



# ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

## PLAN HEAD- FDR YEAR 2021-22

DISTRICT :- EAST CHAMPARAN  
BLOCK :- PATAHI

Estimate for Repair of Road breaches  
(Damaged by Flood) for Motorability in  
GAMHARIA GONAH I To GUJRAUL

LENGTH OF ROAD (in Km)- 1.865 KM

ESTIMATED COST - ~~2.146~~ Lacs

2.019

SUBMITTED BY:  
EXECUTIVE ENGINEER,  
RWD WORKS DIVISION,  
PAKRIDAYAL

## तकनीकी प्रतिवेदन

पथ का नाम:- गम्हरिया जोगाही से गुजरीय

प्रखंड का नाम :- पताही

पथ की लम्बाई :- 1.865 K.M


शीर्ष:- F.D.R


प्राक्कलित राशि:- 2.146 लाख


योजना शीर्ष :- mmcsy

उपरोक्त योजना का प्राक्कलन सचिव, ग्रामीण कार्य विभाग, बिहार पटना के पत्रांक 1937 दिनांक 07.07.2021 के द्वारा दिए गए निदेश के आलोक में एवं कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमंडल, पकड़ीदयाल के निदेशानुसार स्थल जॉचोपरान्त तैयार किया गया है। माह मई 2021 से अक्टूबर 2021 के बीच प्रलयकारी बाढ़ एवं अतिवृष्टि के कारण उक्त पथ में अनेक स्थानों पर कटाव हो गया था जिस कारण पथ से होकर आवागमन बाधित हो गया था। पथ से होकर तत्काल आवागमन चालू करने हेतु क्षतिग्रस्त भाग में तत्काल उपलब्ध हो सके सामग्री यथा-ईट टूकडा/स्थानीय बालू/ बॉस-बल्ला/ खाली सिमेंट बैग/ हयूम पाईप आदि आवश्यकतानुसार उपयोग करने का प्रावधान किया गया है। यह कार्य निदेशानुसार विभागीय रूप से करा दिया गया है।

यह प्राक्कलन अद्यतन अनुसूचित दर पर संवेदक लाभ रहित तैयार किया गया है। जनहित में इसकी स्वीकृति अपेक्षित है।

  
26/10/21  
कनीय अभियंता  
ग्रामीण कार्य विभाग,  
प्रशाखा, पताही

  
26/10/21  
सहायक अभियंता  
ग्रामीण कार्य विभाग,  
कार्य अवर प्रमंडल,.....

  
26/10/21  
कार्यपालक अभियंता  
ग्रामीण कार्य विभाग,  
कार्य प्रमंडल, पकड़ीदयाल।

## **GENERAL ABSTRACT OF COST**


### **ESTIMATE FOR REPAIR OF ROAD BREACHES (DAMAGED BY FLOOD) FOR MOTORIBILITY IN GAMHARIA GONAH I TO GUJRAUL**

**DISTRICT - EAST CHAMPARAN**  
**BLOCK - PATAHI**

**DIVISION - PAKRIDAYAL**  
**LENGTH OF ROAD (in Km)- 1.865 KM**

SL. No.	Item of Work	Amount
1	EARTH WORK :	0.000 Lacs
2	BRICK BATS :	1.808 Lacs
3	SAND BAGS :	0.000 Lacs
4	HUME PIPE :	0.000 Lacs
	<b>COST OF RESTORATION :</b>	<b>1.808 Lacs</b>
	ADD SEIGNIORAGE FEE @ 10% OF MATERIAL COST :	0.103 Lacs
	ADD LABOUR CESS @ 1% :	0.018 Lacs
	ADD GST @ 12% :	0.217 Lacs
	<b>TOTAL COST OF RESTORATION OF ROAD :</b>	<b>2.146 Lacs</b>

  
26/10/21  
Junior Engineer

  
26/10/21  
Asstt. Engineer

  
26/10/21  
Executive Engineer

Name of Work:- Estimate for Repair of Road breaches (Damaged by Flood) for Motorability in GAMHARIA GONAH  
To GUJRAUL

Head - FDR

SI No.	Item No.	Name of Item	unit	No	Length	Width	Height	Qty.	Rate	Amount
1		EARTH WORK - Construction of embankment with approved material obtained from borrow pits with a lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 1000 m as per Technical Specification Clause 301.5	cum		As Per Appendix I			0	183.70	0
2		Providing and Labour for laying dry graded Brick Bats including light ramming etc. all complete as per approved design, specification and direction of E/I.	cum		As Per Appendix II			104.150	<del>4730.01</del> 1938.89	<del>180805.44</del> 201935.00
3		Providing, Filling Sand Bag, Stitching and Placing etc. all complete as per specification and direction of E/I.	Nos.					0.000	24.45	0.00
4		Providing and laying 1000 mm dia reinforced cement concrete pipe NP3 for culvert on first class bedding of granular material in single row excluding excavation, protection works, backfilling, concrete and masonry.	RM		0 Nos*2.5m			0.000	6086.50	0.00
5		Providing and laying 600 mm dia reinforced cement concrete pipe NP3 for culvert on first class bedding of granular material in single row excluding excavation, protection works, backfilling, concrete and masonry.	RM		0 Nos*2.5m			0.000	2545.18	0.00
TOTAL (in Re.)										180805.44

*Saleh*  
26/10/21  
Junior Engineer,  
Rural Works Department,  
Works Section, PATAHI

*Abul*  
26/10/21  
Assistant Engineer,  
Rural Works Department,  
Works Sub Division, PATAHI

*Karigap*  
24/11/21  
Executive Engineer,  
Rural Works Department,  
Works Division, PAKRIDAYAL

Post facto T.A./D is accorded for Rs. 2,01,900.00  
(Two lacs One thousand Nine hundred ..... only.

*S.E. (R.W.D.)*  
works Circle  
Motihari



# SEIGNIORAGE FEE CALCULATION SHEET

Item dexcription	unit	Quantity of Consuming Item	Materials Required/ Unit	Unit	Quantity/ Unit	Total Quantity Required	Rate	Amount	Seigniorage Fee (RS)	Final Amount (RS)
Earth Work	Cum	0.00	Earth	Cum	1.0	0.00	34.82	0.00	0.00	0.00
Brick bats	Cum	104.15	Brick bats	Cum	1.0	104.15	987.00	102796.05	10279.61	10279.61
Sand Bags	per bag	0.00	sand	Cum	0.034	0.00	141.85	0.00	0.00	0.00
1000 MM Dia	RM	0.00	Sand at site	Cum	0.04	0.00	175.80	0.00	0.00	0.00
600 MM Dia	RM	0.00	Sand at site	Cum	0.0032	0.00	175.80	0.00	0.00	0.00
Total Amount of seginorage fee in construction (Rs)										10279.61

*S.Alex*  
26/10/021  
S.E

*Op*  
26/10/17

*L*  
24/11  
*ee*

Name of Work:-

Estimate for Repair of Road breaches (Damaged by Flood) for  
Motorability in GAMHARIA GONAH I To GUJRAUL

Appendix - II					
Measurement for surfacing the Breach with Brick Bats					
Sl. No.	Chainage	Length (M)	Av. Width (M)	Thickness (M)	Quantity (cum)
1	0.900 TO 1.600	23.000	2.50+1.00/2	0.600	24.150
2		7.000	3.750	0.550	14.438
3		5.000	3.750	0.450	8.438
4		5.000	3.750	0.700	13.125
5		7.000	3.750	0.600	15.750
6		4.000	2.500	0.400	4.000
7		10.000	2.000	0.650	13.000
8		6.000	2.500	0.750	11.250
		Total			104.15
		Deduction for 0Nos old 1000 mm HP at 0 m (3.142*0.36*0)			0.00
		Deduction for 0Nos old 600 mm HP at 0 m (3.142*0.22*0)			0.00
		Net Quantity of Brick Bats			104.15

  
26/10/21  
Junior Engineer


  
26/10/21  
Assistant Engineer

  
29/11  
Executive Engineer

**BRICK BATS PITCHING MANUAL MEANS**

<b>6.6.1 WRD Bihar</b>	<b>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.</b>				
	Unit :- Per Cum				
	Taking Output = 2.832 Cum				
	Unskilled Mazdoor	Nos.	3	304.00	912.00
	Rate for 2.832 Cum				912.00
	<b>Rate per Cum (Rs.) -</b>				<b>322.03</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	612.00	408.20
	Time taken for empty return trip.	hour	0.400	612.00	244.80
	cost for 36 t km = a+b+c				653.00
	Rate per t.km = (a+b+c)/36				18.14
	<b>Say Rs. -</b>				<b>18.14</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	612.00	509.80
	Time taken for empty return trip hour 0.5	hour	0.500	612.00	306.00
	Cost for 36 t .km = a+b+c 840.34				815.80
	Rate per t.Km = (a+b+c)/36				22.66
	<b>Say Rs. -</b>				<b>22.66</b>

1.1 RCD	Loading and Unloading of Stone Boulder/ Stone aggregates/Brick Bats/Jhama Metal/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	321.00
	Mazdoor for loading and unloading	day	0.72	304.00
	b) Machinery			
	Tractor 3.60 tonnes capacity	hour	0.1	612.00
	Front end-loader 1 cum bucket capacity @ 25 cum/hour	hour	0.083	1594.00
	Cost for 2.25 cum = a+b+c+d			422.01
	Rate per cum = (a+b+c+d)/ 2.25			187.56
Note:-	Unloading will be done manually.			
1.	Supplying for Brick Bats			
A.	Basic Rate of Brick Bats	Per Cum	987.00	987.00
	Total -			987.00
	Surface Lead	KM	7	
	Unsurface Lead	KM	1	
	Factor (3.6/2.25)	Cum	1.60	
B.	Carriage			
	(1.6 x 7 x 18.14) + (1.6 x 1 x 22.66) + 187.56			426.98
C.	Cost of Labour for Pitching and Light Ramming as per WRD SOR 6.6.1			322.03
	Total (A+B+C) -			1736.01
	Total Cost per Cum		Rs.-	1736.01

  
 26/10/21  
 S. E

  
 26/10/21  
 Anil



## **Inspection Report For Flood Damage Work**


Date :-

1. Name of PIUs- Executive Engineer, RWD. (W.D), Pakridayal.
2. Name of Block – Patahi.
3. Name of Road – GAMHARIA GONAH TO GUJRAUL.

### **(A) For Road**

1. Damage Location/Chainage :- 0.900 To 1.600
2. Damage Length :- 67.00 Meter.
3. Cause of Damage :- Due To Flood 2021/ Heavy Rain.
4. Nature of Damage :- Ditches/Breaches
5. Details of Restoration Work :-
  - (i) Material being used in restoration works :- Bricks Bat/Jhamma Metal/ Rabis/Hume Pipe.
  - (ii) Equipment/Tools being used in restoration Works :- J.C.B./Tractor/Trolley/Others
  - (iii) Procedure Taken up in restoration works :- Emergent Repair.
  - (iv) Restored Length :- 67.00 Meter.

  
06/11/2021  
AD

  
Signature of Inspecting officer  
(Executive Engineer)  
R.W.D. (W.D) Dhaka.