



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
PHENHARA IJORBARA ROAD TO
GOVINDBARA.

ESTIMATED COST -

~~3.72~~ Lacs
3.60

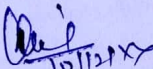
SUBMITTED BY:
EXECUTIVE ENGINEER,
RWD WORKS DIVISION,
PAKRIDAYAL

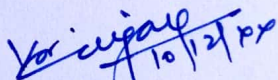
Name of Road:- Phenhara Ijorbara Road To Govindbara.
Length of Road:- 1.15 K.M
Name of Block:- Phenhara
Project Head:- P.M.G.S.Y
Package No:- BR-11R-398
Estimated Cost:- 3.72 Lacs

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 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.

4
10.12.2020
J.E


A.E


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

Name of Work:-

Estimate for Repair of Road breaches (Damaged by Flood) for Motorability in PHENHARA
IJORBARA ROAD TO GOVINDBARA.

Head - 2245

Length- ^{1.15} 4.338 K.M

| SI 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 | | | 167.6325 | 2216.20 | 371507.147 |
| TOTAL (in Re.) | | | | | | | | | 371507.15 | |

Say Re 372000.00

⁴
10.12.2020

Junior Engineer,
Rural Works Department,
Works Section, Phenhara

^{10/12/20}

Assistant Engineer,
Rural Works Department,
Works Sub Division, Phenhara

^{10/12/20}

Executive Engineer,
Rural Works Department,
Works Division, Pakridayal

lost facts
T.A./TS is accorded for Rs. 3,60,000/-
(Three lacs sixty thousand
hundred only.)

²⁵⁻¹²⁻²⁰
S.E. (R.W.D.)
works Circle
Motihari

^{29/12/20}

Name of Work:-

Estimate for Repair of Road breaches (Damaged by Flood) for Motorability in
PHENHARA IJORBARA ROAD TO GOVINDBARA.

| 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 | 0.250-0.350 | 8.700 | 4.500 | 0.900 | 35.235 |
| 2.00 | 0.350-0.900 | 22.500 | 4.100 | 0.750 | 69.188 |
| 3.00 | 0.900-1.200 | 25.800 | 3.500 | 0.700 | 63.210 |
| | | | | Total | 167.633 |

4/10.12.2020

Junior Engineer
Rural Works Department,
Works Section, Phenhara

10/12/20

Asistant Engineer
Rural Works Department,
Works Sub Division, Phenhara

10/12/20

Executive Engineer,
Rural Works Department,
Works Division, Pakridayal

BRICK BATS PITCHING MANUAL MEANS

| | | | | | |
|------------------------|---|------|-------|--------|---------------|
| 6.6.1 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 |
| | Time taken for empty return trip. | hour | 0.400 | 549.10 | 219.64 |
| | b) Overhead charges @ 0.06 on (a) | | | | 35.15 |
| | cost for 36 t km = a+b+c | | | | 621.04 |
| | Rate per t.km = (a+b+c)/36 | | | | 17.25 |
| | Say Rs. - | | | | 17.25 |
| | (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 |
| | Time taken for empty return trip hour 0.50 | hour | 0.500 | 549.10 | 274.55 |
| | b) Overhead charges @ 0.06 on (a) | | | | 43.92 |
| | Cost for 36 t .km = a+b+c | | | | 775.87 |
| | Rate per t.Km = (a+b+c)/36 | | | | 21.55 |
| | Say Rs. - | | | | 21.55 |

| | | | | |
|----------------|---|---------|-------------|----------------|
| 1.1 RCD | 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 |
| | Mazdoor for loading and unloading | day | 0.72 | 287.00 |
| | b) Machinery | | | |
| | Tractor 3.60 tonnes capacity | hour | 0.1 | 549.10 |
| | Front end-loader 1 cum bucket capacity @ 25 cum/hour | hour | 0.083 | 1403.00 |
| | 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 |