

DETAILED ESTIMATE

Jal Jeevan Mission (JJM)-WSS - to Santhanpara, Rajakumary (Part) and Senapathy (Part)
Panchayaths in Idukki District-Package 1B-Source protection work-Construction of weir at
Panniyar river Rajakumary-General Civil Work

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
1	Working charges						
1.001	100.52.S.1						
	Sub Data for providing Earth filled cement bags including cutting of the Earth, filling, conveying and placing in position.						
	Ring bund (30*2*2=120m ³ - 1 bag=0.025m ³)						
		1	30.000	2.000	2.000/0.025		4800.000
	Total						4800.000
						Total Quantity in each	4800.000
1.002	100.52.S.3						
	Sub Data for Supplying, conveying and covering using best quality polythene sheet on bund to protect bund from seasonal changes.						
	polythene sheet						
		1	30.000	4.000			120.000
	Total						120.000
						Total Quantity in sqm	120.000
1.003	100.52.S.5						
	Sub Data for Dismantling the sand / earth filled cement bag from the foundation site of bund, apron on both sides, counter wall and removing the sand/earth from the bag and disposing the damaged cement bags properly as per the direction of the department officers including all cost of labour charges etc complete.						
	Temporary bund						
		1	30.000	2.000	2.000		120.000
	Total						120.000
						Total Quantity in cum	120.000
1.004	100.7.1						
	Bailing out water with 5HP engine and pump set including conveyance to the site, erecting, dismantling and taking back of engine and pump, cost of fuel lubricating oil and other stores pay of staff etc., complete.						
	Bailing out water with diesel engine pump set						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Bailing out water with diesel engine pump set (Assume 3 Nos, 5HP pump set working 12 hours per day for 120 days)	1	10742.00 0				10742.00 0
	Total						10742.00 0
	Total Quantity in Kwh						10742.00 0
1.005	2.8.1 Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil						
	for protection wall right side	1	100.000	1.000	0.600		60.000
	for protection wall left side	1	50.000	1.000	0.600		30.000
	for wing wall	2	12.000	1.000	1.600		38.400
	for RR retaining wall	1	150.000	1.200	0.600		108.000
	Total						236.400
	Total Quantity in cum						236.400
1.006	2.9.3 Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50 m.Hard rock (blasting prohibited)						
	Site leveling for foundation of check dam						
	For apron (average 0.30m height)	1	30.000	4.000	0.300		36.000
	Check dam foundation	1	30.000	1.800	0.300		16.200
	Total						52.200
	Total Quantity in cum						52.200
1.007	OD147371/2022-2023						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	DOWEL BARS_ Supplying and providing MS dowel bars of size 16 mm dia , 200 cm long including drilling holes of 20 mm dia to a depth of 100 cm in rock and filling the gap with cement grout (0.100kg/hole) etc complete						
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	For check dam (60cm c/c)	204					204.000
	For wing wall	72					72.000
	For protection wall	60					60.000
	Total						336.000
	Total Quantity in no						336.000
1.008	5.1.2						
	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:1:1:5:3 (1 cement 1.5 coarse sand :3 graded stone aggregate 20 mm nominal size						
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	Check dam foundation	1	30.000	1.800	0.300		16.200
	Check dam wall	1	30.000	1.500	1.800		81.000
	Wing wall foundation	2	17.800	1.600	0.300		17.088
	Wing wall 1st lift	2	18.500	1.250	1.800		83.250
	Wing wall 2nd lift	2	19.200	0.900	1.500		51.840
	Foundation of protection wall left bank	1	50.000	1.000	0.300		15.000
	Foundation of protection wall right bank	1	100.000	1.000	0.300		30.000
	Protection wall left bank	1	50.000	0.450	2.000		45.000
	Protection wall right bank	1	100.000	0.450	2.500		112.500
	Apron	1	30.000	4.000	0.300		36.000
	Deduct steel vent portion	-5	1.000	1.200	0.300		-1.800
	Total						486.078
	Total Quantity in cum						486.078
1.009	5.9.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete						
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	check dam foundation	1	63.600		0.300		19.080
	wing wall foundation outer	2	21.000		0.300		12.600
	wing wall foundation inner	2	17.800		0.300		10.680
	Total						42.360
	Total Quantity in sqm						42.360
1.010	5.9.6						
	Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts						
	.						
	Check dam wall inside	1	30.000		1.800		54.000
	Check dam wall out side	1	30.000		1.900		57.000
	Wing walls outer	2	21.000		1.800		75.600
	Wing wall inner	2	18.500		1.800		66.600
	wing wall 2nd lift outer	2	21.000		1.500		63.000
	wing wall 2nd lift inside	2	19.200		1.500		57.600
	Protection wall left bank	2	50.000		2.000		200.000
	Protection wall right bank	2	100.000		2.500		500.000
	Side of apron	1	30.000		0.300		9.000
	Belt of RR Masonry 1st	2	50.000		0.150		15.000
	Belt of RR Masonry 2nd (Top)	2	50.000		0.100		10.000
	Total						1107.800
	Total Quantity in sqm						1107.800
1.011	5.22.6						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more						
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SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	C h e c k d a m Foundation	1	30.000	1.800	0.300	70.000 000	1134.000
	Check dam wall	1	30.000	1.500	1.800	100.00 0000	8100.000
	Wing wall foundation	2	17.800	1.600	0.300	70.000 000	1196.160
	Wing walls 1st lift	2	18.500	1.250	1.800	90.000 000	7492.500
	Wing wall 2nd lift	2	19.200	0.900	1.500	70.000 000	3628.800
	Protection wall left bank	1	50.000	0.450	2.000	80.000 000	3600.000
	Protection wall right bank	1	100.000	0.450	3.000	80.000 000	10800.00 0
	For apron	1	30.000	4.000	0.300	60.000 000	2160.000
	For foundation of Protection wall	1	150.000	1.000	0.300	80.000 000	3600.000
	For foundation of RR masonry	1	50.000	1.200	0.150	20.000 000	180.000
	For RR masonry 1st belt	1	50.000	0.800	0.150	16.000 000	96.000
	For RR masonry 2nd belt (Top)	1	50.000	0.600	0.100	16.000 000	48.000
	Deduct steel vent portion	-5	0.700	1.200	0.200	80.000 000	-67.200
	Total						41968.26 0
							Total Quantity in kilogram
							41968.26 0
1.012	50.2.25.1						
	Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge						
		1	30.000	1.000	2.500		75.000
	Total						75.000
							Total Quantity in cum
							75.000
1.013	10.2						
	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.						
	Providing 16 mm thick steel shutters for venting						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
		5				25.000 000	125.000
	Total						125.000
						Total Quantity in kg	125.000
1.014	18.73.9						
	Providing and laying Double Flanged (Screwed / Welded) Centrifugally (Spun) Ductile Iron Pipes of Class K - 9 conforming to IS: 8329 :500 mm dia Ductile Iron Double Flanged						
	.						
	For Providing outlet arrangements	3	5.000				15.000
	Total						15.000
						Total Quantity in metre	15.000
1.015	100.31.1.11						
	Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 500mm diameter, Class I.						
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		3					3.000
	Total						3.000
						Total Quantity in no	3.000
1.016	100.98.491						
	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Hand Wheel PN 1.6, Size 500mm.						
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		3					3.000
	Total						3.000
						Total Quantity in no	3.000
1.017	7.1.1						
	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)						
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	stone pitching(wing wall)	4	4.000	4.000	0.500	0.7500 00	24.000
	Protection wall upstream both sides(100+50)	1	150.000	0.800	2.000		240.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						264.000
						Total Quantity in cum	264.000
1.018	5.1.3 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:1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)						
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	Foundation of RR Masonry	1	150.000	1.200	0.150		27.000
	1st belt of RR masonry	1	150.000	0.800	0.150		18.000
	2nd belt of RR Masonry (Top)	1	150.000	0.600	0.100		9.000
	Total						54.000
						Total Quantity in cum	54.000
1.019	OD147372/2022-2023 Design of check dam of height 1.80 m and length 30 m across Illithode River near existing well cum pump house at Illipalam, including, design of wing wall, protection wall, retaining wall, submission of 3 copies(hard copy and soft copy) of all drawings and obtaining approval from design wing, all charges/ fee etc. as per the direction of departmental officers						
	Design of check dam including submission of 3 sets hard copy and soft copy of design and drawing						
		1					1.000
	Total						1.000
						Total Quantity in no	1.000