



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

BIHAR RURAL ROADS PROJECT

Bihar Rural Road Development Agency (BRRDA)

YEAR (2020 - 2021)

FDR

STATE :- BIHAR
DISTRICT :- Samastipur
BLOCK :- Mohiudinagar

NAME OF ROAD :- Detailed Estimate For Repair of Flood
Damaged in Maa Sita Yashwant High School
Nandini To Shiura PWD Path

TOTAL COST OF CONSTRUCTION :- Rs. 3.586 Lacs

TOTAL COST OF PROJECT :- Rs. 3.586 Lacs

SUBMITTED BY:
EXECUTIVE ENGINEER
RWD (W) DIVISION, PATORI
SAMASTIPUR

Cross check amount - Rs. 3,57,984.00

FDR

YEAR (2020 - 2021)

GENERAL ABSTRACT OF COST

Block:--Mohiudinagar

District:--Samastipur

Name of Road:--

Detailed Estimate For Repair of Flood Damaged in Maa Sita
Yashwant High School Nandini To Shiura PWD Path

SL. No.	Item of Work	Amount
A		
	TOTAL COST OF CONSTRUCTION	3.586 Lacs
	Sub Total= (A)	3.586 Lacs
	TOTAL cost of project	3.586 Lacs

3.586 Lacs

P. Kumar
15.10.20
Junior Engineer
RWD (w)Section ,
Mohiudinagar

Shyam
15/10/20
Asstt. Engineer
RWD (w)Sub Division , Mohiudinagar

P. Kumar
15.10.20
Executive Engineer
RWD (w) Division, Patori

SUMMARY OF COST ESTIMATE FOR THE PROJECT

NAME OF ROAD :

Detailed Estimate For Repair of Flood Damaged in Maa Sita
Yashwant High School Nandini To Shiura PWD Path
DISTRICT Samastipur
BLOCK Mohiudinagar

Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
1	BRICK BAT	2.856
2	EARTHWORK	0.312
	SUB TOTAL OF PAVEMENT COST IN LACS =	3.168
	Sub Total :-	3.168
	12% GST on Total Amount :-	0.380
	1% Lab Cess :-	0.032
	Total Construction Cost (including GST and Labour Cess) (A) :-	3.586

15.10.20
Junior Engineer

RWD (w)Section , Mohiudinagar

15/10/20
Assistant Engineer

RWD (w)Sub Division , Mohiudinagar

15.10.20
Executive Engineer
RWD (w)
Division, Patori

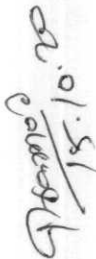
Technical Approved for 3.586 Lakhs Say Three Lakhs -
Eighty Eight Hundred only.

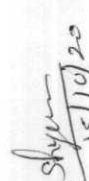
24/11
अनुमोदित
आयोजक कार्य विभाग
आयुक्त संयुक्त नगरपालिका

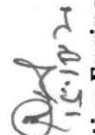
Cost Estimate for Road Work

FORMAT F6

Sl. No.	SDB SL. NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)
SUB HEAD : Brick Bat Filling											
1			Brick Bats								
			Laying Brick Bats on Prepared Soil Surface as per specifications and direction of E/L								
			Damaged Road Strech	cum	1.00	80.0	2.500	0.850	170.00	1,680.02	2,85,603.40
2			Earthwork								
				cum	1.00	300.0	1.000	0.600	180.00	173.06	31,150.80
SUB TOTAL OF CRUST =										3,16,754.20	
TOTAL COST OF PAVEMENT IN RS. =										3,16,754.20	


 15.10.20
 Junior Engineer
 RWD (w)Section , Mohiudinagar


 15/10/20
 Assistant Engineer
 RWD (w)Sub Division , Mohiudinagar


 15.10.20
 Executive Engineer
 RWD (w) Division, Patori

Sl. No.	SDB Sl.No	MORD Ref.No	Description	Unit	Quantity	Rate	Amount (In Rs.)	Total Material Required	Material Amount	Add Seigniorage Fee 10%
EARTHWORK										
1	3.4	301.5	Construction of Embankment with material obtained from borrow pits with a lift upto 1.5 m , transporting to the site spreading , grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a <u>lead upto 1000 m</u> as per Technical Specification Clause 301.5 .							
			Unit = cum							
			Taking output = 100 cum							
		a)	Material							
			Compensation For Earth Taken From Private Land	Cum	100	34.81	3,481.00			
			Cost for 100 cum = a				3,481.00			
			Rate Per Cum = (a)/100=				34.81			
			Total Cost =	Cum			34.81	180.00	6,265.80	626.58
Total Construction Cost (With 10% Seigniorage Fee) :--										626.58


 15.10.22

Analysis for Carriage by Road & Rail

Name of Road:-- Detailed Estimate For Repair of Flood Damaged in Maa Sita Yashwant High School Nandini To Shiura PWD Path
District:- Samastipur Block :- Mohiudinagar

Sl No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km			Loading & Unloading Cost	Carriage Cost by Rail Head	Total `
				Pucka / Surface	Katcha				
1	Stone Metal Gr-I & Gr-II	Cum	Sheikhpura	$\frac{8.00}{4.59} \times 7.60 \times 60.00 \text{ Km} = \text{Rs } 794.77$	$\frac{8.00}{4.59} \times 18.50 \times 0.00 \text{ Km} = \text{Rs } 0.00$		83.64	952.23	Rs. 1830.64
2	Stone Metal Gr-III / GSB	Cum	Sheikhpura	$\frac{8.00}{4.99} \times 7.60 \times 60.00 \text{ Km} = \text{Rs } 731.06$	$\frac{8.00}{4.99} \times 18.50 \times 0.00 \text{ Km} = \text{Rs } 0.00$		83.64	896.90	Rs. 1711.61
3	Stone Aggregate / Chips	Cum	Sheikhpura	$\frac{8.00}{4.99} \times 7.60 \times 60.00 \text{ Km} = \text{Rs } 731.06$	$\frac{8.00}{4.99} \times 18.50 \times 0.00 \text{ Km} = \text{Rs } 0.00$		83.64	896.90	Rs. 1711.61
4	Stone Aggregate / Chips	Cum	Mirzachowki	$\frac{8.00}{4.99} \times 7.60 \times 60.00 \text{ Km} = \text{Rs } 731.06$	$\frac{8.00}{4.99} \times 16.54 \times 0.00 \text{ Km} = \text{Rs } 0.00$		83.64	1282.63	Rs. 2097.34
5	Stone Boulder	Cum	Sheikhpura	$\frac{8.00}{4.80} \times 7.60 \times 60.00 \text{ Km} = \text{Rs } 760.00$	$\frac{8.00}{4.80} \times 18.50 \times 0.00 \text{ Km} = \text{Rs } 0.00$		83.64	922.04	Rs. 1765.68
6	Course Sand	Cum	Kuil	$\frac{8.00}{4.99} \times 6.83 \times 123.00 \text{ Km} = \text{Rs } 1346.84$	$\frac{8.00}{4.99} \times 16.54 \times 0.00 \text{ Km} = \text{Rs } 0.00$		96.53		Rs. 1443.37
7	Local Sand	Cum	Local	$\frac{8.00}{4.99} \times 6.83 \times 2.00 \text{ Km} = \text{Rs } 21.90$	$\frac{8.00}{4.99} \times 16.54 \times 1.00 \text{ Km} = \text{Rs } 26.52$		96.53		Rs. 144.95
8	Brick	1000 Nos	Local	$\frac{8.00}{2.00} \times 6.83 \times 7.00 \text{ Km} = \text{Rs } 191.24$	$\frac{8.00}{2.00} \times 16.54 \times 1.00 \text{ Km} = \text{Rs } 66.16$		406.10		Rs. 663.50

Cost of Haulage Excluding Loading & Unloading as per SOR

Type of Road	Per Ton. Km by Tipper	Per Ton. Km by Truck
For Surface Road	7.60	6.83
Unsurface Gravel Road	9.20	8.22
Kachha Road	18.50	16.54

* Subjected to Verification of Lead

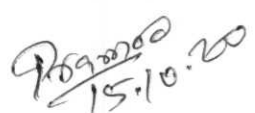
18.10.20
A.E.

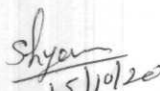
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15.10.20

FDR**YEAR (2020 - 2021)****Analysis for Carriage by Road & Rail****Name of Road:--****Detailed Estimate For Repair of Flood Damaged in Maa Sita Yashwant High School Nandini To Shiura PWD Path****Block :-****Mohiudinagar****District:-****Samastipur****0.190 KM.**

Sl No	Item	Unit	Carriage Cost By Road (Per cum)	Carriage Cost By Road & Rail (Per cum)	Minimum Carriage Cost (Adopted in DPR)
1	Stone Metal Gr-I & Gr-II	Cum	2242.77	1830.64	1830.64
2	Stone Metal Gr-III / GSB	Cum	2069.69	1711.61	1711.61
3	Stone Aggregate / Chips (seikhapura)	Cum	2069.69	1711.61	1711.61
4	Stone Aggregate / Chips	Cum	2617.99	2097.34	2097.34
5	Stone Boulder	Cum	2148.31	1765.68	1765.68
6	Course Sand	Cum	1443.37	1443.37	1443.37
7	Local Sand	Cum	144.95	144.95	144.95
8	Brick	1000 Nos	663.50	663.50	663.50
9	Cement	MT	617.16	617.16	617.16
10	Steel	MT	617.16	617.16	617.16
11	Bitumen Emulsion (Ulberia)	MT	978.35	978.35	978.35
12	Bitumine (Barauni)	MT	848.58	848.58	848.58
13	Hume Pipe (1000 mm)	Pipe	353.75	353.75	353.75


15.10.20
Junior Engineer
RWD (w) Division, Patori


15/10/20
Asstt. Engineer
RWD (w) Division, Patori


15.10.20
Executive Engineer
RWD (w) Division, Patori

Analysis for Carriage Through Railway from Quarry Site to Work Site

Sheikhpura to Karpoorigram

Material -Stone Metal Gr-I & Gr-II

Quarry Site to Sheikhpura Railway Yard (By Road)

Carriage Cost & Lead in Km										Loading & Unloading		Total						
Pucka / Surface					Katcha													
$\frac{8.00}{4.59}$	x	7.60	x	2.00 Km	=	Rs 26.49	+	$\frac{8.00}{4.59}$	x	18.50	x	0.00 Km	=	Rs 0.00	+	Rs 83.64	=	Rs 110.13
UnSurface						$\frac{8.00}{4.59}$	x	9.20	x	1.00 Km			=	Rs 16.03				
														Total "A"		=	Rs 126.16	

Sheikhpura Railway Yard to Karpoorigram Railway Yard = 122.00 Km

i) Loading Cost from Railway Yard to Railway Wagon	= For 1 cum	= Rs 118.86	=	Rs 118.86
Total	= For 1 cum	"B"	=	Rs 118.86
iii) Railway freight charge from Sheikhpura Railway	= For 1 MT 122.00 Km	= Rs 231.30	=	Rs 231.30
Busy Season charge 12% of Railway freight charge	= For 1 MT	= 12%	=	Rs 27.76
Railway Development Charge to 5% of Railway freight Charge	= For 1 MT	= 5%	=	Rs 11.57
Terminal charge @Rs.40.00 per Terminal per MT	= For 1 MT 2 x	= Rs 40.00	=	Rs 80.00
Total	= For 1 MT	"C"	=	Rs 350.63
	For 1 cum			Rs 611.11
	Add 6% Overhead Charge	= 6.0%	=	Rs 36.67
	Add 10% Contractor Profit	= 10%	=	Rs 0.00
	Total Railway Freight for 1 cum	"C"		Rs 647.78
Cost for Stacking the Materials from Unloading dump upto lead 30 m.	Total "D"	= For 1 cum	= Rs 59.43	= Rs 59.43
Carriage Cost from Quarry to Karpoorigram Railway Yard	= For 1 Cum	A+B+C+D	=	Rs 952.23

Analysis for Carriage Through Railway from Quarry Site to Work Site

Sheikhpura to Karpoorigram

Material -Stone Metal Gr-III & GSB

Quarry Site to Sheikhpura Railway Yard (By Road)

		Carriage Cost & Lead in Km				Loading & Unloading		Total
Pucka / Surface		Katcha						
$\frac{8.00}{4.99}$	x 7.60 x 2.00 Km	= Rs 24.37	+	$\frac{8.00}{4.99}$	x 18.50 x 0.00 Km	= Rs 0.00	+ Rs 83.64	= Rs 108.01
	UnSurface	$\frac{8.00}{4.99}$	x	9.20	x 1.00 Km		=	Rs 14.75
Total "A"								= Rs 122.76

Sheikhpura Railway Yard to Karpoorigram Railway Yard = 122.00 Km

i) Loading Cost from Railway Yard to Railway Wagon	=	For 1 cum	=	Rs 118.86	=	Rs 118.86
Total	=	For 1 cum	=	"B"	=	Rs 118.86
iii) Railway freight charge from Sheikhpura Railway station to Karpoorigram Railway station	=	For 1 MT 122.00 Km	=	Rs 231.30	=	Rs 231.30
Busy Season charge 12% of railway freight charge	=	For 1 MT	=	12%	=	Rs 27.76
Railway Development Charge to 5% of Railway Freight Charge	=	For 1 MT	=	5%	=	Rs 11.57
Terminal charge @Rs.40.00 per Terminal per MT	=	For 1 MT 2 x	=	Rs 40.00	=	Rs 80.00
Total	=	For 1 MT	=		=	Rs 350.63
		For 1 CUM		"C"	=	Rs 562.13
		Add 6% Overhead Charge	=	6.0%	=	Rs 33.73
		Add 10% Contractor Profit	=	10%	=	Rs 0.00
		Total Railway Freight for 1 cum		"C"		Rs 595.85
Cost for Stacking the Materials from Unloading dump upto lead 30 m.						
Total "D"	=	For 1 cum	=	Rs 59.43	=	Rs 59.43

Carriage Cost from Quarry to Karpoorigram Railway Yard	=	For 1 Cum	=	A+B+C+D	=	Rs 896.90
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Analysis for Carriage Through Railway from Quarry Site to Work Site

Sheikhpura to Karpoorigram

Material -Stone Aggregate / Chips

Quarry Site to Sheikhpura Railway Yard (By Road)

		Carriage Cost & Lead in Km						Loading & Unloading		Total
Pucka / Surface		Katcha								
$\frac{8.00}{4.99}$	x 7.60 x 2.00 Km	= Rs 24.37	+	$\frac{8.00}{4.99}$	x 18.50 x 0.00 Km	= Rs 0.00	+	Rs 83.64	=	Rs 108.01
UnSurface		$\frac{8.00}{4.99}$	x	9.20	x 1.00 Km				=	Rs 14.75
Total "A"									=	Rs 122.76

Sheikhpura Railway Yard to Karpoorigram Railway Yard = 122.00 Km

i) Loading Cost from Railway Yard to Railway Wagon	=	For 1 cum	=	Rs 118.86	=	Rs 118.86
Total	=	For 1 Cum	=	"B"	=	Rs 118.86

iii) Railway freight charge from Sheikhpura Railway station to Karpoorigram Railway station	=	For 1 MT	122.00 Km	=	Rs 231.30	=	Rs 231.30
Busy Season charge 12% of Railway freight charge	=	For 1 MT		=	12%	=	Rs 27.76
Railway Development Charge to 5% of Railway Freight Charge		For 1 MT		=	5%	=	Rs 11.57
Terminal charge @Rs.40.00 per Terminal per MT		For 1 MT	2	x	Rs 40.00	=	Rs 80.00
Total	=	For 1 MT		=		=	Rs 350.63
		For 1 CUM		=	"C"	=	Rs 562.13
		Add 6% Overhead Charge		=	6%	=	Rs 33.73
		Add 10% Contractor Profit		=	10%	=	Rs 0.00
Total Railway Freight for 1 cum				=	"C"	=	Rs 595.85

Cost for Stacking the Materials from Unloading dump upto lead 30 m.

Total "D"	=	For 1 CUM	=	Rs 59.43	=	Rs 59.43
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Carriage Cost from Quarry to Karpoorigram Railway Yard	=	For 1 Cum	=	A+B+C+D	=	Rs 896.90
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Analysis for Carriage Through Railway from Quarry Site to Work Site

Mirzachowki to Karpoorigram

Material -Stone Aggregate / Chips

Quarry Site to Mirzachowki Railway Yard (By Road)

Pucka / Surface		Carriage Cost & Lead in Km		Katcha		Loading & Unloading		Total
$\frac{8.00}{4.99}$	x 7.60 x 2.00 Km	= Rs 24.37	+ $\frac{8.00}{4.99}$	x 18.50	x 0.00 Km	= Rs 0.00	+ Rs 83.64	= Rs 108.01
UnSurface		$\frac{8.00}{4.99}$	x 9.20	x 1.00 Km				= Rs 14.75
Total "A"								= Rs 122.76

Mirzachowki Railway Yard to Karpoorigram Railway Yard = 230.00 Km

i) Loading Cost from Railway Yard to Railway Wagon	=	For 1 cum	=	Rs 118.86	=	Rs 118.86
Total	=	For 1 Cum	=	"B"	=	Rs 118.86
iii) Railway freight charge from Mirzachowki Railway station to Karpoorigram Railway station	=	For 1 MT 230.00 Km	=	Rs 425.30	=	Rs 425.30
Busy Season charge 12% of Railway freight charge	=	For 1 MT	=	12%	=	Rs 51.04
Railway Development Charge to 5% of Railway Freight Charge	=	For 1 MT	=	5%	=	Rs 21.27
Terminal charge @Rs.40.00 per Terminal per MT	=	For 1 MT 2 x	=	Rs 40.00	=	Rs 80.00
Total	=	For 1 MT	=		=	Rs 577.61
		For 1 CUM		"C"	=	Rs 926.02
		Add 6% Overhead Charge	=	6.0%	=	Rs 55.56
		Add 10% Contractor Profit	=	10%	=	Rs 0.00
		Total Railway Freight for 1 cum		"C"	=	Rs 981.58
Cost for Stacking the Materials from Unloading dump upto lead 30 m.						
Total "D"	=	For 1 CUM	=	Rs 59.43	=	Rs 59.43
Carriage Cost from Quarry to Karpoorigram Railway Yard	=	For 1 Cum	=	A+B+C+D	=	Rs 1282.63

Analysis for Carriage Through Railway from Quarry Site to Work Site

Sheikhpura to Karpoorigram

Material -Stone Boulder

Quarry Site to Sheikhpura Railway Yard (By Road)

		Carriage Cost & Lead in Km						Loading & Unloading		Total
Pucka / Surface		Katcha								
$\frac{8.00}{4.80}$	x 7.60	x 2.00 Km	= Rs 25.33	+	$\frac{8.00}{4.80}$	x 18.50	x 0.00 Km	= Rs 0.00	+ Rs 83.64	= Rs 108.98
UnSurface		$\frac{8.00}{4.80}$	x 9.20	x 1.00 Km						= Rs 15.33
Total "A"									=	Rs 124.31

Sheikhpura Railway Yard to Karpoorigram Railway Yard = 122.00 Km

i) Loading Cost from Railway Yard to Railway Wagon	=	For 1 cum	=	Rs 118.86	=	Rs 118.86
Total	=	For 1 CUM	=	"B"	=	Rs 118.86

iii) Railway freight charge from Sheikhpura Railway station to Karpoorigram Railway station = For 1 MT 122.00 Km = Rs 231.30 = Rs 231.30

Busy Season charge 12% of Railway freight charge = For 1 MT = 12% = Rs 27.76

Railway Development Charge to 5% of Railway Freight Charge = For 1 MT = 5% = Rs 11.57

Terminal charge @Rs.40.00 per Terminal per MT = For 1 MT 2 x Rs 40.00 = Rs 80.00

Total = **For 1 MT** = **Rs 350.63**

For 1 CUM **"C"** = **Rs 584.38**

Add 6% Overhead Charge = 6.0% = Rs 35.06

Add 10% Contractor Profit = 10.0% = Rs 0.00

Total Railway Freight for 1 cum **"C"** = **Rs 619.44**

Cost for Stacking the Materials from Unloading dump upto lead 30 m.

Total "D" = **For 1 CUM** = **Rs 59.43** = **Rs 59.43**

Carriage Cost from Quarry to Karpoorigram Railway Yard = **For 1 Cum** = **A+B+C+D** = **Rs 922.04**

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
Haulage BY TIPPER							
1	1.10	(i)	Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km Case-I : Surfaced Road Speed with load: 25 km per hour Speed while returning empty: 35 km per hour a) Machinery Tipper 10 t capacity Haulage with load Empty return trip b) Overheads @ 6 % on (a) Contractor's profit @ 10% on (a+b) Cost for 100 t-km = a+b Rate per cum = (a+b) /100	hour hour	0.40 0.29	1043.00 1043.00	417.20 302.47 43.18 0.00 762.85 7.63
				Rate Per Km.	Cum		7.60
2	1.10	(ii)	Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km Case-II: Unsurfaced Gravel Road. Speed with load: 20 km/hour Speed for empty return trip: 30 km/hour a) Machinery Tipper 10 t capacity Haulage with load Empty return trip b) Overheads @ 6 % on (a) Contractor's profit @ 10% on (a+b) Cost for 100 t-km = a+b Rate per cum = (a+b) /100	hour hour	0.50 0.33	1043.00 1043.00	521.50 344.19 51.94 0.00 917.63 9.18
				Rate Per Km.	Cum		9.20
3	1.10	(iii)	Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km Case-III : Katcha Track and Track in River Bed/Nallah Bed and Choe Bed. Speed with load: 10 km per hour Speed while returning empty: 15 km per hour a) Machinery Tipper 10 t capacity Haulage with load Empty return trip b) Overheads @ 6 % on (a) (c) Contractor's profit @ 10% on (a+b) Cost for 100 t-km = a+b+c Rate per cum = (a+b+c) /100	hour hour	1.00 0.67	1043.00 1043.00	1043.00 698.81 104.51 0.00 1846.32 18.46
				Rate Per Km.	Cum		18.50

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
Haulage BY TRUCK							
4	1.10	(i)	Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km Case-I : Surfaced Road Speed with load: 25 km per hour Speed while returning empty: 35 km per hour a) Machinery Truck 10 t capacity Haulage with load Empty return trip b) Overheads @ 6 % on (a) (c) Contractor's profit @ 10% on (a+b) Cost for 100 t-km = a+b+c Rate per cum = (a+b+c) /100	hour hour	0.40 0.29	934.30 934.30	373.72 270.95 38.68 0.00 683.35 6.83
				Rate Per Km.	Cum		6.83
5	1.10	(ii)	Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km Case-II: Unsurfaced Gravel Road. Speed with load: 20 km/hour Speed for empty return trip: 30 km/hour a) Machinery Truck 10 t capacity Haulage with load Empty return trip b) Overheads @ 6 % on (a) (c) Contractor's profit @ 10% on (a+b) Cost for 100 t-km = a+b+c Rate per cum = (a+b+c) /100	hour hour	0.50 0.33	934.30 934.30	467.15 308.32 46.53 0.00 822.00 8.22
				Rate Per Km.	Cum		8.22
6	1.10	(iii)	Haulage excluding Loading & Unloading Haulage of materials by tipper excluding cost of loading, unloading and stacking. Unit = t.km Taking output 10 t load and lead 10 km = 100 t.km Case-III : Katcha Track and Track in River Bed/Nallah Bed and Choe Bed. Speed with load: 10 km per hour Speed while returning empty: 15 km per hour a) Machinery Truck 10 t capacity Haulage with load Empty return trip b) Overheads @ 6 % on (a) (c) Contractor's profit @ 10% on (a+b) Cost for 100 t-km = a+b+c Rate per cum = (a+b+c) /100	hour hour	1.00 0.67	934.30 934.30	934.30 625.98 93.62 0.00 1653.90 16.54
				Rate Per Km.	Cum		16.54

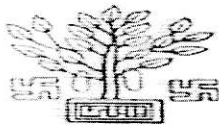
Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
7	1.1	RCD	Loading and Unloading of Stone Boulder/Stone aggregates/Sand/Kanker/Moorum. Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and <i>Unit = cum</i> <i>Taking output = 5.5 cum</i> Time required for i) Positioning of tipper at loading point ii) Loading by front end loader 1 cum bucket capacity @ 25 cum per hour iii) Maneuvering, reversing, dumping and turning for return iv) Waiting time, unforeseen contingencies etc Total 20 Min a) Machinery Tipper 5.5 tonnes capacity Front end-loader 1 cum bucket capacity @ 25 cum/hour (b) Overheads @ 6 % on (a) (c) Contractor's profit @ 10% on (a+b) Cost for 5.5 cum = a+b+c Rate per cum = (a+b+c)/ 5.5	hour hour	0.330 0.330	1043.00 1403.00	344.19 462.99 48.43 0.00 855.61 155.57
			Unloading will be by tipping.			<i>say</i>	156.00
8	1.2		Loading and Unloading Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by Mechanical Means i Loading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by mechanical means including a lead upto 30 m Placing tipper at loading point, loading with front end loader excluding time for haulage and return trip. <i>Unit = cum</i> <i>Taking output = 5.5 cum</i> Time required for i Positioning of tipper at loading point ii Loading by front end loader 1 cum bucket capacity @ 45 cum per hour iii Waiting time, unforeseen contingencies, etc. Total a) Machinery Tipper 10 t capacity Front end-loader 1 cum bucket capacity @ 45 cum per hour b) Overheads @ 6.0 % c) Contractors Profit @ 10.0 % Cost for 5.5 cum = a+b+c Rate per cum = (a+b)/5.5 Unloading of Earth, Sand, Lime, Moorum, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Manure, Crushed Slag, Flyash, Stone for Masonry Work by mechanical means. <i>Unit = cum</i> <i>Taking output = 5.5 cum</i> Placing tipper at unloading point excluding time for haulage and return trip Time required for i Positioning of tipper at loading point ii Manoeuvring, reversing, dumping and turning for return iii Waiting time, unforeseen contingencies, etc. Total a) Machinery Tipper 10 t capacity b) Overheads @ 6 % on (a) c) Contractors Profit @ 10.0 % on (b) Cost for 5.5 cum = a+b Rate per cum = (a+b)/5.5	Min Min Min Min hour hour Min Min Min Min hour hour Min Min Min Min hour	1.000 7.330 2.000 10.330 0.172 0.122 1.000 2.000 2.000 5.000 0.080	1043.00 1403.00	179.40 171.17 21.03 - 371.60 67.56 83.44 5.01 0.00 88.45 16.08 83.64
			Total loading and unloading by mechanical means				83.64

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
8	1.2	RCD	Loading and Unloading of Boulders by Manual Means Unit = cum Taking output = 5.5 cum a) Labour Mate Mazdoor for loading and unloading b) Machinery Tipper 5.5 tonne capacity c) Overheads @ 6 % on (a+b) (d) Contractor's profit @ 10% on (a+b+c) Cost for 5.5 cum = a+b+c+d Rate per cum = (a+b+c+d)/5.5	day day hour	0.110 0.750 0.750	305.00 287.00 1043.00	33.55 215.25 782.25 61.86 0.00 1092.91 198.71
			Unloading will be by tipping.			say	199.00
9	1.3	RCD	Loading and Unloading of Cement or Steel by Manual Means Unit = tonne Taking output = 10 tonnes a) Labour Mate Mazdoor for loading and unloading b) Machinery Truck 10 tonne capacity c) Overheads 6 % on (a+b) (d) Contractor's profit @ 10% on (a+b+c) Cost for 10 tonnes = a+b+c+d Rate per tonnes = (a+b+c+d)/10	day day hour	0.080 2.000 2.000	305.00 287.00 934.30	24.40 574.00 1868.60 148.02 0.00 2615.02 261.50
						say	262.00
10	1.1	(i)	Loading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by manual means including a lead upto 30 m Unit = cum Taking output = 5.5 cum a) Labour Mate Mazdoor (Unskilled) b) Machinery Truck c) Overheads 6 % on (a+b) d) Contractor's profit @ 10% on (a+b+c) Cost for 5.5 cum = a+b+c+d Rate per cum = (a+b+c+d) /5.5	day day hour	0.02 0.50 0.50	305.00 287.00 934.30	6.10 143.50 467.15 37.01 0.00 653.76 118.86
			Total Cost	Cum			118.86
11		(ii)	Loading of Earth, Sand, Moorum, Manure, Flyash by manual means including a lead upto 30 m. Unit = cum Taking output = 5.5 cum a) Labour Mate Mazdoor (Unskilled) b) Machinery Truck c) Overheads 6 % on (a+b) d) Contractor's profit @ 10% on (a+b+c) Cost for 5.5 cum = a+b+c+d Rate per cum = (a+b+c+d) /5.5	day day hour	0.01 0.25 0.25	305.00 287.00 934.30	3.05 71.75 233.58 18.50 0.00 326.88 59.43
			Total Cost	Cum			59.43

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
12		(iii)	Unloading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by mechanical means including a lead upto 30 m Unit = cum Taking output = 5.5 cum				
		a)	Labour				
			Mate	day	0.01	305.00	3.05
			Mazdoor (Unskilled)	day	0.25	287.00	71.75
		b)	Machinery				
			Truck	hour	0.25	934.30	233.58
		c)	Overheads 6 % on (a+b)				18.50
		d)	Contractor's profit @ 10% on (a+b+c)				0.00
			Cost for 5.5 cum = a+b+c+d				326.88
			Rate per cum = (a+b+c+d) / 5.5				59.43
			Total Cost	Cum			59.43
			Total Loding & Unloading of Stone Aggregate	Cum	= 118.86 + 59.43 =		178.29
13		(iv)	Unloading of Earth, Sand, Moorum, Manure, Flyash by manual means including a lead upto 30 m. Unit = cum Taking output = 5.5 cum				
		a)	Labour				
			Mate	day	0.01	305.00	1.53
			Mazdoor (Unskilled)	day	0.13	287.00	35.88
		b)	Machinery				
			Truck	hour	0.166	934.30	155.09
		c)	Overheads 6 % on (a+b)				11.55
		d)	Contractor's profit @ 10% on (a+b+c)				0.00
			Cost for 5.5 cum = a+b+c+d				204.04
			Rate per cum = (a+b+c+d) / 5.5				37.10
			Total Cost	Cum			37.10
			Total Loding & Unloading of Sand / Moorum	Cum	= 59.43 + 37.1 =		96.53
14	1.3		Loading, Unloading and Stacking of Bricks by Manual Means				
		(i)	Loading of Bricks by manual means including a lead upto 30 m Unit = 1000 Nos. Taking output = 2000 Nos.				
		a)	Labour				
			Mate	day	0.01	305.00	3.05
			Mazdoor (Unskilled)	day	0.25	287.00	71.75
		b)	Machinery				
			Truck	hour	0.33	934.30	308.32
		c)	Overheads 6 % on (a+b)				22.99
		d)	Contractor's profit @ 10% on (a+b+c)				0.00
			Cost for 2000 Nos. = a+b+c+d				406.11
			Rate for 1000 bricks = (a+b+c+d) / 2				203.05
			Total Cost	no.			203.05
15		(ii)	Unloading and Stacking of Bricks by manual means including a Unit = 1000 Nos. Taking output = 2000 Nos.				
		a)	Labour				
			Mate	day	0.01	305.00	3.05
			Mazdoor (Unskilled)	day	0.25	287.00	71.75
		b)	Machinery				
			Truck	hour	0.33	934.30	308.32
		c)	Overheads 6 % on (a+b)				22.99
		d)	Contractor's profit @ 10% on (a+b+c)				0.00
			Cost for 2000 Nos. = a+b+c+d				406.11
			Rate for 1000 bricks = (a+b+c+d) / 2				203.05
			Total Cost	no.			203.05
			Total Loding & Unloading of Brick Per 1000		= 203.05 + 203.05 =		406.10

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
			PAVEMENT CRUST LAYERS				
15	4.1 (A)	401	Granular Sub-base with Well Graded Material (Table 400.1) (By mix in place method) Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement 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 II Material Unit = cum Taking output = 300 cum				
		a)	Labour				
			Mate	day	0.48	305.00	146.40
			Mazdoor (Skilled)	day	2.00	364.00	728.00
			Mazdoor (Unskilled)	day	10.00	287.00	2870.00
		b)	Machinery				
			Motor Grader 110 HP @ 50 cum per hour	hour	6.00	2786.00	16716.00
			Three wheel 80-100 kN static roller @ 10 cum per hour	hour	30.00	803.00	24090.00
			Tractor with Rotavator 25 cum per hour	hour	12.00	573.20	6878.40
			Water tanker 6 kl capacity	hour	5.00	184.00	920.00
		c)	Material				
			Well graded granular sub-base material as per Table 400.1				
			26.5 mm to 9.5 mm @ 35%	cum	134.00	657.85	88151.90
			9.5 mm to 2.36 mm @ 25%	cum	96.00	514.58	49399.68
			2.36 mm below @ 40% (Local sand)	cum	153.00	141.85	21703.05
			Water	kl	30.00	40.00	1200.00
		d)	Overheads @ 6 % on (a+b+c)				21280.34
			Cost of GSB for 300 cum				234083.77
			A) Cost of GSB without carriage per cum	cum			780.28
		f)	CARRIAGE				
			Carriage for GSB material	Cum	0.77	1711.61	1312.23
			Carriage for material below 2.36 mm (With Local Sand)	Cum	0.51	144.95	73.92
			Rate per cum with carriage				2166.44
			Total Cost	CUM			2,166.44

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
15	4.7 (3-A)	405	Water Bound Macadam with Stone Screening Type "B" Gr- III WBM Grading 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 smooth wheel roller 80-100 kN in stages to proper grade and camber, applying and brooming, stone 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)	Labour Mate				
			Mazdoor (Skilled)	day	0.68	305.00	207.40
			Mazdoor (Unskilled)	day	2.00	364.00	728.00
		b)	Machinery Tractor Mounted grader for grading @ 100 cum per hour	day	15.00	287.00	4305.00
			Three wheel 80-100 kN static roller @ 8 cum per hour	hour	14.40	549.10	7907.04
			Water tanker 6 kl capacity	hour	45.00	803.00	36135.00
		c)	Material (Refer Tables 400.7, 8, 9 and 10) Aggregate Grading 3 53 mm to 22.4 mm @ 0.91 cum per 10 sqm for compacted thickness of 75 mm	hour	24.00	184.00	4416.00
			Stone Screening Type B 11.2 mm for Grading 3 @ 0.18 cum per 10 sqm	cum	435.60	511.44	222783.26
			Water	cum	86.40	397.73	34363.87
		d)	Overheads @ 6 % on (a+b+c) Cost for 360 cum = a+b+c+d+e Rate per cum = (a+b+c+d+e)/360	kl	144	40.00	5760.00
							18996.33
		f)	CARRIAGE Stone material Grading 3 53 mm to 22.4 mm				335601.91
			Stone Screening	Cum	1.21	1711.61	2071.05
			Rate per cum with carriage	Cum	0.24	1711.61	410.79
			Total Cost	cum			3414.06
							3,414.06



पत्रांक- 2302 रोसड़ा, दिनांक- 01/12/2020

सेवा में,

कार्यपालक अभियंता,
ग्रामीण कार्य विभाग,
कार्य प्रमंडल-पटोरी।

विषय :- FDR के तहत कराए गए कार्यों का निरीक्षण प्रतिवेदन समर्पित करने के संबंध में।

महाशय,

उपर्युक्त विषयक पत्र के आलोक में कहना है कि FDR के तहत आपके प्रमंडल द्वारा कराए गए कार्यों का अधोहस्ताक्षरी द्वारा निरीक्षणोपरांत जांच प्रतिवेदन इस पत्र के साथ संलग्न कर आवश्यक कार्रवाई हेतु समर्पित की जा रही है।

अनु०-यथोक्त।

विश्वासभाजन

कार्यपालक अभियंता
ग्रामीण कार्य विभाग, कार्य प्रमंडल-रोसड़ा

कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल, पटौरी द्वारा कराए गए FDR पथों की जांच से संबंधित प्रतिवेदन

क्रम सं०	पथ का नाम	क्षेत्रीय भाग (मीटर में)	कराए गए कार्य	कराए गए निर्माण कार्य की राशि (रु० में)	GST@12%	L.Cess@1%	S. Fee@10%	Total	अभियुक्ति
1	2	3	4	5	6	7	8	9	10
1	Mastalipur Kasimachak hote huye to Khanua ghat	1200.00	Earth Work, Brick Bat	451100.00	54132.00	4511.00	0.00	509743.00	कार्य पूर्ण
2	Nawada to Yadav Tola	545.00	Earth Work, Brick Bat	359700.00	43164.00	3597.00	0.00	406461.00	कार्य पूर्ण
3	Sarai Madhopur To Imali Chwok	300.00	Brick Bat, GSB Gr-II, WBM Gr-III	509800.00	61176.00	5098.00	2900.00	578974.00	कार्य पूर्ण
4	L038-Approach Road to Dharampur	1500.00	Earth Work, Brick Bat	430400.00	51648.00	4304.00	0.00	486352.00	कार्य पूर्ण
5	Mahnar Mohaddin Nagar PWD Road Dashhara Sahendra Roy House To Sarhad siman via Ravidas Tola	400.00	Brick Bat, GSB, WBM Gr-III	705500.00	84660.00	7055.00	3200.00	800415.00	कार्य पूर्ण
6	PWD Road To Sarai Madhopur	1500.00	Brick Bat, GSB Gr-II, WBM Gr-III	540400.00	64848.00	5404.00	5800.00	616452.00	कार्य पूर्ण
7	Mohiuddin Nagar Bazar To Kursaha Nahar Tak	1500.00	Earth Work, Brick Bat, GSB	453600.00	54432.00	4536.00	6300.00	518868.00	कार्य पूर्ण
8	Mohanpur panchayat antargat Mohanpur Gate to Khanjiva tak	1200.00	Earth Work, Brick Bat, GSB Gr-II, WBM Gr-III	701100.00	84132.00	7011.00	9300.00	801543.00	कार्य पूर्ण
9	Bahadurchak to Nandni Dhala.	1200.00	Earth Work, Brick Bat, GSB Gr-II, WBM Gr-III	562500.00	67500.00	5625.00	12100.00	647725.00	कार्य पूर्ण
10	Bharat cinema Tetarpur to Rahepur	1200.00	Brick Bat, GSB Gr-II, WBM Gr-III	605100.00	72612.00	6051.00	5600.00	689363.00	कार्य पूर्ण
11	Maa Sita Yashwant High school Nandini to Siura PWD Path tak	300.00	Earth Work, Brick Bat	316800.00	38016.00	3168.00	0.00	357984.00	कार्य पूर्ण
12	Mohaddin Nagar ke tanda goan hote hue Panchayat Bhawan tak path nirmaan.	1800.00	Brick Bat, GSB Gr-II	1023900.00	122868.00	10239.00	3400.00	1160407.00	कार्य पूर्ण

कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल, पटोरी द्वारा कराए गए FDR पथों की जांच से संबंधित प्रतिवेदन

क्रम सं०	पथ का नाम	क्षतिग्रस्त भाग (मीटर में)	कराए गए कार्य	कराए गए निर्माण कार्य की राशि (रु० में)	GST@12%	L.Cess@1%	S. Fee@10%	Total	अभियुक्ति
1	2	3	4	5	6	7	8	9	10
13	SH to Harail Part-2	1400.00	Brick Bat, GSB Gr-II, WBM Gr-III	522000.00	62640.00	5220.00	2400.00	592260.00	कार्य पूर्ण
14	Kursaha to Dharampur Durga Mandir Bandh sadak	800.00	Earth Work, Brick Bat, GSB Gr-II, WBM Gr-III	436000.00	52320.00	4360.00	4100.00	496780.00	कार्य पूर्ण
15	Shivaisingpur to Nawada	400.00	Earth Work, Brick Bat	192700.00	23124.00	1927.00	0.00	217751.00	कार्य पूर्ण
16	Sivaisingpur to Gidarganj	125.00	Brick Bat & E/w	165100.00	19812.00	1651.00	0.00	186563.00	कार्य पूर्ण
17	Shapur Undi PWD Road (East of Railway Gumati) to Chakarman	20.00	Brick Bat & E/w	81300.00	9756.00	813.00	400.00	92269.00	कार्य पूर्ण
18	Saraswati Chauk to MMGSY	200.00	Brick Bat, GSB Gr-II, WBM Gr-III	1138000	136560.00	11380.00	16600.00	1302540.00	कार्य पूर्ण
19	Kusho Chowk to Chakraj Ali	500.00	E/w, Brick Bat, GSB Gr-III	705500.00	84660.00	7055.00	8300.00	805515.00	कार्य पूर्ण
20	Approach Road - Bhasingpur	55.00	Brick Bat, GSB, WBM Gr-III	349600.00	41952.00	3496.00	0.00	395048.00	कार्य पूर्ण
21	Ananad Golba To Rajaisi	400.00	Earth Work, Brick Bat	321100.00	38532.00	3211.00	0.00	362843.00	कार्य पूर्ण
22	Thana Chauk Mihiuddin Nagar se kanhauli hote hue nawada hemanpur janewali PMGSY Road Tak	900.00	Earth Work, Brick Bat	521600.00	62592.00	5216.00	0.00	589408.00	कार्य पूर्ण
23	MRL01-Rahepur more Tetarpur via Maniyar tola Mohiuddimpur chowk	3400.00	Brick Bat, Earth Work, GSB Gr-II, WBM Gr-III	1389900.00	166788.00	13899.00	21100.00	1591687.00	कार्य पूर्ण

उपरोक्त सभी पथों की जांच की गई जो संतोषप्रद है।

आर.सी.
कार्यपालक अभियंता

ग्रामीण कार्य विभाग, कार्य प्रमंडल, रोसड़ा