



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

PLAN HEAD- FDR(2245) YEAR 2020-21

DISTRICT :- East Champaran

BLOCK :- Phenhara

Estimate for Repair of Road breaches
(Damaged by Flood) for Motorability in
DEOKULIYA ROAD TO MARPAKOTHI.

ESTIMATED COST - ~~2.19~~ Lacs
2.122

SUBMITTED BY:
EXECUTIVE ENGINEER,
RWD WORKS DIVISION,
PAKRIDAYAL

Name of Road:- Deokuliya Road To Marpa Kothi.

Length of Road:- 2.543 K.M

Name of Block:- Phenhara

Project Head:- M.M.G.S.Y (W.B)

Package No:-

Estimated Cost:- 2.19 Lacs

This estimate has been prepared for temporary restoration of the above road damaged due to heavy rain/ Flood - 2020 under instruction of Rural Works Department vide letter no- 2789 dated. 21.08.2020. Brick Bats/ Local Sand Bag / Humepipe / Bamboo Pile / Soil has been provided as per need of the above damaged road. This road is under Construction/maintenance / out of maintenance.

All items of this estimate has been taken from approved current schedule rate of works circle Motihari. This estimate is submitted for technical approval /Sanction.

W
10.12.2020

J.E

W
10/12/2020

A.E

W
10/12/2020

E.E

R.W.D.(w) Div. Pakridayal.

of Work:- Estimate for Repair of Road breaches (Damaged by Flood) for Motorability in DEOKULIYA ROAD TO MARPAKOTHI.

1 - 2245 Length- 2.543 K.M

Sl No.	Item No.	Name of Item	unit	No	Length	Width	Height	Qty.	Rate	Amount
1		Labour for laying dry graded Jhama Khoa or stone filter under Brick Pitching or Boulder Pitching in slope or apron including light ramming etc. all complete as per approved design, specification and direction of E/I.	cum		As Per Appendix I			98.8	2216-20 2147-40	218960.56 212163710
TOTAL (in Re.)									219000.00	218960.56

Say Re 2,12,2002

4/10.12.2020
Junior Engineer,
Rural Works Department,
Works Section, Phenhara

10/12/2020
Assistant Engineer,
Rural Works Department,
Works Sub Division, Phenhara

10/12/2020
Executive Engineer,
Rural Works Department,
Works Division, Pakridayal

Post Facto -

TAT is accorded for Rs. 2,12,2002

(.....crore.....Two lacs.....Twelve Thousand

Two hundred) only.

28.12.20
S.E. (R.W.D.)
works Circle
Motihari

29/12/20

ne of Work:-

Estimate for Repair of Road breaches (Damaged by Flood) for Motorability in
DEOKULIYA ROAD TO MARPAKOTHI.

Appendix - I

Measurement for surfacing the Breach with Brick Bats

Sl. No.	Chainage	Length (M)	Avg. Width In Meter	Avg. Depth In Meter	Quantity (Cum)
1.00	1.00 - 1.400	50.000	3.800	0.200	38.000
2.00	1.400 - 1.500	80.000	3.800	0.200	60.800
				Total	98.800

WJ
10.12.2020

Junior Engineer
Rural Works Department,
Works Section, Phenhara

Qud
10/12/20

Asistant Engineer
Rural Works Department,
Works Sub Division, Phenhara

Executive Engineer,
Rural Works Department,
Works Division, Pakridayal

BRICK BATS PITCHING MANUAL MEANS

6.1 WRD Bihar Labour for laying dry graded Jhama Khoa or stone filter under Brick Pitching or Boulder Pitching in slope or apron including light ramming etc. all complete as per approved design, specification and direction of E/I.

Unit :- Per Cum				
Taking Output = 2.832 Cum				
Unskilled Mazdoor	Nos.	3	287.00	861.00
Add 6% Overhead Charges				51.66
Rate for 2.832 Cum				912.66
Rate per Cum (Rs.) -				383.15

1.4 RCD Cost of Haulage Excluding Loading and Unloading

Haulage of materials by Tractor excluding cost of loading, unloading and stacking.

Unit = t.km

Taking output 3.60 tonnes load and lead 10 km = 36.0 t.km

(i) Surfaced Road

Speed with load : 15 km / hour.

Speed while Returning empty :25 km / hour.

a) Machinery.

Tractor 3.6 tonne capacity

Time taken for onward haulage with load	hour	0.667	549.10	366.25
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Time taken for empty return trip.	hour	0.400	549.10	219.64
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b) Overhead charges @ 0.06 on (a)				35.15
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cost for 36 t km = a+b+c				621.04
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Rate per t.km = (a+b+c)/36				17.25
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Say Rs. -				17.25
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(ii) Unsurfaced Graveled Road

Speed with load: 12 km / hour

Speed for empty return trip :20 km / hour

a) Machinery

Tractor 3.6 tonnes capacity

Time taken for onward haulage with load	hour	0.833	549.10	457.40
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Time taken for empty return trip hour 0.50	hour	0.500	549.10	274.55
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b) Overhead charges @ 0.06 on (a)				43.92
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Cost for 36 t .km = a+b+c				775.87
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Rate per t.Km = (a+b+c)/36				21.55
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Say Rs. -				21.55
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Loading and Unloading of Stone Boulder/ Stone aggregates/Sand /Kanker/Moorum				
Placing Tractor at loading point, loading with frontloader, dumping, turning for return trip, excluding for haulage and return trip				
Unit = cum				
Taking output = 2.25 cum				
Time required for				
i) Positioning of Tractor at loading point		1 Min		
ii) Loading by front end loader 1 cum bucket capacity @ 25 cum per hour		5 Min		
iii) Maneuvering, reversing, dumping and turning for return		0 Min		
iv) Waiting time, unforeseen contingencies etc		0 Min		
Total		6 Min		
a) Labour				
Mate	day	0.03	305.00	9.15
Mazdoor for loading and unloading	day	0.72	287.00	206.64
b) Machinery				
Tractor 3.60 tonnes capacity	hour	0.1	549.10	54.91
Front end-loader 1 cum bucket capacity @ 25 cum/hour	hour	0.083	1403.00	116.45
c) Overhead charges @ 0.06 on (a+b)				23.23
Cost for 2.25 cum = a+b+c+d				410.38
Rate per cum = (a+b+c+d)/ 2.25				182.39
Note:- Unloading will be done manually.				
1. Supplying for Brick Bats (with OH)				
A. Basic Rate of Brick Bats	Per Cum		1017.00	1017.00
Add overhed Charges		6%		61.02
Total -				1078.02
Surface Lead	KM	7		
Unsurface Lead	KM	1		
Factor (3.6/2.25)	Cum	1.60		
B. Carriage (with OH)				
(1.6 x 7 x 17.25) + (1.6 x 1 x 21.55) + 182.39				410.07
C. Cost of Labour for Pitching and Light Ramming as per WRD SOR 6.6.1 (with OH)				383.15
Total (A+B+C) -				1871.24
Add 1% Labour Cess (A+B+C)				18.71
Add 12% GST (A+B+C)				224.55
Add 10% cost of Material for Seigniorage Fee		1	101.70	101.70
Total Cost per Cum			Rs.-	2216.20