Labour cess @ 1% on 2907.85						29.08			
		Total						2936.93	2936.93		2936.93
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-35	Mazdoor			day	20.00	136.69	2733.80			
		Total-II						3199.08			
III		Hiring charges of Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator 33 KVA			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
								6709.08			
		Total -II+III						6709.08			
		sundries @ 3% on 6709.08						201.27			
		Contractor's profit and overhead charges @ 21.50% on 6910.35						1485.73			
								8396.08			
		Labour cess @ 1% on 8396.08						83.96			
		Cost	15		cum			8480.04			
		Rate	1		cum			565.34	565.34		565.34
		sub mountainous @ 10% on 565.34									56.53
											621.87
									3502.27		3558.80

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
		Case II										
		Using Batching Plant, Transit Mixer and Concrete Pump										
		Unit	1	cum								
		Taking output	120	cum								
I		Material										
(i)	0.00	Cement	405	tonne	48.60	5245.35	254924.01					
(ii)	0.00	Coarse sand		cum	54.00	280.73	15159.42					
(iii)	0.00	40 mm Aggregate		cum	43.20	425.22	18369.50					
(iv)	0.00	20 mm Aggregate		cum	43.20	435.24	18802.37					
(v)	0.00	10 mm Aggregate		cum	21.60	461.32	9964.51					
		Total-I					317219.81					
		Contractor's profit @ 10% on 317219.81					31721.98					
		Cost	120	cum			348941.79					
		Rate	1	cum			2907.85					
		Labour cess @ 1% on 2907.85					29.08					
		Total					2936.93	2936.93				2936.93
II		Labour										
(i)	L-29	Mate		day	0.84	151.44	127.21					
(ii)	L-10	Mason		day	3.00	223.36	670.08					
(iii)	L-35	Mazdoor		day	18.00	136.69	2460.42					
		Total-II					3257.71					
III		Hiring charges of Machinery										
(i)	2.30	Batching Plant @ 20 cum/hour		hour	6.00	2160.00	12960.00					
(ii)	2.22	Generator 100 KVA		hour	6.00	675.00	4050.00					
(iii)	2.19	Loader 1 cum capacity		hour	6.00	780.00	4680.00					
(iv)	2.57	Transit Mixer 4 cum capacity for lead upto 1 km.		hour	15.00	900.00	13500.00					
(v)	2.80	Concrete Pump		hour	6.00	247.50	1485.00					
		Total-III					36675.00					
							39932.71					
		Total -II+III					39932.71					
		sundries @ 3% on 39932.71					1197.98					
		Contractor's profit and overhead charges @ 21.50% on 41130.69					8843.10					
							49973.79					
		Labour cess @ 1% on 49973.79					499.74					
		Cost	120	cum			50473.53					420.61
		Rate	1	cum			420.61	420.61	420.61			42.06
		sub mountainous @ 10% on 420.61										462.67
												3399.60
								3357.54				3399.60

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
F		Well cap										
	(i)	RCC Grade M20										
		Case I										
		Labour cost as per analysis 7 C							565.34			621.87
		cost of concrete as per analysis 7 C							3173.49			3230.02
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 C				2794.84						
IV		Formwork @	4%					111.79				
		sundries @ 3% on 111.79						3.35				
		Contractor's profit and overhead charges @ 21.50% on 115.14						24.76				
								139.90				
		Labour cess @ 1% on 139.9						1.40				
		Rate 1 cum						141.30	141.30			141.30
		sub mountainous @ 10% on 141.3										14.13
								706.64				777.30
								3314.79				3385.45

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
		Case II									
		Using Batching Plant, Transit Mixer and Concrete Pump									
		Labour cost as per analysis 7 C (Case II)							420.61		462.67
		cost of concrete as per analysis 7 C (Case II)							3028.76		3070.82
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 C				2680.34					
IV		Formwork @	4%					107.21			
		sundries @ 3% on 107.21						3.22			
		Contractor's profit and overhead charges @ 21.50% on 110.43						23.74			
								134.17			
		Labour cess @ 1% on 134.17						1.34			
								135.51	135.51		135.51
		sub mountainous @ 10% on 135.51									13.55
								556.12			611.73
								3164.27			3219.88

Sr No	Code No.	Description			Unit		Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(ii)		RCC Grade M25										
		Case II										
		Using Batching Plant, Transit Mixer and Concrete Pump										
		Labour cost as per analysis 7 E (Case II)							420.61			462.67
		cost of concrete as per analysis 7 E (Case II)							3355.10			3397.16
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 E				2974.08						
IV		Formwork @	3.75%					111.53				
		sundries @ 3% on 111.53						3.35				
		Contractor's profit and overhead charges @ 21.50% on 114.88						24.70				
								139.58				
		Labour cess @ 1% on 139.58						1.40				
		Rate 1 cum						140.98	140.98			140.98
		sub mountainous @ 10% on 140.98										14.10
								561.59				617.75
								3496.08				3552.24

Sr No	Code No.	Description			Unit		Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(iii)		RCC Grade M30										
		Case II										
		Using Batching Plant, Transit Mixer and Concrete Pump										
		Labour cost as per analysis 7 G (Case II)							420.61			462.67
		cost of concrete as per analysis 7 G (Case II)							3378.42			3420.48
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 G				2995.06						
IV		Formwork @	3.5%					104.83				
		sundries @ 3% on 104.83						3.14				
		Contractor's profit and overhead charges @ 21.50% on 107.97						23.21				
								131.18				
		Labour cess @ 1% on 131.18						1.31				
		Rate 1 cum						132.49	132.49			132.49
		sub mountainous @ 10% on 132.49										13.25
								553.10				608.41
								3510.91				3566.22

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(iv)		RCC Grade M35									
		Case II									
		Using Batching Plant, Transit Mixer and Concrete Pump									
		Labour cost as per analysis 7 H (Case II)							420.61		462.67
		cost of concrete as per analysis 7H (Case II)							3465.83		3507.89
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 7 H				3073.74					
IV		Formwork @	3.0%					92.21			
		sundries @ 3% on 92.21						2.77			
		Contractor's profit and overhead charges @ 21.50% on 94.98						20.42			
								115.40			
								1.15			
		Rate 1 cum						116.55	116.55		116.55
		sub mountainous @ 10% on 116.55									11.66
								537.16			590.88
								3582.38			3636.10

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)
(v)		RCC M40 Grade									
		Using Batching Plant, Transit Mixer and Concrete Pump									
		Case I									
		Labour cost as per analysis 11 B (viii)						420.61			462.67
		cost of concrete as per analysis 11 B (viii)						3570.73			3612.79
		Per Cum Basic Cost of Labour, Material & Machinery (I+II+III) as per analysis 11 B (viii)				3168.16					
IV		Formwork & staging @	3%					95.04			
		sundries @ 3% on 95.04						2.85			
		Contractor's profit and overhead charges @ 21.50% on 97.89						21.05			
								118.94			
		Labour cess @ 1% on 118.94						1.19			
		Rate	1	cum				120.13	120.13		120.13
		sub mountainous @ 10% on 120.13									12.01
								540.74			594.81
								3690.86			3744.93

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
12		Sinking of 6 m external diameter well (other than pneumatic method of sinking) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.									
		As per MoRT&H Specification 1200									
		Unit	1	m							
		Taking output	1	m							
		Diameter of well - 6 m.									
A		Sandy Soil									
(i)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.50 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.12	151.44	18.17			
(ii)	L-48	Sinker (skilled)			day	1.00	335.06	335.06			
(iii)	L-33	Sinking helper (semi-skilled)			day	2.00	149.97	299.94			
		Total-II						653.17			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	2.00	950.00	1900.00			
(ii)		Consumables in sinking @10 per cent on machinery						190.00			
		Total-III						2090.00			
		Total-II+III						2743.17			
		sundries @ 3% on 2743.17						82.30			
		Contractor's profit and overhead charges @ 21.50% on 2825.47						607.48			
								3432.95			
		Labour cess @ 1% on 3432.95						34.33			
		Cost	1	m				3467.28	3467.28		3467.28
		sub mountainous @ 10% on 3467.28									346.73
		Cost	1	m					3467.28		3814.01

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(i)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.33 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.15	151.44	22.72			
(ii)	L-48	Sinker			day	1.25	335.06	418.83			
(iii)	L-33	Sinking helper (semi-skilled)			day	2.50	149.97	374.93			
		Total-II						816.48			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories			hour	3.00	950.00	2850.00			
(ii)		Consumables in sinking @10 per cent on machinery						285.00			
		Total-III						3135.00			
		Total-II+III						3951.48			
		sundries @ 3% on 3951.48						118.54			
		Contractor's profit and overhead charges @ 21.50% on 4070.02						875.05			
								4945.07			
		Labour cess @ 1% on 4945.07						49.45			
		Cost	1	m				4994.52	4994.52		4994.52
		sub mountainous @ 10% on 4994.52									499.45
		Cost	1	m					4994.52		5493.97

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)
(iii)		Beyond 10m upto 20m									
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
		11th m		5%	5244.25						5768.67
		12th m		5%	5506.46						6057.10
		13th m		5%	5781.78						6359.96
		14th m		5%	6070.87						6677.96
		15th m		5%	6374.41						7011.86
		16th m		5%	6693.13						7362.45
		17th m		5%	7027.79						7730.57
		18th m		5%	7379.18						8117.10
		19th m		5%	7748.14						8522.96
		20th m		5%	8135.55						8949.11
		Total Cost from 10m upto 20m			65961.56						72557.74
		Avg Rate per metre			6596.16						7255.77

Sr No	Code No.		Description		Unit		Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(iv)			Beyond 20m upto 30 m									
a			Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b			Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour.				Including 20% for Kentledge					Including 20% for Kentledge
			21st m		7.5%	8745.72	10494.86			9620.29		11544.35
			22nd m		7.5%	9401.65	11281.98			10341.81		12410.17
			23rd m		7.5%	10106.77	12128.12			11117.45		13340.94
			24th m		7.5%	10864.78	13037.74			11951.26		14341.51
			25th m		7.5%	11679.64	14015.57			12847.60		15417.12
			26th m		7.5%	12555.61	15066.73			13811.17		16573.40
			27th m		7.5%	13497.28	16196.74			14847.01		17816.41
			28th m		7.5%	14509.58	17411.50			15960.54		19152.65
			29th m		7.5%	15597.80	18717.36			17157.58		20589.10
			30th m		7.5%	16767.64	20121.17			18444.40		22133.28
			Total Cost from 20m upto 30m			123726.47	148471.77			136099		163318.93
			Avg Rate per metre			12372.65	14847			13610.00		16331.89

Sr No	Code No.	Description		Unit		Plain			Sub mountainous Region		
					Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(V)		Beyond 30m upto 40 m									
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour.				Including 20% for Kentledge					Including 20% for Kentledge
		31st m		10%	18444.40	22133.28			20288.84		24346.61
		32nd		10%	20288.84	24346.61			22317.72		26781.26
		33rd m		10%	22317.72	26781.26			24549.49		29459.39
		34th m		10%	24549.49	29459.39			27004.44		32405.33
		35th m		10%	27004.44	32405.33			29704.88		35645.86
		36th m		10%	29704.88	35645.86			32675.37		39210.44
		37th m		10%	32675.37	39210.44			35942.91		43131.49
		38th m		10%	35942.91	43131.49			39537.20		47444.64
		39th m		10%	39537.20	47444.64			43490.92		52189.10
		40th m		10%	43490.92	52189.10			47840.01		57408.01
		Total Cost from 30m upto 40m			293956.2	352747.40			323351.8		388022.13
		Avg Rate per metre			29395.62	35274.7			32335.18		38802.21

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
B		Clayey Soil (6m dia. Well)										
			Unit	1	m							
			Taking output	1	m							
(i)		Depth below bed level upto 3.0 M										
		Rate of sinking = 0.33 m per hour.										
II		Labour										
(i)	L-29	Mate			day	0.15	151.44	22.72				
(ii)	L-48	Sinker (skilled)			day	1.50	335.06	502.59				
(iii)	L-33	Sinking helper (semi-skilled)			day	2.25	149.97	337.43				
		Total-II						862.74				
III		Hiring charges of Machinery										
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories			hour	3.00	950.00	2850.00				
(ii)		Consumables in sinking @10 per cent on machinery						285.00				
		Total-III						3135.00				
		Total-II+III						3997.74				
		sundries @ 3% on 3997.74						119.93				
		Contractor's profit and overhead charges @ 21.50% on 4117.67						885.30				
								5002.97				
		Labour cess @ 1% on 5002.97						50.03				
		Cost	1	m				5053.00	5053.00			5053.00
		sub mountainous @ 10% on 5053										505.30
		Cost	1	m					5053.00			5558.30

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.17 m per hour.									
I		Labour									
(i)	L-29	Mate			day	0.30	151.44	45.43			
(ii)	L-48	Sinker			day	3.00	335.06	1005.18			
(iii)	L-33	Sinking helper (semi-skilled)			day	4.50	149.97	674.87			
		Total-I						1725.48			
II		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.00	950.00	5700.00			
(ii)	2.20	Air compressor with pneumatic chisel attachment for cutting hard clay.			hour	2.00	655.00	1310.00			
(iii)		Consumables in sinking @10 per cent on machinery						701.00			
		Total-II						7711.00			
		Total-II+III						9436.48			
		sundries @ 3% on 9436.48						283.09			
		Contractor's profit and overhead charges @ 21.50% on 9719.57						2089.71			
								11809.28			
		Labour cess @ 1% on 11809.28						118.09			
		Cost 1	m					11927.37	11927.37		11927.37
		sub mountainous @ 10% on 11927.37									1192.74
		Cost 1	m					11927.37	11927.37		13120.11

Sr No	Code No.		Description		Unit		Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
a			Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b			Add for dewatering @ 5 per cent of cost, if required.				Including for dewatering @ 5% of cost, if required					Including for dewatering @ 5% of cost, if required
			11th m		5%	12523.74	13149.93			13776.11		14464.92
			12th m		5%	13149.93	13807.43			14464.92		15188.17
			13th m		5%	13807.43	14497.80			15188.17		15947.58
			14th m		5%	14497.80	15222.69			15947.58		16744.96
			15th m		5%	15222.69	15983.82			16744.96		17582.21
			16th m		5%	15983.82	16783.01			17582.21		18461.32
			17th m		5%	16783.01	17622.16			18461.32		19384.39
			18th m		5%	17622.16	18503.27			19384.39		20353.61
			19th m		5%	18503.27	19428.43			20353.61		21371.29
			20th m		5%	19428.43	20399.85			21371.29		22439.85
			Total Cost from 10m upto 20m			157522.28	165398.39			173274.56		181938.30
			Avg Rate per metre			15752.23	16539.8			17327.46		18193.83

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)
(iv)		Beyond 20m upto 30 m									
a		Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add 5 per cent of cost for dewatering of the cost, if required									
c		Add 25 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 25% for Kentledge	Including 5% for dewatering, if required			Including 25% for Kentledge	Including 5% for dewatering, if required
		21st m		7.5%	20885.56	26106.95	27412.30		22974.14	28717.68	30153.56
		22nd m		7.5%	22451.98	28064.98	29468.23		24697.20	30871.50	32415.08
		23rd m		7.5%	24135.88	30169.85	31678.34		26549.49	33186.86	34846.20
		24th m		7.5%	25946.07	32432.59	34054.22		28540.70	35675.88	37459.67
		25th m		7.5%	27892.03	34865.04	36608.29		30681.25	38351.56	40269.14
		26th m		7.5%	29983.93	37479.91	39353.91		32982.34	41227.93	43289.33
		27th m		7.5%	32232.72	40290.90	42305.45		35456.02	44320.03	46536.03
		28th m		7.5%	34650.17	43312.71	45478.35		38115.22	47644.03	50026.23
		29th m		7.5%	37248.93	46561.16	48889.22		40973.86	51217.33	53778.20
		30th m		7.5%	40042.60	50053.25	52555.91		44046.90	55058.63	57811.56
		Total Cost from 20m upto 30m			295469.9	369337.34	387804.22		325017.12	406271.43	426585.00
		Avg Rate per metre			29546.99	36933.73	38780.4		32501.71	40627.14	42658.50

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(v)		Beyond 30m upto 40 m										
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
b		Add 5 per cent of cost for dewatering, if required										
c		Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour.				Including 20% for Kentledge	Including 5% for dewatering, if required			Including 20% for Kentledge	Including 5% for dewatering, if required	
		31st m			10%	44046.86	52856.23	55499.04		48451.59	58141.91	61049.01
		32nd			10%	48451.55	58141.86	61048.95		53296.75	63956.10	67153.91
		33rd m			10%	53296.71	63956.05	67153.85		58626.43	70351.72	73869.31
		34th m			10%	58626.38	70351.66	73869.24		64489.07	77386.88	81256.22
		35th m			10%	64489.02	77386.82	81256.16		70937.98	85125.58	89381.86
		36th m			10%	70937.92	85125.50	89381.78		78031.78	93638.14	98320.05
		37th m			10%	78031.71	93638.05	98319.95		85834.96	103001.95	108152.05
		38th m			10%	85834.88	103001.86	108151.95		94418.46	113302.15	118967.26
		39th m			10%	94418.37	113302.04	118967.14		103860.31	124632.37	130863.99
		40th m			10%	103860.21	124632.25	130863.86		114246.34	137095.61	143950.39
		Total Cost from 30m upto 40m				701993.61	842392.3	884511.92		772193.7	926632.41	972964.05
		Avg Rate per metre				70199.36	84239.23	88451.19		77219.37	92663.24	97296.41

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
C		Soft Rock (6m dia well)									
			Unit	1	m						
			Taking output	1	m						
		Depth in Soft rock strata up to 3m									
		Rate of sinking = 0.25 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.92	151.44	139.32			
(ii)	L-48	Sinker (skilled)			day	3.00	335.06	1005.18			
(iii)	L-33	Sinking helper (semi-skilled)			day	20.00	149.97	2999.40			
(iv)	L-17	Diver			day	0.50	335.06	167.53			
		Total-II						4311.43			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	4.00	950.00	3800.00			
(ii)	2.20	Air compressor with pneumatic breakers			hour	3.50	655.00	2292.50			
(iii)		Consumables in sinking @10 per cent on machinery						609.25			
		Total-III						6701.75			
IV		Add for dewatering @ of 5 per cent of (III+II), if required						550.66			
								7252.41			
								11563.84			
		sundries @ 3% on 11563.84						346.92			
		Contractor's profit and overhead charges @ 21.50% on 11910.76						2560.81			
								14471.57			
		Labour cess @ 1% on 14471.57						144.72			
		Cost	1	m				14616.29	14616.29		14616.29
		sub mountainous @ 10% on 14616.29									1461.63
		Cost	1	m					14616.29		16077.92

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
D		Hard Rock (6m dia well)									
		Unit	1	m							
		Taking output	1	m							
		Depth in hard rock strata upto 3 m									
		Rate of sinking = 0.17 m per hour.									
I		Material									
(i)	0.00	Gelatine 80 per cent			Kg	4.00	100.00	400.00			
(ii)	/100	Electric Detonators			each	18.00	7.50	135.00			
		Total-I						535.00			
		Contractor's profit @ 10% on 535						53.50			
		Cost	1	m				588.50			
		Rate	1	m				588.50			
		Labour cess @ 1% on 588.5						5.89			
		Total						594.39	594.39		594.39
II		Labour									
(i)	L-29	Mate			day	1.56	151.44	236.25			
(ii)	L-9	Driller			day	2.00	151.44	302.88			
(iii)	L-7	Blaster			day	0.25	151.44	37.86			
(iv)	L-35	Mazdoor			day	12.00	136.69	1640.28			
(v)	L-31	Mazdoor (Skilled)			day	4.00	164.69	658.76			
		Total-II						2876.03			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.00	950.00	5700.00			
(ii)	2.20	Hire & running charges of compressor with pneumatic breaker/Jack hammer for drilling.			hour	2.00	655.00	1310.00			
		Consumables in sinking @10 per cent on machinery						701.00			
		Total-III						7711.00			
		Total-I+II+III						10587.03			
		sundries @ 3% on 10587.03						317.61			
		Contractor's profit and overhead charges @ 21.50% on 10904.64						2344.50			
								13249.14			
		Labour cess @ 1% on 13249.14						132.49			
		Cost	1	m				13381.63	13381.63		13381.63
		sub mountainous @ 10% on 13381.63									1338.16
											14719.79
		Cost	1	m					13976.02		15314.18

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
13		Sinking of 7 m external diameter well (other than pneumatic method of sinking) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.									
		As per MoRT&H Specification 1200									
		Diameter of well - 7 m.			Unit 1	m					
		Taking output			1	m					
A		Sandy Soil									
(i)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.30 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.15	151.44	22.72			
(ii)	L-48	Sinker (skilled)			day	1.25	335.06	418.83			
(iii)	L-33	Sinking helper (semi-skilled)			day	2.50	149.97	374.93			
		Total-II						816.48			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	3.25	950.00	3087.50			
(ii)		Consumables in sinking @10 per cent on machinery						308.75			
		Total-III						3396.25			
		Total-II+III						4212.73			
		sundries @ 3% on 4212.73						126.38			
		Contractor's profit and overhead charges @ 21.50% on 4339.11						932.91			
								5272.02			
		Labour cess @ 1% on 5272.02						52.72			
		Cost	1	m				5324.74	5324.74		5324.74
		sub mountainous @ 10% on 5324.74									532.47
		Cost	1	m					5324.74		5857.21

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		Beyond 3m upto 10m depth									
II		Labour									
(i)	L-29	Mate			day	0.18	151.44	27.26			
(ii)	L-48	Sinker			day	1.50	335.06	502.59			
(iii)	L-33	Sinking helper (semi-skilled)			day	3.00	149.97	449.91			
		Total-II						979.76			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	4.50	950.00	4275.00			
(ii)		Consumables in sinking @10 per cent on machinery						427.50			
		Total-III						4702.50			
		Total-II+III						5682.26			
		sundries @ 3% on 5682.26						170.47			
		Contractor's profit and overhead charges @ 21.50% on 5852.73						1258.34			
								7111.07			
		Labour cess @ 1% on 7111.07						71.11			
		Cost	1	m				7182.18	7182.18		7182.18
		sub mountainous @ 10% on 7182.18									718.22
		Cost	1	m					7182.18		7900.40

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(iii)		Beyond 10m upto 20m										
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
		11th m			5%	7541.29						8295.42
		12th m			5%	7918.35						8710.19
		13th m			5%	8314.27						9145.70
		14th m			5%	8729.98						9602.99
		15th m			5%	9166.48						10083.14
		16th m			5%	9624.80						10587.30
		17th m			5%	10106.04						11116.67
		18th m			5%	10611.34						11672.50
		19th m			5%	11141.91						12256.13
		20th m			5%	11699.01						12868.94
		Total Cost from 10m upto 20m				94853.47						104338.98
		Avg Rate per metre				9485.4						10433.90

Sr No	Code No.		Description		Unit	Quantity	Plain			Sub mountainous Region		
							Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(iv)			Beyond 20m upto 30 m									
a			Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b			Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour.				Including 20% for Kentledge					Including 20% for Kentledge
			21st m		7.5%	12576.44	15091.73				13834.11	16600.93
			22nd m		7.5%	13519.67	16223.60				14871.67	17846.00
			23rd m		7.5%	14533.65	17440.38				15987.05	19184.46
			24th m		7.5%	15623.67	18748.40				17186.08	20623.30
			25th m		7.5%	16795.45	20154.54				18475.04	22170.05
			26th m		7.5%	18055.11	21666.13				19860.67	23832.80
			27th m		7.5%	19409.24	23291.09				21350.22	25620.26
			28th m		7.5%	20864.93	25037.92				22951.49	27541.79
			29th m		7.5%	22429.80	26915.76				24672.85	29607.42
			30th m		7.5%	24112.04	28934.45				26523.31	31827.97
			Total Cost from 20m upto 30m			177920.00	213504.00				195712.49	234854.98
			Avg Rate per metre			17792.00	21350.0				19571.00	23485.00

Sr No	Code No.		Description		Unit		Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(V)			Beyond 30m upto 40 m									
a			Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b			Add 20 per cent of cost for Kentledge including supports, loading arrangement, and Labour etc.				Including 20% for Kentledge					Including 20% for Kentledge
			31st m		10%	26523.24	31827.89				29175.64	35010.77
			32nd		10%	29175.56	35010.67				32093.20	38511.84
			33rd m		10%	32093.12	38511.74				35302.52	42363.02
			34th m		10%	35302.43	42362.92				38832.77	46599.32
			35th m		10%	38832.67	46599.20				42716.05	51259.26
			36th m		10%	42715.94	51259.13				46987.66	56385.19
			37th m		10%	46987.53	56385.04				51686.43	62023.72
			38th m		10%	51686.28	62023.54				56855.07	68226.08
			39th m		10%	56854.91	68225.89				62540.58	75048.70
			40th m		10%	62540.40	75048.48				68794.64	82553.57
			Total Cost from 30m upto 40m			422712.08	507254.50				464984.56	557981.47
			Avg Rate per metre			42271.21	50725.5				46498.46	55798.15

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
B		Clayey Soil (7m dia. Well)									
		Unit	1	m							
		Taking output	1	m							
(I)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.22 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.18	151.44	27.26			
(ii)	L-48	Sinker (skilled)			day	1.50	335.06	502.59			
(iii)	L-33	Sinking helper (semi-skilled)			day	3.00	149.97	449.91			
		Total-II						979.76			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	4.50	950.00	4275.00			
(ii)		Consumables in sinking @10 per cent on machinery						427.50			
		Total-III						4702.50			
		Total-II+III						5682.26			
		sundries @ 3% on 5682.26						170.47			
		Contractor's profit and overhead charges @ 21.50% on 5852.73						1258.34			
								7111.07			
		Labour cess @ 1% on 7111.07						71.11			
		Cost	1	m				7182.18	7182.18		7182.18
		sub mountainous @ 10% on 7182.18									718.22
		Cost	1	m					7182.18		7900.40

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(i)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.17 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.26	151.44	39.37			
(ii)	L-48	Sinker			day	2.00	335.06	670.12			
(iii)	L-33	Sinking helper (semi-skilled)			day	4.00	149.97	599.88			
		Total-II						1309.37			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.00	950.00	5700.00			
(ii)	2.20	Air compressor with pneumatic chisel attachment for cutting hard clay.			hour	3.25	655.00	2128.75			
(ii)		Consumables in sinking @10 per cent on machinery						782.88			
		Total-III						8611.63			
		Total-II+III						9921.00			
		sundries @ 3% on 9921						297.63			
		Contractor's profit and overhead charges @ 21.50% on 10218.63						2197.01			
								12415.64			
		Labour cess @ 1% on 12415.64						124.16			
		Cost 1	m					12539.80	12539.80		12539.80
		sub mountainous @ 10% on 12539.8									1253.98
		Cost 1	m						12539.80		13793.78

Sr No	Code No.	Description			Unit	Plain				Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
(iii)		Beyond 10 m upto 20 m										
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
b		Add for dewatering @ 5 per cent of cost, if required.				Including for dewatering @ 5% of cost, if required					Including for dewatering @ 5% of cost, if required	
		11th m		5%	13166.79	13825.13					14483.47	15207.64
		12th m		5%	13825.13	14516.39					15207.64	15968.02
		13th m		5%	14516.39	15242.21					15968.02	16766.42
		14th m		5%	15242.21	16004.32					16766.42	17604.74
		15th m		5%	16004.32	16804.54					17604.74	18484.98
		16th m		5%	16804.54	17644.77					18484.98	19409.23
		17th m		5%	17644.77	18527.01					19409.23	20379.69
		18th m		5%	18527.01	19453.36					20379.69	21398.67
		19th m		5%	19453.36	20426.03					21398.67	22468.60
		20th m		5%	20426.03	21447.33					22468.60	23592.03
		Total Cost from 10m upto 20m			165610.55	173891.09					182171.46	191280.02
		Avg Rate per metre			16561.06	17389.1					18217.15	19128.00
(iv)		Beyond 20m upto 30 m										
a		Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
b		Add 5 per cent of cost for dewatering on the cost, if required										
c		Add 25 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 25% for Kentledge	Including 5% for dewatering, if required				Including 25% for Kentledge	Including 5% for dewatering, if required
		21st m		7.5%	21957.98	27447.48	28819.85		24153.75	30192.19	31701.80	
		22nd m		7.5%	23604.83	29506.04	30981.34		25965.28	32456.60	34079.43	
		23rd m		7.5%	25375.19	31718.99	33304.94		27912.68	34890.85	36635.39	
		24th m		7.5%	27278.33	34097.91	35802.81		30006.13	37507.66	39383.04	
		25th m		7.5%	29324.20	36655.25	38488.01		32256.59	40320.74	42336.78	
		26th m		7.5%	31523.52	39404.40	41374.62		34675.83	43344.79	45512.03	
		27th m		7.5%	33887.78	42359.73	44477.72		37276.52	46595.65	48925.43	
		28th m		7.5%	36429.36	45536.70	47813.54		40072.26	50090.33	52594.85	
		29th m		7.5%	39161.56	48951.95	51399.55		43077.68	53847.10	56539.46	
		30th m		7.5%	42098.68	52623.35	55254.52		46308.51	57885.64	60779.92	
		Total Cost from 20m upto 30m			310641.4	388301.80	407716.90		341705.2	427131.55	448488.13	
		Avg Rate per metre			31064.14	38830.18	40771.7		34170.52	42713.16	44848.81	
(v)		Beyond 30m upto 40 m										
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
b		Add 5 per cent of cost for dewatering, if required										
c		Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 20% for Kentledge	Including 5% for dewatering, if required				Including 20% for Kentledge	Including 5% for dewatering, if required
		31st m		10%	46308.55	55570.26	58348.77		50939.36	61127.23	64183.59	
		32nd		10%	50939.41	61127.29	64183.65		56033.30	67239.96	70601.96	
		33rd m		10%	56033.35	67240.02	70602.02		61636.63	73963.96	77662.16	
		34th m		10%	61636.69	73964.03	77662.23		67800.29	81360.35	85428.37	
		35th m		10%	67800.36	81360.43	85428.45		74580.32	89496.38	93971.20	
		36th m		10%	74580.40	89496.48	93971.30		82038.35	98446.02	103368.32	
		37th m		10%	82038.44	98446.13	103368.44		90242.19	108290.63	113705.16	
		38th m		10%	90242.28	108290.74	113705.28		99266.41	119119.69	125075.67	
		39th m		10%	99266.51	119119.81	125075.80		109193.05	131031.66	137583.24	
		40th m		10%	109193.16	131031.79	137583.38		120112.36	144134.83	151341.57	
		Total Cost from 30m upto 40m			738039.2	885646.98	929929.32		811842.3	974210.71	1022921.24	
		Avg Rate per metre			73803.92	88564.70	92992.93		81184.23	97421.07	102292.12	

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
C		Soft Rock (7m dia well)									
		Unit	1	m							
		Taking output	1	m							
		Depth in soft rock strata upto 3m									
		Rate of sinking = 0.22 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.58	151.44	87.84			
(ii)	L-48	Sinker (skilled)			day	4.00	335.06	1340.24			
(iii)	L-33	Sinking helper (semi-skilled)			day	10.00	149.97	1499.70			
(iv)	L-17	Diver			day	0.75	335.06	251.30			
		Total-II						3179.08			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	4.50	950.00	4275.00			
(ii)	2.20	Air compressor with pneumatic breakers			hour	3.75	655.00	2456.25			
								6731.25			
(ii)		Consumables in sinking @10 per cent on machinery						673.13			
		Total-III						7404.38			
		Total-II+III						10583.46			
		sundries @ 3% on 10583.46						317.50			
		Contractor's profit and overhead charges @ 21.50% on 10900.96						2343.71			
								13244.67			
		Labour cess @ 1% on 13244.67						132.45			
		Cost	1	m				13377.12	13377.12		13377.12
		sub mountainous @ 10% on 13377.12									1337.71
									13377.12		14714.83

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
D		Hard Rock (7m dia well)									
		Unit	1	m							
		Taking output	1	m							
		Depth in Hard rock strata up to 3 m									
		Rate of sinking = 0.17 m per hour.									
I		Material									
(i)	0.00	Gelatine 80 per cent			Kg	7.00	100.00	700.00			
(ii)	/100	Electric Detonators			each	30.00	7.50	225.00			
		Total-I						925.00			
		Contractor's profit @ 10% on 925						92.50			
		Cost	1	m				1017.50			
		Rate	1	m				1017.50			
		Labour cess @ 1% on 1017.5						10.18			
		Total						1027.68	1027.68		1027.68
II		Labour									
(i)	L-29	Mate			day	1.60	151.44	242.30			
(ii)	L-9	Driller			day	2.00	151.44	302.88			
(iii)	L-7	Blaster			day	0.25	151.44	37.86			
(iv)	L-35	Mazdoor			day	18.00	136.69	2460.42			
(v)	L-31	Mazdoor (Skilled)			day	4.00	164.69	658.76			
(vi)	L-17	Diver			day	0.50	335.06	167.53			
		Total-II						3869.75			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.00	950.00	5700.00			
(ii)	2.20	Hire & running charges of compressor with pneumatic breaker/Jack hammer for drilling.			hour	2.00	655.00	1310.00			
								7010.00			
		Consumables in sinking @10 per cent on machinery						701.00			
		Total-I						7711.00			
		Total-II+III						11580.75			
		sundries @ 3% on 11580.75						347.42			
		Contractor's profit and overhead charges @ 21.50% on 11928.17						2564.56			
								14492.73			
		Labour cess @ 1% on 14492.73						144.93			
		Cost	1	m				14637.66	14637.66		14637.66
		sub mountainous @ 10% on 14637.66									1463.77
											16101.43
								15665.34			17129.11

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
14		Sinking of 8 m external diameter well (other than pneumatic method of sinking) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.									
		As per MoR I & H Specification 1200									
			Unit	1	m						
		Taking output	1	m							
		Diameter of well - 8 m.									
A		Sandy Soil									
(i)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.25 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.18	151.44	27.26			
(ii)	L-48	Sinker (skilled)			day	1.50	335.06	502.59			
(iii)	L-33	Sinking helper (semi-skilled)			day	3.00	149.97	449.91			
		Total-II						979.76			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	4.00	950.00	3800.00			
(ii)		Consumables in sinking @10 per cent on machinery						380.00			
		Total-III						4180.00			
		Total-II+III						5159.76			
		sundries @ 3% on 5159.76						154.79			
		Contractor's profit and overhead charges @ 21.50% on 5314.55						1142.63			
								6457.18			
		Labour cess @ 1% on 6457.18						64.57			
		Cost	1	m				6521.75	6521.75		6521.75
		sub mountainous @ 10% on 6521.75									652.18
									6521.75		7173.93

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(i)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.20 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.25	151.44	37.86			
(ii)	L-48	Sinker			day	1.75	335.06	586.36			
(iii)	L-33	Sinking helper (semi-skilled)			day	3.50	149.97	524.90			
		Total-II						1149.12			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	5.00	950.00	4750.00			
(ii)		Consumables in sinking @10 per cent on machinery						475.00			
		Total-III						5225.00			
		Total-II+III						6374.12			
		sundries @ 3% on 6374.12						191.22			
		Contractor's profit and overhead charges @ 21.50% on 6565.34						1411.55			
								7976.89			
		Labour cess @ 1% on 7976.89						79.77			
		Cost	1	m				8056.66	8056.66		8056.66
		sub mountainous @ 10% on 8056.66									805.67
								8056.66			8862.33

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(iii)		Beyond 10m upto 20m										
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
		11th m			5%	8459.49						9305.44
		12th m			5%	8882.46						9770.71
		13th m			5%	9326.58						10259.25
		14th m			5%	9792.91						10772.21
		15th m			5%	10282.56						11310.82
		16th m			5%	10796.69						11876.36
		17th m			5%	11336.52						12470.18
		18th m			5%	11903.35						13093.69
		19th m			5%	12498.52						13748.37
		20th m			5%	13123.45						14435.79
		Total Cost from 10m upto 20m				106402.5						117042.82
		Avg Rate per metre				10640.3						11704.28

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)
(iv)		Beyond 20m upto 30 m									
a		Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour.				Including 20% for Kentledge					Including 20% for Kentledge
		21st m		7.5%	14107.71	16929.25				15518.47	18622.16
		22nd m		7.5%	15165.79	18198.95				16682.36	20018.83
		23rd m		7.5%	16303.22	19563.86				17933.54	21520.25
		24th m		7.5%	17525.96	21031.15				19278.56	23134.27
		25th m		7.5%	18840.41	22608.49				20724.45	24869.34
		26th m		7.5%	20253.44	24304.13				22278.78	26734.54
		27th m		7.5%	21772.45	26126.94				23949.69	28739.63
		28th m		7.5%	23405.38	28086.46				25745.92	30895.10
		29th m		7.5%	25160.78	30192.94				27676.86	33212.23
		30th m		7.5%	27047.84	32457.41				29752.62	35703.14
		Total Cost from 20m upto 30m			199583.0	239499.58				219541.25	263449.49
		Avg Rate per metre			19958.30	23950.0				21954.13	26344.95

Sr No	Code No.	Description		Unit		Plain			Sub mountainous Region		
					Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(V)		Beyond 30m upto 40 m									
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add 20 per cent of cost for Kentledge including supports, loading arrangement, and Labour etc.				Including 20% for Kentledge					Including 20% for Kentledge
		31st m		10%	29752.62	35703.14				32727.88	39273.46
		32nd		10%	32727.88	39273.46				36000.67	43200.80
		33rd m		10%	36000.67	43200.80				39600.74	47520.89
		34th m		10%	39600.74	47520.89				43560.81	52272.97
		35th m		10%	43560.81	52272.97				47916.89	57500.27
		36th m		10%	47916.89	57500.27				52708.58	63250.30
		37th m		10%	52708.58	63250.30				57979.44	69575.33
		38th m		10%	57979.44	69575.33				63777.38	76532.86
		39th m		10%	63777.38	76532.86				70155.12	84186.14
		40th m		10%	70155.12	84186.14				77170.63	92604.76
		Total Cost from 30m upto 40m			474180.1	569016.2				521598.14	625917.78
		Avg Rate per metre			47418.01	56902				52159.81	62591.78

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
B		Clayey Soil (8m dia. Well)									
		Unit	1	m							
		Taking output	1	m							
(I)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.18 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.22	151.44	33.32			
(ii)	L-48	Sinker (skilled)			day	2.00	335.06	670.12			
(iii)	L-33	Sinking helper (semi-skilled)			day	3.50	149.97	524.90			
		Total-II						1228.34			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	5.50	950.00	5225.00			
(ii)		Consumables in sinking @10 per cent on machinery						522.50			
		Total-III						5747.50			
		Total-II+III						6975.84			
		sundries @ 3% on 6975.84						209.28			
		Contractor's profit and overhead charges @ 21.50% on 7185.12						1544.80			
								8729.92			
		Labour cess @ 1% on 8729.92						87.30			
		Cost	1	m				8817.22	8817.22		8817.22
		sub mountainous @ 10% on 8817.22									881.72
									8817.22		9698.94

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(i)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.17 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.32	151.44	48.46			
(ii)	L-48	Sinker			day	2.50	335.06	837.65			
(iii)	L-33	Sinking helper (semi-skilled)			day	4.50	149.97	674.87			
		Total-II						1560.98			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.00	950.00	5700.00			
(ii)	2.20	Air compressor with pneumatic chisel attachment for cutting hard clay.			hour	3.50	655.00	2292.50			
(ii)		Consumables in sinking @10 per cent on machinery						799.25			
								8791.75			
		Total-II+III						10352.73			
		sundries @ 3% on 10352.73						310.58			
		Contractor's profit and overhead charges @ 21.50% on 10663.31						2292.61			
								12955.92			
		Labour cess @ 1% on 12955.92						129.56			
		Cost	1	m				13085.48	13085.48		13085.48
		sub mountainous @ 10% on 13085.48									1308.55
									13085.48		14394.03

Sr No	Code No.		Description			Unit	Plain			Sub mountainous Region		
							Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)
(iii)			Beyond 10 m upto 20 m									
a			Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b			Add for dewatering @ 5 per cent of cost, if required.				Including for dewatering @ 5% of cost, if required					Including for dewatering @ 5% of cost, if required
			11th m			5%	13739.75	14426.74			15113.73	15869.42
			12th m			5%	14426.74	15148.08			15869.42	16662.89
			13th m			5%	15148.08	15905.48			16662.89	17496.03
			14th m			5%	15905.48	16700.75			17496.03	18370.83
			15th m			5%	16700.75	17535.79			18370.83	19289.37
			16th m			5%	17535.79	18412.58			19289.37	20253.84
			17th m			5%	18412.58	19333.21			20253.84	21266.53
			18th m			5%	19333.21	20299.87			21266.53	22329.86
			19th m			5%	20299.87	21314.86			22329.86	23446.35
			20th m			5%	21314.86	22380.60			23446.35	24618.67
			Total Cost from 10m upto 20m				172817.11	181457.96			190098.85	199603.79
			Avg Rate per metre				17281.71	18145.8			19009.89	19960.38
(iv)			Beyond 20m upto 30 m									
a			Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b			Add 5 per cent of cost for dewatering on the cost, if required									
c			Add 25 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 25% for Kentledge	Including 5% for dewatering, if required			Including 25% for Kentledge	Including 5% for dewatering, if required
			21st m			7.5%	22913.47	28641.84		30073.93	25204.83	31506.04
			22nd			7.5%	24631.98	30789.98		32329.48	27095.19	33868.99
			23rd m			7.5%	26479.38	33099.23		34754.19	29127.33	36409.16
			24th m			7.5%	28465.33	35581.66		37360.74	31311.88	39139.85
			25th m			7.5%	30600.23	38250.29		40162.80	33660.27	42075.34
			26th m			7.5%	32895.25	41119.06		43175.01	36184.79	45230.99
			27th m			7.5%	35362.39	44202.99		46413.14	38898.65	48623.31
			28th m			7.5%	38014.57	47518.21		49894.12	41816.05	52270.06
			29th m			7.5%	40865.66	51082.08		53636.18	44952.25	56190.31
			30th m			7.5%	43930.58	54913.23		57658.89	48323.67	60404.59
			Total Cost from 20m upto 30m				324158.8	405198.57		425458.48	356574.9	445718.64
			Avg Rate per metre				32415.88	40519.86		42545.9	35657.49	44571.86

Sr No	Code No.	Description		Unit	Plain			Sub mountainous Region			
					Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
(v)		Beyond 30m upto 40 m									
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add 5 per cent of cost for dewatering, if required									
c		Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 20% for Kentledge	Including 5% for dewatering, if required		Including 20% for Kentledge	Including 5% for dewatering, if required	
		31st m		10%	48323.64	57988.37	60887.79		53156.04	63787.25	66976.61
		32nd		10%	53156.00	63787.20	66976.56		58471.64	70165.97	73674.27
		33rd m		10%	58471.60	70165.92	73674.22		64318.80	77182.56	81041.69
		34th m		10%	64318.76	77182.51	81041.64		70750.68	84900.82	89145.86
		35th m		10%	70750.64	84900.77	89145.81		77825.75	93390.90	98060.45
		36th m		10%	77825.70	93390.84	98060.38		85608.33	102730.00	107866.50
		37th m		10%	85608.27	102729.92	107866.42		94169.16	113002.99	118653.14
		38th m		10%	94169.10	113002.92	118653.07		103586.08	124303.30	130518.47
		39th m		10%	103586.01	124303.21	130518.37		113944.69	136733.63	143570.31
		40th m		10%	113944.61	136733.53	143570.21		125339.16	150406.99	157927.34
		Total Cost from 30m upto 40m			770154.3	924185.2	970394.47		847170.3	1016604.41	1067434.64
		Avg Rate per metre			77015.43	92418.52	97039.5		84717.03	101660.44	106743.46

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
C		Soft Rock (8m dia well)									
		Unit	1	m							
		Taking output	1	m							
		Depth in soft rock strata upto 3m									
		Rate of sinking = 0.20 m per hour.									
		(without dewatering)									
II		Labour									
(i)	L-29	Mate			day	0.68	151.44	102.98			
(ii)	L-48	Sinker (skilled)			day	4.00	335.06	1340.24			
(iii)	L-33	Sinking helper (semi-skilled)			day	12.00	149.97	1799.64			
(iv)	L-17	Diver			day	1.00	335.06	335.06			
		Total-II						3577.92			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	5.00	950.00	4750.00			
(ii)	2.20	Air compressor with pneumatic breakers			hour	3.75	655.00	2456.25			
(iii)		Consumables in sinking @10 per cent on machinery						720.63			
		Total-III						7926.88			
		Total-II+III						11504.80			
		sundries @ 3% on 11504.8						345.14			
		Contractor's profit and overhead charges @ 21.50% on 11849.94						2547.74			
								14397.68			
		Labour cess @ 1% on 14397.68						143.98			
		Cost	1	m				14541.66	14541.66		14541.66
		sub mountainous @ 10% on 14541.66									1454.17
									14541.66		15995.83

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
D		Hard Rock (8m dia well)									
		Unit	1	m							
		Taking output	1	m							
		Depth in Hard rock strata up to 3 m									
		Rate of sinking = 0.17 m per hour.									
		(without dewatering)									
I		Material									
(i)	0.00	Gelatine 80 per cent			Kg	8.00	100.00	800.00			
(ii)	/100	Electric Detonators			each	32.00	7.50	240.00			
		Total-I						1040.00			
		Contractor's profit @ 10% on 1040						104.00			
		Cost	1	m				1144.00			
		Rate	1	m				1144.00			
		Labour cess @ 1% on 1144						11.44			
		Total						1155.44	1155.44		1155.44
II		Labour									
(i)	L-29	Mate			day	1.09	151.44	165.07			
(ii)	L-9	Driller			day	2.00	151.44	302.88			
(iii)	L-7	Blaster			day	0.25	151.44	37.86			
(iv)	L-35	Mazdoor			day	20.00	136.69	2733.80			
(v)	L-31	Mazdoor (Skilled)			day	4.00	164.69	658.76			
		Total-II						3898.37			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.00	950.00	5700.00			
(ii)	2.20	Hire & running charges of compressor with pneumatic breaker/Jack hammer for drilling.			hour	2.00	655.00	1310.00			
		Consumables in sinking @10 per cent on machinery						701.00			
		Total-III						7711.00			
		Total-II+III						11609.37			
		sundries @ 3% on 11609.37						348.28			
		Contractor's profit and overhead charges @ 21.50% on 11957.65						2570.89			
								14528.54			
		Labour cess @ 1% on 14528.54						145.29			
		Cost	1	m				14673.83	14673.83		14673.83
		sub mountainous @ 10% on 14673.83									1467.38
											16141.21
											15829.27
											17296.65

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
15		Sinking of 9 m external diameter well (other than pneumatic method of sinking) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.									
		As per MoRT&H Specification 1200									
		Unit	1	m							
		Taking output	1	m							
		Diameter of well - 9 m.									
A		Sandy Soil									
(i)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.25 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.19	151.44	28.77			
(ii)	L-48	Sinker (skilled)			day	1.50	335.06	502.59			
(iii)	L-33	Sinking helper (semi-skilled)			day	3.25	149.97	487.40			
		Total-II						1018.76			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	4.00	950.00	3800.00			
(ii)		Consumables in sinking @10 per cent on machinery						380.00			
		Total-III						4180.00			
		Total-II+III						5198.76			
		sundries @ 3% on 5198.76						155.96			
		Contractor's profit and overhead charges @ 21.50% on 5354.72						1151.26			
								6505.98			
		Labour cess @ 1% on 6505.98						65.06			
		Cost	1	m				6571.04	6571.04		6571.04
		sub mountainous @ 10% on 6571.04									657.10
									6571.04		7228.14

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(i)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.18 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.27	151.44	40.89			
(ii)	L-48	Sinker			day	1.75	335.06	586.36			
(iii)	L-33	Sinking helper (semi-skilled)			day	4.00	149.97	599.88			
		Total-II						1227.13			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	5.50	950.00	5225.00			
(ii)		Consumables in sinking @10 per cent on machinery						522.50			
		Total-III						5747.50			
		Total-II+III						6974.63			
		sundries @ 3% on 6974.63						209.24			
		Contractor's profit and overhead charges @ 21.50% on 7183.87						1544.53			
								8728.40			
		Labour cess @ 1% on 8728.4						87.28			
		Cost	1	m				8815.68	8815.68		8815.68
		sub mountainous @ 10% on 8815.68									881.57
								8815.68			9697.25

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(iii)		Beyond 10m upto 20m										
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
		11th m			5%	9256.46						10182.11
		12th m			5%	9719.28						10691.22
		13th m			5%	10205.24						11225.78
		14th m			5%	10715.50						11787.07
		15th m			5%	11251.28						12376.42
		16th m			5%	11813.84						12995.24
		17th m			5%	12404.53						13645.00
		18th m			5%	13024.76						14327.25
		19th m			5%	13676.00						15043.61
		20th m			5%	14359.80						15795.79
		Total Cost from 10m upto 20m				116426.69						128069.49
		Avg Rate per metre				11642.7						12806.95

Sr No	Code No.		Description		Unit	Quantity	Plain			Sub mountainous Region		
							Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(iv)			Beyond 20m upto 30 m									
a			Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b			Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour.				Including 20% for Kentledge					Including 20% for Kentledge
			21st m		7.5%	15436.79	18524.15				16980.47	20376.56
			22nd m		7.5%	16594.55	19913.46				18254.01	21904.81
			23rd m		7.5%	17839.14	21406.97				19623.06	23547.67
			24th m		7.5%	19177.08	23012.50				21094.79	25313.75
			25th m		7.5%	20615.36	24738.43				22676.90	27212.28
			26th m		7.5%	22161.51	26593.81				24377.67	29253.20
			27th m		7.5%	23823.62	28588.34				26206.00	31447.20
			28th m		7.5%	25610.39	30732.47				28171.45	33805.74
			29th m		7.5%	27531.17	33037.40				30284.31	36341.17
			30th m		7.5%	29596.01	35515.21				32555.63	39066.76
			Total Cost from 20m upto 30m			218385.6	262062.7				240224.29	288269.14
			Avg Rate per metre			21838.56	26206				24022.43	28826.91

Sr No	Code No.	Description		Unit	Plain			Sub mountainous Region		
					Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)
(v)		Beyond 30m upto 40 m								
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter								
b		Add 20 per cent of cost for Kentledge including supports, loading arrangement, and Labour etc.				Including 20% for Kentledge				Including 20% for Kentledge
		31st m		10%	32555.61	39066.73			35811.19	42973.43
		32nd		10%	35811.17	42973.40			39392.31	47270.77
		33rd m		10%	39392.29	47270.75			43331.54	51997.85
		34th m		10%	43331.52	51997.82			47664.69	57197.63
		35th m		10%	47664.67	57197.60			52431.16	62917.39
		36th m		10%	52431.14	62917.37			57674.28	69209.14
		37th m		10%	57674.25	69209.10			63441.71	76130.05
		38th m		10%	63441.68	76130.02			69785.88	83743.06
		39th m		10%	69785.85	83743.02			76764.47	92117.36
		40th m		10%	76764.44	92117.33			84440.92	101329.10
		Total Cost from 30m upto 40m			518852.6	622623.14			570738.15	684885.78
		Avg Rate per metre			51885.26	62262.3			57073.82	68488.58

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
B		Clayey Soil (9m dia. Well)									
		Unit	1	m							
		Taking output	1	m							
(I)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.17 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.24	151.44	36.35			
(ii)	L-48	Sinker (skilled)			day	2.25	335.06	753.89			
(iii)	L-33	Sinking helper (semi-skilled)			day	3.75	149.97	562.39			
		Total-II						1352.63			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	5.75	950.00	5462.50			
(ii)		Consumables in sinking @10 per cent on machinery						546.25			
		Total-III						6008.75			
		Total-II+III						7361.38			
		sundries @ 3% on 7361.38						220.84			
		Contractor's profit and overhead charges @ 21.50% on 7582.22						1630.18			
								9212.40			
		Labour cess @ 1% on 9212.4						92.12			
		Cost	1	m				9304.52	9304.52		9304.52
		sub mountainous @ 10% on 9304.52									930.45
									9304.52		10234.97

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.15 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.34	151.44	51.49			
(ii)	L-48	Sinker			day	2.50	335.06	837.65			
(iii)	L-33	Sinking helper (semi-skilled)			day	5.00	149.97	749.85			
		Total-II						1638.99			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.50	950.00	6175.00			
(ii)	2.20	Air compressor with pneumatic chisel attachment for cutting hard clay.			hour	3.75	655.00	2456.25			
(ii)		Consumables in sinking @10 per cent on machinery						863.13			
		Total-III						9494.38			
		Total-II+III						11133.37			
		sundries @ 3% on 11133.37						334.00			
		Contractor's profit and overhead charges @ 21.50% on 11467.37						2465.48			
								13932.85			
		Labour cess @ 1% on 13932.85						139.33			
		Cost		m				14072.18	14072.18		14072.18
		sub mountainous @ 10% on 14072.18									1407.22
								14072.18			15479.40

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)
(iii)		Beyond 10 m upto 20 m									
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add for dewatering @ 5 per cent of cost, if required.				Including for dewatering @ 5% of cost, if required					Including for dewatering @ 5% of cost, if required
		11th m		5%	14775.79	15514.58				16253.37	17066.04
		12th m		5%	15514.58	16290.31				17066.04	17919.34
		13th m		5%	16290.31	17104.83				17919.34	18815.31
		14th m		5%	17104.83	17960.07				18815.31	19756.08
		15th m		5%	17960.07	18858.07				19756.08	20743.88
		16th m		5%	18858.07	19800.97				20743.88	21781.07
		17th m		5%	19800.97	20791.02				21781.07	22870.12
		18th m		5%	20791.02	21830.57				22870.12	24013.63
		19th m		5%	21830.57	22922.10				24013.63	25214.31
		20th m		5%	22922.10	24068.21				25214.31	26475.03
		Total Cost from 10m upto 20m			185848.31	195140.73				204433.15	214654.81
		Avg Rate per metre			18584.83	19514.1				20443.32	21465.48

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(iv)		Beyond 20m upto 30 m										
a		Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
b		Add 5 per cent of cost for dewatering on the cost, if required										
c		Add 25 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 25% for Kentledge	Including 5% for dewatering, if required			Including 25% for Kentledge	Including 5% for dewatering, if required	
		21st m			7.5%	24641.26	30801.58	32341.66		27105.38	33881.73	35575.82
		22nd m			7.5%	26489.35	33111.69	34767.27		29138.28	36422.85	38243.99
		23rd m			7.5%	28476.05	35595.06	37374.81		31323.65	39154.56	41112.29
		24th m			7.5%	30611.75	38264.69	40177.92		33672.92	42091.15	44195.71
		25th m			7.5%	32907.63	41134.54	43191.27		36198.39	45247.99	47510.39
		26th m			7.5%	35375.70	44219.63	46430.61		38913.27	48641.59	51073.67
		27th m			7.5%	38028.88	47536.10	49912.91		41831.77	52289.71	54904.20
		28th m			7.5%	40881.05	51101.31	53656.38		44969.15	56211.44	59022.01
		29th m			7.5%	43947.13	54933.91	57680.61		48341.84	60427.30	63448.67
		30th m			7.5%	47243.16	59053.95	62006.65		51967.48	64959.35	68207.32
		Total Cost from 20m upto 30m				348602.0	435752.46	457540.09		383462.13	479327.67	503294.07
		Avg Rate per metre				34860.20	43575.25	45754.01		38346.21	47932.77	50329.41

Sr No	Code No.	Description		Unit	Plain			Sub mountainous Region			
					Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
(v)		Beyond 30m upto 40 m									
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add 5 per cent of cost for dewatering, if required									
c		Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 20% for Kentledge	Including 5% for dewatering, if required		Including 20% for Kentledge	Including 5% for dewatering, if required	
		31st m		10%	51967.48	62360.98	65479.03		57164.23	68597.08	72026.93
		32nd		10%	57164.23	68597.08	72026.93		62880.65	75456.78	79229.62
		33rd m		10%	62880.65	75456.78	79229.62		69168.72	83002.46	87152.58
		34th m		10%	69168.72	83002.46	87152.58		76085.59	91302.71	95867.85
		35th m		10%	76085.59	91302.71	95867.85		83694.15	100432.98	105454.63
		36th m		10%	83694.15	100432.98	105454.63		92063.57	110476.28	116000.09
		37th m		10%	92063.57	110476.28	116000.09		101269.93	121523.92	127600.12
		38th m		10%	101269.93	121523.92	127600.12		111396.92	133676.30	140360.12
		39th m		10%	111396.92	133676.30	140360.12		122536.61	147043.93	154396.13
		40th m		10%	122536.61	147043.93	154396.13		134790.3	161748.32	169835.74
		Total Cost from 30m upto 40m			828227.9	993873.42	1043567.10		911050.6	1093260.76	1147923.81
		Avg Rate per metre			82822.79	99387.34	104356.71		91105.06	109326.08	114792.38

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
C		Soft Rock (9m dia well)									
		Unit	1	m							
		Taking output	1	m							
		Depth in soft rock strata upto 3m									
		Rate of sinking = 0.150 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.76	151.44	115.09			
(ii)	L-48	Sinker (skilled)			day	4.00	335.06	1340.24			
(iii)	L-33	Sinking helper (semi-skilled)			day	14.00	149.97	2099.58			
(iv)	L-17	Diver			day	1.20	335.06	402.07			
		Total-II						3956.98			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.50	950.00	6175.00			
(ii)	2.20	Air compressor with pneumatic breakers			hour	4.00	655.00	2620.00			
		Total-III						8795.00			
(ii)		Consumables in sinking @10 per cent on machinery						879.50			
		Total						9674.50			
		Total-II+III						13631.48			
		sundries @ 3% on 13631.48						408.94			
		Contractor's profit and overhead charges @ 21.50% on 14040.42						3018.69			
								17059.11			
		Labour cess @ 1% on 17059.11						170.59			
		Cost	1	m				17229.70	17229.70		17229.70
		sub mountainous @ 10% on 17229.7									1722.97
								17229.70			18952.67

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
D		Hard Rock (9m dia well)									
		Unit	1	m							
		Taking output	1	m							
		Depth in Hard rock strata up to 3 m									
		Rate of sinking = 0.15 m per hour.									
I		Material									
(i)	0.00	Gelatine 80 per cent			Kg	10.00	100.00	1000.00			
(ii)	/100	Electric Detonators			each	40.00	7.50	300.00			
		Total-I						1300.00			
		Contractor's profit @ 10% on 1300						130.00			
		Cost	1	m				1430.00			
		Rate	1	m				1430.00			
		Labour cess @ 1% on 1430						14.30			
		Total						1444.30	1444.30		1444.30
II		Labour									
(i)	L-29	Mate			day	1.17	151.44	177.18			
(ii)	L-9	Driller			day	2.00	151.44	302.88			
(iii)	L-7	Blaster			day	0.25	151.44	37.86			
(iv)	L-35	Mazdoor			day	22.00	136.69	3007.18			
(v)	L-31	Mazdoor (Skilled)			day	4.00	164.69	658.76			
(vi)	L-17	Diver			day	1.00	335.06	335.06			
		Total-II						4518.92			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	7.00	950.00	6650.00			
(ii)	2.20	Hire & running charges of compressor with pneumatic breaker/Jack hammer for drilling.			hour	2.50	655.00	1637.50			
		Total-III						8287.50			
		Consumables in sinking @10 per cent on machinery						828.75			
		Total						9116.25			
		Total-II+III						13635.17			
		sundries @ 3% on 13635.17						409.06			
		Contractor's profit and overhead charges @ 21.50% on 14044.23						3019.51			
								17063.74			
		Labour cess @ 1% on 17063.74						170.64			
		Cost	1	m				17234.38	17234.38		17234.38
		sub mountainous @ 10% on 17234.38									1723.44
											18957.82
								18678.68			20402.12

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
16		Sinking of 10 m external diameter well (other than pneumatic method of sinking) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.									
		As per MoRT&H Specification 1200									
		Unit	1	m							
		Taking output	1	m							
		Diameter of well - 10 m.									
A		Sandy Soil									
(i)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.20 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.20	151.44	30.29			
(ii)	L-48	Sinker (skilled)			day	1.50	335.06	502.59			
(iii)	L-33	Sinking helper (semi-skilled)			day	3.50	149.97	524.90			
		Total-II						1057.78			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	5.00	950.00	4750.00			
(ii)		Consumables in sinking @10 per cent on machinery						475.00			
		Total-III						5225.00			
		Total-II+III						6282.78			
		sundries @ 3% on 6282.78						188.48			
		Contractor's profit and overhead charges @ 21.50% on 6471.26						1391.32			
								7862.58			
		Labour cess @ 1% on 7862.58						78.63			
		Cost	1	m				7941.21	7941.21		7941.21
		sub mountainous @ 10% on 7941.21									794.12
									7941.21		8735.33

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(i)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.17 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.31	151.44	46.95			
(ii)	L-48	Sinker			day	2.00	335.06	670.12			
(iii)	L-33	Sinking helper (semi-skilled)			day	4.25	149.97	637.37			
		Total-II						1354.44			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	5.75	950.00	5462.50			
(ii)		Consumables in sinking @10 per cent on machinery						546.25			
		Total-III						6008.75			
		Total-II+III						7363.19			
		sundries @ 3% on 7363.19						220.90			
		Contractor's profit and overhead charges @ 21.50% on 7584.09						1630.58			
								9214.67			
		Labour cess @ 1% on 9214.67						92.15			
		Cost	1	m				9306.82	9306.82		9306.82
		sub mountainous @ 10% on 9306.82									930.68
									9306.82		10237.50

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(iii)		Beyond 10m upto 20m										
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
		11th m			5%	9772.16						10749.38
		12th m			5%	10260.77						11286.85
		13th m			5%	10773.81						11851.19
		14th m			5%	11312.50						12443.75
		15th m			5%	11878.13						13065.94
		16th m			5%	12472.04						13719.24
		17th m			5%	13095.64						14405.20
		18th m			5%	13750.42						15125.46
		19th m			5%	14437.94						15881.73
		20th m			5%	15159.84						16675.82
		Total Cost from 10m upto 20m				122913.25						135204.56
		Avg Rate per metre				12291.3						13520.46

Sr No	Code No.		Description		Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)
(iv)			Beyond 20m upto 30 m								
a			Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter								
b			Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour.				Including 20% for Kentledge				Including 20% for Kentledge
			21st m		7.5%	16296.83	19556.20			17926.51	21511.81
			22nd m		7.5%	17519.09	21022.91			19271.00	23125.20
			23rd m		7.5%	18833.02	22599.62			20716.33	24859.60
			24th m		7.5%	20245.50	24294.60			22270.05	26724.06
			25th m		7.5%	21763.91	26116.69			23940.30	28728.36
			26th m		7.5%	23396.20	28075.44			25735.82	30882.98
			27th m		7.5%	25150.92	30181.10			27666.01	33199.21
			28th m		7.5%	27037.24	32444.69			29740.96	35689.15
			29th m		7.5%	29065.03	34878.04			31971.53	38365.84
			30th m		7.5%	31244.91	37493.89			34369.39	41243.27
			Total Cost from 20m upto 30m			230552.7	276663.18			253607.90	304329.48
			Avg Rate per metre			23055.27	27666.3			25360.79	30432.95

Sr No	Code No.	Description		Unit		Plain			Sub mountainous Region		
					Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(v)		Beyond 30m upto 40 m									
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add 20 per cent of cost for Kentledge including supports, loading arrangement, and Labour etc.				Including 20% for Kentledge					Including 20% for Kentledge
		31st m		10%	34369.40	41243.28				37806.33	45367.60
		32nd		10%	37806.34	45367.61				41586.96	49904.35
		33rd m		10%	41586.97	49904.36				45745.66	54894.79
		34th m		10%	45745.67	54894.80				50320.23	60384.28
		35th m		10%	50320.24	60384.29				55352.25	66422.70
		36th m		10%	55352.26	66422.71				60887.48	73064.98
		37th m		10%	60887.49	73064.99				66976.23	80371.48
		38th m		10%	66976.24	80371.49				73673.85	88408.62
		39th m		10%	73673.86	88408.63				81041.24	97249.49
		40th m		10%	81041.25	97249.50				89145.36	106974.43
		Total Cost from 30m upto 40m			547759.7	657311.7				602535.59	723042.72
		Avg Rate per metre			54775.97	65731				60253.56	72304.27

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
B		Clayey Soil (10m dia. Well)									
			Unit	1	m						
			Taking output	1	m						
(I)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.18 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.25	151.44	37.86			
(ii)	L-48	Sinker (skilled)			day	2.50	335.06	837.65			
(iii)	L-33	Sinking helper (semi-skilled)			day	5.50	149.97	824.84			
		Total-II						1700.35			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.00	950.00	5700.00			
(ii)		Consumables in sinking @10 per cent on machinery						570.00			
		Total-III						6270.00			
		Total-II+III						7970.35			
		sundries @ 3% on 7970.35						239.11			
		Contractor's profit and overhead charges @ 21.50% on 8209.46						1765.03			
								9974.49			
		Labour cess @ 1% on 9974.49						99.74			
		Cost	1	m				10074.23	10074.23		10074.23
		sub mountainous @ 10% on 10074.23									1007.42
									10074.23		11081.65

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.15 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.40	151.44	60.58			
(ii)	L-48	Sinker			day	3.00	335.06	1005.18			
(iii)	L-33	Sinking helper (semi-skilled)			day	5.50	149.97	824.84			
		Total-II						1890.60			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.00	950.00	5700.00			
(ii)	2.20	Air compressor with pneumatic chisel attachment for cutting hard clay.			hour	4.00	655.00	2620.00			
(iii)		Consumables in sinking @10 per cent on machinery						832.00			
		Total-III						9152.00			
		Total-II+III						11042.60			
		sundries @ 3% on 11042.6						331.28			
		Contractor's profit and overhead charges @ 21.50% on 11373.88						2445.38			
								13819.26			
		Labour cess @ 1% on 13819.26						138.19			
		Cost I		m				13957.45	13957.45		13957.45
		sub mountainous @ 10% on 13957.45									1395.75
									13957.45		15353.20

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)
(iii)		Beyond 10 m upto 20 m									
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add for dewatering @ 5 per cent of cost, if required.				Including for dewatering @ 5% of cost, if required					Including for dewatering @ 5% of cost, if required
		11th m		5%	14655.32	15388.09				16120.85	16926.89
		12th m		5%	15388.09	16157.49				16926.89	17773.23
		13th m		5%	16157.49	16965.36				17773.23	18661.89
		14th m		5%	16965.36	17813.63				18661.89	19594.98
		15th m		5%	17813.63	18704.31				19594.98	20574.73
		16th m		5%	18704.31	19639.53				20574.73	21603.47
		17th m		5%	19639.53	20621.51				21603.47	22683.64
		18th m		5%	20621.51	21652.59				22683.64	23817.82
		19th m		5%	21652.59	22735.22				23817.82	25008.71
		20th m		5%	22735.22	23871.98				25008.71	26259.15
		Total Cost from 10m upto 20m			184333.1	193549.71				202766.21	212904.51
		Avg Rate per metre			18433.31	19355.0				20276.62	21290.45

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(iv)		Beyond 20m upto 30 m										
a		Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
b		Add 5 per cent of cost for dewatering on the cost, if required										
c		Add 25 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 25% for Kentledge	Including 5% for dewatering, if required			Including 25% for Kentledge	Including 5% for dewatering, if required	
		21st m			7.5%	24440.36	30550.45	32077.97		26884.36	33605.45	35285.72
		22nd m			7.5%	26273.39	32841.74	34483.83		28900.69	36125.86	37932.15
		23rd m			7.5%	28243.89	35304.86	37070.10		31068.24	38835.30	40777.07
		24th m			7.5%	30362.18	37952.73	39850.37		33398.36	41747.95	43835.35
		25th m			7.5%	32639.34	40799.18	42839.14		35903.24	44879.05	47123.00
		26th m			7.5%	35087.29	43859.11	46052.07		38595.98	48244.98	50657.23
		27th m			7.5%	37718.84	47148.55	49505.98		41490.68	51863.35	54456.52
		28th m			7.5%	40547.75	50684.69	53218.92		44602.48	55753.10	58540.76
		29th m			7.5%	43588.83	54486.04	57210.34		47947.67	59934.59	62931.32
		30th m			7.5%	46857.99	58572.49	61501.11		51543.75	64429.69	67651.17
		Total Cost from 20m upto 30m				345759.9	432199.8	453809.83		380335.5	475419.32	499190.29
		Avg Rate per metre				34575.99	43219.98	45380.98		38033.55	47541.93	49919.03

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(v)		Beyond 30m upto 40 m										
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
b		Add 5 per cent of cost for dewatering, if required										
c		Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 20% for Kentledge	Including 5% for dewatering, if required			Including 20% for Kentledge	Including 5% for dewatering, if required	
		31st m			10%	51543.79	61852.55	64945.18		56698.13	68037.76	71439.65
		32nd			10%	56698.17	68037.80	71439.69		62367.94	74841.53	78583.61
		33rd m			10%	62367.99	74841.59	78583.67		68604.73	82325.68	86441.96
		34th m			10%	68604.79	82325.75	86442.04		75465.20	90558.24	95086.15
		35th m			10%	75465.27	90558.32	95086.24		83011.72	99614.06	104594.76
		36th m			10%	83011.80	99614.16	104594.87		91312.89	109575.47	115054.24
		37th m			10%	91312.98	109575.58	115054.36		100444.18	120533.02	126559.67
		38th m			10%	100444.28	120533.14	126559.80		110488.60	132586.32	139215.64
		39th m			10%	110488.71	132586.45	139215.77		121537.46	145844.95	153137.20
		40th m			10%	121537.6	145845.10	153137.36		133691.2	160429.45	168450.92
		Total Cost from 30m upto 40m				821475.36	985770.4	1035058.98		903622.1	1084346.48	1138563.80
		Avg Rate per metre				82147.54	98577.04	103505.9		90362.21	108434.65	113856.38

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
C		Soft Rock (10m dia well)										
			Unit	1	m							
			Taking output	1	m							
		Depth in soft rock strata upto 3m										
		Rate of sinking = 0.140 m per hour.										
II		Labour										
(i)	L-29	Mate			day	0.86	151.44	130.24				
(ii)	L-48	Sinker (skilled)			day	4.00	335.06	1340.24				
(iii)	L-33	Sinking helper (semi-skilled)			day	16.00	149.97	2399.52				
(iv)	L-17	Diver			day	1.40	335.06	469.08				
		Total-II						4339.08				
III		Hiring charges of Machinery										
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	7.00	950.00	6650.00				
(ii)	2.20	Air compressor with pneumatic breakers			hour	4.25	655.00	2783.75				
		Total-III						9433.75				
(iii)		Consumables in sinking @10 per cent on machinery						943.38				
		Total						10377.13				
		Total-II+III						14716.21				
		sundries @ 3% on 14716.21						441.49				
		Contractor's profit and overhead charges @ 21.50% on 15157.7						3258.91				
								18416.61				
		Labour cess @ 1% on 18416.61						184.17				
		Cost	1	m				18600.78	18600.78			18600.78
		sub mountainous @ 10% on 18600.78										1860.08
									18600.78			20460.86

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
D		Hard Rock (10m dia well)									
		Unit	1	m							
		Taking output	1	m							
		Depth in Hard rock strata up to 3 m									
		Rate of sinking = 0.12 m per hour.									
I		Material									
(i)	0.00	Gelatine 80 per cent			Kg	11.00	100.00	1100.00			
(ii)	/100	Electric Detonators			each	44.00	7.50	330.00			
		Total-I						1430.00			
		Contractor's profit @ 10% on 1430						143.00			
		Cost	1	m				1573.00			
		Rate	1	m				1573.00			
		Labour cess @ 1% on 1573						15.73			
		Total						1588.73	1588.73		1588.73
II		Labour									
(i)	L-29	Mate			day	1.27	151.44	192.33			
(ii)	L-9	Driller			day	2.00	151.44	302.88			
(iii)	L-7	Blaster			day	0.25	151.44	37.86			
(iv)	L-35	Mazdoor			day	24.00	136.69	3280.56			
(v)	L-31	Mazdoor (Skilled)			day	4.00	164.69	658.76			
		Total-II						4472.39			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	8.50	950.00	8075.00			
(ii)	2.20	Hire & running charges of compressor with pneumatic breaker/Jack hammer for drilling.			hour	3.00	655.00	1965.00			
								10040.00			
		Consumables in sinking @10 per cent on machinery						1004.00			
		Total-III						11044.00			
		Total-II+III						15516.39			
		sundries @ 3% on 15516.39						465.49			
		Contractor's profit and overhead charges @ 21.50% on 15981.88						3436.10			
								19417.98			
		Labour cess @ 1% on 19417.98						194.18			
		Cost	1	m				19612.16	19612.16		19612.16
		sub mountainous @ 10% on 19612.16									1961.22
											21573.38
								21200.89			23162.11

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
17		Sinking of 11 m external diameter well (other than pneumatic method of sinking) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.									
		As per MoRT&H Specification 1200									
		Unit 1		m							
		Taking output 0.5		m							
		Diameter of well - 11 m.									
A		Sandy Soil									
(i)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.15 m per hour.									
II		Labour									
(i)	L-29	Male			day	0.21	151.44	31.80			
(ii)	L-48	Sinker (skilled)			day	1.50	335.06	502.59			
(iii)	L-33	Sinking helper (semi-skilled)			day	3.30	149.97	494.90			
		Total-II						1029.29			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.00	950.00	5700.00			
(ii)		Consumables in sinking @10 per cent on machinery						570.00			
		Total-III						6270.00			
		Total-II+III						7299.29			
		sundries @ 3% on 7299.29						218.98			
		Contractor's profit and overhead charges @ 21.50% on 7518.27						1616.43			
								9134.70			
		Labour cess @ 1% on 9134.7						91.35			
		Cost 0.5		m				9226.05	9226.05		9226.05
		sub mountainous @ 10% on 9226.05									922.61
								9226.05			10148.66
		Cost 1		m				18452.10			20297.31

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(i)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.17 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.32	151.44	48.46			
(ii)	L-48	Sinker			day	2.00	335.06	670.12			
(iii)	L-33	Sinking helper (semi-skilled)			day	4.50	149.97	674.87			
		Total-II						1393.45			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	4.00	950.00	3800.00			
(ii)		Consumables in sinking @10 per cent on machinery						380.00			
		Total-III						4180.00			
		Total-II+III						5573.45			
		sundries @ 3% on 5573.45						167.20			
		Contractor's profit and overhead charges @ 21.50% on 5740.65						1234.24			
								6974.89			
		Labour cess @ 1% on 6974.89						69.75			
		Cost 0.5 m						7044.64	7044.64		7044.64
		sub mountainous @ 10% on 7044.64									704.46
								7044.64			8671.71
		Cost 1 m						14089.28			17343.42

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)
(iii)		Beyond 10m upto 20m									
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
		11th m		5%	14793.74						18210.59
		12th m		5%	15533.43						19121.12
		13th m		5%	16310.10						20077.18
		14th m		5%	17125.61						21081.04
		15th m		5%	17981.89						22135.09
		16th m		5%	18880.98						23241.84
		17th m		5%	19825.03						24403.93
		18th m		5%	20816.28						25624.13
		19th m		5%	21857.09						26905.34
		20th m		5%	22949.94						28250.61
		Total Cost from 10m upto 20m			186074.1						229050.87
		Avg Rate per metre			18607.41						22905.09

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(iv)		Beyond 20m upto 30 m									
a		Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour.					Including 20% for Kentledge				Including 20% for Kentledge
		21st m			7.5%	24671.19	29605.43			30369.41	36443.29
		22nd m			7.5%	26521.53	31825.84			32647.12	39176.54
		23rd m			7.5%	28510.64	34212.77			35095.65	42114.78
		24th m			7.5%	30648.94	36778.73			37727.82	45273.38
		25th m			7.5%	32947.61	39537.13			40557.41	48668.89
		26th m			7.5%	35418.68	42502.42			43598.22	52319.06
		27th m			7.5%	38075.08	45690.10			46869.16	56242.99
		28th m			7.5%	40930.71	49116.85			50384.35	60461.22
		29th m			7.5%	44000.51	52800.61			54163.18	64995.82
		30th m			7.5%	47300.55	56760.66			58225.42	69870.50
		Total Cost from 20m upto 30m				349025.4	418830.54			429638.74	515566.47
		Avg Rate per metre					41883.05			42963.87	51556.65

Sr No	Code No.	Description		Unit	Plain			Sub mountainous Region		
					Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)
(v)		Beyond 30m upto 40 m								
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter								
b		Add 20 per cent of cost for Kentledge including supports, loading arrangement, and Labour etc.				Including 20% for Kentledge				Including 20% for Kentledge
		31st m		10%	52030.61	62436.73			64047.96	76857.55
		32nd		10%	57233.67	68680.40			70452.76	84543.31
		33rd m		10%	62957.04	75548.45			77498.04	92997.65
		34th m		10%	69252.74	83103.29			85247.84	102297.41
		35th m		10%	76178.01	91413.61			93772.62	112527.14
		36th m		10%	83795.81	100554.97			103149.88	123779.86
		37th m		10%	92175.39	110610.47			113464.87	136157.84
		38th m		10%	101392.9	121671.52			124811.36	149773.63
		39th m		10%	111532.22	133838.66			137292.50	164751.00
		40th m		10%	122685.44	147222.53			151021.75	181226.10
		Total Cost from 30m upto 40m			829233.9	995080.6			1020759.58	1224911.49
		Avg Rate per metre			82923.39	99508.06			102075.96	122491.15

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
B		Clayey Soil (11m dia. Well)									
			Unit	1	m						
			Taking output	0.5	m						
(I)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.1 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.26	151.44	39.37			
(ii)	L-48	Sinker (skilled)			day	2.50	335.06	837.65			
(iii)	L-33	Sinking helper (semi-skilled)			day	4.00	149.97	599.88			
		Total-II						1476.90			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	5.00	950.00	4750.00			
(ii)		Consumables in sinking @10 per cent on machinery						475.00			
		Total-III						5225.00			
		Total-II+III						6701.90			
		sundries @ 3% on 6701.9						201.06			
		Contractor's profit and overhead charges @ 21.50% on 6902.96						1484.14			
								8387.10			
		Labour cess @ 1% on 8387.1						83.87			
		Cost	0.5	m				8470.97	8470.97		8470.97
		sub mountainous @ 10% on 8470.97									847.10
								8470.97			9318.07
		Cost	1	m				16941.94			18636.13

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.08 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.43	151.44	65.12			
(ii)	L-48	Sinker			day	3.50	335.06	1172.71			
(iii)	L-33	Sinking helper (semi-skilled)			day	5.75	149.97	862.33			
		Total-II						2100.16			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.00	950.00	5700.00			
(ii)	2.20	Air compressor with pneumatic chisel attachment for cutting hard clay.			hour	4.25	655.00	2783.75			
(ii)		Consumables in sinking @10 per cent on machinery						848.38			
								9332.13			
		Total-II+III						11432.29			
		sundries @ 3% on 11432.29						342.97			
		Contractor's profit and overhead charges @ 21.50% on 11775.26						2531.68			
								14306.94			
		Labour cess @ 1% on 14306.94						143.07			
		Cost 0.5	m					14450.01	14450.01		14450.01
		sub mountainous @ 10% on 14450.01									1445.00
		Cost 1	m					28900.02			31790.02

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(iii)		Beyond 10 m upto 20 m									
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add for dewatering @ 5 per cent of cost, if required.					Including for dewatering @ 5% of cost, if required				Including for dewatering @ 5% of cost, if required
		11th m			5%	30345.02	31862.27			33379.52	35048.50
		12th m			5%	31862.27	33455.38			35048.50	36800.93
		13th m			5%	33455.38	35128.15			36800.93	38640.98
		14th m			5%	35128.15	36884.56			38640.98	40573.03
		15th m			5%	36884.56	38728.79			40573.03	42601.68
		16th m			5%	38728.79	40665.23			42601.68	44731.76
		17th m			5%	40665.23	42698.49			44731.76	46968.35
		18th m			5%	42698.49	44833.41			46968.35	49316.77
		19th m			5%	44833.41	47075.08			49316.77	51782.61
		20th m			5%	47075.08	49428.83			51782.61	54371.74
		Total Cost from 10m upto 20m				381676.4	400760.19			419844.13	440836.35
		Avg Rate per metre				38167.64	40076.02			41984.41	44083.64

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
(iv)		Beyond 20m upto 30 m										
a		Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
b		Add 5 per cent of cost for dewatering on the cost, if required										
c		Add 25 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 25% for Kentledge	Including 5% for dewatering, if required			Including 25% for Kentledge	Including 5% for dewatering, if required	
		21st m			7.5%	50605.71	63257.14	66420.00		55666.31	69582.89	73062.03
		22nd m			7.5%	54401.14	68001.43	71401.50		59841.28	74801.60	78541.68
		23rd m			7.5%	58481.23	73101.54	76756.62		64329.38	80411.73	84432.32
		24th m			7.5%	62867.32	78584.15	82513.36		69154.08	86442.60	90764.73
		25th m			7.5%	67582.37	84477.96	88701.86		74340.64	92925.80	97572.09
		26th m			7.5%	72651.05	90813.81	95354.50		79916.19	99895.24	104890.00
		27th m			7.5%	78099.88	97624.85	102506.09		85909.90	107387.38	112756.75
		28th m			7.5%	83957.37	104946.71	110194.05		92353.14	115441.43	121213.50
		29th m			7.5%	90254.17	112817.71	118458.60		99279.63	124099.54	130304.52
		30th m			7.5%	97023.23	121279.04	127342.99		106725.60	133407.00	140077.35
		Total Cost from 20m upto 30m				715923.5	894904.3	939649.57		787516.2	984395.21	1033614.97
		Avg Rate per metre				71592.35	89490.43	93964.96		78751.62	98439.52	103361.50

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)
(v)		Beyond 30m upto 40 m									
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add 5 per cent of cost for dewatering, if required									
c		Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 20% for Kentledge	Including 5% for dewatering, if required			Including 20% for Kentledge	Including 5% for dewatering, if required
		31st m		10%	106725.55	128070.66	134474.19		117398.16	140877.79	147921.68
		32nd		10%	117398.11	140877.73	147921.62		129137.98	154965.58	162713.86
		33rd m		10%	129137.92	154965.50	162713.78		142051.78	170462.14	178985.25
		34th m		10%	142051.7	170462.05	178985.15		156257.0	187508.35	196883.77
		35th m		10%	156256.9	187508.26	196883.67		171882.7	206259.19	216572.15
		36th m		10%	171882.57	206259.08	216572.03		189070.93	226885.12	238229.38
		37th m		10%	189070.83	226885.00	238229.25		207976.0	249573.62	262052.30
		38th m		10%	207977.91	249573.49	262052.16		228775.8	274530.98	288257.53
		39th m		10%	228775.7	274530.84	288257.38		251653.4	301984.08	317083.28
		40th m		10%	251653.27	301983.92	317083.12		276818.74	332182.49	348791.61
		Total Cost from 30m upto 40m			1700930	2041116.5	2143172.35		1871024	2245229.34	2357490.81
		Avg Rate per metre			170093.1	204111.65	214317.24		187102.5	224522.93	235749.08

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
C		Soft Rock (11m dia well)										
			Unit	1	m							
			Taking output	0.5	m							
		Depth in soft rock strata upto 3m										
		Rate of sinking = 0.06 m per hour.										
II		Labour										
(i)	L-29	Mate			day	0.95	151.44	143.87				
(ii)	L-48	Sinker (skilled)			day	4.25	335.06	1424.01				
(iii)	L-33	Sinking helper (semi-skilled)			day	18.00	149.97	2699.46				
(iv)	L-17	Diver			day	1.50	335.06	502.59				
		Total-II						4769.93				
III		Hiring charges of Machinery										
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	8.00	950.00	7600.00				
(ii)	2.20	Air compressor with pneumatic breakers			hour	4.50	655.00	2947.50				
								10547.50				
(iii)		Consumables in sinking @10 per cent on machinery						1054.75				
		Total-III						11602.25				
		Total-II+III						16372.18				
		sundries @ 3% on 16372.18						491.17				
		Contractor's profit and overhead charges @ 21.50% on 16863.35						3625.62				
								20488.97				
		Labour cess @ 1% on 20488.97						204.89				
		Cost	0.5	m				20693.86	20693.86			20693.86
		sub mountainous @ 10% on 20693.86										2069.39
		Cost	1	m					41387.72			45526.49

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
D		Hard Rock (11m dia well)									
		Unit	1	m							
		Taking output	0.5	m							
		Depth in Hard rock strata up to 3 m									
		Rate of sinking = 0.05 m per hour.									
I		Material									
(i)	0.00	Gelatine 80 per cent			Kg	12.00	100.00	1200.00			
(ii)	/100	Electric Detonators			each	48.00	7.50	360.00			
		Total-I						1560.00			
		Contractor's profit @ 10% on 1560						156.00			
		Cost	0.5	m				1716.00			
		Rate	1	m				3432.00			
		Labour cess @ 1% on 3432						34.32			
		Total						3466.32	3466.32		3466.32
II		Labour									
(i)	L-29	Mate			day	1.35	151.44	204.44			
(ii)	L-9	Driller			day	2.00	151.44	302.88			
(iii)	L-7	Blaster			day	0.25	151.44	37.86			
(iv)	L-35	Mazdoor			day	26.00	136.69	3553.94			
(v)	L-31	Mazdoor (Skilled)			day	4.00	164.69	658.76			
		Total-II						4757.88			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	10.00	950.00	9500.00			
(ii)	2.20	Hire & running charges of compressor with pneumatic breaker/Jack hammer for drilling.			hour	3.50	655.00	2292.50			
								11792.50			
		Consumables in sinking @10 per cent on machinery						1179.25			
		Total-III						12971.75			
		Total-II+III						17729.63			
		sundries @ 3% on 17729.63						531.89			
		Contractor's profit and overhead charges @ 21.50% on 18261.52						3926.23			
								22187.75			
		Labour cess @ 1% on 22187.75						221.88			
		Cost	0.5	m				22409.63			
		Rate	1	m				44819.26	44819.26		44819.26
		sub mountainous @ 10% on 44819.26									4481.93
											49301.19
								48285.58			52767.51

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
18		Sinking of 12 m external diameter well (other than pneumatic method of sinking) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.									
		As per MoRT&H Specification 1200									
		Unit	1	m							
		Taking output	0.25	m							
		Diameter of well - 12 m.									
A		Sandy Soil									
(i)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.05 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.22	151.44	33.32			
(ii)	L-48	Sinker (skilled)			day	1.75	335.06	586.36			
(iii)	L-33	Sinking helper (semi-skilled)			day	4.00	149.97	599.88			
		Total-II						1219.56			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.00	950.00	5700.00			
(ii)		Consumables in sinking @10 per cent on machinery						570.00			
		Total-III						6270.00			
		Total-II+III						7489.56			
		sundries @ 3% on 7489.56						224.69			
		Contractor's profit and overhead charges @ 21.50% on 7714.25						1658.56			
								9372.81			
		Labour cess @ 1% on 9372.81						93.73			
		Cost	0.25	m				9466.54	9466.54		9466.54
		sub mountainous @ 10% on 9466.54									946.65
								9466.54			10413.19
		Cost	1	m				37866.16			41652.78

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(i)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.038 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.37	151.44	56.03			
(ii)	L-48	Sinker			day	2.50	335.06	837.65			
(iii)	L-33	Sinking helper (semi-skilled)			day	4.75	149.97	712.36			
		Total-II						1606.04			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.50	950.00	6175.00			
(ii)		Consumables in sinking @10 per cent on machinery						617.50			
								6792.50			
		Total-II+III						8398.54			
		sundries @ 3% on 8398.54						251.96			
		Contractor's profit and overhead charges @ 21.50% on 8650.5						1859.86			
								10510.36			
		Labour cess @ 1% on 10510.36						105.10			
		Cost 10.25 m						10615.46	10615.46		10615.46
		sub mountainous @ 10% on 10615.46									1061.55
								10615.46			11677.01
		Cost 1 m						42461.84			46708.02

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(iii)		Beyond 10m upto 20m										
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
		11th m			5%	44584.93						49043.43
		12th m			5%	46814.18						51495.60
		13th m			5%	49154.89						54070.38
		14th m			5%	51612.63						56773.90
		15th m			5%	54193.26						59612.60
		16th m			5%	56902.92						62593.23
		17th m			5%	59748.07						65722.89
		18th m			5%	62735.47						69009.03
		19th m			5%	65872.24						72459.48
		20th m			5%	69165.85						76082.45
		Total Cost from 10m upto 20m				560784.4						616862.99
		Avg Rate per metre				56078.44						61686.30

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)
(iv)		Beyond 20m upto 30 m									
a		Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour.				Including 20% for Kentledge					Including 20% for Kentledge
		21st m		7.5%	74353.29	89223.95				81788.63	98146.36
		22nd m		7.5%	79929.79	95915.75				87922.78	105507.34
		23rd m		7.5%	85924.52	103109.42				94516.99	113420.39
		24th m		7.5%	92368.86	110842.63				101605.76	121926.91
		25th m		7.5%	99296.5	119155.82				109226.19	131071.43
		26th m		7.5%	106743.8	128092.51				117418.15	140901.78
		27th m		7.5%	114749.54	137699.45				126224.51	151469.41
		28th m		7.5%	123355.76	148026.91				135691.35	162829.62
		29th m		7.5%	132607.4	159128.93				145868.20	175041.84
		30th m		7.5%	142553.0	171063.60				156808.32	188169.98
		Total Cost from 20m upto 30m			1051882	1262259.0				1157070.88	1388485.06
		Avg Rate per metre			105188	126225.90				115707.09	138848.51

Sr No	Code No.	Description		Unit	Plain			Sub mountainous Region		
					Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)
(v)		Beyond 30m upto 40 m								
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter								
b		Add 20 per cent of cost for Kentledge including supports, loading arrangement, and Labour etc.				Including 20% for Kentledge				Including 20% for Kentledge
		31st m		10%	156808.30	188169.96			172489.15	206986.98
		32nd		10%	172489.1	206986.96			189738.07	227685.68
		33rd m		10%	189738.0	227685.65			208711.88	250454.26
		34th m		10%	208711.84	250454.21			229583.07	275499.68
		35th m		10%	229583.0	275499.62			252541.38	303049.66
		36th m		10%	252541.3	303049.6			277795.52	333354.62
		37th m		10%	277795.5	333354.5			305575.07	366690.08
		38th m		10%	305575.00	366690.00			336132.58	403359.10
		39th m		10%	336132.5	403359.00			369745.84	443695.01
		40th m		10%	369745.8	443694.9			406720.42	488064.50
		Total Cost from 30m upto 40m			2499120.4	2998944.4			2749032.98	3298839.57
		Avg Rate per metre			249912.04	299894.44			274903.30	329883.96

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
B		Clayey Soil (12m dia. Well)									
			Unit	1	m						
			Taking output	0.25	m						
(I)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.04 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.30	151.44	45.43			
(ii)	L-48	Sinker (skilled)			day	3.00	335.06	1005.18			
(iii)	L-33	Sinking helper (semi-skilled)			day	4.50	149.97	674.87			
		Total-II						1725.48			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.25	950.00	5937.50			
(ii)		Consumables in sinking @10 per cent on machinery						593.75			
		Total-III						6531.25			
		Total-II+III						8256.73			
		sundries @ 3% on 8256.73						247.70			
		Contractor's profit and overhead charges @ 21.50% on 8504.43						1828.45			
								10332.88			
		Labour cess @ 1% on 10332.88						103.33			
		Cost	0.25	m				10436.21	10436.21		10436.21
		sub mountainous @ 10% on 10436.21									1043.82
									10436.21		11479.83
		Cost	1	m					41744.84		45919.32

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.03 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.48	151.44	72.69			
(ii)	L-48	Sinker			day	3.75	335.06	1256.48			
(iii)	L-33	Sinking helper (semi-skilled)			day	6.00	149.97	899.82			
		Total-II						2228.99			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	8.33	950.00	7913.50			
(ii)	2.20	Air compressor with pneumatic chisel attachment for cutting hard clay.			hour	4.50	655.00	2947.50			
(iii)		Consumables in sinking @10 per cent on machinery						1086.10			
								11947.10			
		Total-II+III						14176.09			
		sundries @ 3% on 14176.09						425.28			
		Contractor's profit and overhead charges @ 21.50% on 14601.37						3139.29			
								17740.66			
		Labour cess @ 1% on 17740.66						177.41			
		Cost 0.25 m						17918.07	17918.07		17918.07
		sub mountainous @ 10% on 17918.07									1791.81
								17918.07			19709.88
		Cost 1 m						71672.28			78839.51

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
(iii)		Beyond 10 m upto 20 m										
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
b		Add for dewatering @ 5 per cent of cost, if required.				Including for dewatering @ 5% of cost, if required					Including for dewatering @ 5% of cost, if required	
		11th m			5%	75255.89	79018.68				82781.48	86920.55
		12th m			5%	79018.68	82969.61				86920.55	91266.58
		13th m			5%	82969.61	87118.09				91266.58	95829.91
		14th m			5%	87118.09	91473.99				95829.91	100621.41
		15th m			5%	91473.99	96047.69				100621.41	105652.48
		16th m			5%	96047.69	100850.07				105652.48	110935.10
		17th m			5%	100850.07	105892.57				110935.10	116481.86
		18th m			5%	105892.57	111187.20				116481.86	122305.95
		19th m			5%	111187.20	116746.56				122305.95	128421.25
		20th m			5%	116746.6	122583.89				128421.25	134842.31
		Total Cost from 10m upto 20m				946560.4	993888.4				1041216.57	1093277.40
		Avg Rate per metre				94656.04	99388.84				104121.66	109327.74

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(iv)		Beyond 20m upto 30 m										
a		Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
b		Add 5 per cent of cost for dewatering on the cost, if required										
c		Add 25 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 25% for Kentledge	Including 5% for dewatering, if required			Including 25% for Kentledge	Including 5% for dewatering, if required	
		21st m			7.5%	125502.55	156878.19	164722.10		138052.84	172566.05	181194.35
		22nd m			7.5%	134915.24	168644.05	177076.25		148406.80	185508.50	194783.93
		23rd m			7.5%	145033.9	181292.35	190356.97		159537.3	199421.64	209392.72
		24th m			7.5%	155911.4	194889.28	204633.74		171502.61	214378.26	225097.17
		25th m			7.5%	167604.8	209505.98	219981.28		184365.3	230456.64	241979.47
		26th m			7.5%	180175.1	225218.93	236479.88		198192.71	247740.89	260127.93
		27th m			7.5%	193688.28	242110.35	254215.87		213057.16	266321.45	279637.52
		28th m			7.5%	208214.9	260268.63	273282.06		229036.5	286295.56	300610.34
		29th m			7.5%	223831.0	279788.8	293778.22		246214.2	307767.73	323156.12
		30th m			7.5%	240618.35	300772.9	315811.59		264680.2	330850.30	347392.82
		Total Cost from 20m upto 30m				1775496	2219369.5	2330338.0		1953045.6	2441307.02	2563372.37
		Avg Rate per metre				177549.6	221936.95	233033.80		195304.56	244130.70	256337.24

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
(v)		Beyond 30m upto 40 m										
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
b		Add 5 per cent of cost for dewatering, if required										
c		Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 20% for Kentledge	Including 5% for dewatering, if required			Including 20% for Kentledge	Including 5% for dewatering, if required	
		31st m			10%	264680.2	317616.2	333497.0		291148.3	349377.91	366846.81
		32nd			10%	291148.2	349377.9	366846.7		320263.1	384315.71	403531.50
		33rd m			10%	320263.0	384315.6	403531.4		352289.4	422747.28	443884.64
		34th m			10%	352289.3	422747.2	443884.6		387518.3	465022.01	488273.11
		35th m			10%	387518.3	465021.9	488273.0		426270.2	511524.20	537100.41
		36th m			10%	426270.1	511524.1	537100.3		468897.2	562676.63	590810.46
		37th m			10%	468897.1	562676.5	590810.4		515786.9	618944.29	649891.50
		38th m			10%	515786.8	618944.2	649891.4		567365.6	680838.72	714880.66
		39th m			10%	567365.5	680838.6	714880.5		624102.2	748922.59	786368.72
		40th m			10%	624102.0	748922.5	786368.6		686512.4	823814.86	865005.60
		Total Cost from 30m upto 40m				4218321	5061985	5315083.9		4640154	5568184.20	5846593.41
		Avg Rate per metre				421832.1	506198.5	531508.4		464015.4	556818.42	584659.34

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
C		Soft Rock (12m dia well)										
			Unit	1	m							
		Taking output	0.25	m								
		Depth in soft rock strata upto 3m										
		Rate of sinking = 0.025 m per hour.										
II		Labour										
(i)	L-29	Mate			day	1.06	151.44	160.53				
(ii)	L-48	Sinker (skilled)			day	4.50	335.06	1507.77				
(iii)	L-33	Sinking helper (semi-skilled)			day	20.00	149.97	2999.40				
(iv)	L-17	Diver			day	1.75	335.06	586.36				
		Total-II						5254.06				
III		Hiring charges of Machinery										
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	10.00	950.00	9500.00				
(ii)	2.20	Air compressor with pneumatic breakers			hour	4.75	655.00	3111.25				
								12611.25				
(iii)		Consumables in sinking @10 per cent on machinery						1261.13				
		Total-III						13872.38				
		Total-II+III						19126.44				
		sundries @ 3% on 19126.44						573.79				
		Contractor's profit and overhead charges @ 21.50% on 19700.23						4235.55				
								23935.78				
		Labour cess @ 1% on 23935.78						239.36				
		Cost	0.25	m				24175.14	24175.14			24175.14
		sub mountainous @ 10% on 24175.14										2417.51
									24175.14			26592.65
		Cost	1	m				96700.56				106370.62

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
D		Hard Rock (12m dia well)									
		Unit	1	m							
		Taking output	0.25	m							
		Depth in Hard rock strata up to 3 m									
		Rate of sinking = 0.02 m per hour.									
I		Material									
(i)	0.00	Gelatine 80 per cent			Kg	14.00	100.00	1400.00			
(ii)	/100	Electric Detonators			each	56.00	7.50	420.00			
		Total-I						1820.00			
		Contractor's profit @ 10% on 1820						182.00			
		Cost	0.25	m				2002.00			
		Rate	1	m				8008.00			
		Labour cess @ 1% on 8008						80.08			
		Total						8088.08	8088.08		8088.08
II		Labour									
(i)	L-29	Mate			day	1.44	151.44	218.07			
(ii)	L-9	Driller			day	2.00	151.44	302.88			
(iii)	L-7	Blaster			day	0.25	151.44	37.86			
(iv)	L-35	Mazdoor			day	28.00	136.69	3827.32			
(v)	L-31	Mazdoor (Skilled)			day	4.50	164.69	741.11			
		Total-II						5127.24			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	12.50	950.00	11875.00			
(ii)	2.20	Hire & running charges of compressor with pneumatic breaker/Jack hammer for drilling.			hour	4.00	655.00	2620.00			
								14495.00			
		Consumables in sinking @10 per cent on machinery						1449.50			
		Total-III						15944.50			
		Total-II+III						21071.74			
		sundries @ 3% on 21071.74						632.15			
		Contractor's profit and overhead charges @ 21.50% on 21703.89						4666.34			
								26370.23			
		Labour cess @ 1% on 26370.23						263.70			
		Cost	0.25	m				26633.93			
		Rate	1	m				106535.72	106535.72		106535.72
		sub mountainous @ 10% on 26633.93									10653.57
											117189.29
								114623.80			125277.37

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
19		Sinking of Twin D Type well (other than pneumatic method of sinking) through all types of strata namely sandy soil, clayey soil and rock as shown against each case, complete as per drawing and technical specifications. Depth of sinking is reckoned from bed level.										
		As per MoRT&H Specification 1200										
		Unit	1	m								
		Taking output	1	m								
		Dimensions of well.										
		Overall length = 12 m										
		Overall width = 6 m										
A		Sandy Soil										
(i)		Depth below bed level upto 3.0 M										
		Rate of sinking = 0.18 m per hour.										
II		Labour										
(i)	L-29	Mate			day	0.20	151.44	30.29				
(ii)	L-48	Sinker (skilled)			day	1.25	335.06	418.83				
(iii)	L-33	Sinking helper (semi-skilled)			day	3.75	149.97	562.39				
		Total-II						1011.51				
III		Hiring charges of Machinery										
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	5.50	950.00	5225.00				
(ii)		Consumables in sinking @10 per cent on machinery						522.50				
								5747.50				
		Total-II+III						6759.01				
		sundries @ 3% on 6759.01						202.77				
		Contractor's profit and overhead charges @ 21.50% on 6961.78						1496.78				
								8458.56				
		Labour cess @ 1% on 8458.56						84.59				
		Cost I	1	m				8543.15	8543.15			8543.15
		sub mountainous @ 10% on 8543.15										854.32
									8543.15			9397.47

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(i)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.17 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.30	151.44	45.43			
(ii)	L-48	Sinker			day	1.50	335.06	502.59			
(iii)	L-33	Sinking helper (semi-skilled)			day	4.00	149.97	599.88			
		Total-II						1147.90			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	5.88	950.00	5586.00			
(ii)		Consumables in sinking @10 per cent on machinery						558.60			
								6144.60			
		Total-II+III						7292.50			
		sundries @ 3% on 7292.5						218.78			
		Contractor's profit and overhead charges @ 21.50% on 7511.28						1614.93			
								9126.21			
		Labour cess @ 1% on 9126.21						91.26			
		Cost	1	m				9217.47	9217.47		9217.47
		sub mountainous @ 10% on 9217.47									921.75
									9217.47		10139.22

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)	Total (in Rs)
(iii)		Beyond 10m upto 20m										
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
		11th m			5%	9678.34						10646.18
		12th m			5%	10162.26						11178.49
		13th m			5%	10670.37						11737.41
		14th m			5%	11203.89						12324.28
		15th m			5%	11764.08						12940.49
		16th m			5%	12352.28						13587.51
		17th m			5%	12969.89						14266.89
		18th m			5%	13618.38						14980.23
		19th m			5%	14299.30						15729.24
		20th m			5%	15014.27						16515.70
		Total Cost from 10m upto 20m				121733.1						133906.42
		Avg Rate per metre				12173.31						13390.64

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)
(iv)		Beyond 20m upto 30 m									
a		Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter									
b		Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour.				Including 20% for Kentledge					Including 20% for Kentledge
		21st m			7.5%	16140.34	19368.00			17754.38	21305.00
		22nd m			7.5%	17350.87	20821.00			19085.96	22903.00
		23rd m			7.5%	18652.19	22383.00			20517.41	24621.00
		24th m			7.5%	20051.10	24061.00			22056.22	26467.00
		25th m			7.5%	21554.93	25866.00			23710.44	28453.00
		26th m			7.5%	23171.55	27806.00			25488.72	30586.00
		27th m			7.5%	24909.42	29891.00			27400.37	32880.00
		28th m			7.5%	26777.63	32133.00			29455.40	35346.00
		29th m			7.5%	28785.95	34543.00			31664.56	37997.00
		30th m			7.5%	30944.90	37134.00			34039.40	40847.00
		Total Cost from 20m upto 30m				228338.9	274006.0			251172.86	301405.00
		Avg Rate per metre				22833.89	27400.60			25117.29	30140.50

Sr No	Code No.	Description		Unit	Plain			Sub mountainous Region		
					Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)
(v)		Beyond 30m upto 40 m								
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter								
b		Add 20 per cent of cost for Kentledge including supports, loading arrangement, and Labour etc.				Including 20% for Kentledge				Including 20% for Kentledge
		31st m		10%	34039.39	40847.00			37443.34	44932.00
		32nd		10%	37443.33	44932.00			41187.67	49425.00
		33rd m		10%	41187.66	49425.00			45306.44	54368.00
		34th m		10%	45306.43	54368.00			49837.08	59804.00
		35th m		10%	49837.07	59804.00			54820.79	65785.00
		36th m		10%	54820.78	65785.00			60302.87	72363.00
		37th m		10%	60302.86	72363.00			66333.16	79600.00
		38th m		10%	66333.15	79600.00			72966.48	87560.00
		39th m		10%	72966.47	87560.00			80263.13	96316.00
		40th m		10%	80263.12	96316.00			88289.44	105947.00
		Total Cost from 30m upto 40m			542500.26	651000.0			596750.40	716100.00
		Avg Rate per metre			54250.03	65100.00			59675.04	71610.00

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
B		Clayey Soil (Twin D Type well)									
		Unit	1	m							
		Taking output	1	m							
(I)		Depth below bed level upto 3.0 M									
		Rate of sinking = 0.16 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.26	151.44	39.37			
(ii)	L-48	Sinker (skilled)			day	2.50	335.06	837.65			
(iii)	L-33	Sinking helper (semi-skilled)			day	4.00	149.97	599.88			
		Total-II						1476.90			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.25	950.00	5937.50			
(ii)		Consumables in sinking @10 per cent on machinery						593.75			
								6531.25			
		Total-II+III						8008.15			
		sundries @ 3% on 8008.15						240.24			
		Contractor's profit and overhead charges @ 21.50% on 8248.39						1773.40			
								10021.79			
		Labour cess @ 1% on 10021.79						100.22			
		Cost	1	m				10122.01	10122.01		10122.01
		sub mountainous @ 10% on 10122.01									1012.20
									10122.01		11134.21

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		Beyond 3m upto 10m depth									
		Rate of sinking = 0.15 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.45	151.44	68.15			
(ii)	L-48	Sinker			day	3.25	335.06	1088.95			
(iii)	L-33	Sinking helper (semi-skilled)			day	6.00	149.97	899.82			
		Total-II						2056.92			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	6.67	950.00	6336.50			
(ii)	2.20	Air compressor with pneumatic chisel attachment for cutting hard clay.			hour	4.50	655.00	2947.50			
(ii)		Consumables in sinking @10 per cent on machinery						928.40			
								10212.40			
		Total-II+III						12269.32			
		sundries @ 3% on 12269.32						368.08			
		Contractor's profit and overhead charges @ 21.50% on 12637.4						2717.04			
								15354.44			
		Labour cess @ 1% on 15354.44						153.54			
		Cost		m				15507.98	15507.98		15507.98
		sub mountainous @ 10% on 15507.98									1550.80
								15507.98			17058.78

Sr No	Code No.	Description	Unit	Plain			Sub mountainous Region		
				Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Cost (in Rs)
(iii)		Beyond 10 m upto 20 m							
a		Add 5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter							
b		Add for dewatering @ 5 per cent of cost, if required.			Including for dewatering @ 5% of cost, if required				Including for dewatering @ 5% of cost, if required
		11th m	5%	16283.38	17098.00			17911.72	18807.00
		12th m	5%	17097.55	17952.00			18807.31	19748.00
		13th m	5%	17952.43	18850.00			19747.68	20735.00
		14th m	5%	18850.05	19793.00			20735.06	21772.00
		15th m	5%	19792.55	20782.00			21771.81	22860.00
		16th m	5%	20782.18	21821.00			22860.40	24003.00
		17th m	5%	21821.29	22912.00			24003.42	25204.00
		18th m	5%	22912.35	24058.00			25203.59	26464.00
		19th m	5%	24057.97	25261.00			26463.77	27787.00
		20th m	5%	25260.87	26524.00			27786.96	29176.00
		Total Cost from 10m upto 20m		204810.62	215051.00			225291.72	236556.00
		Avg Rate per metre		20481.06	21505.10			22529.17	23655.60

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
(iv)		Beyond 20m upto 30 m										
a		Add 7.5 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
b		Add 5 per cent of cost for dewatering on the cost, if required										
c		Add 25 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 25% for Kentledge	Including 5% for dewatering, if required			Including 25% for Kentledge	Including 5% for dewatering, if required	
		21st m			7.5%	27155.44	33944.30	35641.52		29870.98	37338.73	39205.67
		22nd m			7.5%	29192.10	36490.13	38314.64		32111.30	40139.13	42146.09
		23rd m			7.5%	31381.51	39226.89	41188.23		34519.65	43149.56	45307.04
		24th m			7.5%	33735.12	42168.90	44277.35		37108.62	46385.78	48705.07
		25th m			7.5%	36265.25	45331.56	47598.14		39891.77	49864.71	52357.95
		26th m			7.5%	38985.14	48731.43	51168.00		42883.65	53604.56	56284.79
		27th m			7.5%	41909.03	52386.29	55005.60		46099.92	57624.90	60506.15
		28th m			7.5%	45052.21	56315.26	59131.02		49557.41	61946.76	65044.10
		29th m			7.5%	48431.13	60538.91	63565.86		53274.22	66592.78	69922.42
		30th m			7.5%	52063.46	65079.33	68333.30		57269.79	71587.24	75166.60
		Total Cost from 20m upto 30m				384170.4	480213.00	504223.66		422587.3	528234.15	554645.88
		Avg Rate per metre				38417.04	48021.30	50422.37		42258.73	52823.42	55464.59

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
(v)		Beyond 30m upto 40 m										
a		Add 10 per cent for every additional meter depth of sinking over the rate of sinking for the previous meter										
b		Add 5 per cent of cost for dewatering, if required										
c		Add 20 per cent of cost for Kentledge including supports, loading arrangement and Labour).				Including 20% for Kentledge	Including 5% for dewatering, if required			Including 20% for Kentledge	Including 5% for dewatering, if required	
		31st m			10%	57269.81	68723.77	72160.00		62996.77	75596.12	79376.00
		32nd			10%	62996.79	75596.15	79376.00		69296.45	83155.74	87314.00
		33rd m			10%	69296.47	83155.76	87314.00		76226.10	91471.32	96045.00
		34th m			10%	76226.12	91471.34	96045.00		83848.71	100618.45	105649.00
		35th m			10%	83848.73	100618.48	105649.00		92233.58	110680.30	116214.00
		36th m			10%	92233.60	110680.32	116214.00		101456.94	121748.33	127836.00
		37th m			10%	101456.96	121748.35	127836.00		111602.63	133923.16	140619.00
		38th m			10%	111602.66	133923.19	140619.00		122762.89	147315.47	154681.00
		39th m			10%	122762.93	147315.52	154681.00		135039.2	162047.02	170149.00
		40th m			10%	135039.22	162047.06	170149.00		148543.10	178251.72	187164.00
		Total Cost from 30m upto 40m				912733.29	1095279.9	1150043.00		1004006.4	1204807.63	1265047.00
		Avg Rate per metre				91273.33	109527.99	115004.30		100400.64	120480.76	126504.70

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
C		Soft Rock (Twin D Type well)									
			Unit	1	m						
		Taking output	1	m							
		Depth in soft rock strata upto 3m									
		Rate of sinking = 0.12 m per hour.									
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-48	Sinker (skilled)			day	4.50	335.06	1507.77			
(iii)	L-33	Sinking helper (semi-skilled)			day	15.00	149.97	2249.55			
(iv)	L-17	Diver			day	1.50	335.06	502.59			
		Total-II						4390.15			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	8.33	950.00	7913.50			
(ii)	2.20	Air compressor with pneumatic breakers			hour	6.00	655.00	3930.00			
								11843.50			
(iii)		Consumables in sinking @10 per cent on machinery						1184.35			
		Total-III						13027.85			
		Total-II+III						17418.00			
		sundries @ 3% on 17418						522.54			
		Contractor's profit and overhead charges @ 21.50% on 17940.54						3857.22			
								21797.76			
		Labour cess @ 1% on 21797.76						217.98			
		Cost	1	m				22015.74	22015.74		22015.74
		sub mountainous @ 10% on 22015.74									2201.57
								22015.74			24217.31

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
D		Hard Rock (Twin D Type well)									
		Unit	1	m							
		Taking output	1	m							
		Depth in Hard rock strata up to 3 m									
		Rate of sinking = 0.1 m per hour.									
I		Material									
(i)	0.00	Gelatine 80 per cent			Kg	10.00	100.00	1000.00			
(ii)	/100	Electric Detonators			each	40.00	7.50	300.00			
		Total-I						1300.00			
		Contractor's profit @ 10% on 1300						130.00			
		Cost	1	m				1430.00			
		Rate	1	m				1430.00			
		Labour cess @ 1% on 1430						14.30			
		Total						1444.30	1444.30		1444.30
II		Labour									
(i)	L-29	Mate			day	1.34	151.44	202.93			
(ii)	L-9	Driller			day	2.00	151.44	302.88			
(iii)	L-7	Blaster			day	0.25	151.44	37.86			
(iv)	L-35	Mazdoor			day	25.00	136.69	3417.25			
(v)	L-31	Mazdoor (Skilled)			day	4.25	164.69	699.93			
		Total-II						4660.85			
III		Hiring charges of Machinery									
(i)	2.15	Hire & running charges of crane with grab bucket of 0.75 cum capacity and accessories.			hour	10.00	950.00	9500.00			
(ii)	2.20	Hire & running charges of compressor with pneumatic breaker/Jack hammer for drilling.			hour	3.00	655.00	1965.00			
								11465.00			
		Consumables in sinking @10 per cent on machinery						1146.50			
		Total-III						12611.50			
		Total-II+III						17272.35			
		sundries @ 3% on 17272.35						518.17			
		Contractor's profit and overhead charges @ 21.50% on 17790.52						3824.96			
								21615.48			
		Labour cess @ 1% on 21615.48						216.15			
		Cost	1	m				21831.63	21831.63		21831.63
		sub mountainous @ 10% on 21831.63									2183.16
											24014.79
								23275.93			25459.09

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
20		Sand Filling in Wells complete as per Drawing and Technical Specifications.									
		As per MoRT&H Specification 1207									
		Unit	1		cum						
		Taking output	1		cum						
I		Material									
(i)	0.00	Sand (assuming 20 per cent voids)			cum	1.20	200.59	240.71			
		Total-I						240.71			
		Contractor's profit @ 10% on 240.71						24.07			
		Cost	1		m			264.78			
		Rate	1		m			264.78			
		Labour cess @ 1% on 264.78						2.65			
		Total						267.43	267.43		267.43
II		Labour									
(i)	L-29	Mate			day	0.01	151.44	1.51			
(ii)	L-35	Mazdoor			day	0.30	136.69	41.01			
		Total-II						42.52			
		sundries @ 3% on 42.52						1.28			
		Contractor's profit and overhead charges @ 21.50% on 43.8						9.42			
								53.22			
		Labour cess @ 1% on 53.22						0.53			
		Cost	1		m			53.75	53.75		53.75
		sub mountainous @ 10% on 53.75									5.38
											59.13
											321.18
											326.56

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
21		Providing Steel Liner 10 mm thick for Curbs and 6 mm thick for Steining of Wells including Fabricating and Setting out as per Detailed Drawing.									
		As per MORTH Specification 1200 & 1900									
		Unit	1	MT							
		Taking output	1	MT							
I		Material									
(i)	0.00	Structural steel including 5 per cent wastage			tonne	1.05	38143.69	40050.87			
		Total-I						40050.87			
		Contractor's profit @ 10% on 40050.87						4005.09			
		Cost	1	mt				44055.96			
		Rate	1	mt				44055.96			
		Labour cess @ 1% on 44055.96						440.56			
		Total						44496.52	44496.52		44496.52
II		Labour									
(i)	L-29	Mate			day	1.24	151.44	187.79			
(ii)	L-20	Fitter			day	6.00	223.36	1340.16			
(iii)	L-6	Blacksmith			day	5.00	190.00	950.00			
(iv)	L-5	Welder			day	5.00	223.36	1116.80			
(v)	L-35	Mazdoor			day	10.00	136.69	1366.90			
		Electrodes, cutting gas and other consumables @ 5 per cent on cost a (i) above.						2002.54			
		Total-II						6964.19			
		sundries @ 3% on 6964.1935						208.93			
		Contractor's profit and overhead charges @ 21.50% on 7173.12						1542.22			
								8715.34			
		Labour cess @ 1% on 8715.34						87.15			
		Cost	1	mt				8802.49	8802.49		8802.49
		sub mountainous @ 10% on 8802.49									880.25
											9682.74
											54179.26
									53299.01		

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
22		Bored cast-in-situ M35 grade R.C.C. Pile excluding Reinforcement complete as per Drawing and Technical Specifications and removal of excavated earth with all lifts and lead upto 1000 m.										
		As per MoRT&H Specification 1100 &1700										
		Pile diameter-1000 mm										
		Unit	1	m								
		taking output	10	m								
I		Materials										
		RCC Grade M35			cum	7.85	3819.44	29982.60		7.85	3879.96	30457.71
		Cost						2998.26	2998.26			3045.77
		Labour (only for labour rate)			cum	7.85	605.23	4751.06		7.85	665.75	5226.16
								475.11	475.11			522.62
		Concrete to be cast with a tremie pipe 200mm dia.										
II		Labour										
(i)	L-29	Male/Supervisor			day	0.16	151.44	24.23				
(ii)	L-35	Mazdoor			day	4.00	136.89	546.76				
		Total-II						570.99				
III		Machinery(for boring and construction)										
(i)	2.43	Hire and running charges of hydraulic piling rig with power unit and complete accessories including shifting from one bore location to another.			hour	6.00	5267.50	31725.00				
(ii)	2.14	Hire and running charges of light crane for lowering reinforcement cage			hour	0.50	345.00	172.50				
		Hire and running charges of Bentonite pump			hour	6.00	Rate included in piling rig					
(iii)	2.19	Loader I cum bucket capacity.			hour	0.40	780.00	312.00				
(iv)	2.56	Tipper 5.5 cum capacity for disposal of muck from pile bore hole			hour	0.40	300.00	120.00				
(v)	M-71	Bentonite			kg	350.00	4.10	1435.00				
		Total-III						33764.50				
								34335.49				
		sundries @ 3% on 34335.49						1030.06				
		Contractor's profit and overhead charges @ 21.50% on 35365.55						7603.59				
								42969.14				
		Labour cess @ 1% on 42969.14						429.69				
					10 m			43398.83				
		Cost	1	m				4339.88	4339.88			4339.88
		sub mountainous @ 10% on 43398.83							4814.99			433.99
												5296.49
									7338.14			7819.64

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
23		Bored cast-in-situ M35 grade R.C.C. Pile excluding Reinforcement complete as per Drawing and Technical Specifications and removal of excavated earth with all lifts and lead upto 1000 m.										
		Pile diameter-1200 mm										
		As per MoRT&H Specification 1100 &1700										
		Unit	1	m								
		taking output	9	m								
		Materials										
I		PCC Grade M35			cum	10.17	3819.44	38843.70		10.17	3879.96	39459.22
		Cost						4315.97	4315.97			4384.36
		Labour (only for labour rate)			cum	10.17	605.23	6155.19		10.17	665.75	6770.71
								683.91	683.91			752.3
		Concrete to be cast with a tremie pipe 200mm dia.										
II		Labour										
(i)	L-29	Mate/Supervisor			day	0.18	151.44	27.26				
(ii)	L-35	Mazdoor			day	4.50	136.89	615.11				
		Total-II						642.37				
III		Machinery(for boring and construction)										
(i)	2.43	Hire and running charges of hydraulic piling rig with power unit and complete accessories including shifting from one bore location to another.			hour	6.00	5287.50	31725.00				
(ii)	2.14	Hire and running charges of light crane for lowering reinforcement cage			hour	0.50	345.00	172.50				
		Hire and running charges of Bentonite pump			hour	6.00	Rate included in piling rig					
(iii)	2.19	Loader I cum bucket capacity.			hour	0.50	780.00	390.00				
(iv)	2.56	Tipper 5.5 cum capacity for disposal of muck from pile bore hole			hour	0.50	300.00	150.00				
(v)	M-71	Bentonite			kg	385.00	4.10	1578.50				
		Total-III						34016.00				
								34658.37				
		sundries @ 3% on 34658.37						1039.75				
		Contractor's profit and overhead charges @ 21.50% on 35698.12						7675.10				
								43373.22				
		Labour cess @ 1% on 43373.22						433.73				
				9m				43806.95				
		Cost	1	m				4867.44	4867.44			4867.44
		sub mountainous @ 10% on 43806.95							5551.35			486.74
												6106.48
									9183.41			9738.54

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region			
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate in Rs)	Cost (in Rs)	Total (in Rs)
24		Pile Load Test on single Vertical Pile in accordance with IS:2911(Part-IV)										
		Unit	1	MT								
		Taking output	1	MT								
		a) Initial and routine load test			tonne	1.00	700.00	700.00	1.00			700.00
		b) Lateral load test			tonne	1.00	5000.00	5000.00	0.15			5750.00

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
25		Cement Concrete for Reinforced Concrete in Pile Cap complete as per Drawing and Technical Specification									
		As per MoRT&H Specification 1100 , 1500 & 1700									
		Unit	1	cum							
		Taking output	15	cum							
A		RCC Grade M20									
I		Material									
(i)	0.00	Cement	347	kg	tonne	5.21	5245.35	27302.05			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	20 mm Aggregate			cum	8.10	435.24	3525.44			
(iv)	0.00	10 mm Aggregate			cum	5.40	461.32	2491.13			
		Total-I						35213.55			
		Contractor's profit @ 10% on 35213.55						3521.36			
		Cost	15	cum				38734.91			
		Rate	1	cum				2582.33			
		Labour cess @ 1% on 2582.33						25.82			
		Total						2608.15	2608.15		2608.15
II		Labour									
(i)	L-29	Mate			day	0.90	151.44	136.30			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-34	Mazdoor for concreting			day	20.00	143.81	2876.20			
(iv)	L-34	Mazdoor for breaking pile head, bending bars, cleaning etc.			day	1.00	143.81	143.81			
		Total-II						3491.35			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	0.75	2160.00	1620.00			
(ii)	2.22	Generator 100 KVA			hour	0.75	675.00	506.25			
(iii)	2.19	Loader (capacity 1 cum)			hour	0.75	780.00	585.00			
		Transit Mixer (capacity 4.0 cu.m)									
(iv)	2.57	Lead upto 1 Km			hour	2.00	900.00	1800.00			
(v)	2.80	Concrete Pump			hour	0.75	247.50	185.63			
		Total-III						4696.88			
IV		Formwork @ 4 per cent on cost of concrete i.e. cost of Material, Labour and Machinery						1736.07			
		Total-II+III+IV						9924.30			
		sundries @ 3% on 9924.3						297.73			
		Contractor's profit and overhead charges @ 21.50% on 10222.03						2197.74			
								12419.77			
		Labour cess @ 1% on 12419.77						124.20			
		Cost	15	cum				12543.97			
		sub mountainous @ 10% on 836.26	1	cum				836.26	836.26		836.26
											83.63
											919.89
											3528.04
									3444.41		

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		Using Batching Plant, Transit Mixer and Concrete Pump									
I		Material									
(i)	0.00	Cement	347	kg	tonne	5.21	5245.35	27302.05			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	20 mm Aggregate			cum	8.10	435.24	3525.44			
(iv)	0.00	10 mm Aggregate			cum	5.40	461.32	2491.13			
		Total-I						35213.55			
		Contractor's profit @ 10% on 35213.55						3521.36			
		Cost	15		cum			38734.91			
		Rate	1		cum			2582.33			
		Labour cess @ 1% on 2582.33						25.82			
		Total						2608.15	2608.15		2608.15
II		Labour									
(i)	L-29	Mate			day	0.16	151.44	24.23			
(ii)	L-10	Mason			day	0.38	223.36	84.88			
(iii)	L-34	Mazdoor for concreting			day	2.50	143.81	359.53			
(iv)	L-34	Mazdoor for breaking pile head, bending bars, cleaning etc.			day	1.00	143.81	143.81			
		Total-II						612.45			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	0.75	2160.00	1620.00			
(ii)	2.22	Generator 100 KVA			hour	0.75	675.00	506.25			
(iii)	2.19	Loader (capacity 1 cum)			hour	0.75	780.00	585.00			
		Transit Mixer (capacity 4.0 cu.m)									
(iv)	2.57	Lead upto 1 Km			hour	2.00	900.00	1800.00			
(v)	2.80	Concrete Pump			hour	0.75	247.50	185.63			
		Total-III						4696.88			
IV		Formwork @ 4 per cent on cost of concrete i.e. cost of Material, Labour and Machinery						1620.92			
		Total-II+III+IV						6930.25			
		sundries @ 3% on 6930.25						207.91			
		Contractor's profit and overhead charges @ 21.50% on 7138.16						1534.70			
								8672.86			
		Labour cess @ 1% on 8672.86						86.73			
			15		cum			8759.59			
		Cost	1		cum			583.97	583.97		583.97
		sub mountainous @ 10% on 583.97									58.40
											642.37
								3192.12			3250.52

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
B		RCC Grade M25									
		Unit	1	cum							
		Taking output	15	cum							
(i)		Using Concrete Mixer									
I		Material									
(i)	0.00	Cement	403	kg	tonne	6.05	5245.35	31708.14			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	20 mm Aggregate			cum	8.10	435.24	3525.44			
(iv)	0.00	10 mm Aggregate			cum	5.40	461.32	2491.13			
		Total-I						39619.64			
		Contractor's profit @ 10% on 39619.64						3961.96			
		Cost	15	cum				43581.60			
		Rate	1	cum				2905.44			
		Labour cess @ 1% on 2905.44						29.05			
		Total						2934.49	2934.49		2934.49
II		Labour									
(i)	L-29	Mate			day	0.90	151.44	136.30			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-34	Mazdoor for concreting			day	20.00	143.81	2876.20			
(iv)	L-34	Mazdoor for breaking pile head, bending bars, cleaning etc.			day	1.00	143.81	143.81			
		Total-II						3491.35			
III		Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator (capacity 33 KVA)			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
IV		Formwork @ 4 per cent on cost of concrete i.e. cost of Material, Labour and Machinery						1864.84			
		Total-II+III+IV						8866.19			
		sundries @ 3% on 8866.19						265.99			
		Contractor's profit and overhead charges @ 21.50% on 9132.18						1963.42			
								11095.60			
		Labour cess @ 1% on 11095.6						110.96			
			15	cum				11206.56			
		Cost	1	cum				747.10	747.10		747.10
		sub mountainous @ 10% on 747.1									74.71
											821.81
								3681.59			3756.30

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		Using Batching Plant, Transit Mixer and Concrete Pump									
I		Material									
(i)	0.00	Cement	403	Kg	tonne	6.05	5245.35	31708.14			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	20 mm Aggregate			cum	8.10	435.24	3525.44			
(iv)	0.00	10 mm Aggregate			cum	5.40	461.32	2491.13			
		Total-I						39619.64			
		Contractor's profit @ 10% on 39619.64						3961.96			
		Cost	15		cum			43581.60			
		Rate	1		cum			2905.44			
		Labour cess @ 1% on 2905.44						29.05			
		Total						2934.49	2934.49		2934.49
II		Labour									
(i)	L-29	Mate			day	0.16	151.44	24.23			
(ii)	L-10	Mason			day	0.38	223.36	84.88			
(iii)	L-34	Mazdoor for concreting			day	2.50	143.81	359.53			
(iv)	L-34	Mazdoor for breaking pile head, bending bars, cleaning etc.			day	1.00	143.81	143.81			
		Total-II						612.45			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	0.75	2160.00	1620.00			
(ii)	2.22	Generator 100 KVA			hour	0.75	675.00	506.25			
(iii)	2.19	Loader (capacity 1 cum)			hour	0.75	780.00	585.00			
		Transit Mixer (capacity 4.0 cu.m)									
(iv)	2.57	Lead upto 1 Km			hour	2.00	900.00	1800.00			
(v)	2.80	Concrete Pump			hour	0.75	247.50	185.63			
		Total-III						4696.88			
IV		Formwork @ 4 per cent on cost of concrete i.e. cost of Material, Labour and Machinery						1797.16			
		Total-II+III+IV						7106.49			
		sundries @ 3% on 7106.49						213.19			
		Contractor's profit and overhead charges @ 21.50% on 7319.68						1573.73			
								8893.41			
		Labour cess @ 1% on 8893.41						88.93			
			15		cum			8982.34			
		Cost	1		cum			598.82	598.82		598.82
		sub mountainous @ 10% on 598.82									59.88
											658.70
									3533.31		3593.19

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
C		RCC Grade M30									
		Unit	1	cum							
		Taking output	15	cum							
(i)		Using Concrete Mixer									
I		Material									
(i)	0.00	Cement	407	kg	tonne	6.11	5245.35	32022.86			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	20 mm Aggregate			cum	8.10	435.24	3525.44			
(iv)	0.00	10 mm Aggregate			cum	5.40	461.32	2491.13			
		Total-I						39934.36			
		Contractor's profit @ 10% on 39934.36						3993.44			
		Cost	15	cum				43927.80			
		Rate	1	cum				2928.52			
		Labour cess @ 1% on 2928.52						29.29			
		Total						2957.81	2957.81		2957.81
II		Labour									
(i)	L-29	Mate			day	0.90	151.44	136.30			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-34	Mazdoor for concreting			day	20.00	143.81	2876.20			
(iv)	L-34	Mazdoor for breaking pile head, bending bars, cleaning etc.			day	1.00	143.81	143.81			
		Total-II						3491.35			
III		Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator (capacity 33 KVA)			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
IV		Formwork @ 4 per cent on cost of concrete i.e. cost of Material, Labour and Machinery						1877.43			
		Total-II+III+IV						8878.78			
		sundries @ 3% on 8878.78						266.36			
		Contractor's profit and overhead charges @ 21.50% on 9145.14						1966.21			
								11111.35			
		Labour cess @ 1% on 11111.35						111.11			
			15	cum				11222.46			
		Cost	1	cum				748.16	748.16		748.16
		sub mountainous @ 10% on 748.16									74.82
											822.98
								3705.97			3780.79

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		Using Batching Plant, Transit Mixer and Concrete Pump									
I		Material									
(i)	0.00	Cement	407	kg	tonne	6.11	5245.35	32022.86			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	20 mm Aggregate			cum	8.10	435.24	3525.44			
(iv)	0.00	10 mm Aggregate			cum	5.40	461.32	2491.13			
(v)	0.00	Admixer			kg	24.42	35.48	866.42			
		Total-I						40800.78			
		Contractor's profit @ 10% on 40800.78						4080.08			
		Cost	15		cum			44880.86			
		Rate	1		cum			2992.06			
		Labour cess @ 1% on 2992.06						29.92			
		Total						3021.98	3021.98		3021.98
II		Labour									
(i)	L-29	Mate			day	0.16	151.44	24.23			
(ii)	L-10	Mason			day	0.38	223.36	84.88			
(iii)	L-34	Mazdoor for concreting			day	2.50	143.81	359.53			
(iv)	L-34	Mazdoor for breaking pile head, bending bars, cleaning etc.			day	1.00	143.81	143.81			
		Total-II						612.45			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	0.75	2160.00	1620.00			
(ii)	2.22	Generator 100 KVA			hour	0.75	675.00	506.25			
(iii)	2.19	Loader (capacity 1 cum)			hour	0.75	780.00	585.00			
		Transit Mixer (capacity 4.0 cu.m)									
(iv)	2.57	Lead upto 1 Km			hour	2.00	900.00	1800.00			
(v)	2.80	Concrete Pump			hour	0.75	247.50	185.63			
		Total-III						4696.88			
IV		Formwork @ 4 per cent on cost of concrete i.e. cost of Material, Labour and Machinery						1844.40			
		Total-II+III+IV						7153.73			
		sundries @ 3% on 7153.73						214.61			
		Contractor's profit and overhead charges @ 21.50% on 7368.34						1584.19			
								8952.53			
		Labour cess @ 1% on 8952.53						89.53			
		Cost	15		cum			9042.06			
		sub mountainous @ 10% on 602.8			cum			602.80	602.80		602.80
											663.08
									3624.78		3685.06

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
D		RCC Grade M35									
		Unit	1	cum							
		Taking output	15	cum							
(i)		Using Concrete Mixer									
I		Material									
(i)	0.00	Cement	422	kg	tonne	6.33	5245.35	33203.07			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	20 mm Aggregate			cum	8.10	435.24	3525.44			
(iv)	0.00	10 mm Aggregate			cum	5.40	461.32	2491.13			
		Total-I						41114.57			
		Contractor's profit @ 10% on 41114.57						4111.46			
		Cost	15	cum				45226.03			
		Rate	1	cum				3015.07			
		Labour cess @ 1% on 3015.07						30.15			
		Total						3045.22	3045.22		3045.22
II		Labour									
(i)	L-29	Mate			day	0.90	151.44	136.30			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-34	Mazdoor for concreting			day	20.00	143.81	2876.20			
(iv)	L-34	Mazdoor for breaking pile head, bending bars, cleaning etc.			day	1.00	143.81	143.81			
		Total-II						3491.35			
III		Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator (capacity 33 KVA)			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
IV		Formwork @ 4 per cent on cost of concrete i.e. cost of Material, Labour and Machinery						1924.64			
		Total-II+III+IV						8925.99			
		sundries @ 3% on 8925.99						267.78			
		Contractor's profit and overhead charges @ 21.50% on 9193.77						1976.66			
								11170.43			
		Labour cess @ 1% on 11170.43						111.70			
			15	cum				11282.13			
		Cost	1	cum				752.14	752.14		752.14
		sub mountainous @ 10% on 752.14									75.21
											827.35
											3872.57
								3797.36			3872.57

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
(ii)		Using Batching Plant, Transit Mixer and Concrete Pump									
I		Material									
(i)	0.00	Cement	422	kg	tonne	6.33	5245.35	33203.07			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	20 mm Aggregate			cum	8.10	435.24	3525.44			
(iv)	0.00	10 mm Aggregate			cum	5.40	461.32	2491.13			
		Total-I						41114.57			
		Contractor's profit @ 10% on 41114.57						4111.46			
		Cost	15		cum			45226.03			
		Rate	1		cum			3015.07			
		Labour cess @ 1% on 3015.07						30.15			
		Total						3045.22	3045.22		3045.22
II		Labour									
(i)	L-29	Mate			day	0.16	151.44	24.23			
(ii)	L-10	Mason			day	0.38	223.36	84.88			
(iii)	L-34	Mazdoor for concreting			day	2.50	143.81	359.53			
(iv)	L-34	Mazdoor for breaking pile head, bending bars, cleaning etc.			day	1.00	143.81	143.81			
		Total-II						612.45			
III		Hiring charges of Machinery									
(i)	2.30	Batching Plant @ 20 cum/hour			hour	0.75	2160.00	1620.00			
(ii)	2.22	Generator 100 KVA			hour	0.75	675.00	506.25			
(iii)	2.19	Loader (capacity 1 cum)			hour	0.75	780.00	585.00			
		Transit Mixer (capacity 4.0 cu.m)									
(iv)	2.57	Lead upto 1 Km			hour	2.00	900.00	1800.00			
(v)	2.80	Concrete Pump			hour	0.75	247.50	185.63			
		Total-III						4696.88			
IV		Formwork @ 4 per cent on cost of concrete i.e. cost of Material, Labour and Machinery						1856.96			
		Total-II+III+IV						7166.29			
		sundries @ 3% on 7166.29						214.99			
		Contractor's profit and overhead charges @ 21.50% on 7381.28						1586.98			
								8968.26			
		Labour cess @ 1% on 8968.26						89.68			
			15		cum			9057.94			
		Cost	1		cum			603.86	603.86		603.86
		sub mountainous @ 10% on 603.86									60.39
											664.25
								3649.08			3709.47

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
26		Levelling Course for Pile cap									
		Providing and laying of PCC M15 levelling course 100mm thick below the pile cap.									
		As per MoRT&H Specification 1100 & 1700									
		Unit	1		cum						
		Taking output	15		cum						
(i)		Using Concrete Mixer									
I		Material									
(i)	0.00	Cement	275		tonne	4.13	5245.35	21637.07			
(ii)	0.00	Coarse sand			cum	6.75	280.73	1894.93			
(iii)	0.00	40 mm aggregate			cum	8.10	425.22	3444.28			
(iv)	0.00	20 mm Aggregate			cum	4.05	435.24	1762.72			
(v)	0.00	10 mm Aggregate			cum	1.35	461.32	622.78			
		Total-I						29361.78			
		Contractor's profit @ 10% on 29361.78						2936.18			
		Cost	15		cum			32297.96			
		Rate	1		cum			2153.20			
		Labour cess @ 1% on 2153.2						21.53			
		Total						2174.73	2174.73		2174.73
II		Labour									
(i)	L-29	Mate			day	0.86	151.44	130.24			
(ii)	L-10	Mason			day	1.50	223.36	335.04			
(iii)	L-34	Mazdoor for concreting			day	20.00	143.81	2876.20			
		Total-II						3341.48			
III		Machinery									
(i)	2.10	Concrete mixer (cap. 0.40/0.28 cum)			hour	6.00	225.00	1350.00			
(ii)	2.24	Generator (capacity 33 KVA)			hour	6.00	360.00	2160.00			
		Total-III						3510.00			
								6851.48			
		sundries @ 3% on 6851.48						105.30			
		Contractor's profit and overhead charges @ 21.50% on 6956.78						1495.71			
								8452.49			
		Labour cess @ 1% on 8452.49						84.52			
					15 cum			8537.01			
		Cost	1		cum			569.13	569.13		569.13
		sub mountainous @ 10% on 569.13									56.91
											626.04
											2800.77
									2743.86		

Sr No	Code No.	Description			Unit	Plain			Sub mountainous Region		
						Quantity	Rate (in Rs)	Cost (in Rs)	Total	Rate (in Rs)	Total (in Rs)
27		Supplying, Fitting and Placing un-coated HYSD bar Reinforcement in Foundation complete as per Drawing and Technical Specifications.									
		As per MoRT&H Specification 1600									
		Unit	1	MT							
		Taking output	1	MT							
I		Material									
(i)	0.00	HYSD bars including 5 per cent overlaps and wastage			tonne	1.05	41055.69	43108.47			
(ii)	0.00	Binding wire			Kg	6.00	49.59	297.51			
		Total-I						43405.98			
		Contractor's profit @ 10% on 43405.98						4340.60			
		Cost	1	MT				47746.58			
		Rate	1	MT				47746.58			
		Labour cess @ 1% on 47746.58						477.47			
		Total						48224.05	48224.05		48224.05
II		Labour for cutting, bending, shifting to site, tying and placing in position									
(i)	L-29	Mate			day	0.40	151.44	60.58			
(ii)	L-5	Blacksmith			day	2.00	223.36	446.72			
(iii)	L-35	Mazdoor			day	6.00	136.69	820.14			
		Total-II						1327.44			
		sundries @ 3% on 1327.44						39.82			
		Contractor's profit and overhead charges @ 21.50% on 1367.26						293.96			
								1661.22			
		Labour cess @ 1% on 1661.22						16.61			
					1 MT			1677.83			
		Cost	1	MT				1677.83	1677.83		1677.83
		sub mountainous @ 10% on 1677.83									167.78
											1845.61
									49901.88		50069.66