



ग्रामीण कार्य विभाग

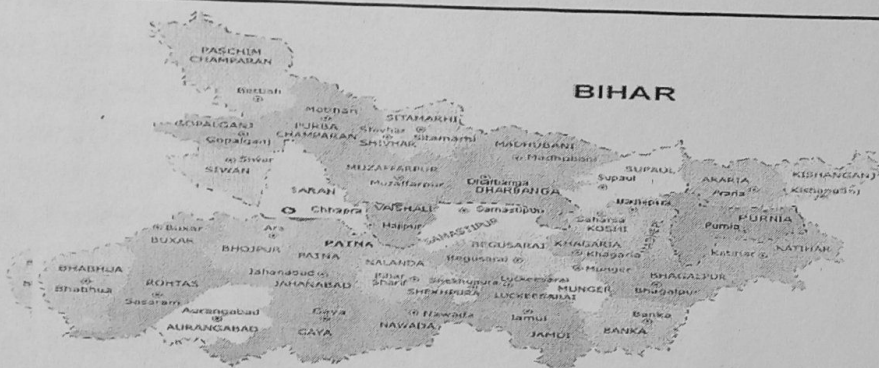
Rural Works Department, Govt of Bihar

BIHAR RURAL ROADS PROJECT

Govt. of Bihar

FDR(Motorable)

Estimate for Motorable of Road from T04 To Marachi Beldari Madwa Hasanpur REO Road in Nalanda District.



Name of the Road :-

^{to}
T04 To Marachi Beldari Madwa Hasanpur REO Road

DISTRICT	:	NALANDA	
DIVISION	:	HILSA	
BLOCK	:	HILSA	
TOTAL COST OF CONSTRUCTION	:	27385	Lac
TOTAL COST OF PROJECT	:	27385	Lac
SUBMITTED BY			
RURAL WORKS DEPARTMENT			
WORKS DIVISION-HILSA			

21.200 *he*

Kam
25-10-2021
J-E

27/10/21
A.6

INSPECTION REPORT FOR FLOOD DAMAGE WORK

Date :

1. Name of PIUS :- R.W.D. HILSA (E.E)
2. Name of Block/Road :- HILSA

A. For Road : *Tot to Marachi Beldani Maolwa Hasanpur Red Road*

1. Damage Location/Change :-
2. Damage Length :- 81.5 m
3. Nature of Damage :-
4. Details of Restoration Works :-
 - i. Material Being used in Restoration works :- *Brick bats*
 - ii. Equipment's / Tools being used in Restoration works :- *Tractor, JCB, Roller*
 - iii. Procedure taken up in restoration works :-
 - iv. Restored Length :- 81.5 m

B. For Bridge : *N/A*

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

C. Requirement of New CD/Bridge : *N/A*

- i. Name of Road :-
- ii. Location Chainage :-
- iii. Type of CD work/Length required :-

- Upload one photograph of damaged portion if available
-
- Attach minimum two photograph (during restoration & after restoration) photographs should be Geotags and at least one photo be captured in selfie mode.

Signature of

Ram
09/12/21
JE

9/12/21
AE

EE

09/12/21
Executive Engineer
Rural Works Department
Works Division, Rajgarh

Measurements:

① CH - 280 M

$$R/S = 9.5 \times \frac{1.80 + 1.20 + 1.60}{3} \times 1.2 = 9.5 \times 1.533 \times 1.2 = 17.48 \text{ m}^3$$

② CH - 390 M

$$R/S = 28.80 \times \frac{2.8 + 4.70 + 4.20 + 3.40 + 2.20 + 2.40 + 2.70}{7} \times \frac{2.20 + 2.10 + 2.30}{3}$$

$$= 28.80 \times 3.27 \times 2.2 = 207.187 \text{ m}^3$$

③ CH - 500 M

$$\begin{matrix} 29.30 & \times & \frac{3.5 + 4.10}{2} & \times & \frac{7.70 + 7.8 + 7.90}{3} \\ (L) & & 2(D) & & W \end{matrix}$$

$$= 29.30 \times 7.8 \times 3.8 \text{ m} = 868.452$$

④ CH - 600 M

$$L/S = 5.2 \times \frac{6 + 3.5}{2} \times \frac{0.90 + 1.20}{2}$$

$$= 5.2 \times 4.75 \times 1.05 = 25.935 \text{ m}^3$$

$$R/S = 5.60 \times \frac{1.20 + 0.90}{2} \times \frac{1.8 + 1.10 + 1.60}{3}$$

$$= 5.60 \times 1.05 \times 1.5 \text{ m} = 8.82 \text{ m}^3$$

$$R/S = 5.80 \times \frac{4.80 + 4.50 + 4.10}{3} \times \frac{0.9 + 1.20}{2}$$

$$= 5.80 \times 4.433 \times 1.05 = 26.998 \text{ m}^3$$

CH - 640 M

$$R/S = 3.30 \times \frac{1.40 + 1.20}{2} \times \frac{1.30 + 1.10}{2}$$

$$= 3.30 \times 1.3 \times 1.2 \text{ m} = 5.148 \text{ m}^3$$

CH - 670

$$R/S = 3.50 \times \frac{2.10 + 1.90 + 1.80}{3} \times \frac{1.5 + 1.60 + 1.40}{3}$$

$$= 3.50 \times 1.933 \times 1.5 = 2.8995 \text{ m}^3$$

Done
09/11/21

SUMMARY OF COST ESTIMATE FOR THE PROJECT

NAME OF ROAD : T04 To Marachi Beldari Madwa Hasanpur REO Road

DISTRICT NALANDA
BLOCK HILSA
DIVISION HILSA

Sl No.	DESCRIPTION	AMOUNT (LAKHS)
1	BRICK BATS	2119.970 = 2119.970
		2738515.000
	Total	2738515.000
	TOTAL COST IN LACS =	27.385
	TOTAL COST OF PROJECT IN LACS =	27.385

Kamran
25/10/2024
JE
RWD

Pd
27/10/24
AE
RWD

21.200
27/10
EE
RWD

Technically approved for Rs.....

(Rupees.....)

Condition and direction laid down in attached
technical notes with DPR is to be followed Strictly

S. E.
RWD
Work Circle Nalanda

Technically Sanctioned for Rs...2,12,00,000.00
(Rupees...Twenty One Lacs Twenty
...Thousand only...)
Condition and direction in attached
technical notes will be binding on the contractor.

Amur
24/12/2021

S. E.

RWD

Work Circle Nalanda

22/12/2021

Name of Road T04 To Marachi Beldari Madwa Hasanpur REO Road
Block HILSA
District NALANDA

Calculation of Brick Bats

Sl.No	Lenth (m)	Width(m)	Thickness (m)	Qty. (Cum)
1	3.30	1.300	1.200	5.150 ✓
2	3.50	1.933	1.500	10.150 ✓
3	5.60	1.050	1.500	8.820 ✓
4	5.80 5.20	4.500 4.75	1.050	27.440 25.935 ✓
5	29.30	7.800	3.800	868.450 ✓
6	28.80	3.271	2.200	207.250 ✓
7	9.80 5.80	1.767 4.433	1.750 1.05	30.300 26.998 ✓
8	28.10	2.300	1.867	120.660 →
9	9.50	1.533	1.200	17.480 ✓
Total				1295.670 1170.233 m ³

Ram
25/10/2021
J.E.

Ad
27/10/21
A.S

R
27/10
E.E

Amth
09/11/21
E.E.
R.W.D. Raut S.H.

Quantity after deduction of voids $1170.233 \text{ m}^3 \times \frac{12}{14} = 1003.058 \text{ m}^3$

Ad
9/11/21
A.S

Ram
09/12/2021
J.E.

RWD

WD

RWD
LE

Bats

Carriage Cost & Lead in Km

Analysis for Carriage

NALANDA

District:-

TO4 To Marachi Beldari Madwa Hasanpur REO Road
NATLANDA
Analysis for Carriage by Road (By Tractor)

SDB Sl. No.	MOR D Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount (in Rs)
1.1 RCD		Loading and Unloading of brick bats with tractor				
		Unit=cum				
		Taking output= 2.25 cum				
		Time required for				
		a) Positioning of tipper at loading point		1 MIN		
		b) Loading by front end loader 1 cum bucket capacity @ 25 cum per hour		5 Min		
		c) Maneuvering, reversing, dumping and turning for return		0 Min		
		d) Waiting time, unforeseen contingencies etc		6 Min		
		Total				
		a) Labour	day	0.03	415	12.450
		Mate	day	0.72	328	236.160
		Mazdoor for loading and unloading				
		b) Machinery	hour	0.1	525	52.500
		Tractor 3.60 tonne capacity	hour	0.083	1650	136.950
		Front end loader 1cum bucket capacity @25 cum/hour				
		c) Overhead charges @ 0.06 on (a+b)				26.284
		d) contractor profit @ 0.00n (a+b+c)				0.000
		Cost for 2.25 cum= (a+b+c+d)				464.344
		Rate per cum= (a+b+c+d)/2.25				206.375
	Note	Unloading will be done manually				
1.4 RCD		Cost of Haulage Excluding Loading and Unloading				
		Haulage of material 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)	Surface 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	707.90	472.169
		Time taken for empty return trip.	hour	0.4	707.90	283.160
		Total				755.329
		b) Add overhead charges @0.06				45.320
		c) Add contractor profit @0.0				0.000
		cost for 36 t.km = a+b+c				800.649
		Rate per t.km = (a+b+c)/36				22.240
	ii)	Unsurface Graveled Road/ Katcha				
		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	707.90	589.681
		Time taken for empty return trip	hour	0.5	707.90	353.950
		Total				943.631
		b) Add overhead charges @0.06				56.618
		c) Add contractor profit @0.0				0.000
		Cost for 36 t.km = a+b+c				1000.249
		Rate per t.km = (a+b+c)/36				27.785