

# HEAD :- 3054 MR (POSTFACTO)

Year 2017-18

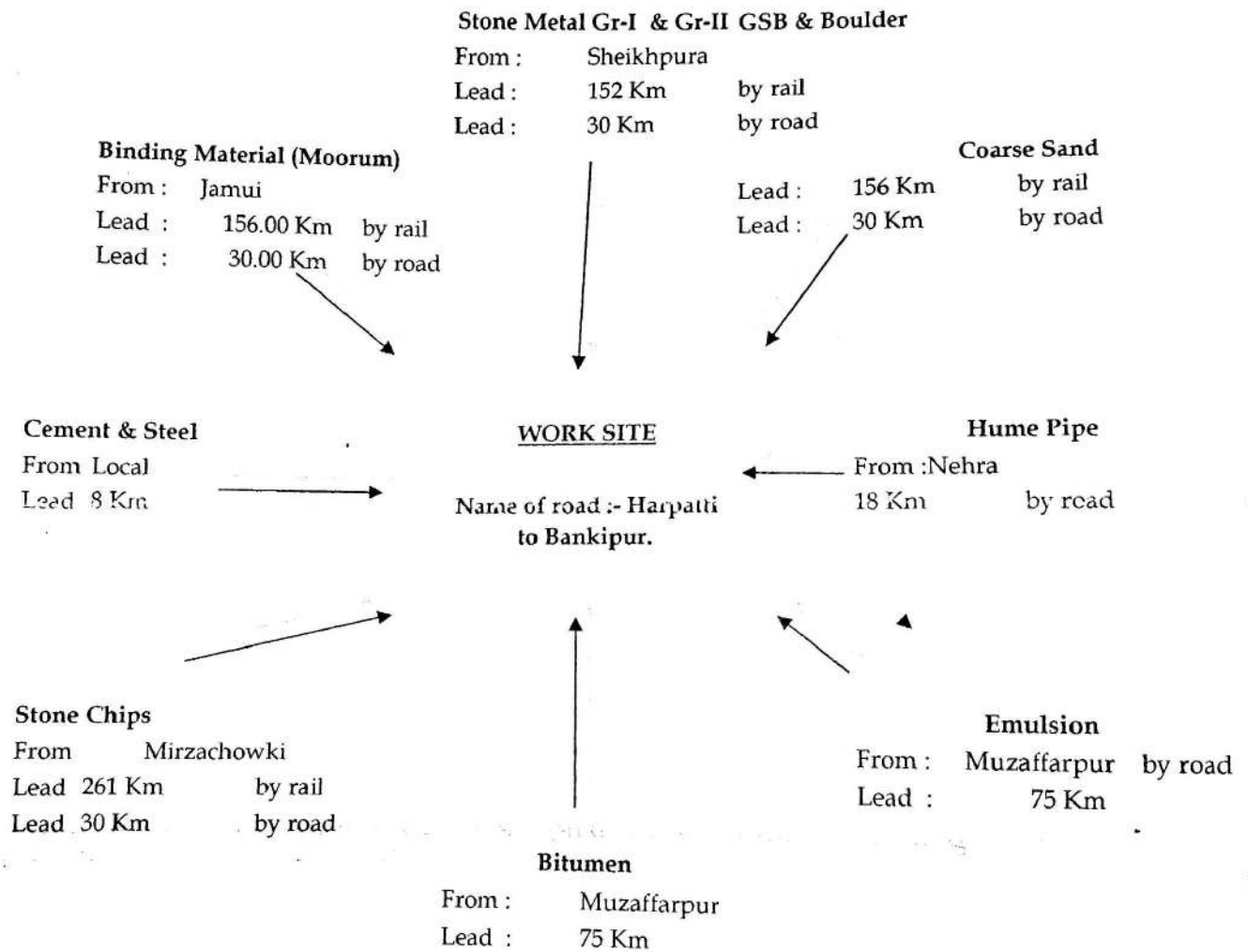
## QUARRY CHART

Name of road :- Harpatti to Bankipur.

Block:- Bahadurpur

District:- Darbhanga

Length of the Road:- 1.440 KM



\* Subjected to Verification of Lead

*[Signature]*  
14.03.2020.  
Junior Engineer  
Bahadurpur

*[Signature]*  
19/3/2020  
Assistant Engineer  
Bahadurpur  
*[Signature]*  
24.4.20

*[Signature]*  
Executive Engineer  
RWD Works Division Darbhanga-1

Superintending Engineer  
RWD Works Circle, Darbhanga  
20/04/2020

HEAD :- 3054 MR (POSTFACTO)  
Year 2019-20

NAME OF ROAD :- HARPATTI TO BANKIPUR.

Block:- Bahadurpur  
District:- Darbhanga

Length of the Road:- 1.440 KM.

GENERAL ABSTRACT OF COST

SI No.	Item of Work	Amount (in Rs.) As Per Estimate
1	EROSION CONTROL & EARTH WORK	3,39,228.58
2	SUB-BASES, BASES ( NON- BITUMINOUS)	2,18,362.76
3	BASES AND SURFACE COURSES (BITUMINOUS)	11,41,635.42
5	MISCELLANEOUS & ROAD SIGNAGE	2,38,788.28
	Repairing Cost of Road:-	19,38,015.04
	GST 12%	2,32,561.80
	Labour Cess 1%	19,380.15
	Seigniorage Fee	16,126.93
	Contingency 1%	-22,060.84
	Total cost of Project:-	22,28,144.77

Rs 22,06,084 = w

*14.03.2020*  
Junior Engineer  
Bahadurpur

*14/2/2020*  
Asstt. Engineer  
Bahadurpur

*14/2/2020*  
Executive Engineer  
R.W.D.(W) Division, Darbhanga-1

Post-facto T/A Rs 22,06,084 = w (Rupees Twenty two  
lacs Six thousand eighty four only)

*20/04/2020*  
Superintending Engineer  
RWD, Works Circle, Darbhanga

HEAD :- 3054 MR (POSTFACTO)

Year 2019-20

### ABSTRACT OF QUANTITY & COST

Name of road :- Harpatti to Bankipur.

Block:- Bahadurpur				Constructed New B.T. Road:-		1.233 KM					
District:- Darbhanga				Constructed New Links Road:-		0.746 KM					
Hume Pipe Culvert :-				2 Nos.		Total Constructed road Under Maintenance		1.978 KM			
R.C.C. Slab Culvert :-				1 No.		Constructed Old B.T. Road:-		1.090 KM			
						Constructed Old PCC Road:-		0.350 KM			
						Total Length:-		1.440 KM			
Sil No	SOR No.	Description	No	Length	Width	Height / Thickness	Sub Quantity	Total Quantity	Rate (in Rs.)	Amount (In Rs.)	
1	2	3	4	5	6	7	8	9	10	11	
EROSION CONTROL & EARTH WORK											
1	2.20 (I)	Clearing and Grubbing Road Land									
		Clearing and Grubbing Road Land including uprooting wild vegetation, grass, bushes, shrubs, saplings and trees of girth upto 300mm, removal of stumps of such trees cut earlier and unserviceable materials & stacking of serviceable materials to be used or auctioned upto a lead of 1000m including removal and disposal of top organic soil not exceeding 150mm in thickness as per technical specification clause 201.1									
		0.00 M to 478 M	2	478.00	4.00		3824.00				
		478 M to 810 M	2	332.00	0.60		398.40				
		810 M to 1047 M	2	237.00	2.00		948.00				
		1047 M to 1107 M	2	60.00	4.00		480.00				
		Link to Kamran School Road	2	125.75	2.00		503.00				
		Link to Fatmi's House	2	19.90	0.60		23.88				
		Link to School More	2	39.35	0.60		47.22				
		Link to Jogiyara Road	2	184.25	2.00		737.00				
		Link Rd. SH 50 to Piprauliya Road	2	209.00	3.00		1254.00				
		Link Rd. SH 50 to Block/Kabilpur Road	2	293.15	3.00		1758.90				
							9974.40	0.997	Ha	46,485.24	46,366.24
2	3.4	Construction of Embankment with Material Obtained from Borrow Pits									
		Construction of embankment with approved material obtained from borrow pits with a lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 1000 m as per Technical Specification Clause 301.5									
		0.00 M to 478 M	2	478.00	1.50	0.30	430.20				
		478 M to 810 M	2	332.00	0.60	0.30	119.52				
		810 M to 1047 M	2	237.00	1.50	0.30	213.30				
		1047 M to 1107 M	2	60.00	1.50	0.30	54.00				
		Link to Kamran School Road	2	125.75	1.50	0.30	113.18				
		Link to Fatmi's House	2	19.90	0.60	0.15	3.58				
		Link to School More	2	39.35	0.60	0.15	7.08				
		Link to Jogiyara Road	1	184.25	1.20	0.30	66.33				
		Link Rd. SH 50 to Piprauliya Road	2	209.00	1.50	0.30	188.10				
		Link Rd. SH 50 to Block/Kabilpur Road	2	293.15	1.50	0.30	263.84				
		Near River	2	30.00	2.00	1.80	216.00				
		Near RCC Culvert	2	10.00	2.50	2.50	125.00				
							1800.13	1800.13	cum	162.69	2,92,862.34
TOTAL COST OF EROSION CONTROL & EARTH WORK:-										3,39,228.58	

No	SOR No.	Description	No	Length	Width	Height / Thickness	Sub Quantity	Total Quantity	Rate (in Rs.)	Amount (In Rs.)
1	2	3	4	5	6	7	8	9	10	11
		<u>SUB-BASES, BASES ( NON- BITUMINOUS)</u>						9	10	11
3	4.1	Granular Sub Base, Gr -I								
		Construction of granular sub-base by providing well graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.								
		As pot area measured					28.945	28.945 cum	2,502.79	72,443.00
4	4.8	Water Bound Macadam with Crushable Screenings Gr - 3								
	3	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with three wheel 80-100 kN static roller in stages to proper grade and camber, applying and brooming, crushable screening to fill-up the interstices of coarse aggregate, watering and compacting to the required density Grading 3 as per Technical Specification Clause 405.								
		As pot area measured					47.555	47.555 cum	3,068.45	1,45,919.76
<b>TOTAL COST SUB-BASES, BASES ( NON- BITUMINOUS):-</b>										<b>2,18,362.76</b>

MISCELLANEOUS & ROAD SIGNAGE



No	SOR No.	Description	No	Length	Width	Height / Thickness	Sub Quantity	Total Quantity	Rate (in Rs.)	Amount (In Rs.)
1	2	3	4	5	6	7	8	9	10	11
9	8.13 803	<b>Road marking with Hot Applied Thermoplastic compound with Reflectorisng Glass Beads on bituminous Surface:-</b> Providing and laying of hot applied thermoplastic compound 2.5 mm thick including felectorisng glass beads @ 250 gms per sqm area ,thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level ,uniform and with thermo plastic paint at edge.								
		1st KM & 2nd Km (Part)	2	1107.000	0.10		221.40			
		Link to Kamran School Road	2	125.750	0.10		25.15			
		Fatmi's Gali	2	19.900	0.10		3.98			
		School Gali More	2	39.350	0.10		7.87			
		Jogiyara Road	2	184.250	0.10		36.85			
		Mixes	10	5.000	0.10		5.00			
				1476.250			300.25	300.25	Sqm	668.58 2,00,740.92
10	12.1	Brick masonry work in cement mortar (1:4) in substructure complete excepting pointing and plastering, as per drawing and technical specification Clauses 602, 603, 604, 1202 & 1204								
		RCC Return Wall	2	7.30	0.25	0.30	1.10			
							1.10	1.10	cum	5109.82 5,595.25
11	12.3	<b>Plastering with CM 1:4</b>								
		Plastering with cement mortar (1:4), 15 mm thick on brickwork in substructure as per technical specification Clauses 613.4 & 1204								
		RCC Parapet	2	7.300	0.55		8.03			
							8.03	8.03	sqm	146.20 1,174.01
12	10.7	<b>Painting on concrete /Steel surfaces with Epoxy</b>								
		Painting two coats including prime coat with epoxy paint of approved brand on concrete / steel surfaces after through clearing of surface to give in even shade as per drawing and technical specification Clause 1701.								
		1001 mm dia HP Culvert	2	6.150	0.40		4.92			
			2	6.150	0.15		1.85			
			2	6.150	0.25		3.08			
			2	6.150	0.40		4.92			
			4	0.400	0.50		0.80			
		RCC Culvert	2	7.200	0.25		3.60			
			2	7.200	0.75		10.80			
			4	0.250	0.75		0.75			
							30.71	30.71	sqm	131.22 4,029.75
13		<b>White washing of parapet walls of CD work and tree trunks</b>								
		White washing two coats on parapet walls and tree trunks including preparation of surface by cleaning scraping etc. as per technical specifications Clause 1915.								
		Trees / Electric Poles	250	1.500	0.80		300.00			
							300.00	300.00	sqm	31.89 9,567.46
<b>TOTAL COST OF MISCELLANEOUS &amp; ROAD SIGNAGE:-</b>										238788.28
<b>TOTAL COST OF ROAD PAVEMENT:-</b>										19,38,015.04

*[Signature]*  
14.03.2020  
Junior Engineer  
Bahadurpur

*[Signature]*  
14/3/2020  
Asstt. Engineer  
Bahadurpur

*[Signature]*  
Executive Engineer  
R.W.D.(W) Division, Darbhanga-1

# Analysis of Rates for Seigniorage Fee

Name of road :- Harpati to Bankipur.		
Length of the Road :-	2.700 KM	
Block :- Bahadurpur		

Sl. No.	SDB Sl. No.	MORD Ref. No.	Description	Unit	Quantity	Rate	Amount	Total Material Qty Required	Total Amount	Seigniorage Fee
1	3.14	303.1	Construction of Embankment with Material Obtained from Borrow Pits							
			Construction of embankment with approved material obtained from borrow pits with a lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 1000 m as per Technical Specification Clause 301.5							
			Unit = cum							
			Taking output = 100 cum							
		a)	Material							
			Compensation for earth taken from private land	cum	100.00	23.78	2378.00			
			Cost for 100 cum = a				2378.00			
			Rate per cum = (a) / 100				23.78			
						Total Cost	23.78	1800.125	42806.97	4280.70
2	4.1	401	Granular Sub Base, Gr -I							
			Construction of granular sub-base by providing well graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.							
		(ii)	For Grading I Material							
			Unit = cum							
			Taking output = 300 cum							
		a)	Material							
			Well graded granular sub-base material as per Table 400.1	cum	180.00	516.12	92,901.60			
			53 mm to 9.5 mm @ 50 per cent	cum	72.00	411.33	29,615.76			
			9.5 mm to 2.36 mm @ 20 per cent	cum	108.00	185.94	20,081.52			
			2.36 mm below @ 30 per cent				1,42,598.88			
			Cost for 300 cum = A				475,329.6	28.945	13758.42	1375.84
			Rate per cum = (A) / 100							

Sl. No.	SDB SI No.	MORD Ref No.	Description	Unit	Quantity	Rate	Amount	Total Material Qty Required	Total Amount	Seigniorage Fee
3	(3-A)		Water Bound Macadam with Crushable Screenings Gr - 3 Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with three wheel 80-100 kN static roller in stages to proper grade and camber, applying and brooming, crushable screening to fill-up the interstices of coarse aggregate, watering and compacting to the required density Grading 3 as per Technical Specification Clause 405.							
		(A)	By Mechanical Means							
			Unit = cum							
			Taking output = 360 cum							
		a)	Material (Refer Tables 400.7, 8, 9 and 10)							
			Aggregate							
			Grading 3 53 mm to 22.4 mm @ 0.91 cum per 10 sqm	cum	435.60	458.22	1,99,600.63			
			for compacted thickness of 75 mm							
			Stone Screening - Type B 11.2 mm for Grading-3 @ 0.18	cum	86.40	345.52	29,852.93			
			cum per 10 sqm							
			Cost for 360 cum = A				2,29,453.56			
			Rate per cum = (A) / 360	cum			637.371	47.555	30310.10	3031.01
4	5.11	509	Mix Seal Surfacing Providing, laying and rolling of close-graded premix surfacing material of 20 mm thickness composed of 11.2 mm to 0.9 mm (Type-A) or 13.2 mm to 0.9 mm (Type-B) aggregates using penetration grade bitumen to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a three wheel 80-100 kN static roller capacity, finished to required level and grades as per Technical Specification Clause 509.							
		(B)	By Mechanical Means							
			(i) Bitumen (S-90)							
			Unit- Sqm							
			Taking output - 4000 sqm (80 Cum)							
		a)	Material							
			Stone Crushed aggregates, 13.2mm to 0.09 mm @ 0.27	cum	108	470.04	50764.32			
			cum per 10 sqm				50764.32			
			Cost for 4000 sqm = a				12.69	5609.69	71193.02	7119.30
			Rate per sqm = (a) / 4000	sqm						

[illegible]

**Junior Engineer  
Bahadurpur**

Asst. Engineer  
Bahadurpur

Executive Engineer  
R.W.D.(W) Division, Darbhanga-1