

TS Register No: 1711/2019-2020

AS Register No:1799/2019-2020

**CHUNGAM(CHAKREPURAKKAL)-KAYALCHIRA PATHWAY DEVELOPMENT
AND BOAT LANDING BY THE SIDE OF PUNNAMADA RIVER, At ALAPPUZHA**

DISTRICT

Detailed Estimate

(Dsr year: **2016**, Cost Index Applied for this estimate is **48.71%**)

SI No	Description	No	L	B	D	CF	Quantity	Remark
1 Appendix A- WALKWAY								
1	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							
	PATHWAY SIDE PROTECTION							
	FOUNDATION	2	400.000	1.200	0.500		480.000	
	Total Quantity						480.000 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						480.000 cum	
	Say 480.000 cum @ Rs 247.45 / cum						Rs 118776.00	
2	60.64.1 Coconut Pile - Supplying and stacking well matured straight coconut post for driving down throug various strata bellow bed level including cost coveyance labour charges etc complete.							
	@ 90cm c/c zig zag=445nos on one side	2*445			3.000		2670.000	
	Total Quantity						2670.000 metre	
	Total Deducted Quantity						0.000 metre	
	Net Total Quantity						2670.000 metre	
	Say 2670.000 metre @ Rs 137.79 / metre						Rs 367899.30	
3	60.64.4 Coconut Pile - Driving down coconut pile to lines and levels through variuos strata including all hire charges and labour for fixing , staging platform and all other appliances necessary for pile driving down after pointing the bottom end							
	@ 90cm c/c zig zag=445nos on one side	2*445			3.000		2670.000	
	Total Quantity						2670.000 metre	

		Total Deducted Quantity					0.000 metre	
		Net Total Quantity					2670.000 metre	
		Say 2670.000 metre @ Rs 797.10 / metre					Rs 2128257.00	
4	60.7.1 DRY RUBBLE MASONRY _ Dry rubble without concrete levelling course masonry with good quality blasted rubble including packing to compactness to lines and levels cost and conveyance of all materials labour charges etc. complete as per direction of Departmental officers at site							
PATHWAY SIDE PROTECTION								
	FOUNDATION BED	2	400.000	1.200	0.500		480.000	
	SIDE WALL	2	400.000	(1+.625)/2	1.500		975.000	
		Total Quantity					1455.000 cum	
		Total Deducted Quantity					0.000 cum	
		Net Total Quantity					1455.000 cum	
		Say 1455.000 cum @ Rs 2854.19 / cum					Rs 4152846.45	
5	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)							
PATHWAY								
	TOP RR	2	400.000	(.625+.5)/2	0.500		225.000	
		Total Quantity					225.000 cum	
		Total Deducted Quantity					0.000 cum	
		Net Total Quantity					225.000 cum	
		Say 225.000 cum @ Rs 5897.62 / cum					Rs 1326964.50	
6	51.2.3 Filling with Quarry Muck Filling up low lying and water logged areas with local material/ quarry muck, spreading in layers, leveling the top at site and consolidation by ramming, etc complete for improving the CBR value of subgrade							
	PATHWAY FILLING	1	400.000	3.500	1.500		2100.000	
	Quantity of excavation	1	480.000				-480.000	
		Total Quantity					2100.000 cum	
		Total Deducted Quantity					-480.000 cum	
		Net Total Quantity					1620.000 cum	
		Say 1620.000 cum @ Rs 893.69 / cum					Rs 1447777.80	
7	16.91.2							

	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge. 80 mm thick C.C. paver block of M-30 grade with approved color design and pattern.							
	PATHWAY	1	400.000	3.500			1400.000	
	Total Quantity						1400.000 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						1400.000 sqm	
	Say 1400.000 sqm @ Rs 950.18 / sqm						Rs 1330252.00	
Sl No	Description	No	L	B	D	CF	Quantity	Remark
2 Appendix B- BOAT LANDING								
1	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							
	Foundation SP wall							
	foundation masonry DR	1	330.000	1.250	0.500		206.250	
	Foundation Rain Shelter							
		15*4	0.450	0.450	0.600		7.290	
	Total Quantity						213.540 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						213.540 cum	
	Say 213.540 cum @ Rs 247.45 / cum						Rs 52840.47	
2	60.7.1 DRY RUBBLE MASONRY _ Dry rubble without concrete levelling course masonry with good quality blasted rubble including packing to compactness to lines and levels cost and conveyance of all materials labour charges etc. complete as per direction of Departmental officers at site							
	foundation bed	1	330.000	1.250	0.500		206.250	
	Super Structure	1	330.000	$(1.05+.66)/2$	1.500		423.225	
	Total Quantity						629.475 cum	
	Total Deducted Quantity						0.000 cum	

	Net Total Quantity						629.475 cum	
	Say 629.475 cum @ Rs 2854.19 / cum						Rs 1796641.25	
3	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)							
	1	330.000	(.66+.5)/2	0.600			114.841	
	Total Quantity						114.841 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						114.841 cum	
	Say 114.841 cum @ Rs 5897.62 / cum						Rs 677288.58	
4	51.2.3 Filling with Quarry Muck Filling up low lying and water logged areas with local material/ quarry muck, spreading in layers, leveling the top at site and consolidation by ramming, etc complete for improving the CBR value of subgrade							
	A R E A DEVELOPMENT	1	330.000	6.000	1.000		1980.000	
	Qnty of excavation	1	213.540				-213.540	
	Total Quantity						1980.000 cum	
	Total Deducted Quantity						-213.540 cum	
	Net Total Quantity						1766.460 cum	
	Say 1766.460 cum @ Rs 893.69 / cum						Rs 1578667.64	
5	16.91.2 Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength,thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge.80 mm thick C.C. paver block of M-30 grade with approved color design and pattern.							
	1	330.000	4.000				1320.000	
	Total Quantity						1320.000 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						1320.000 sqm	
	Say 1320.000 sqm @ Rs 950.18 / sqm						Rs 1254237.60	
6	4.1.3 Providing and laying in position cement concrete of specified grade excluding the cost of centering and							

	shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)							
	Foundation Rain Shelter							
		15*4	0.450	0.450	0.600		7.290	
	Total Quantity						7.290 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						7.290 cum	
	Say 7.290 cum @ Rs 8152.21 / cum						Rs 59429.61	
7	50.10.1 Steel work in built up G I tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting,fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete							
	Rain Shelter							
	15X3.94X3.2=189.12 m2@15kg/m2	1	189.120			15.0	2836.800	
	Hand Rails							
	330*1.2= 396 m2 @ 8 kg / m 2	1	396.000			8.0	3168.000	
	Total Quantity						6004.800 kg	
	Total Deducted Quantity						0.000 kg	
	Net Total Quantity						6004.800 kg	
	Say 6004.800 kg @ Rs 148.92 / kg						Rs 894234.82	
8	12.48 Providing & fixing on roof pressed clay tile (Mangalore tile) of 20 mm nominal thickness and of approved size and as per approved pattern on steel frame work complete (steel frame work to be paid separately)							
	Rain Shelter							
		15	3.940	3.200			189.120	
	Total Quantity						189.120 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						189.120 sqm	
	Say 189.120 sqm @ Rs 353.93 / sqm						Rs 66935.24	
9	12.49 Providing & laying on roof pressed clay tile ridge (Mangalore tile) of 20 mm thickness and of approved pattern on steel frame work complete (steel frame work to be paid separately).							
	Rain Shelter							
		15	3.200				48.000	

			Total Quantity	48.000 metre			
			Total Deducted Quantity	0.000 metre			
			Net Total Quantity	48.000 metre			
			Say 48.000 metre @ Rs 78.00 / metre				Rs 3744.00
10	13.48.1 Finishing with Deluxe Multi surface paint system for interiors and exteriors using primer as per manufacturers specifications:Two or more coats applied on walls @ 1.25 ltr/10 sqm over and including one coat of special primer applied @ 0.75 ltr /10 sqm						
	Roof Tiles						
	Over Mangalore Roof Tiles	15	3.940	3.200			189.120
			Total Quantity	189.120 sqm			
			Total Deducted Quantity	0.000 sqm			
			Net Total Quantity	189.120 sqm			
			Say 189.120 sqm @ Rs 147.15 / sqm				Rs 27829.01
11	13.61.1 Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two or more coats on new work						
	Hand Rails						
	330*1.2= 396m2	1	396.000			0.5	198.000
	Rain Shelter Truss						
	15X3.94X3.2=189.12 m2	1	189.120			0.5	94.560
			Total Quantity	292.560 sqm			
			Total Deducted Quantity	0.000 sqm			
			Net Total Quantity	292.560 sqm			
			Say 292.560 sqm @ Rs 116.59 / sqm				Rs 34109.57
12	od214966/2019_2020 Supplying and fixing pre cast three seated RCC garden bench of safe area: length 1.5 m, width 0.45m and back rest 0.40m with all cost of labour conveyance etc. complete						
		15					15.000
			Total Quantity	15.000 each			
			Total Deducted Quantity	0.000 each			
			Net Total Quantity	15.000 each			
			Say 15.000 each @ Rs 8711.25 / each				Rs 130668.75
13	od214970/2019_2020						

Supply and Plantation of Trees, Bamboos, Shrubs, and Hedge at site i/c watering and removal of unserviceable materials as per direction of officer in charge including cost of plant & watering etc. complete. Details cost of sapling and plantation for 100 nos (Based on actual observation)								
		520					520.000	
Total Quantity							520.000 each	
Total Deducted Quantity							0.000 each	
Net Total Quantity							520.000 each	
Say 520.000 each @ Rs 883.84 / each							Rs 459596.80	
Sl No	Description	No	L	B	D	CF	Quantity	Remark
3 Appendix C- Pile and Slab Retaining Wall								
1	od215432/2019_2020 Pre-cast RCC piles 8.55m X .3m X .3m with pointed end in Cement Concrete 1:1.5:3 by using 20mm.nominal size broken stone including all cost of form work, watering, curing etc.complete excluding cost of reinforcement, casting at contractor's own yard near site of work etc. complete.							
	No of piles=(330/1.8)+1=184 add 5% extra for bends	193	0.300	0.300	8.250		143.303	
	Do pointed end	193	0.300/3	0.300	0.300		1.737	
Deuction for Grooves								
		193*2	2.550	0.090	0.075		-6.644	
Total Quantity							145.040 cum	
Total Deducted Quantity							-6.644 cum	
Net Total Quantity							138.396 cum	
Say 138.396 cum @ Rs 12409.67 / cum							Rs 1717448.69	
2	od215471/2019_2020 Precast Reinforced Cement Concrete slabs required size in cement concrete 1:1.5:3 by using 20mm.nominal size broken stone including all cost of form work, watering, curing etc.complete by casting at contractor's own yard near the site of work etc. complete excluding the cost of reinforcement.							
		192*3	1.650	0.080	0.750		57.024	
Total Quantity							57.024 cum	
Total Deducted Quantity							0.000 cum	
Net Total Quantity							57.024 cum	
Say 57.024 cum @ Rs 10361.32 / cum							Rs 590843.91	
3	5.22.6 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more							

	Pile	1	138.396			120.0	16607.520		
	Slab	1	57.084			100.0	5708.401		
	Tie beam, Anchor beam & Anchor block	1	84.008			110.0	9240.880		
	Total Quantity						31556.801 kilogram		
	Total Deducted Quantity						0.000 kilogram		
	Net Total Quantity						31556.801 kilogram		
	Say 31556.801 kilogram @ Rs 84.17 / kilogram						Rs 2656135.94		
4	od215409/2019_2020 Conveying precast R C C piles 300 mm square, 8.55m length from the place of casting to the site including hire charges of boats,coir ropes,crow bar etc. complete. 								
		193					193.000		
	Total Quantity						193.000 each		
	Total Deducted Quantity						0.000 each		
	Net Total Quantity						193.000 each		
	Say 193.000 each @ Rs 492.96 / each						Rs 95141.28		
5	od215644/2019_2020 Lifting, handling , hoisting, aligning, fixing and Driving down R C C piles 300mm. square through various strata from the bed level till refusal of monkey weighing not less than 2 ton with the aid of pile driving plant winches, barge and accessories, wire rope etc.including labour,lubricant oil, pay of staff etc.complete.								
		193			6.000		1158.000		
	Total Quantity						1158.000 metre		
	Total Deducted Quantity						0.000 metre		
	Net Total Quantity						1158.000 metre		
	Say 1158.000 metre @ Rs 854.28 / metre						Rs 989256.24		
6	od218146/2019_2020 Chipping and removing the top of the R.C.C.piles to lines and levels carefully with out damaging the remaining portion and removing the debris up to distance of 150m stacking etc complete. specification as per 15.3 of DAR								
		193	0.300	0.300	0.300		5.211		
	Total Quantity						5.211 cum		
	Total Deducted Quantity						0.000 cum		
	Net Total Quantity						5.211 cum		
	Say 5.211 cum @ Rs 2163.06 / cum						Rs 11271.71		
7	od215783/2019_2020								

	Conveying, lifting, handling, hoisting, aligning and setting in position, the precast R C C slab in between piles and finishing with neat cement on joints etc complete							
		192*3	1.650	0.080	0.750		57.024	
	Total Quantity						57.024 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						57.024 cum	
	Say 57.024 cum @ Rs 9857.32 / cum						Rs 562103.82	
8	od218367/2019_2020 Protecting the filled earth from seepage through the joints of precast slabs using geofabric filter GWT - 26 - 130 as per the direction from the departmental officers at site including all cost of materials, labour, conveyance and all other incidental charges involved etc complete.							
		1	330.000		2.750		907.500	
	Total Quantity						907.500 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						907.500 sqm	
	Say 907.500 sqm @ Rs 100.72 / sqm						Rs 91403.40	
9	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							
	Anchor beams	96	1.500	0.300	(.3+.7)/2		21.600	
	Anchor blocks	96	0.750	0.750	1.450		78.300	
	Total Quantity						99.900 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						99.900 cum	
	Say 99.900 cum @ Rs 247.45 / cum						Rs 24720.26	
10	5.9.5 Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers							
	Tie beam for pile	1	330.000	0.820			270.600	
	Total Quantity						270.600 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						270.600 sqm	
	Say 270.600 sqm @ Rs 509.93 / sqm						Rs 137987.06	
11	5.9.6							

	Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts							
	For Bollards							
		22	0.300		0.600	3.14	12.435	
	Total Quantity						12.435 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						12.435 sqm	
	Say 12.435 sqm @ Rs 695.74 / sqm						Rs 8651.53	
12	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete							
	Anchor Block	96*4	0.750		0.750		216.000	
	Anchor beam	96*2	1.500		0.300		86.400	
	Total Quantity						302.400 sqm	
	Total Deducted Quantity						0.000 sqm	
	Net Total Quantity						302.400 sqm	
	Say 302.400 sqm @ Rs 288.42 / sqm						Rs 87218.21	
13	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							
	Tie beam for piles	1	330.000	0.300	0.300		29.700	
	Anchor blocks	96	0.750	0.750	0.750		40.500	
	Anchor beam	96	1.500	0.300	0.300		12.960	
	Bollards	20	0.150	0.150	0.600	3.14	0.848	
	Total Quantity						84.008 cum	
	Total Deducted Quantity						0.000 cum	
	Net Total Quantity						84.008 cum	
	Say 84.008 cum @ Rs 9242.85 / cum						Rs 776473.34	
14	od227978/2019_2020 Providing sign board in structural steel work in single section, with plate, including cutting, hoisting, fixing in position and applying a priming coat, two coats of synthetic enamel paint of approved quality and lettering etc all complete.							
	Sign board @ 35 kg / m ² . 5	1	2.500	1.250		35.0	109.375	
	Total Quantity						109.375 kilogram	

							Total Deducted Quantity	0.000 kilogram
							Net Total Quantity	109.375 kilogram
							Say 109.375 kilogram @ Rs 103.53 / kilogram	Rs 11323.59
SI No	Description	No	L	B	D	CF	Quantity	Remark
4 Appendix D- Solar Light								
1	90.15.3.3 Supply installation testing and commissioning of Octogaonal Pole made of hot dip galvanised GI sheet 70 mm top diameter, 130 mm bottom diameter thickness 3mm base plate dimensions of 200x200x12 mm suitable for wind speed as per IS 875 Part III single arm bracket 0.5mt including connector foundation bolt 4 nos fixed in existing RCC foundation and junction box etc. complete 6 Meters	20					20.000	
							Total Quantity	20.000 each
							Total Deducted Quantity	0.000 each
							Net Total Quantity	20.000 each
							Say 20.000 each @ Rs 20794.25 / each	Rs 415885.00
2	od224993/2019_2020 SITC of Solar LED lighting System with following accessories. (a) All in one Solar LED CSADHMP40 CDL, 30W LED Crompton make / Equilant having 60W solar module Wp with 24 Ah battery having 5100 lumens having dimenssions(Approx) 955 X 630 X 55 (LWH) haing approximate weight of 19Kg suitable to fit on tubular pole.(3years warranty) including AMC for two years.	20					20.000	
							Total Quantity	20.000 each
							Total Deducted Quantity	0.000 each
							Net Total Quantity	20.000 each
							Say 20.000 each @ Rs 54265.29 / each	Rs 1085305.80
SI No	Description	No	L	B	D	CF	Quantity	Remark
5 Consulancy Charges @ 6%								
Lump-Sum Total						Rs 1630209.96		
Provision for GST payments (in %) @						18.0%		
Amount reserved for GST payments						5184067.70		
Total						33984443.70		
Lumpsum for round off						15556.30		
						TOTAL Rs 34000000.00		
						Rounded Total Rs 3,40,00,000		
						Rupees Three Crore Forty Lakh Only		

(Cost Index Applied for this estimate is 48.71%)



Other Engineering Organisations

PRICE