

PROPOSED ESTIMATE FOR CONCRETE ROAD										
The rates are taken from PWD(WB) schedule of rate for Road & Bridge works 1.12.15 & 11 th,12th ,13th,14th Addenda & Corrigenda and Building works of Midnapore west effect from 01.11.2017 .										
Length = 100.00 m. Width= 3.00 m.										
Sl no	Page No & It No	Description	Nos	L (m.)	B (m.)	H (m.)	QTY	Unit	Rate	Amount
1	237,3.16(b)	Box cutting or filling in Road embankment in all sorts of soil including spreading the spoils properly over the flank as necessary or on berm to approximate grade & camber and rolling the sub-grade with power roller to proper camber and grade as per direction and satisfaction of Engineer-in-charge including uprooting and removing plants and jungles when and where necessary.								
		For Lugs	2	100.00	0.150		30.00	Sqm	19.00	570.00
		For each additional Depth of 150mm and part thereof.					30.00	Sqm		
			Total			30.00	Sqm			
2	245,(iii)	Water Bound Macadam Base Course.								
		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 including lighting, guarding, barricading and making necessary earthen bundh of one metre width on each side and preparing the bed by necessary cutting or filling, including cost of all materials and hire and labour charges of all men and machinery and compacting to the required density, as per Clause 404 of Specifications for Road & Bridge Works of MoRT&H (5th Revision).								
			1	100.00	2.700	0.075	20.250	cum	3196.07	64,720.37
4	322,18.05(b)	Hire and labour charges for Shuttering with or without staging upto 4.0 m height using approved stout props with wooden planks/ply wood/steel sheet plate with required bracing for any kind of plain or reinforced concrete works in all sorts of minor structure including culvert, box culvert, cross-drain etc. The rate is inclusive of fitting, fixing and striking out after completion of work as per specification and direction.								
		outer side	2	100.00		0.410	82.000	sqm	214.00	17,548.00
		Inner Side	2	100.00		0.250	50.000	sqm	214.00	10,700.00
5	PWD Building Schedule(P-47) It no-03	Supplying & Laying Polytheshet(150gm/sqm)over damp proof course or below flooring or roof terracing or in foundation or in foundation trenches.	1	100.00	2.70		270.00			
		For Lugs	2	100.00	0.15		30.00			
					Total			300.00	m ²	24.00
6	Rate analysis attached	Providing and laying Design Mix concrete for plain /reinforced concrete work in any part of bridge (excluding bottom plugging) with coarse aggregates of appropriate nominal size and grading, fine aggregate (sand) conforming to proper grading zone, both of approved quality and cement, as necessary, including labour, cost and carriage of all materials and including preparation of design mix, approval of the same by the Engineer-in-Charge and cost for quality control, sampling, testing etc. all complete but excluding cost of labour and materials for formwork & reinforcement works.M30								
Carriage way			1	100.00	3.000	0.160	48.000	cum	5691.68	2,73,200.40
Drop Wall			2	100.00	0.150	0.250	7.500	cum	5691.68	42,687.56

Sl no	Page No & It No	Description	Nos	L (m.)	B (m.)	H (m.)	QTY	Unit	Rate	Amount
7	Rate analysis is attached	Supplying and spreading moorum (70%) and sand (30%) by volume to the required thk. In layers as specified and directed by the EIC stabilized the same by adding requisite quantity of water to get OMC remixing in wet condition, wet rolling in power roller to the required compacted thickness to proper grade, camber, super elevation etc with power roller including proper tampering and curing the same for 5 days to have maximum dry density as specified and lighting, guarding, barricading and making adequate earthen bundth for protecting the edges etc.								
		Both side	2	100.00	0.300	0.235	14.100	cum	637.98	8,995.49
		Rate analysis attached								
9		Expansion Joint with Bitumin(L.S)	28					Nos	75	2,100.00
TOTAL COST (A) Rs.										4,27,151.82
Add GST(6% CGST+6% SGST)On SI No A)B@12.0% Rs.										51,258.22
Cost of Civi works excluding labour welfare cess Total (C=A+B)Rs.										4,78,410.04
Labour welfare cess (on SI.no C)@1.0%D Rs.										4,784.10
Cost of Civi works including labour welfare cess amount (E=C+D) Rs.										4,83,194.00
Add Contingency (on SI.no C) @3.0% Rs.										14,352.30
TOTAL ESTIMATED COST Rs.										4,97,546.00
TOTAL ESTIMATED COST Rs.(IN WORD)-FOUR LAKH NINETY SEVEN THOUSAND FIVE HUNDRED FOURTY SIX ONLY										

Rate Aaysis of Concrete

(Format C)

1st Corrigendum & Addenda to PWD (WB), SOR: 2015-16 Road & Bridge Works, P-1, Case-II

Gradation of Stone Metal(Graded Aggregates)	20mm	10mm				
Cost of material from Pakur(Medinipur)	1700.00	1569.00				
L+U(P-224,1.03(c))	57.75	337.25	337.25	L+U+S	77.00 L=40%	
P-227,It-3	Up to 20KM			L+U	57.75 U=35%	
Upto 5km	124.00			S	19.25 S=25%	
5-10km	10.90X5			124.00	L=Loading	
10-20km	10.10X10			54.50	U=Unloading	
20-50km	9.50X05			101.00	S=Stacking	
50-100	8.40X50			0.00		
100-150	7.90X50					
	337.25			2037.25	1906.25	
	Cement					
	Concrete					
Cost of 20 mm stone chips	cum	0.6	0.54	2037.25	1100.12	
Cost of 10 mm stone chips	cum	0.4	0.36	1906.25	686.25	
P-208,Table No-3.2						
Cost of Cement(PPC/PSC/OPC43) P-215,11th Corrigenda & Addenda,P-1	(5717/1000)x430				2458.31	
Providing and laying Design Mix concrete for plain / reinforced concrete work in any part of bridge (excluding bottom plugging) with coarse aggregates of appropriate nominal size and grading, fine aggregate (sand) conforming to proper grading zone, both of approved quality and cement, as necessary, including labour, cost and carriage of all materials and including preparation of design mix, approval of the same by the Engineer-in-Charge and cost for quality control, sampling, testing etc. all complete but excluding cost of labour and materials for formwork & reinforcement works.M-30 Grade.Using concrete mixer.(P=322,Item18.07(d)(i)11th corigendum					1447.00	
					5691.68	
				Total		

430kg Cement for M20 Ggrade(For Estimation purpose)From durability consideration, the value of minimum cement content and maximum water cement ratio to be considered in the mix design shall be as per the direction of the Engineer-inCharge.(P-323,Note-2)

Rate Analysis						
Rate Analysis of Sandy Moorum						
Description of Item			Moorum			
a)	Cost of Morrum at Quarry per cum (11th Corrigenda & Addenda to PWD (WB), SOR: 2015-16 Road & Bridge Works P-3, It-7)		117.00			
b)	Carring charge from quarry to work site = 07 km					
	0 -5 KM	Rs 124.00				
	5 - 10 KM	Rs 54.50	178.50			
	TOTAL = Rs 178.50					
c)	Loading & Unloading		46.50			
	62.00 x @ 0.75					
Total cost of moorum per cum			342.00			
Compaction by Moorum (70%) & Sand (30%)						
a)	Moorum (P-3, Sl No. - 7)	0.7	1	510.45	Rs	357.31
b)	Sand (P-3, Sl no-3)	0.3	1	342.22	Rs	102.66
c)	Labour and other cost (P-242, sl no - 4.04 & 4.05)				Rs	178.00
Total					Rs	637.98
Fine Sand						
	Cost at Site		305	rs/cum	L+U+S	77.00 L = 40%
	(11th Corrigenda & Addenda to PWD (WB), SOR: 2015-16 Road & Bridge Works P-3, It-3)				L+U	57.75 U = 35%
			-19.25	rs/cum	S	19.25 S = 25%
			285.75	rs/cum		
	Compacting Factor(280,12.04,Note 2)		0.835			
			342.22	rs/cum		
	Labour Charges 11th Corrigendum		173.00	rs/cum		
	280,12.04					
	Total		515.22	rs/cum		

Rate Analysis of WBM GRADE-II							
(P-245/Item-4.11(iii) Roads & Bridge schedule & 11th Corrigenda							
A) Hard broken Aggregates of Pakur Variety From Midnapore Railway Yard							
							Rs./m3
1	Cost of aggregates size (53-22.4mm) Pg-222,Table-III(2)						1691
2	Loading & unlaoding(75% Of Rs.83) Pg-224,It-1.03(d)						62.25
					Rs.		
3	Carrying						
	Upto 5 km				124		
	5-10km		10.90x5		54.5		
	10-20 km		10.10x10		101		
	20-50km		9.50x00				
	Total				279.5		279.5
	Cost Of Hard Broken Aggregates/cu.m(53-22.4mm) at site						2032.75
B) Screening Materials							
							Rs./cu.m
1	Cost at quarry (pg-223, Table-III(2), 11th Corrigendum(Type-B)Medinipur rail way yard						1280.00
2	Loading & Unloading (75% of Rs.62)P-224,It no-1.03(a)						46.50
3	Carrying						
i	Upto 5 km					124	
ii	5-10km		10.90x5		54.5		
iii	10-20 km		10.10x10		101		
iv	20-50km		9.50x00				
			Total		279.5		279.50
	Cost of screening materials at site						1606.00
Analysis of WBM Grade-II							
	Item	Size	Source	Qty		Rate(Rs)	Amount(Rs./cu.m)
1	Cost of Stone metal	53mm-22.4mm	Pakur	1.21		2032.75	2459.6275
2	Cost of Screening Materials	Type-B	Pakur	0.24		1606.00	385.44
3	Labour & Others (Pg-245, It-4.11(iii)(b) & 11th Corrigendum						351
	Total						3196.07