

**DEVELOPMENT OF WALKWAY WITH OTHER UTILITIES
AROUND RANITAL LAKE, JABALPUR**

S.NO	DESCRIPTION	AMOUNT
1	LAKE SIDE WALKWAY	18641307.60
2	STORM WATER DRAIN	9976670.10
3	SEWER LINE	4269945.60
4	HOTRICULTURE	1620292.70
5	RETAINING WALL	16933379.40
6	BOUNDARY WALL	11913526.33
6	LIGHTING & ELECTRICAL WORKS	6107355.90
	GRAND TOTAL	₹ 6,94,62,477.63
	SAY RS (Crore)	₹ 6.95

Development of Walkway with other utilities around Ranital Lake, Jabalpur

Detail Estimate of Lakeside Walkway

S.No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Rate	Revised Reduced Rates as per Order	Unit	Amount in Rs.
1	3.1, Vol III	Excavation					
		Excavation for roadway in soil including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto1000 metres and as per relevant clauses of section-300					
		Ranital lake full perimeter Road					
		For Walkway	10285.00	98.00	88.20	Cum	₹ 9,07,137.00
2	3.11, Vol III	Sub grade					
		Construction of Embankment/Sub grade/ earth shoulders, as per clause 305 & its sub-clauses, Where required but with approved materials/soil like morrum CBR value not less then 7% i/c all lead & lifts i/c excavation, cost of watering, mpcation and maintenance of surface during construction to ensure shedding & preventing ponding of water (clause 305.3.6) shaping & dressing (clause 305.3.7), finishing etc. complete but excluding scarifying existing granular/bituminous road surface vide clause 305.6.					
		Ranital lake full perimeter Road					
		For Walkway	10285.00				
		Total	10285.00	272.00	244.80	cum	₹ 25,17,768.00
4		Stone Soling					
	UADD SOR Vol iii 4.3/P-31	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening/ binding materials to fill up the interstices of coarse aggregate, watering and compacting to the required density and as per relevant clauses of section-400.					
	4.3(ii)	Grading- II					
	a)	Using Screening Crushable type	3740.00				
		Total	3740.00	857.00	771.30	cum	₹ 28,84,662.00
		Stone Dust					
	UADD SOR Vol iii 9.2/P-75	Supply as per clause 514 including all lead and stacking etc. complete.(Rolling & vibrating compaction up to 90-95%)					
	9.2(i)	Crusher stone dust (clause 507.2.3)	1530.00	198.00	178.20	cum	₹ 2,72,646.00
		GSB					
	UADD SOR Vol iii 4.1/P-30	Construction of granular sub-base by providing coarse graded material, spreading in uniform layers with on prepared surface, mixing by mix in place method at OMC, and compacting with vibratory roller to achieve the desired density, complete in all respect and as per relevant clauses of section-400.					
	(ii)	for grading- II Material	765.00	614.00	552.60	cum	₹ 4,22,739.00
6		Dry Lean Concrete					
	UADD SOR Vol iii 6.1/P-60	Construction of dry lean cement concrete Sub-base over a prepared sub-gradewith coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table of MORTH Specifications 600-1, cement content not to be less than 200 kg/cum, optimum moisture to be ndetermined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with paver with electronic sensor/mechanical paver, compacting with 8-10 tonnes vibratory roller, finishing and curing and as per relevant clauses of section-603.					
		Total quantity	680.00	2715.00	2443.50	cum	₹ 16,61,580.00

8		Cement Concrete Paving					
	UADD SOR Vol iii 6.11/P-62	Providing and laying Cement Concrete grade M-20 (Nominal mix 1:1.5:3) with 20mm graded crushed stone aggregate, mixing shall be in mechanical mixer, laying with paver compacting by use of pin, plate / screed vibrators including form work by strong steel girders fixed by spikes, separation membrane 125 micron thick, i/c cutting of joints @ 4 to 5 m interval & filling it with hot applied bituminous sealant without dowel bars.					
		Total quantity	1190.00	4698.00	4228.20	sqm	₹ 50,31,558.00
		Stone Pitching					
	UADD SOR Vol iii 16.4/P-109	Providing and laying Pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing					
	(i)	Stone/Boulder	528.00	838.00	754.20	sqm	₹ 3,98,217.60
		Railing					
	UADD SOR Vol III 15.8 pg no. 105	Providing, fitting and fixing mild steel railing complete as per standard drawing No.BD/1-88 and Technical Specification and as per relevant clauses of section 1900 and 2700.		2525.00	2272.50	RM	₹ 45,45,000.00
GRAND TOTAL							₹ 1,86,41,307.60

Development of Walkway with other utilities around Ranital Lake, Jabalpur

ESTIMATE OF STORM WATER DRAIN

S No.	UADD SOR Ref	Descriptions of Item	Quantity	Rate	Revised Reduced Rates as per Order	Unit	Amount
	15.1, Vol I	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.					
			1400.00	129.10	116.19	cum	162666.00
	15.2, Vol I	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.					
			980.00	155.00	139.50	cum	136710.00
	15.9, Vol I	Filling with moorum for pipe bedding or over the pipe including supply of moorum					
			196.00	625.00	562.50	cum	110250.00
	2.27.1 Vol II	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete. Crusher Stone Dust					
		Total quantity	238.00	628.00	565.20	cum	134517.60
	15.18, Vol I	Providing & laying mechanically mixed cement concrete 20mm maximum size graded crushed stone including cost of centering & shuttering.					
		Total quantity	238.00	4321.00	3888.90	cum	925558.20
4	15.20, Vol I	Providing and laying Plain/ Reinforcement cement concrete in sub structure or complete section including cost of form work staging/bracing and shuttering complete as per drawing and technical specification and as per relevant I.S. Standard (Height above average ground level).					
	V	RCC Grade M25					
		Total quantity	688.50	5840.00	5256.00	cum	3618756.00
5	5.10 Vol II	Providing, hoisting and fixing up to floor two level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like including the cost of required centering, shuttering, finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding cost of reinforcement with Cement concrete grade M-20 (Nominal Mix with 20 mm maximum size of stone aggregate)					
		Total quantity	306.00	6524.00	5871.60	cum	1796709.60
6	15.22	Providing and placing in position cold twisted or un-coated HYSD steel bar and hot rolled deformed steel reinforcement for R.C.C.work i/c cutting, bending, binding etc. complete i/c cost of binding wire and wastage.					
		Sub structure					
			62454.60	55.00	49.50	Kg	3091502.70
							₹ 99,76,670.10

Development of Walkway with other utilities around Ranital Lake, Jabalpur

ESTIMATE FOR SEWER LINE ALONG RANITAL LAKE

S.No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Rate	Revised Reduced Rates as per Order	Unit	Amount in Rs.
		Excavation for Drain pipe					
1	UADD SOR Vol (i) 15.1/P-151	Earth work in Excavation for pipe trench in all kinds of soil and WBM in areas including dressing, watering and ramming and disposal of Excavated earth lead upto 50 meters and lift upto 1.5m, disposal earth to be leveled, neatly dressed.					
		For RCC NP2 pipes (for sewer drainage)	2040.00	129.10	116.19	cum	₹ 2,37,027.60
		REINFORCED CEMENT CONCRETE PIPES					
2	UADD SOR Vol (i) 13.1/P-138	Providing, Laying and jointing non-pressure (NP2) RCC socket & spigot pipes with rubber gasket joint including testing of joints. [Conforming to IS ; 458-1988, ISI marked laying as per IS 783:1985)					
		500 mm dia	1700.00				
			1700.00	1049.00	944.10	Per m	₹ 16,04,970.00
3	UADD SOR Vol (i) 15.9/P-151	Filling with moorum for pipe bedding or over the pipe including supply of moorum					
		HUME PIPE AREA	510.00				
			510.00	625.00	562.50	cum	₹ 2,86,875.00
4	UADD SOR Vol (ii) 11.43/P-135	Dry stone pitching 20 to 22.5cm thick including supply of stones and preparing surface complete.					
			1530.00	783.00	704.70	Sq m	₹ 10,78,191.00
5	UADD SOR Vol (i) 14.5	Construction of circular type of manhole 1500 mm internal dia. at bottom, 560 mm dia at top, total depth of manhole 2650mm in brick masonry with 1:5 cement mortar (1 cement : 5 fine sand), 12 mm thick Cement plaster 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement. 30 cm thick foundation in Cement concrete grade M-7.5 (Nominal Mix) with stone aggregate 40 mm nominal size, RCC Cement Concrete grade M-20 (Nominal Mix) with 20mm Nominal size on top slab and making channel in cement concrete grade M-15 (Nominal Mix) with stone aggregate 20 mm nominal size neatly finished, curing fixing of ISI marked reinforced concrete heavy duty cover (including transportation of cover) complete. as per standard design (Drawing No. 15)					
			60.00	19683.00	17714.70	EACH	₹ 10,62,882.00
GRAND TOTAL							₹ 42,69,945.60

B.O.Q FOR FOR RANITAL LAKE SIDE LANDSCAPING							
SL.NO	Reff.	Description of item	Qty	Unit	RATE	Revised Reduced Rates as per Order	AMOUNT
1	UADD SOR 19.1/P-204	Trenching in ordinary soil up to a depth of 60cm including removal and stacking of serviceable materials and then disposing of surplus soil, by spreading and neatly leveling within a lead of 50m and making up the trench area to proper levels by filling with earth or earth mixed with sludge or/and manure before and after flooding trench with water (excluding cost of imported earth, sludge or manure)	2700	Cum	129.00	116.10	313470.00
2	UADD SOR 19.2/P-204	Supplying and stacking of good earth at site including royalty and carriage up to 1 km (earth measured in stacks will be reduced by 20% for payment).	999	Cum	184.00	165.60	165434.40
3	UADD SOR 19.4	Supplying and stacking at site dump manure from approved source, including carriage up to 1 km (manure measured in stacks will be reduced by 8% for payment)					
	19.4.3	Screened through sieve of I.S. designation 4.75mm	999.00	Cum	184.00	165.60	165434.40
4	UADD SOR 19.8	Spreading of sludge, dump manure or/and good earth in required thickness (Cost of sludge, dump manure or/ and good earth to be paid separately	999.00	Cum	15.00	13.50	13486.50
5	UADD SOR 19.9	Mixing earth and sludge or manure in proportion specified or as directed by the engineer(SAME QTY AS 19.8)	999.00	Cum	102.00	91.80	91708.20
HEDGING							
7	UADD SOR 19.13	Preparation of beds for hedging and shrubbery by excavating 60cm deep and trenching the excavated base to a further depth of 30cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1(8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, leveling etc. Including stacking and disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50m lift up to 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately).	999.00	Cum	62.00	55.80	55744.20
	UADD SOR 19.14	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% : 1 part of stacked volume of manure after reduction by 8%) flooding with water, dressing including removal of rubbish and surplus earth, if any with all leads and lifts (cost of manure, sludge or extra good earth if needed to be paid for separately) :					
	19.14.2	Holes 60 cm dia, and 60 cm deep.	1000	Each	24.00	21.60	21600.00
Supply and stacking of Shrubs & trees							
	Ref. No	Description with Botanical name					
	MP PWD SOR 23.15	Providing and planting different variety of plants of approved quality and sizes as mentioned including making pits of required size at site, refilled with B.C. Soil mixture annuring and pesticide etc. complete (to be paid separately) including watering and 90 days maintenance from the date of final bill as per direction of engineer in charge complete in all respect (B.C. Mixture paid separately).					
	23.15.7	Foxtail Palm (1.80mtrsto 2.10mtrs height.) or equivalent	75	Each	1784.00	1605.60	120420.00
	23.15.8	Cycus (1.80mtrs to 2.10mtrs height.) or equivalent	50	Each	3067.00	2760.30	138015.00
	23.15.9	Ficus Varicated (1.80mtrs to 2.1 Omtrs height.) or equivalent	50	Each	994.00	894.60	44730.00
8	10411 P-49 (S2)	Supply and stacking of plant Tecoma gaudichaudi of height 60-75 cm.with 5-6 branches in p.bag of size 25 cmTecoma guadichaudi/Yellow bells or equivalent	1000	Each	50.00		50000.00
9	10389 P-58 (S3)	Supply and stacking of plant Murraya exotica of height 45-60 cm. inpoly bags of size 15 cmMurraya exotica/Jasmine, Kamini or equivalent	800	Each	15.00		12000.00

10	DSR 2016 ,Hotriculture 5.19/p149 (S4)	Providing and Displaying Euphorbia milli hybrid variety plant with multi branch, full bloom, with fresh and healthy well developed having 30 to 45 cm ht. in 35 cm Cement Pots as per direction of the officer-in-charge.Euphorbia milii/Crown of Thorns or equivalent	500	Each	615.00		307500.00
11	DSR 2016 ,Hotriculture 5.2/P- 319 (S8)	Providing and Displaying Acalypha green well developed, fresh & healthy with good foliage, multi branch 30 to 45 cm ht. in 20 cm size Earthen Pot/ Plastic Pot bushy plant as per direction of the officer-in-charge. Acalypha green or equivalent	1000	Each	30.75		30750.00
12	DSR 2016 ,Hotriculture 10079/P-19 (S11)	Providing of Raphis palm plant, having ht. 75 cm to 90 cm with 12 to 15 equal suckers, well developed, full of fresh & healthy leaves from bottom to top in 25 cm size Earthen pot / Plastic pot.Raphis excelsa/Raphis Palm	200	Each	450.00		90000.00
TOTAL HOTRICULTURE COST							1620292.70

ESTIMATE OF RETAINING WALL AT RANITAAL

S. NO	UADD SOR REF. NO.	DESCRIPTION OF ITEMS	Quantity	Unit	Rate	Revised Reduced Rates as per Order	Total Amount
EXCAVATION							
1	Vol II 2.6 Pg No 15	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.					
	Vol II 2.6.1 Pg No 15	All kinds of soil	1440.00	CUM	127.00	114.30	₹ 1,64,592.00
2	Vol II 2.24 Pg No 19	Extra rates for quantities of works, executed: (The extra percentage rate is applicable in respect of each item but limited to quantities of work executed in these difficult conditions).					
		In or under water and/or liquid mud, including pumping out water as required.(All water that may accumulate in excavations during the progress of the work from seepage, (not due to the negligence of the contractor), shall be bailed, pumped out or otherwise removed. The contractor shall take adequate measures for bailing and/or pumping out water from excavations and/or pumping out water from excavations and construct diversion channels, bunds, sumps, etc) (20% of the rate of the item. The extra percentage in rate is applicable in respect of each item but limited, to quantities of ,work executed,in difficult condition.)	900.00	CUM	152.40	137.16	₹ 1,23,444.00
3	Vol II 2.16 Pg No 15	Close timbering/steel in trenches including strutting, shoring and packing cavities (wherever required) complete. (Measurements to be taken of the face area timbered).					
		Depth not exceeding 1.5m	450.00	SQM	99.00	89.10	₹ 40,095.00
		Depth exceeding 1.5m but not exceeding 3 m.	1800.00	SQM	104.00	93.60	₹ 1,68,480.00
		Depth exceeding 3m but not exceeding 4.5 m.	1050.00	SQM	110.00	99.00	₹ 1,03,950.00
4	Vol II 2.25 Pg No 19	Filling by available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	1800.00	CUM	59.00	53.10	₹ 95,580.00
5	Vol II 2.27 Pg No 19	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.					
	2.27.1	Crusher Stone Dust	72.00	CUM	628.00	565.20	₹ 40,694.40
	2.27.3	Moorum/Hard copra	108.00	CUM	570.00	513.00	₹ 55,404.00
REINFORCED CEMENT CONCRETE							
6	Vol II 5.31 Pg No 51	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement. including Admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. M-25 grade reinforced cement concrete by using 410 kg. of cement per cum of concrete. All work up to floor 2 level.					

			984.00	CUM	5245.00	4720.50	₹ 46,44,972.00
		REINFORCEMENT					
7	Vol II 5.20 Pg No 49	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all astage etc. complete.					
	Vol II 5.20.6 Pg No 49	Thermo-Mechanically Treated bars @ 200 Kg per Cum	196800.00	KG	60.00	54.00	10627200.00
		CENTERING AND SHUTTERING					
8	Vol II 20.1 Pg No 209	Centering and shuttering including strutting, propping etc.and removal of form for :					
	Vol II 20.1.1 Pg No 209	Foundations, footings, bases of columns, etc. For mass concrete.					
			3240.00	SQM	138.00	124.20	₹ 4,02,408.00
9	Vol II 20.1.2 Pg No 209	Walls (any thickness) including attached pilasters, butterresses, plinth and string courses etc					
		Trapezium Portion 2nd (Above Plinth level)	2400.00	SQM	216.00	194.40	₹ 4,66,560.00
		TOTAL FOR RETAINING WALL					₹ 1,69,33,379.40

ESTIMATE OF BOUNDARY WALL & SEAT

Length 600 Mtr

S. No	SOR Item No.	Item of Work	Measurement				Quantity	Unit	Rate	Revised Reduced Rates as per Order	Reduced Amount in Rs.
			No.	L	B	H/D					
	Excavation										
	2.8.1, Vol. 2, Pg 16	Earth work in excavation by mechanical means (Hydraulic avator) / manual means in foundation enches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus xcavated soil as directed, within a lead of 50 m2.8.1 All kinds of soil									
						108.38	CuM	129.00	116.10	12582.34	
	Concrete										
	4.1.2, Vol. 2, Pg 34	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering All work up to plinth level									
		4.1.2 Cement concrete grade M-15 with 20 mm max.size of stone agg.									
		Total				116.45	CuM	4154.00	3738.60	₹ 4,35,359.97	
	16.9, Vol. 2, Pg 187	Boring, providing and installing bored cast-in-situ reinforced cement concrete pile of specified diameter and length below the pile cap M 20 in cement concrete, to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring with, bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. all complete, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap).									
		Total				500.00	Rm	1165.00	1048.50	524250.00	
	5.1, Vol. 2, Pg 46	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :									
	5.1.1	Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.									
		Total				34.83	Cum	4728.00	4255.20	₹ 1,48,187.34	
	5.2.1, Vol. 2, Pg 46	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor two level excluding cost of centering, shuttering, finishing and reinfor cement 5.2.1 Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate									
		Total				85.50	Cum	5050.00	4545.00	₹ 3,88,597.50	
	Reinforcement										
	5.20.6, Vol. 2, Pg 49	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete.									
	5.20.6	Thermo-Mechanically Treated bars.									
		Total				16736.88	Kg	60.00	54.00	₹ 9,03,791.25	

Back Filling & Water Proofing										
2.25, Vol. 2, Pg 19	Filling by available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.									
	Total					108.38	CuM	59.00	53.10	₹ 5,754.71
4.10. Vol. 2, Pg 36	Providing and laying damp-proof course 50mm thick with cement Concrete grade M-15 (Nominal Mix) with 20 mm maximum size of stone aggregate									
	Total					127.42	Sqm	226.00	203.40	₹ 25,917.23
4.11. Vol. 2, Pg 36	Extra for providing and mixing water proofing material in cement concrete work @ 1 kg per 50kg of cement.									
	Nos of Bag@410 kg or 8.2bags per cum					4777.29	Per 50 kg cement	61.00	54.90	₹ 2,62,273.07
Centering & Shuttering										
20.1.1, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for									
20.1.1	Foundations, footings, bases of columns, etc. For mass concrete.									
	Total					179.20	Sqm	138.00	124.20	₹ 22,256.64
20.1.6, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for Columns, Pillars, Piers, Abutments, Posts, Struts.									
	Total					546.00	Sqm	282.00	253.80	₹ 1,38,574.80
20.1.5, Vol. 2, Pg 209	Centering & shuttering propping and removal of form for									
20.1.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers.									
	Total					498.00	Sqm	203.00	182.70	₹ 90,984.60
Brick Work										
6.38, Vol. 2, Pg 62	Brick work with well burnt open bhatta bricks crushing strength not less than 25kg/cm ² and water absorption not more than 20% in foundation and plinth In cement mortar 1:4.									
	Total					540.56	CuM	3136.00	2822.40	₹ 15,25,663.00
Cement Plaster										
13.11, Vol. 2, Pg 157	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement: 6 fine sand).									
	Total					2858.88	Sqm	149.00	134.10	₹ 3,83,375.81
Stone Work										
11.29 Vol.2, Pg 130	40 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 coarse sand) including pointing with cement mortar 1:2 (1 cement : 2 stone dust) with an admixture of pigment to match the shade of stone. (minimum size of kota stone 0.25 m)									
	Total					1238.82	SqM	477.00	429.30	₹ 5,31,825.43
10.25 Vol. 2, Pg 116	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.									
	10.25.2 In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.									
	Total					97025.06	Kg	67.00	60.30	₹ 58,50,611.38
Painting										

13.48.3 Vol. 2, Pg 162	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand or manufacture									
	Total					2237.81	sqm	65.00	58.50	₹ 1,30,911.93
13.26 Vol. 2, Pg 159	Providing and applying 1.5 mm thick (in two coat) white cement based wall putty of best quality, over plastered surface to prepare the surface even and smooth complete.									
	Quantity as above in Plaster (External)					2858.88	SqM	82.00	73.80	₹ 2,10,985.34
13.45. Vol. 2, Pg 161	Finishing walls with textured exterior paint of required shade :									
	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/10 sqm.									
	Quantity as above in External Plaster					2858.88	SqM	125.00	112.50	₹ 3,21,624.00
TOTAL										₹ 1,19,13,526.33

Development of Walkway with other utilities around Ranital Lake, Jabalpur

ESTIMATE FOR LIGHTING AND ELECTRICAL WORKS RANITAL LAKE

Sr. No.	UADD SOR/ MP PWD SOR	Description of Items	Unit	Qty	Rate	Reduced Rate as per UADD Orders	Amount
1		Panel, MCCB and MCB					
2	9.15	Supplying, fixing, testing & commissioning wall / floor mounted LT Panel primer coated with two coat of enamel paint & provided with required gasket for dust / vermin proof with degree of protection IP42 suitable for 415V 3 phase, 50 Hz, 4 wire system fabricated out of CRCA sheet upto 2 mm thick (1.6 mm for doors) with frame work of angle iron / channel / bolted type construction duly compartmentalised for incomer, bus section, outgoing, cable alleys & CT,PT Ampere Meter, Volt Meter, selector switches, Frequency Meter, phase indicating lamps, energy Meter complete including cost of busbar supports, detachable cable gland plates, 2 earthing terminals, internal wiring & fixing of separately supplied MCBs, MCCBs, panel mounted Changeover switch / SFUs, etc. as required but excluding cost of busbar strips, Ampere Meter, Volt Meter, Selector switch as per approved design & specification	Kg	5	116.00	104.40	522.00
3	9.16	Supplying and fixing of LT Panel accessories of approved make in existing LT Panel including connections etc.as required as per specification					
4	9.16.1	Digital Ampere Meter with CTs with selector	Set	1	2,354.00	2,118.60	2,118.60
5	9.16.2	Digital Volt Meter with selector switch & HRC fuse	Set	1	2,530.00	2,277.00	2,277.00
6	9.16.5	Aluminium bus bar strips with PVC sleeves	Kg	2	209.00	188.10	376.20
7	9.16.6	LED lamps	Each	3	242.00	217.80	653.40
8	10.23	Labour rate for point wiring a Light / Fan / Twin control light / Socket out let on separate board / Call bell Point in (open) surface rigid steel conduit system.	Each	100	93.00	83.70	8,370.00
9	10.33.15	Cement concrete grade M-20 (Nominal Mix) with 20mm maximum size of stone aggregate (rate from Building ISSR)	Cum	15	4,594.00	4,134.60	62,019.00
10	8.00	Supplying of ISI Marked and approved make of Moulded Case Circuit Breaker (MCCB) suitable for 3 phase,3 pole, 50 Hz, 415 Volts, AC supply with respective interrupting capacity (KA) at 415 Volts cited against their range standard conforming to IS - 8828					
11	8.1	MCCB with Breaking Capacity 25 KA at 415 V					
12	8.1.1	Current Rating -25 to100 Amps & 70% -100% adjustable	Each	1	4,939.00	4,445.10	4,445.10
13	8.5	Supplying of ISI Marked and accepted standard of Miniature Circuit Breaker (MCB) of 'C' series suitable for 240/415 Volts, 50 Cycle, 10 kA Value AC supply conforming to IS : 8828 : 1996, IEC : 60898 :2002 but without enclosures					
14	8.5.4	FOR TRIPLE POLE (TP)	Each	2	1,145.00	1,030.50	2,061.00
15	8.5.4.3	For 40 Amps. Rating only.					
16	8.16.2	Fixing of MCB / MCCB Isolator TP / TPN / FP in sheet steel enclosure as required as per accepted practice, including mounting on busbar and cable connection etc. complete.	Each	1	20.00	18.00	18.00
17	8.17	Labour charges for fixing sheet steel enclosure, MCB DB surface mounting type, as per accepted practice on 25x5mm flat iron clamps duly embedded in wall, cable connection etc. complete.					
18	8.17.1	8.5 (1) to 8.5 (4)	Each	2	94.00	84.60	169.20
19		Earthing:					
20	11.34	Providing and fixing earthing arrangement with 16mm dia 2.5 meter long galvanized iron or steel rod electrode including packing of charcoal powder and salt as per specification watering pipe 19mm dia G.I. Connection etc. complete with refilling the pit as required, but excluding the excavation of earth pit.	Each	180	667.00	600.30	1,08,054.00
21	11.37	Providing and laying earth continuity conductor including fixing with					
22	11.37.B	G.I. Or Steel Earth Continuity Conductor :-					
23	11.37.B.1	06 Sq mm	Mtrs	2000	7.00	6.30	12,600.00

24	11.40	Supplying and erecting earth pit of minnum bore dia 150 mm size, approved make safe earthing electrode consiting pipe in pipe tecnologie as per IS 3043-1987 made of corrosion free GI pipes having outer pipe dia of 50 mm having 80-200 micron galvanising, inner pipe dia of 25 mm having 20-250 micron galavinsing, connection teriminal dia of 12 mm with constant OHMIC value sourrounded by highly conductiv compund with high charge disipation sutible for effective and maintence free earthing					
25	11.40.2	with 3 mtr. Pipe in normal soil with 50 kg (two bag) back filling compound	Each	1	10,800.00	9,720.00	9,720.00
26		Cables, HDPE Pipe and JB's					
27	13.10	Supplying and erection of water tight terminal box of 14 SWG M.S. Sheet 4mm thick box of required size to erect the suitable kit kat / MCB / Switch with Top & bottom folded fitted with rubber ring to make it water tight with pole clamp made from 40x3mm M.S. flat iron with 2 Nos. Nut and Bolts duly painted with 2 coat of Red Oxide paint and 2 coat of Aluminium silver paint erected with cable gland but excluding the cost of the Kit Kat / MCB / Switch complete as per specification:					
28	13.10.1	20x15x15Cms.	Each	20	286.00	257.40	5,148.00
29	14.1	Supply of XLPE Insulated power cable (conforming IS-7098) 1100 Volt grade/Heavy duty power cable conforming to IS 1554-1100 Volts grade , 2 core /3½ core/4 coreISI MARKED with Alu. Stranded /solid conductor					
	14.1.2	ARMOURED 2 Core					
	14.1.2.3	6 Sq.mm.(XLPE)	Mtrs	200	138.00	124.20	24,840.00
	14.1.4	ARMOURED 3 Core					
	14.1.4.1	6 Sq.mm.(XLPE)	Mtrs	200	158.00	142.20	28,440.00
30	14.1.8	ARMOURED 4 CORE					
	14.1.8.2	10 Sq.mm.(XLPE)	Mtrs	300	183.00	164.70	49,410.00
31	14.1.8.3	16 Sq.mm.(XLPE)	Mtrs	800	229.00	206.10	1,64,880.00
	14.1.8.4	25 Sq.mm.(XLPE)	Mtrs	1200	281.00	252.90	3,03,480.00
32	14.5.1	Providing and erecting epoxy resin end termination / joint for low tension P.V.C. / XPLE insulated cable of 1100 Volt grade complete with cable jointing compound, Harner, Plastic mould adhesive cum solvent epoxy putty, spacer, tapes etc. as per I.S. specification 8438. 1977 for cable duty erected on existing pole / support / switch gears and connection to supply for all core cable as under.					
33	14.5.1	id/od epoxy resin end termination					
34	14.5.1.a	a. 10-50 sqmm 2 / 3 / 3½ core	Each	4	524.00	471.60	1,886.40
35	14.10.7	Laying of one number PVC insulated and PVC sheathed power cable of 1:1 kV grade of size not exceeding 25 Sq.mm in the existing RCC Hume/Stone/Ware/G.I. pipe as required.	Mtrs	2000	20.00	18.00	36,000.00
36	17.4	Supplying and installing Double wall corrugated pipes (DWC) of HDPE (IS 14930 Part II -marked) for cable laid under ground with necessary connecting sockets / couplings, tees of same material and at required depth upto 90cm. below road / ground surface, including excavation, back filling with excavated material with ramming and making the surface good.					
37	17.4.2	63.00mm outside dia.	Mtrs	2000	210.00	189.00	3,78,000.00
38		Light Pole, Top Post and Foundation					
39	MP PWD SOR 2014 42.93	Providing and erecting hot dipped galvanized octagonal poles in single section made from 3mm thick sheet having lockable weather proof flush door junction box complete erected in an approved manner on provided foundation. Suitable size & type of foundation bolts 4 nos. 'J' type (EN8 grade)	Each				
40	42.93.2	4 mtrs. Height 130 X 70mm A/F, 200x200x12mm base plate, 4 nos X 16 x 450mm bolt	Each	180	10,112.00	10,112.00	18,20,160.00

