



# ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

## BIHAR RURAL ROADS PROJECT Govt. of Bihar

**FDR : 2024-25**

STATE :- BIHAR

DISTRICT :- Begusarai

BLOCK :- Balia

Mirzapur to PMGSY Road Hasanpur.

### **DETAILED ESTIMATE OF FDR**

TEMPORARY WORK

**TOTAL ESTIMATED COST :-**

428058 = 10  
**RS. ~~424010.810~~**

EXECUTIVE ENGINEER  
R.W.D WORKS DIVISION, BALIA  
BEGUARAI

## Detailed Estimate for FDR

Name of Road:- Mirzapur to PMGSY Hasanpur.

Item No-1 : Supplying laying & Compacting Brick Bat in road-- -----do do all completed job of E/I

| Ch. (M)                      | No. | Length (In M) | Width (In M) |      |           | Depth (In M) |      |            | Quantity (In M3) | Rate    | Amount     |
|------------------------------|-----|---------------|--------------|------|-----------|--------------|------|------------|------------------|---------|------------|
|                              |     |               |              |      | av. Width |              |      | av. Depth. |                  |         |            |
|                              | 1   | 20.40         | 5.20         | 5.00 | 5.10      | 1.80         | 1.90 | 1.85       | 192.47           | 1767.69 | 340227=50  |
|                              |     |               |              |      |           |              |      |            | 192.47           | 1767.69 | 340234.365 |
| Total Estimate Cost          |     |               |              |      |           |              |      |            |                  |         | 340234.37  |
| Add 18% GST                  |     |               |              |      |           |              |      |            |                  |         | 61242.19   |
| S.Fee Brick Bat 192.474@99.4 |     |               |              |      |           |              |      |            |                  |         | 19131.92   |
| Add 1% Labour Cess           |     |               |              |      |           |              |      |            |                  |         | 3402.34    |
| Total Estimate Cost          |     |               |              |      |           |              |      |            |                  |         | 424010.81  |

15/11/24  
JE

15/11/24  
AE

Rr  
25/11/24  
EE  
कार्यपालक अभियन्ता  
ग्रामीण कार्य विभाग  
सर्व प्रमुख अधिकारी

**BOQ**

Abstract of cost

Tender Inviting Authority: Executive Engineer RWD Work Division Balia

Name of Work: Mirzapur to PMGSY Hasanpur.

SCHEDULE OF WORK / ITEM(S)

| Sl.No                               | Description of Work / Item(s)                                                      | Unit | Quantity (In M3) | Rate    | Amount                              |
|-------------------------------------|------------------------------------------------------------------------------------|------|------------------|---------|-------------------------------------|
| 1                                   | Supplying laying & Compacting Brick Bat in road-----do do all completed job of E/I | M    | 192.47           | 1767.69 | <del>340234.3651</del><br>340227=00 |
| Total Estimate Cost                 |                                                                                    |      |                  |         | <del>340234.37</del> 340227=00      |
| Add-18% GST                         |                                                                                    |      |                  |         | <del>61242.19</del>                 |
| S.Fee Brick Bat 192.47@99.4         |                                                                                    |      |                  |         | <del>19131.92</del> 19132=00        |
| Add 1% Labour Cess                  |                                                                                    |      |                  |         | <del>3402.34</del> 3402=00          |
| Total Estimate Cost <u>WST @18%</u> |                                                                                    |      |                  |         | <del>424010.81</del> 65297=00       |

428058=00

Rm/11/15

Supervising Engineer  
Rural Work  
Mirzapur and Hasanpur  
and Hasanpur

SUPERINTENDING ENGINEER  
RURAL WORK  
Mirzapur & Hasanpur

First-facts technically approved for R.428058=00 (Rupees four lakh twenty eight thousand fifty eight) only.

  
Dr. P. S. Pillai  
SUPERINTENDING ENGINEER  
RURAL WORK DEPARTMENT  
WORKS CROU-ASSURANCE

| Sl. No. | SOR Sl. No. | DESCRIPTION                                                                                                                       | Unit  | Quantity | Rate   | Amount in Rs |
|---------|-------------|-----------------------------------------------------------------------------------------------------------------------------------|-------|----------|--------|--------------|
|         |             | BRICK BATS PITCHING MANUAL MEANS                                                                                                  |       |          |        |              |
| 1       | 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 10km = 36.0 t.km                                                                        |       |          |        |              |
|         |             | (i) Surface Road                                                                                                                  |       |          |        |              |
|         |             | Speed with Load: 15 km/hour                                                                                                       |       |          |        |              |
|         |             | Speed while Returning empty: 25km/hour                                                                                            |       |          |        |              |
|         |             | a) Machinery                                                                                                                      |       |          |        |              |
|         |             | Tractor 3.6 tonne capacity                                                                                                        |       |          |        |              |
|         |             | Time taken for onward haulage with load                                                                                           | hour  | 0.667    | 688.00 | 458.89       |
|         |             | Time taken for empty return trip.                                                                                                 | hour  | 0.400    | 688.00 | 275.20       |
|         |             | Cost for 36 t Km=a                                                                                                                |       |          |        | 734.09       |
|         |             | Rate per t.km=(a)/36                                                                                                              |       |          |        | 20.39        |
|         |             | (ii) Katcha Track and Track in River Bed/Nallah Bed and Choe Bed                                                                  |       |          |        |              |
|         |             | Speed with Load:10 km/hour                                                                                                        |       |          |        |              |
|         |             | Speed while Returning empty:15km/hour.                                                                                            |       |          |        |              |
|         |             | a) Machinery                                                                                                                      |       |          |        |              |
|         |             | Tractor 3.6 tonne capacity                                                                                                        |       |          |        |              |
|         |             | Time taken for onward haulage with load                                                                                           | hour  | 1.000    | 688.00 | 688.00       |
|         |             | Time taken for empty return trip.                                                                                                 | hour  | 0.670    | 688.00 | 460.96       |
|         |             | Cost for 36 t Km=a+b                                                                                                              |       |          |        | 1148.96      |
|         |             | Rate per t.km=(a+b)/36                                                                                                            |       |          |        | 31.92        |
| 2       | 1.1 RCD     | Loading and Unloading of Stone Boulder/Stone aggregates/Sand/Kanker/Moorum                                                        |       |          |        |              |
|         |             | Placing Tractor at Loading Point, Loading With frontloader, dumping turning fo return trip, excluding for haulage and return trip |       |          |        |              |
|         |             | Unit = Per Cum                                                                                                                    |       |          |        |              |
|         |             | Takin Output = 2.25 Cum                                                                                                           |       |          |        |              |
|         |             | Time Required for                                                                                                                 |       |          |        |              |
|         |             | i) Positioning of Tractor of loading Point                                                                                        | 1 Min |          |        |              |
|         |             | ii) Loading by Front end loader 1 Cum Bucket Capactiy @ 25 Cum Per hour                                                           | 5 Min |          |        |              |
|         |             | iii) Maneuviring, reversing, dumping and turning for return                                                                       | 0     |          |        |              |
|         |             | iv) Waiting tim, unforeseen contigencies etc                                                                                      | 0     |          |        |              |
|         |             | Total                                                                                                                             | 6 Min |          |        |              |
|         |             | a) Labour                                                                                                                         |       |          |        |              |
|         |             | Mate                                                                                                                              | day   | 0.03     | 419.00 | 12.57        |
|         |             | Mazdoor for loading and unloading                                                                                                 | day   | 0.72     | 395.00 | 284.40       |

|   |                       |                                                                                                                        |         |       |         |         |
|---|-----------------------|------------------------------------------------------------------------------------------------------------------------|---------|-------|---------|---------|
|   |                       | b) Machinery                                                                                                           |         |       |         |         |
|   |                       | Tractor 3.6 tonne capacity                                                                                             | hour    | 0.10  | 688.00  | 68.80   |
|   |                       | Front end-loader 1 cum bucket capacity @ 25 cum/hour                                                                   | hour    | 0.83  | 1432.00 | 118.85  |
|   |                       | Cost for 2.25 cum = (a+b)                                                                                              |         |       |         | 484.62  |
|   |                       | Rate per cum (Rs)                                                                                                      |         |       |         | 215.39  |
|   |                       | (Unloading will be done manually)                                                                                      |         |       |         |         |
| 3 | 6.6.1<br>WRD<br>Bihar | <b>Labour for laying, Spreading, Pitching and light ramming all complete as per specification and Direction of E/I</b> |         |       |         |         |
|   |                       | Unit = Per Cum                                                                                                         |         |       |         |         |
|   |                       | Takin Output = 2.832                                                                                                   |         |       |         |         |
|   |                       | a) Labour                                                                                                              |         |       |         |         |
|   |                       | Mazdoor (Unskilled)                                                                                                    | Nos.    | 2.000 | 395.00  | 790.00  |
|   |                       | Cost for 2.832 cum                                                                                                     |         |       |         | 790.00  |
|   |                       | Rate per cum (Rs)                                                                                                      |         |       |         | 278.95  |
|   |                       | <b>1 Supplying, Filling, Spreading and Light Ramming (Compacting) of Brick Bats at Work Site:-</b>                     |         |       |         |         |
|   |                       | A. Brick Bats                                                                                                          | Per Cum | 1.00  | 994.00  | 994.00  |
|   |                       | B. Carriage Calculation                                                                                                |         |       |         |         |
|   |                       | Surface lead 7 Km, Katcha Lead 1 Km,                                                                                   |         |       |         | 494.74  |
|   |                       | $(3.6/2.25*7*20.39)+(3.6/2.25*1*31.92)+215.39$                                                                         |         |       |         |         |
|   |                       | C. Cost for labour for Pitching, Spreading and Light Ramming                                                           |         |       |         | 278.95  |
|   |                       | As Per WRD SOR 6.6.1                                                                                                   |         |       |         | 1767.69 |
|   |                       | <b>Total (A+B+C)</b>                                                                                                   |         |       |         |         |
|   |                       | [Without (GST+LC+SF)]                                                                                                  |         |       |         | ✓       |