

RURAL WORKS DEPARTMENT



GOVERNMENT OF BIHAR

CIRCLE – R.W.D Works Circle, Chapra

DVISION – R.W.D Works Division, Marhaura

Name of Work – Restoration/Motrable of Road from
Katsa School to Rajpur.

Block - Amnaur

Estimated Cost - Rs 1522983.49

2020-21

ABSTRACT OF COST

Inspection Report for Flood damage work

Date:

1. Name of PIUs-

E.E. R.W.D (W) Moorlaure.

2. Name of Block/Road-

Ammours - Motadella of Road from
Katsa School To Rajpur.

A. For Road

1. Damage Location/Chainage : 0.10, 1700, 2020, 2430
 2. Damage Length : 69 y.
 3. Nature of Damage :
 4. Details of Restoration : Road Ca Hyda to flood.

- i Material being used in Restoration : Brick Gal, Local Sand etc.
 ii Equipment/Tools being used in Restoration works: Tractors, Rollers, J.C.B, etc.
 iii Procedure taken up in Restoration works : Coring, Relaying, etc.
 iv Restored Length : 69

B. For Bridge

1. Damage Location/Chainage :
 2. Damage Length :
 3. Nature of Damage :
 4. Details of Restoration :
 i Material being used in Restoration :
 ii Equipment/Tools being used in Restoration works :
 iii Procedure taken up in Restoration works :
 iv Restored Length :


 Signature of JE/AE/EE

Signature

AKHILESH KUMAR
(Name of Inspector)

E.E R.W.D

(W) DIVISION - SONEPUR

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Name of Work – Restoration/Mottrable of Road from
Katsa School to Rajpur.

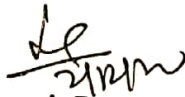
Block – Amnaur

Sl No.	Particulars	Amount(In Rs)
A	Cost of Restoration Work	Rs 1347773.00
B	Add 12% GST on (A)	Rs 161732.76
C	Add 1% L.Cess on (A)	Rs 13477.73
	Total Cost	Rs 1522983.49


J.E.

RWD

Amnaur


A.E.

RWD

Marhaura

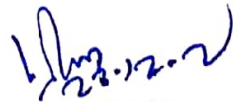

E.E.

RWD

Marhaura

Rs. 15,22,983 = 10.

T/A for Rs. 15,22,983 = 10 (Rupees fifteen lac twenty -
two thousand nine hundred eighty three) only.



अधीक्षण अभियंता
ग्रामीण कार्य विभाग
कार्य प्रमंडल, छपरा

ANALYSIS FOR CARRIAGE OF MATERIAL

) Name of the Work :- Restoration/Motrabale of Road from Narohanee to Jamalpur

) Haulage Charge By 8 T Capacity Truck

- (i) For Surface Road :- Rs. 7.52 Per t per K.M
 (ii) For Unsurface Toad :- Rs. 9.04 Per t per K.M
 (iii) For Kutcha Road :- Rs. 18.19 Per t per K.M

1 CARRIAGE COST OF BAMBOO 62 MM TO 75 MM OF 6 To 8 M LONG

Lead as per Quarry Chart :- 5 P + 5 K

$$\text{Haulage Cost} = \frac{8}{3.00} \times [(7.52 \times 5.00) + (18.19 \times 5.00)] = 206.09$$

Loading & Unloading =

$$\begin{aligned} &= \frac{2224.00}{2430.09} \\ \text{Total per \% Nos} &= \\ \text{Total per m} &= 3.47 \end{aligned}$$

2 CARRIAGE COST OF STONE BOULDER

Lead as per Quarry Chart :- 180 P + 0 K

$$\text{Haulage Cost} = \frac{8}{4.80} \times [(7.52 \times 180.00) + (18.19 \times 0.00)] = 2256.00$$

Loading & Unloading =

$$= 196.13$$

$$\text{Total per M}^3 = 2452.13$$

3 CARRIAGE COST OF GSB Material

Lead as per Quarry Chart :- 180 P + 0 K

$$\text{Haulage Cost} = \frac{8}{4.99} \times [(7.52 \times 180.00) + (18.19 \times 0.00)] = 2170.10$$

Loading & Unloading =

$$= 196.13$$

$$\text{Total per M}^3 = 2366.23$$

4 CARRIAGE COST OF HUME PIPE (1000 MM DIA)

Lead as per Quarry Chart :- 55 P + 0 K

$$\text{Haulage Cost} = \frac{8}{22.5} \times [(7.52 \times 55.00) + (18.19 \times 0.00)] = 330.88$$

Loading & Unloading =

$$\begin{aligned} &= \frac{76.58}{407.46} \\ \text{Total per M} &= \end{aligned}$$

5 CARRIAGE COST OF HUME PIPE (600 MM DIA)

Lead as per Quarry Chart :- 55 P + 0 K

$$\text{Haulage Cost} = \frac{8}{52.50} \times [(7.52 \times 55.00) + (18.19 \times 0.00)] = 63.02$$

Loading & Unloading =

$$\begin{aligned} &= \frac{32.82}{95.84} \\ \text{Total per M} &= \end{aligned}$$

Detailed Estimate

Name of Work - Restoration/Mottrable of Road from Katsa School to Rajpur

Sl.No.	Item	S No	Length	Width	Avg.H/D	Qty	Unit	Rate	Amount
1	Providing laying and spreading brick bats in road ditches all complete as per approved design, specification and direction of E/I.	1	30	3.96	2.5	297			
		2	15	3.96	2.6	154.44			
		3	14	3.96	2.63	145.81			
		4	16	3.95	1.6	101			
		Total				698.24	Cum	1909.87	1333548.00
2	Filling and spreading local sand over brick bats as per drawing and technical specification Clause 303.5.9	1	30	3.96	0.1	11.88			
		2	15	3.96	0.1	5.94			
		3	14	3.96	0.1	5.54			
		4	16	3.95	0.1	6.32	0		
		Total				29.68	Cum	479.27	14225.00
TOTAL								1347773.00	

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2) Haulage Charge By 3.60 t Tractor capacity

- (i) For Surface Road :- Rs. 18.70 Per t per K.M
(ii) For Unsurface Toad :- Rs. 23.30 Per t per K.M
(iii) For Kutcha Road :- Rs. 29.20 Per t per K.M

1 CARRIAGE COST OF BRICK BAT

Lead as per Quarry Chart :- 7 P + 1 K

$$\text{Haulage Cost} = \frac{3.60}{2.25} \times [(18.70 \times 7.00) + (29.20 \times 1.00)] = 256.16$$

$$\text{Unloading} = \quad \quad \quad = \quad \quad \quad = \quad \quad \quad 65.38$$

$$\text{Total per 1000 Nos.} = \quad \quad \quad 321.54$$

2 CARRIAGE COST OF LOCAL SAND

Lead as per Quarry Chart :- 2 P + 1 K

$$\text{Haulage Cost} = \frac{3.60}{2.25} \times [(18.70 \times 2.00) + (29.20 \times 1.00)] = 106.56$$

$$\text{Unloading} = \quad \quad \quad = \quad \quad \quad = \quad \quad \quad 40.81$$

$$\text{Total per M}^3 = \quad \quad \quad 147.37$$

3 CARRIAGE COST OF STEEL

Lead as per Quarry Chart :- 5 P + 0 K

$$\text{Haulage Cost} = \frac{3.60}{3.60} \times [(18.70 \times 5.00) + (29.20 \times 0.00)] = 93.50$$

$$\text{Loading \& Unloading} = \quad \quad \quad = \quad \quad \quad = \quad \quad \quad 325.46$$

$$\text{Total per Mt} = \quad \quad \quad 418.96$$


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RWD
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R.W.D
Marhaura


E.E.
R.W.D
Marhaura

Name of work :-

SUMMARY OF CARRIAGE COST OF MATERIAL

Restoration/Mottrable of Road from Marhaura to Jemapur

KatSa school to Rajpur

S.I No.	Name of material	Unit	Source	Mode of Transport	Carriage Charge by Road	Total Carriage up to site
1	2	3	4	5	7	8
1	Bricks Bats	per m ³	Local Kiln	By Road	321.54	321.54
2	Fine sand	per m ³	Local source	By Road	147.37	147.37
3	Steel	per mt	Local	By Road	418.96	418.96
4	Boulder	per m ³	Sheikhpura	By Road	2452.13	2452.13
5	Stone metal <50 mm	per m ³	Sheikhpura	By Road	2366.23	2366.23
6	Hume pipe (1000 mm dia)	Per metre	Hajipur	By Road	407.46	407.46
7	Hume pipe (600 mm dia)	Per metre	Hajipur	By Road	95.84	95.84
8	Bamboo of 62 to 75 mm dia	Per metre	Local	By Road	3.47	3.47

31/02/20

RWD

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Marhaura

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Marhaura

Marhaura

FDR Analysis

r. b.	Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
1	Loading and Unloading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by Manual Means				
(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	day	0.02	305.00	6.10
	Mazdoor (Unskilled)	day	0.50	287.00	143.50
b)	Machinery				
	Truck	hour	0.50	934.30	467.15
c)	Overheads on (a+b)	=@	6%		37.01
d)	Contractor's profit on (a+b+c)	=@	10%		65.38
	Cost for 5.5 cum = a+b+c+d				719.13
	Rate per cum = (a+b+c+d)/5.5				130.75
(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	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 on (a+b)	=@	6%		18.50
d)	Contractor's profit on (a+b+c)	=@	10%		32.69
	Cost for 5.5 cum = a+b+c+d				359.57
	Rate per cum = (a+b+c+d)/5.5				65.38
(iii)	Unloading 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	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 on (a+b)	=@	6%		18.50
d)	Contractor's profit on (a+b+c)	=@	10%		32.69
	Cost for 5.5 cum = a+b+c+d				359.57
	Rate per cum = (a+b+c+d)/5.5				65.38

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(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

Mazdoor (Unskilled)

day

0.005

305.00

1.53

day

0.125

287.00

35.88

b) Machinery

Truck

hour

0.166

934.30

155.09

c) Overheads on (a+b)

=@

6%

11.55

d) Contractor's profit on (a+b+c)

=@

10%

20.40

Cost for 5.5 cum = a+b+c+d

224.45

Rate per cum = (a+b+c+d)/5.5

40.81

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

Mazdoor (Unskilled)

day

0.01

305.00

3.05

day

0.25

287.00

71.75

b) Machinery

Truck

hour

0.33

934.30

308.32

c) Overheads on (a+b)

=@

6%

22.99

d) Contractor's profit on (a+b+c)

=@

10%

40.61

Cost for 2000 Nos. = a+b+c+d

446.72

Rate for 1000 bricks = (a+b+c+d)/2

223.36

(ii) Unloading and Stacking of Bricks by manual means including a lead upto 30 m

Unit = 1000 Nos.

Taking output = 2000 Nos.

a) Labour

Mate

Mazdoor (Unskilled)

day

0.01

305.00

3.05

day

0.25

287.00

71.75

b) Machinery

Truck

hour

0.33

934.30

308.32

c) Overheads on (a+b)

=@

6%

22.99

d) Contractor's profit on (a+b+c)

=@

10%

40.61

Cost for 2000 Nos. = a+b+c+d

446.72

Rate for 1000 bricks = (a+b+c+d)/2

223.36

1.5 Loading and Unloading of Structural Steel and Steel Bars by manual means

(i) Loading of Structural Steel, Steel Bars by manual means including a lead upto 30 m

Unit = t

Taking output = 10 t

a) Labour

Mate

day

0.07

305.00

21.35

Mazdoor (Unskilled)

day

1.80

287.00

516.60

b) Machinery

Truck

hour

1.00

934.30

934.30

c) Overheads on (a+b)

=@

6%

88.34

d) Contractor's profit on (a+b+c)

=@

10%

156.06

Cost for 10 t = a+b+c+d

1716.64

Rate per tonnes = (a+b+c+d)/10

171.66

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Name of Road $\Rightarrow$ FDR
BLOCK - Katsa school to Rajapur
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