

DETAILED ESTIMATE**GENERAL-Urgent Re Construction of Damaged Culvert at km 2/700 at Arikandampakku -
Nenmini Church Road in Manjeri LAC -Civil work-General Civil Work**

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
1	Detailed Estimate						
1.001	3.13.1.B 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, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work. Ordinary soil - Mechanical Means - (Depth upto 3 m)						
	Arikandampakku - Nenmini Church Road						
	For Culvert	1.000	7.000	5.000	3.850		134.750
	For Culvert - Wing Wall	2*2	1.500	0.500	3.850		11.550
	For Drainage & Retaining Wall	1.000	40.000	2.100	1.150		96.600
	For Drainage Only	1.000	82.000	1.600	1.150		150.880
	Total						393.780
							Total Quantity in cum 393.780
1.002	12.4 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.						
	Arikandampakku - Nenmini Church Road						
	For Culvert - PCC	1.000	7.000	4.700	0.300		9.870
	For Drainage & Retaining Wall - PCC	1.000	40.000	2.100	0.150		12.600
	For Drainage Only - PCC	1.000	82.000	1.600	0.150		19.680
	Total						42.150
							Total Quantity in cum 42.150
1.003	12.8.A.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications. PCC Grade M15						
	Arikandampakku - Nenmini Church Road						
	For Culvert - First Footing	1.000	7.000	4.700	0.300		9.870
	For Culvert - Abutment	2.000	7.000	$(0.50+1.20)/2$	2.800		33.320
	For Culvert - Wing Wall - Footing	2*2	1.000	0.850	0.300		1.020
	For Culvert - Wing Wall	2*2	$(1.00+1.50)/2$	$(0.70+0.50)/2$	2.800		8.400
	For Culvert - Wing Wall - Parapet	2*2	1.500	0.500	0.750		2.250
	For Culvert - Parapet	2.000	2.500	0.300	$(0.75+0.60)/2$		1.013
	For Retaining Wall - First Footing	1.000	40.000	0.800	0.200		6.400
	For Retaining Wall - Protection Wall	1.000	40.000	$(0.40+0.60)/2$	1.800		36.000
	For Drainage - Side Walls	1.000	122.000	0.300	1.000		36.600
		1.000	40.000	0.300	1.000		12.000
	Total						146.873
	Total Quantity in cum						146.873
1.004	12.8.1.C.1						
	Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications RCC Grade M20 - Using Concrete Mixer						
	Arikandampakku - Nenmini Church Road						
	For Culvert - Bed Block	2.000	7.000	0.500	0.200		1.400
	For Culvert - Slab	1.000	7.000	2.500	0.250		4.375
	For Drainage - Covering Slab	1.000	122.000	1.200	0.120		17.568
	Total						23.343
	Total Quantity in cum						23.343
1.005	12.40						
	Supply, Fitting and Placing un-coated HYSD bar Reinforcement in Foundation complete as per Drawing and Technical Specifications						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity	
Arikandampakku - Nenmini Church Road								
	For Culvert - First Footing	1.000	9.870			0.0200 00	0.197	
	For Culvert - Abutment	1.000	33.320			0.0200 00	0.666	
	For Culvert - Wing Wall - Footing	1.000	1.020			0.0200 00	0.020	
	For Culvert - Wing Wall	1.000	8.400			0.0200 00	0.168	
	For Culvert - Bed Block	1.000	1.400			0.0500 00	0.070	
	For Culvert - Slab	1.000	4.375			0.1300 00	0.569	
	For Retaining Wall - First Footing	1.000	6.400			0.0150 00	0.096	
	For Retaining Wall - Protection Wall	1.000	36.000			0.0150 00	0.540	
	For Drainage - Covering Slab	1.000	17.568			0.0500 00	0.878	
	Total						3.204	
	Total Quantity in MT							3.204
1.006	13.9.A							
	Back filling behind abutment, wing wall and return wall complete as per drawing and Technical Specification Granular material							
Arikandampakku - Nenmini Church Road								
	Back Side of Abutment	2.000	9.000	(1.50+1.30)/2	1.200		30.240	
	Total						30.240	
	Total Quantity in cum							30.240
1.007	55.4							
	Supplying and stacking 36mm size hard broken stone in standard heaps for measurement.							
Arikandampakku - Nenmini Church Road								
	For Culvert - Both Side	2.000	3.000	5.500	0.100		3.300	
	Total						3.300	
	Total Quantity in cum							3.300
1.008	55.7.a							

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing bitumen leveling coarse between 40mm and 150mm with 36mm deptl metal by spreading the metal to line and levels and rolling until the compacted coarse aggregate has a firm surface and applying hot bitumen with pressure sprayer at the rate of 20 Kg per M3 metal including all cost of bitumen conveyance heating mixing spreading in appropriate locations to proper levels compacting with power roler and other sundry stores.						
	Arikandampakku - Nenmini Church Road						
	For Culvert - Both Side	2.000	3.000	5.500	0.100		3.300
	Total						3.300
	Total Quantity in cum						3.300
1.009	5.2.a						
	Providing and applying tack coat with bitumen emulsion(RS) using emulsion pressure distributor at the rate of 0.20 - 0.30 kg per sqm on the prepared bituminous surface cleaned with mechanical broom.						
	Arikandampakku - Nenmini Church Road						
	Over Culvert Portion @ km 2/700	1.000	15.000	5.500			82.500
	Total						82.500
	Total Quantity in sqm						82.500
1.010	5.7.1						
	Providing, laying and rolling of close-graded premix surfacing material of 20 mm thickness composed of 11.2 mm to 0.09 mm (Type-A) aggregates using viscosity grade bitumen (VG - 30) to the required line, grade, and level to serve as wearing course on a previously prepared base, including mixing in a suitable HMP of appropriate capacity not less than 75 tonnes/hour., laying and rolling with a Smooth wheeled roller 8-10 tonne capacity, and finishing to the required level and grade.						
	Arikandampakku - Nenmini Church Road						
	Over Culvert Portion @ km 2/700	1.000	15.000	5.500			82.500
	Total						82.500
	Total Quantity in sqm						82.500
1.011	OD117835/2024-2025						
	Random Rubble Masonry (coursed/uncoursed) Work (using departmental rubble obtained from dismantled) in Cement Mortar 1:6 in Foundation complete as per Drawing and Technical Specifications. etc complete (Data derived from Morth spec code 12.7.B)						
	Arikandampakku - Nenmini Church Road						
	Protecting Outlet Land Area - For Foundation	2.000	5.500	0.800	0.300		2.640

EST No. : PWD/RB/EST/15396/2024_5_1_1 (Edit Id : 10)
Cost Index (Place) : Malappuram, GST : 18%

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Protecting Outlet Land Area - For Wall	2.000	5.500	$(0.75+0.60)/2$	3.000		22.275
	Total						24.915
						Total Quantity in cum	24.915

Approved By
Abdul Gafoor C H
(PEN: 130047), Executive Engineer



ABSTRACT ESTIMATE**GENERAL-Urgent Re Construction of Damaged Culvert at km 2/700 at Arikandampakku -
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SI No	Specification	Quantity	Rate	Amount
1	Detailed Estimate			
1.001	3.13.1.B 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, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work. Ordinary soil - Mechanical Means - (Depth upto 3 m)			
	Net Total	393.780cum	@57.41/cum	22606.91
1.002	12.4 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.			
	Net Total	42.150cum	@6489.39/cum	273527.79
1.003	12.8.A.1 Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications. PCC Grade M15			
	Net Total	146.873cum	@7481.54/cum	1098836.22
1.004	12.8.1.C.1 Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications RCC Grade M20 - Using Concrete Mixer			
	Net Total	23.343cum	@8141.62/cum	190049.84
1.005	12.40 Supply, Fitting and Placing un- coated HYSD bar Reinforcement in Foundation complete as per Drawing and Technical Specifications			
	Net Total	3.204MT	@88727.57/MT	284283.13
1.006	13.9.A Back filling behind abutment, wing wall and return wall complete as per drawing and Technical Specification Granular material			
	Net Total	30.240cum	@2572.57/cum	77794.52
1.007	55.4			

SI No	Specification	Quantity	Rate	Amount
	Supplying and stacking 36mm size hard broken stone in standard heaps for measurement.			
	Net Total	3.300cum	@2317.53/cum	7647.85
1.008	55.7.a			
	Providing bitumen leveling coarse between 40mm and 150mm with 36mm deptl metal by spreading the metal to line and levels and rolling until the compacted coarse aggregate has a firm surface and applying hot bitumen with pressure sprayer at the rate of 20 Kg per M3 metal including all cost of bitumen conveyance heating mixing spreading in appropriate locations to proper levels compacting with power roler and other sundry stores.			
	Net Total	3.300cum	@2610.33/cum	8614.09
1.009	5.2.a			
	Providing and applying tack coat with bitumen emulsion(RS) using emulsion pressure distributor at the rate of 0.20 - 0.30 kg per sqm on the prepared bituminous surface cleaned with mechanical broom.			
	Net Total	82.500sqm	@11.42/sqm	942.15
1.010	5.7.1			
	Providing, laying and rolling of close-graded premix surfacing material of 20 mm thickness composed of 11.2 mm to 0.09 mm (Type-A) aggregates using viscosity grade bitumen (VG - 30) to the required line, grade, and level to serve as wearing course on a previously prepared base, including mixing in a suitable HMP of appropriate capacity not less than 75 tonnes/hour., laying and rolling with a Smooth wheeled roller 8-10 tonne capacity, and finishing to the required level and grade.			
	Net Total	82.500sqm	@189.88/sqm	15665.10
1.011	OD117835/2024-2025			
	Random Rubble Masonry (coursed/uncoursed) Work (using departmental rubble obtained from dismantled) in Cement Mortar 1:6 in Foundation complete as per Drawing and Technical Specifications. etc complete (Data derived from Morth spec code 12.7.B)			
	Net Total	24.915cum	@5260.05/cum	131054.15
	Heading Total(Rs)			2111021.75
	Total Estimation PAC			2111021.75
3	Extra Charges			
2.001	Provision for GST			
		2111021.75	18.00%	379983.92
	Grand Total			2491005.67
	Round off			8994.33
	Rounded Total(Rs)			2500000.00
	Rupees Twenty Five Lakh			

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