

## Inspection Report For Flood Damage Work

Date :

1 Name of PIUs: *E.E, R.W.D, Works Division, Gopalganj-2*2 Name of Block/Road: *BARAULI / SONVARSA TO JHOKHA ROAD***A For Road**1 Damage Location / Chainage: *900 to 1200  
1400 to 1950*2 Damage Length: *62.20 M*3 Nature of Damage: *Benchers Develops*

## 4 Details of Restoration Works:

- i. Material being used in Restoration Works: *Bricks Bats Used.*
- ii Equipments / Tools being used in Restoration Works: *JCB, Tractor and Manpower.*
- iii Procedure taken up in Restoration Works: *As per SOP*
- iv Restored Length: *62.20 M*

**B For Bridge**

1 Damage Location / Chainage:

2 Damage Length:

3 Nature of Damage:

## 4 Details of Restoration Works:

- i. Material being used in Restoration Works :
- ii Equipments / Tools being used in Restoration Works :
- iii Procedure taken up in Restoration Works:
- iv Restored Length :

*Samit Singh.*  
23/09/2020  
JE

*[Signature]*  
23-9-2020  
AE

*[Signature]*  
23/9/20  
EE

*[Signature]*  
23/9/2020  
Signature  
(Name of Inspector)

**Submitted By: -**  
Executive Engineer  
Rural works Division Gopalganj - 2

**Motorable work of Sonvarsa to Jhokha Road**  
**Estimated Cost :- Rs 1896302.00**

**STATE :- BIHAR**  
**DISTRICT :- GOPALGANJ**  
**BLOCK :- BARAULI**

**FLOOD DAMAGED REPAIR (F.D.R)**

**गौरी काली विभाग**

Rural Works Department, Govt of Bihar



**STATEMENT OF CASE****Name of Work :- Motorable work of Sonvarsa to Jhokha****Estimated Cost :- Rs. 1896302.00****Length :- 4.296 KM**

**Description:-** The estimate has been framed under the supervision of Assistant Engineer in accordance with the order of Executive Engineer, RWD Work Division Gopalganj – 2, letter No. -1574 dated 18.08.2020. The part of above mentioned road has been damaged due to heavy rain /flood and due to this reason damage the transportation facility has been obstructed. At the first time flood period damaged the road at a specific location then motorable work completion of damaged part of road again damaged at the same location by the 2nd time the flood. The immediate Motorable work is necessary to public interest /district administration for interest of Election commission. Villagers and transport facility will be benefitted by the completion of this Motorable work.

In the Estimate there has been a provision of repairing the damaged part of the road & making it Motorable by filling of Brickbats etc. In the context of post flood scenario there is still the flow of water which prevails through the damaged part of road.

In this estimate the rate of raw material and labour wages has been prepared after the analysis of new rate. This estimate is as per the specifications. The estimate is submitted for technical and administrative acceptance.

*Savit Singh*  
23/09/20  
J.E.

*[Signature]*  
23-9-20  
A.E.

*[Signature]*  
23/9/20  
E.E.

DETAILED ESTIMATE FOR MOTORABLE WORK

Name of Work :- Motorable work of Sonvansa to Jhokha

Length :- 4.296 KM

| SI No. | Description of Item                                                                                                                                      | Chainage |      | No. | Length (M) | Avg. width (M)      | Avg. Depth (M) | Qty    | Unit               | Unit rate (in Rs.) | Amount                   |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|-----|------------|---------------------|----------------|--------|--------------------|--------------------|--------------------------|
|        |                                                                                                                                                          | From     | To   |     |            |                     |                |        |                    |                    |                          |
| 1      | Providing brick bats filled in ditches including all cost of material and labour in all respect complete the job as per direction of Engineer in Charge. | 900      | 1200 | 1   | 13.50      | $\{(3.8+3.2)/2\}$   | 1.20           | 56.70  | Cum                |                    |                          |
|        |                                                                                                                                                          |          |      | 1   | 5.50       | $\{(3.6+2.4)/2\}$   | 0.80           | 13.20  | Cum                |                    |                          |
|        |                                                                                                                                                          |          |      | 1   | 28.80      | $\{(4.30+3.40)/2\}$ | 5.50           | 609.84 | Cum                |                    |                          |
|        |                                                                                                                                                          | 1400     | 1950 | 1   | 2.40       | 3.10                | 1.15           | 8.58   | Cum                |                    |                          |
|        |                                                                                                                                                          |          |      | 1   | 2.50       | 3.30                | 0.85           | 7.01   | Cum                |                    |                          |
|        |                                                                                                                                                          |          |      | 1   | 12.00      | 3.40                | 1.05           | 42.84  | Cum                |                    |                          |
|        |                                                                                                                                                          |          |      | 1   | 5.20       | 3.50                | 1.80           | 32.76  | Cum                |                    |                          |
|        |                                                                                                                                                          |          |      | 1   | 2.30       | 1.20                | 0.90           | 2.48   | Cum                |                    |                          |
|        |                                                                                                                                                          |          |      |     |            |                     |                |        |                    |                    |                          |
|        |                                                                                                                                                          |          |      |     |            |                     |                |        |                    |                    |                          |
|        |                                                                                                                                                          |          |      |     |            |                     | Total Qty      | 773.39 | Cum                | 2412.11<br>2427.85 | 1865508.24<br>1677526.30 |
|        |                                                                                                                                                          |          |      |     |            |                     |                |        | Add Contingency 1% |                    | 1865508.24<br>1877526.30 |
|        |                                                                                                                                                          |          |      |     |            |                     |                |        | Say Rs.            |                    | 1895302.00               |

1884157 ~

Say Rs 18.842 Lac

*Sanjit Singh*  
J.E.  
22/07/2020

*23/07/2020*  
A.E.

*23/9/20*  
E.E.

Technically Approved for Rs 18.842 Lac (Rupees Eighteen Lac Eighty Four Thousand & Two Hundred) only

*13/01/21*  
Superintending Engineer  
Rajiv Kumar  
11/01/2021

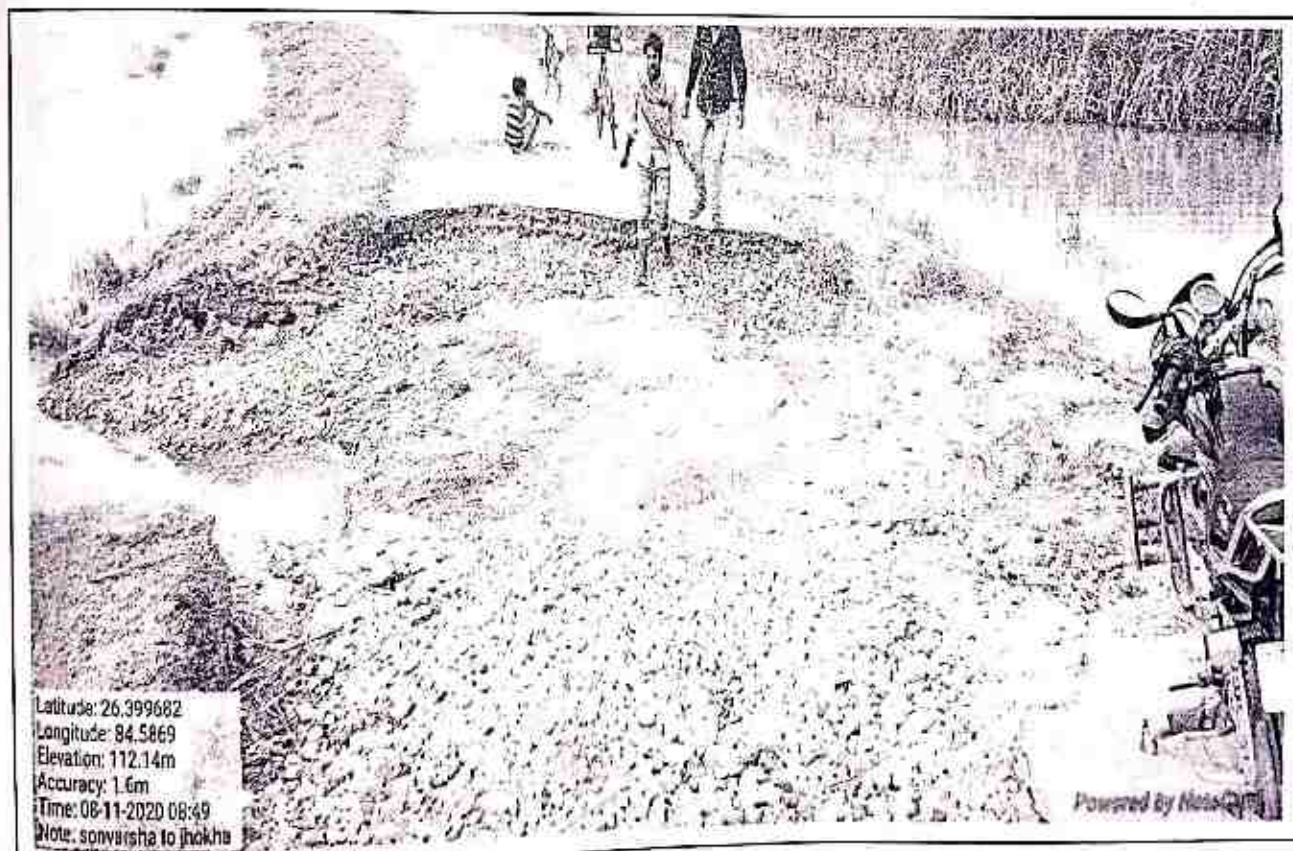
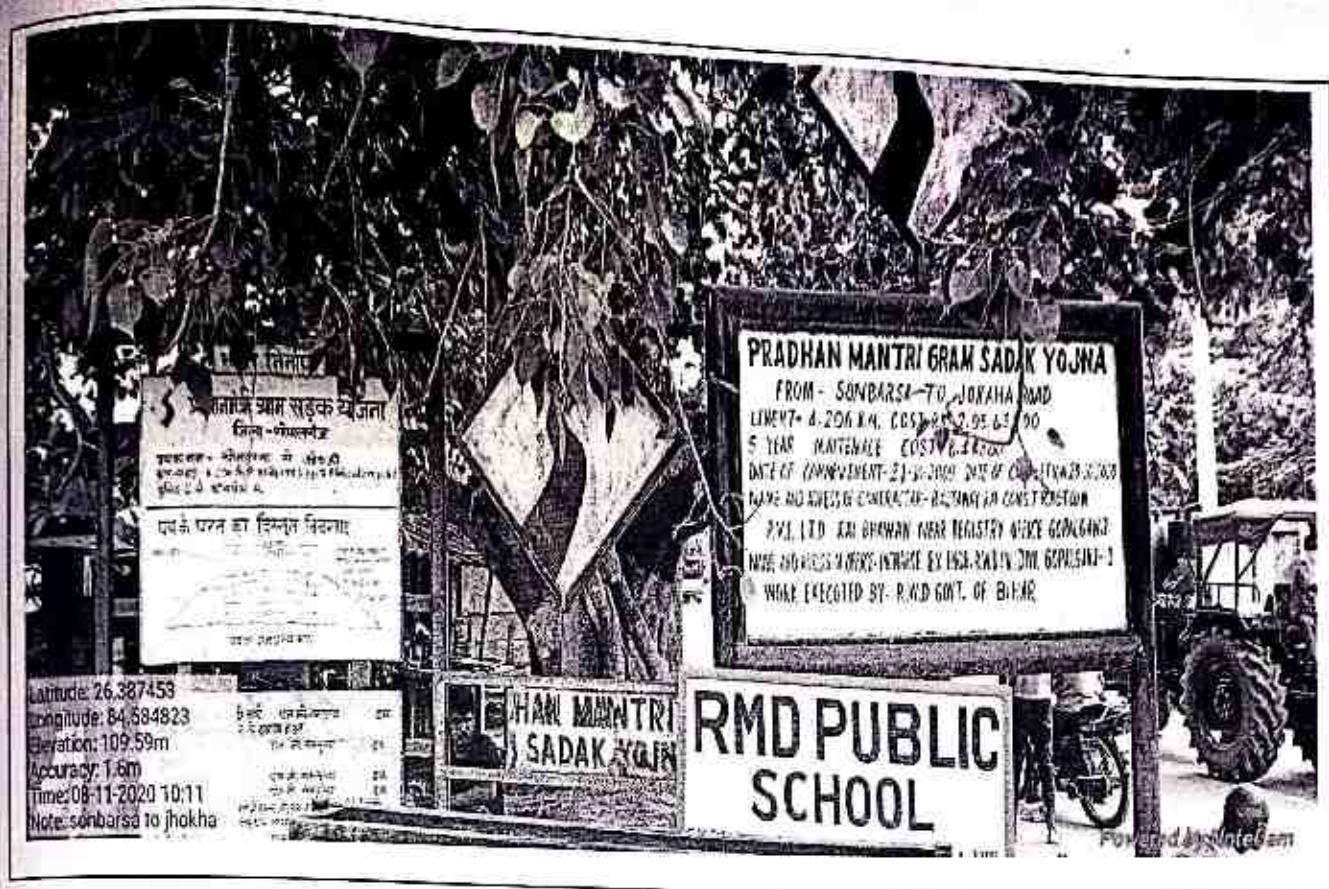
## BRICK BATS PITCHING MANUAL MEANS

|                                |                                                                                                                                                                                                                                 |      |       |        |               |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|--------|---------------|
| <b>6.6.1<br/>WRD<br/>Bihar</b> | <b>Labour for laying dry graded Jhama Khoo or stone filler 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.</b> |      |       |        |               |
|                                | Unit :- Per Cum                                                                                                                                                                                                                 |      |       |        |               |
|                                | Taking Output = 2.832 Cum (=100 cft)                                                                                                                                                                                            |      |       |        |               |
|                                | 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.) -                                                                                                                                                                                                            |      |       |        | <b>383.15</b> |
| <b>1.4 RCD</b>                 | <b>Cost of Haulage Excluding Loading and Unloading</b>                                                                                                                                                                          |      |       |        |               |
|                                | 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                                                                                                                                                                       |      |       |        |               |
|                                | <b>(i) Surfaced Road</b>                                                                                                                                                                                                        |      |       |        |               |
|                                | 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 | 219.84        |
|                                | 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. -                                                                                                                                                                                                                       |      |       |        | <b>17.25</b>  |
|                                | <b>(ii) Unsurfaced Graveled Road</b>                                                                                                                                                                                            |      |       |        |               |
|                                | 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                                                                                                                                                                                                          |      |       |        | 775.87        |
|                                | Rate per t.Km = (a+b)/36                                                                                                                                                                                                        |      |       |        | 21.55         |
|                                | Say Rs. -                                                                                                                                                                                                                       |      |       |        | <b>21.55</b>  |

| 1.1 RCD | Loading and Unloading of Stone Boulder/ Stone aggregates/Sand /Kanker/Moorum                                                          |         |         |         |
|---------|---------------------------------------------------------------------------------------------------------------------------------------|---------|---------|---------|
|         | Placing Tractor at loading point, loading with front loader, 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 3.50 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                                                                                                             |         |         | 410.38  |
|         | Rate per cum = (a+b+c)/ 2.25                                                                                                          |         |         | 182.39  |
| Note -  | Unloading will be done manually                                                                                                       |         |         |         |
| 1.      | Providing Brick filling in ditches including all cost of labour and materials                                                         |         |         |         |
| A.      | Basic Rate of Brick Bats                                                                                                              | Per Cum | 1017.00 | 1017.00 |
|         | Add overhead 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)                                                                                                                    |         |         | 410.07  |
|         | $(1.6 \times 7 \times 17.25) + (1.6 \times 1 \times 21.55) + 182.39$                                                                  |         |         |         |
| C       | Cost of Labour for Fitching and Light Ramming as per WRD SOR 6.6.1 (with OH)                                                          |         |         | 353.15  |
| D       | Contractor profit @ 10 % on (A+B+C)                                                                                                   |         |         | 187.12  |
|         | Total (A+B+C+D) -                                                                                                                     |         |         | 2058.36 |
|         | Add 1% Labour Cess (A+B+C)                                                                                                            |         |         | 20.58   |
|         | Add 12% GST (A+B+C)                                                                                                                   |         |         | 247.00  |
|         | Add 10% cost of Material for Seigniorage Fee                                                                                          |         | 1       | 101.70  |
|         | Total Cost per Cum                                                                                                                    |         | Rs.-    | 2427.65 |

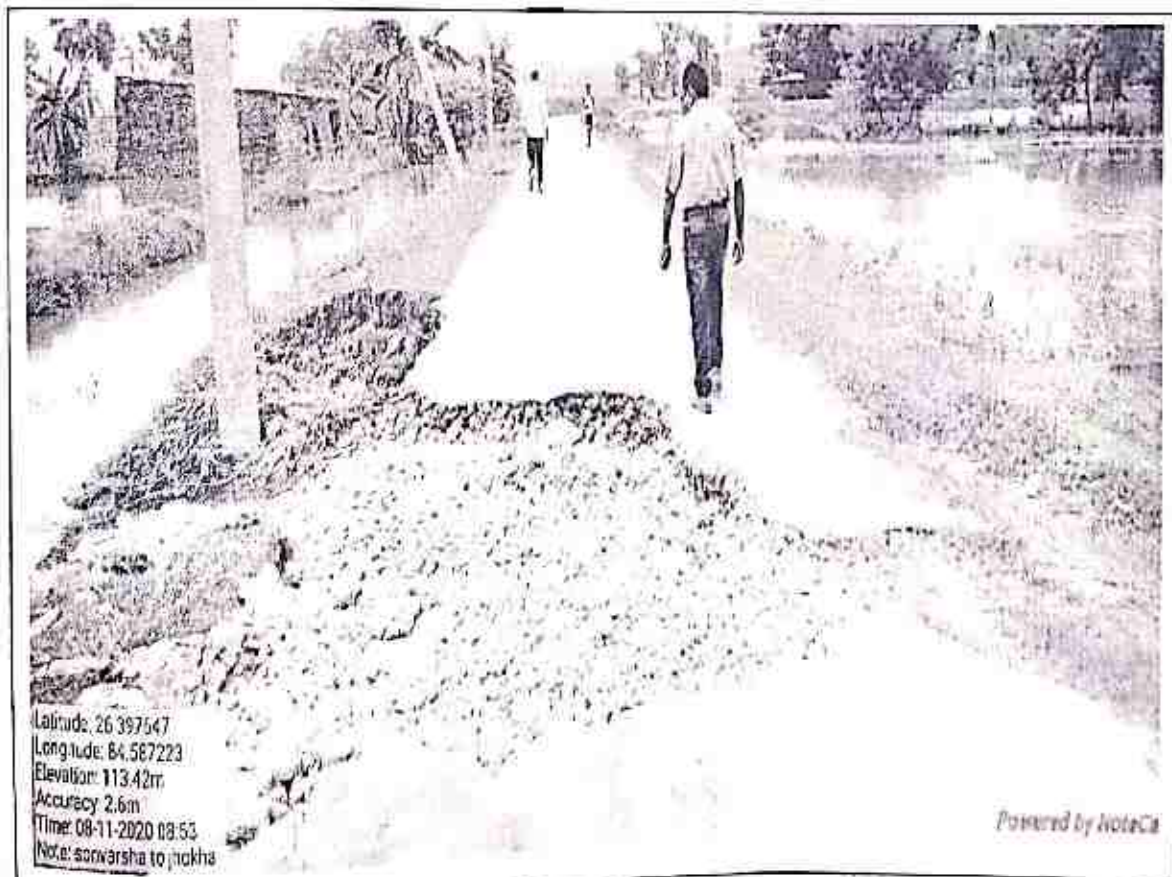
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23/09/2020



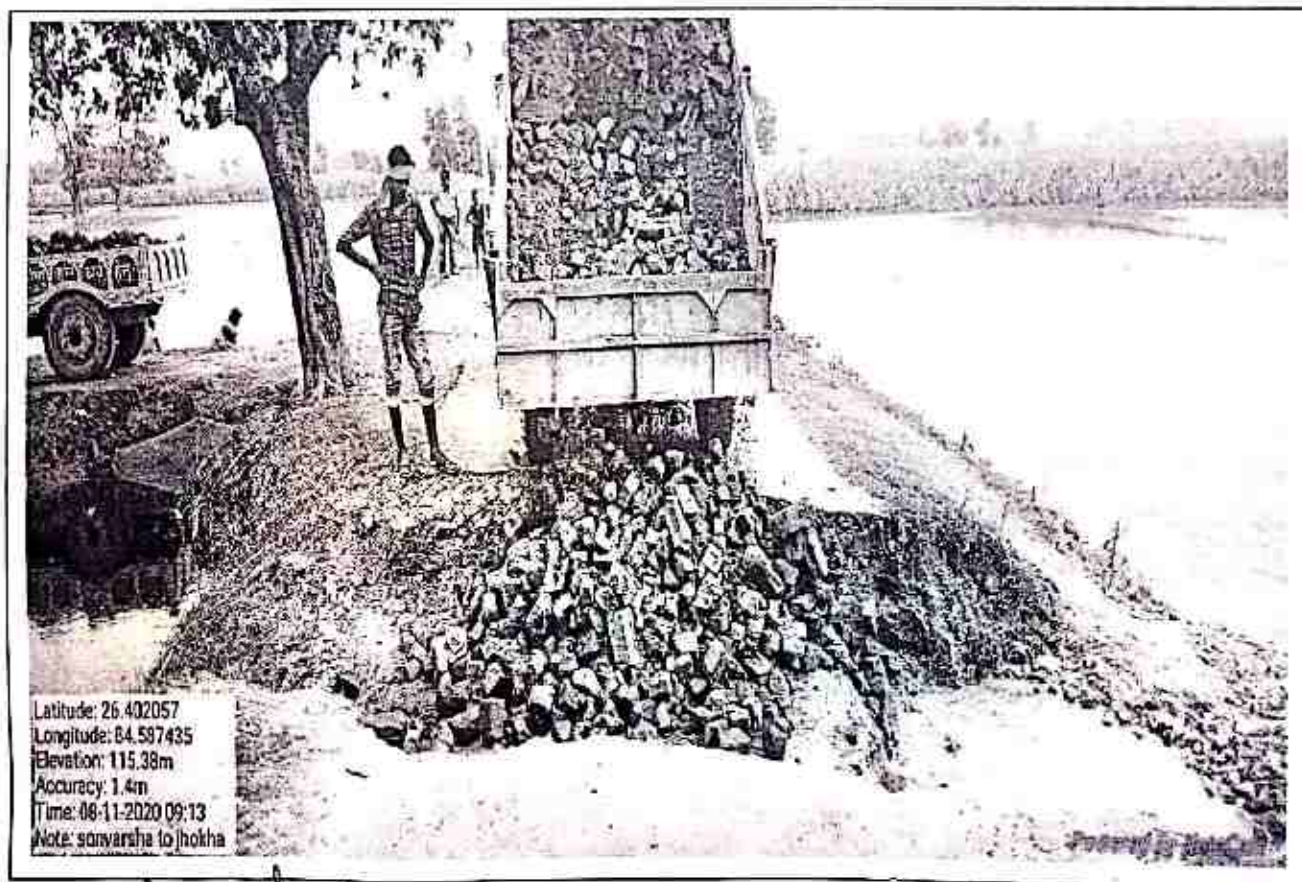
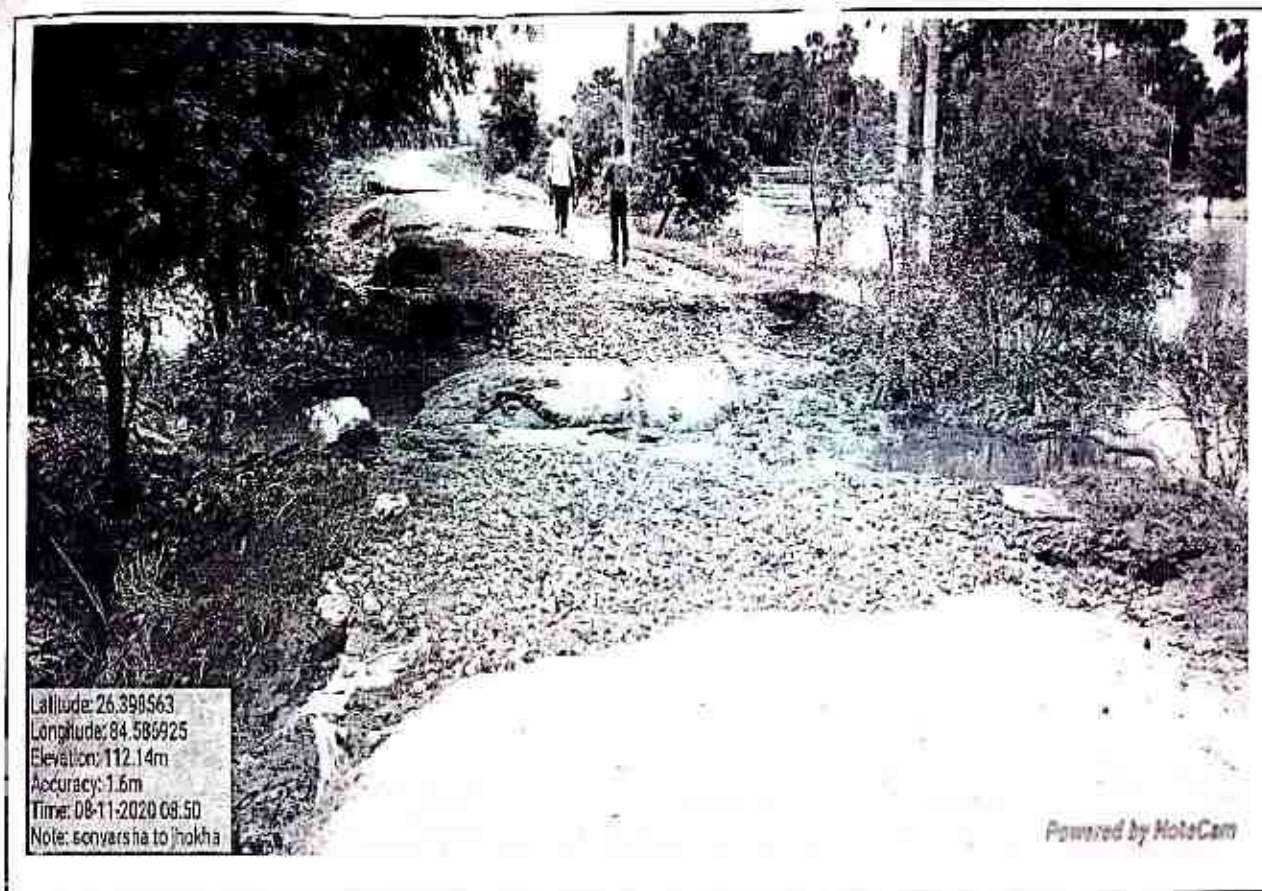
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