



# ग्रामीण कार्य विभाग

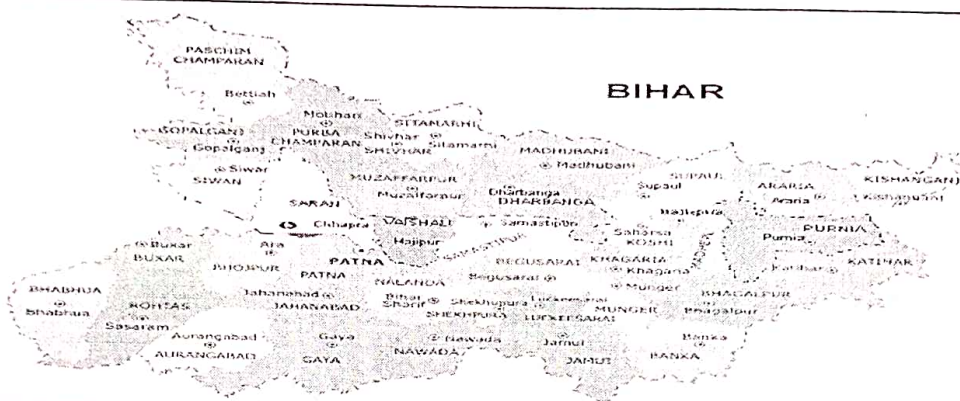
Rural Works Department, Govt of Bihar

## BIHAR RURAL ROADS PROJECT

Govt. of Bihar

### FDR(Motorable)

Estimate for Motorable of Road from T03 Harvansh Pur Road To Shohra Pul Chhakan Tola Via Durga Bigha in Nalanda District.



Name of the Road :-

T03 Harvansh Pur Road To Shohra Pul Chhakan Tola Via Durga Bigha

|                            |   |                   |     |
|----------------------------|---|-------------------|-----|
| DISTRICT                   | : | NALANDA           |     |
| DIVISION                   | : | HILSA             |     |
| BLOCK                      | : | HILSA             |     |
| TOTAL COST OF CONSTRUCTION | : | 24.718            | Lac |
| TOTAL COST OF PROJECT      | : | <del>24.718</del> | Lac |

SUBMITTED BY  
RURAL WORKS DEPARTMENT  
WORKS DIVISION-HILSA

10.872 lce

Ram  
25/10/2011  
J.F.

27/10/21  
A.E.

# 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 : T03 Haerwansh Pura Road To Shohra Pura Chhakan Tola  
Durga Bigha

1. Damage Location/Change :-
2. Damage Length :- 383.90 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 trolley, I.C.B., Roller
  - iii. Procedure taken up in restoration works :- Mechanically and manually
  - iv. Restored Length :-

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 :-

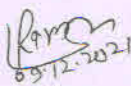
C. Requirement of New CD/Bridge : N.A.

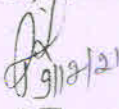
- i. Name of Road :-
- ii. Location Chainage :-
- iii. Type of CD work/Length required :-

- 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

  
JE

  
AE

EE

  
Executive Engineer  
Rural Works Department  
Works Division, Rajgir

The work is satisfactory

## SUMMARY OF COST ESTIMATE FOR THE PROJECT

NAME OF ROAD : T03 Harvansh Pur Road To Shohra Pul Chhakan Tola Via  
 DISTRICT Durga Bigha  
 BLOCK NALANDA  
 DIVISION HILSA  
 HILSA

| Sl. No. | DESCRIPTION                     | AMOUNT (LAKHS)     |
|---------|---------------------------------|--------------------|
| 1       | BRICK BATS                      | 1087216 = 108.7216 |
|         |                                 | 2471758.000        |
|         | Total                           | 2471758.000        |
|         | TOTAL COST IN LACS =            | 24.718             |
|         | TOTAL COST OF PROJECT IN LACS = | 24.718             |

*Rama*  
 25/10/2021  
 JE  
 RWD

*Ad*  
 27/10/21  
 AE  
 RWD

*R* 10.872 lacs  
 27/10  
 EE  
 RWD

Technically approved for Rs.....  
 (Rupees.....)

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

S. E.  
 RWD  
 Work Circle Nalanda

Technically Sanctioned for Rs. 10,87,200/-  
(Rupees Ten Lacs Eighty Seven Thousand  
Two Hundred only)  
Condition and direction attached  
technical notes with Bill only.

*Arun*  
24/12/2021

RWD

Work Circle Nalanda

22/12/2021

**Estimate for Motorable of Road from T03 Harvansh Pur Road To Shohra Pul Chhakan Tola Via Durga Bigha in Nalanda District.**

| Sl. No. | Name of Road | T03 Harvansh Pur Road To Shohra Pul Chhakan Tola Via Durga Bigha |                                                                                                                                                                 |      |     |        |       |        |                                |                               | AMOUNT<br>(in Rs.)                  |
|---------|--------------|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|--------|-------|--------|--------------------------------|-------------------------------|-------------------------------------|
|         |              |                                                                  | Description                                                                                                                                                     | Unit | NOS | LENGTH | WIDTH | HEIGHT | QUANTITY                       | RATE                          |                                     |
| 1       |              |                                                                  | SUB HEAD : EARTHWORK, BRICKS BATS, SAND FILLING<br>Construction of Bricks Bats                                                                                  |      |     |        |       |        |                                |                               |                                     |
|         |              |                                                                  | Supplying Brick bats with carriage at site including labour cess , GST and seignorance fee<br>(excluding over head and CP)                                      |      |     |        |       |        |                                |                               |                                     |
|         |              |                                                                  |                                                                                                                                                                 | cum  |     |        |       |        | 514.441<br><del>1169.460</del> | 514.441<br><del>1201.00</del> | 617841/-<br><del>14,04,521.00</del> |
| 2       |              |                                                                  | Carriage for Brick bats including labour cess & GST (excluding over head and CP)                                                                                | No   |     |        |       |        | 514.441<br><del>1169.460</del> | 514.441<br><del>564.910</del> | 290612/-<br><del>6,60,639.00</del>  |
| 3       |              |                                                                  | Supplying unskilled labour for Brick bats and laying 600 mm dia for spreading and levelling brick bats including labour cess & GST (excluding over head and CP) | No   |     |        |       |        | 545/-<br><del>1,239.628</del>  | 328.00                        | 178760/-<br><del>4,06,598.00</del>  |
|         |              |                                                                  |                                                                                                                                                                 |      |     |        |       |        |                                |                               | 24,71,758.00                        |

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AE  
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EE  
RWD

10,87,216/-

Name of Road T03 Harvansh Pur Road To Shohra Pul Chhakan Tola Via Durga Bigha  
Block HILSA  
District NALANDA

### Calculation of Brick Bats

| Sl.No | Lenth (m)   | Width(m)    | Thickness (m) | Qty. (Cum)    |
|-------|-------------|-------------|---------------|---------------|
| 1     | 16.50 12.50 | 1.300 0.85  | 1.125 1.30    | 24.130 73.813 |
| 2     | 9.00 ✓      | 1.175 0.833 | 1.325 1.35    | 14.040 10.125 |
| 3     | 4.60 2.10   | 1.400 1.30  | 0.900 0.50    | 2.020 2.180   |
| 4     | 2.10 6.0    | 1.400 0.90  | 0.800 1.35    | 2.360 7.20    |
| 5     | 3.50 4.60   | 1.533 1.25  | 1.600 0.90    | 8.580 5.175   |
| 6     | 4.10 6.80   | 1.233 2.40  | 1.133 1.0     | 5.730 16.32   |
| 7     | 1.50 7.20   | 1.500 2.35  | 1.100 1.35    | 2.400 22.802  |
| 8     | 1.50 4.50   | 1.500 2.40  | 1.000 0.80    | 2.250 8.640   |
| 9     | 1.80 4.50   | 1.200 2.05  | 1.000 ✓       | 2.160 9.225   |
| 10    | 6.20 4.0    | 2.433 2.70  | 0.950 0.50    | 14.330 5.40   |
| 11    | 2.10 8.0    | 1.500 2.233 | 1.200 1.233   | 3.780 22.026  |
| 12    | 2.20 5.10   | 1.600 0.80  | 1.500 0.20    | 5.280 0.816   |
| 13    | 7.50 3.0    | 2.525 1.60  | 1.200 1.50    | 22.730 7.20   |
| 14    | 4.50 3.0    | 3.200 1.40  | 1.000 0.50    | 14.400 2.10   |
| 15    | 1.00 2.80   | 1.000 2.0   | 1.000 0.50    | 1.000 2.80    |
| 16    | 4.50 15.0   | 3.100 10.75 | 1.200 0.50    | 16.740 14.812 |
| 17    | 5.50 9.30   | 3.467 0.733 | 0.900 1.05    | 47.160 7.157  |
| 18    | 2.10 3.20   | 1.500 1.10  | 0.300 0.50    | 0.050 1.760   |
| 19    | 8.20 8.0    | 2.700 1.266 | 0.767 0.50    | 16.980 5.066  |
| 20    | 4.20 13.0   | 1.333 2.266 | 0.900 0.60    | 5.040 17.639  |
| 21    | 3.10 6.80   | 2.100 1.20  | 1.100 0.75    | 7.160 6.12    |
| 22    | 2.90 15.0   | 1.800 1.633 | 1.200 0.633   | 6.610 15.505  |
| 23    | 2.20 3.20   | 1.400 2.050 | 0.300 1.75    | 0.920 11.480  |
| 24    | 1.50 3.0    | 0.900 1.40  | 0.300 1.50    | 0.410 6.30    |
| 25    | 3.50 9.10   | 2.600 1.80  | 0.900 0.50    | 8.190 ✓       |
| 26    | 16.10 3.70  | 2.240 2.20  | 0.925 0.50    | 33.360 4.07   |
| 27    | 9.20 4.10   | 1.567 3.15  | 1.500 0.50    | 21.620 6.457  |
| 28    | 4.50 3.20   | 2.000 1.50  | 1.100 0.50    | 9.000 2.40    |
| 29    | 7.50 30.0   | 2.233 2.071 | 0.867 0.50    | 14.520 31.05  |
| 30    | 1.10 4.50   | 1.000 1.60  | 0.900 0.50    | 0.990 3.60    |
| 31    | 20.70 53.0  | 2.475 1.118 | 1.275 1.45    | 65.320 85.918 |
| 32    | 14.30 14.50 | 1.867 1.90  | 1.233 0.90    | 34.680 29.795 |
| 33    | 3.30 8.60   | 2.200 2.33  | 1.800 0.50    | 13.070 10.033 |
| 34    | 3.50 ✓      | 2.500 1.05  | 1.600 0.50    | 14.000 1.837  |
| 35    | 10.10 9.50  | 2.033 1.0   | 0.825 1.0     | 16.940 9.50   |
| 36    | 4.50 59.50  | 2.500 1.145 | 1.100 1.225   | 12.380 83.456 |
| 37    | 2.80 9.0    | 1.900 1.50  | 1.100 0.30    | 5.860 4.050   |
| 38    | 2.30 4.50   | 1.400 1.30  | 1.300 0.30    | 4.190 1.755   |
| 39    | 4.50 7.0    | 3.600 0.95  | 0.650 0.30    | 10.530 1.995  |

2069

C.O. Qty = 500.936 m<sup>3</sup>

BL 500.936 m<sup>3</sup>

|    |           |            |           |                                |
|----|-----------|------------|-----------|--------------------------------|
| 40 | 3.804.10  | 2.2503.66  | 1.0502.50 | -8.98036.90                    |
| 41 | 30.505.70 | 2.5503.60  | 4.1331.0  | 88.12020.57                    |
| 42 | 4.90-6.30 | 2.2503.430 | 0.9331.50 | -10.29032.444                  |
| 43 | 44.706.20 | 2.4001.833 | 1.0330.50 | -36.4405.683                   |
| 44 | 9.106.0   | 2.8331.230 | 1.4000.50 | -36.0903.699                   |
| 45 | 55.00     | 1.475      | 1.425     | 115.600                        |
| 46 | 4.10      | 1.500      | 1.200     | 7.380                          |
| 47 | 8.80      | 1.833      | 0.933     | 15.050                         |
| 48 | 3.20      | 1.500      | 1.100     | 5.280                          |
| 49 | 2.40      | 1.000      | 1.200     | 2.880                          |
| 50 | 6.20      | 1.500      | 1.500     | 13.950                         |
| 51 | 60.00     | 1.600      | 1.600     | 153.600                        |
| 52 | 3.20      | 1.167      | 1.367     | 5.100                          |
| 53 | 11.50     | 4.900      | 2.500     | 140.880                        |
| 54 | 5.90      | 4.100      | 1.100     | 26.610                         |
| 55 | 9.50      | 1.633      | 1.500     | 23.270                         |
| 56 | 6.80      | 2.233      | 1.133     | 17.200                         |
|    | 446.5     |            | Total     | 4469.460600.182 m <sup>3</sup> |

Ram  
28/10/2021  
JE

Al  
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A.E

R  
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E.E

Ram  
29/11/21  
E. E.  
R.W.D.  
Rajis.

Quantity after deduction of voids =  $600.182 \text{ m}^3 \times \frac{12}{14} = 514.414 \text{ m}^3$

Al  
9/12/21  
A.E

Ram  
09/12/2021  
JE

# Analysis for Carriage by Road (By Tractor)

Name of Road:-- T03 Harvaush Pur Road To Shohra Pul Chhalkan Tola Via Durga Bigha  
 District:- NALANDA Block :- HILSA

| District: _____ |                  |      |              |                            |   |       |   |         |        |           |      |   |       |                          |                            |       |          |
|-----------------|------------------|------|--------------|----------------------------|---|-------|---|---------|--------|-----------|------|---|-------|--------------------------|----------------------------|-------|----------|
| 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               | Brick bat        | Cum  | Local        | 3.60                       | x | 22.24 | x | 7.00 Km | =      | Rs 249.09 | 3.60 | x | 27.78 | x                        | 1.00 Km                    | =     | Rs 44.46 |
|                 |                  |      |              | 2.25                       |   |       |   |         |        | 2.25      |      |   |       |                          |                            |       |          |

Carriage Including GST and Labour Cess For Brick  
 Bats

*[Signature]*  
 27/10/21  
 AE  
 RWD

564.9096  
*[Signature]*  
 27/10  
 EE  
 RWD

| 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                                                                 |      |          |        |                |
|             |               | i) Positioning of tipper 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                                    |      | 6 Min    |        |                |
|             |               | Total                                                                             |      |          |        |                |
|             |               | a) Labour                                                                         |      |          |        |                |
|             |               | Mate                                                                              | day  | 0.03     | 415    | 12.450         |
|             |               | Mazoor for loading and unloading                                                  | day  | 0.72     | 328    | 236.160        |
|             |               | b) Machinery                                                                      |      |          |        |                |
|             |               | Tractor 3.60 tonne capacity                                                       | hour | 0.1      | 525    | 52.500         |
|             |               | Front end loader 1cum bucket capacity @25 cum/hour                                | hour | 0.083    | 1650   | 136.950        |
|             |               | 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         |