



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 ^{diversion} H.L.
Bridge on place of old Culvert in patahi jhanda
chowk To sugapipar raoad

^{BRIDGE}
LENGTH OF ROAD (in Km)- 0.04537 KM

ESTIMATED COST - ~~17.762~~ Lacs
16.346

SUBMITTED BY:
EXECUTIVE ENGINEER,
RWD WORKS DIVISION,
PAKRIDAYAL

Diversion

तकनीकी प्रतिवेदन

पथ का नाम:- H.L Bridge on place of old culvert in Patohi Jhadachowk To Sugapihar road.

प्रखंड का नाम :- पताही

पुल की लम्बाई :- 0.04537 K.M

शीर्ष:-

F.D.R

प्राक्कलित राशि:- 17.762 लाख

योजना शीर्ष :-


NABARD

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,.....


26/11/21

कार्यपालक अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रमंडल, पकड़ीदयाल।

GENERAL ABSTRACT OF COST

ESTIMATE FOR REPAIR OF ROAD BREACHES (DAMAGED BY FLOOD) FOR
MOTORIBILITY IN H.L BRIDGE ON PLACE OF OLD CULVERT IN PATAHI
JHANDA CHOWK TO SUGAPIPAR RAOAD


DISTRICT - EAST CHAMPARAN

DIVISION - PAKRIDAYAL

BLOCK - PATAHI

LENGTH OF ROAD (in Km)- 0.04537 KM

SL. No.	Item of Work	Amount
1	EARTH WORK :	0.000 Lacs
2	BRICK BATS :	14.386 Lacs
3	SAND BAGS :	0.000 Lacs
4	HUME PIPE :	0.609 Lacs
	COST OF RESTORATION :	14.995 Lacs
	ADD SEIGNIORAGE FEE @ 10% OF MATERIAL COST :	0.818 Lacs
	ADD LABOUR CESS @ 1% :	0.150 Lacs
	ADD GST @ 12% :	1.799 Lacs
	TOTAL COST OF RESTORATION OF ROAD :	17.762 Lacs


26/10/21
Junior Engineer


26/10/21
Asstt. Engineer


26/11/21
Executive Engineer

Name of Work:- Estimate for Repair of Road breaches (Damaged by Flood) for Motorability in H.L Bridge on place of old Culvert in patahi Jhanda chowk To sugapipar raoad

Head - FDR

Sl 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			828.690	1736.07 1938.89	1438614.13 1606739.00
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	4 Nos*	2.5m			10.000	6086.50 2781.35	60865.00 27814.00
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.)	1499479.13

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

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

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

Post facto is accorded for Rs. 16,34,600.00
Sixteen lakh thirty four thousand six hundred only.

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

SEIGNIORAGE FEE CALCULATION SHEET

Item description	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	828.69	Brick bats	Cum	1.0	828.69	987.00	817917.03	81791.70	81791.70
Sand Bags	per bag	0.00	sand	Cum	0.034	0.00	141.85	0.00	0.00	0.00
1000 MM Dia	RM	10.00	Sand at site	Cum	0.04	0.40	175.80	70.32	7.03	7.03
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 seigniorage fee in construction (Rs)										81798.74

Sale
26/10/21
J.E

Op
26/10/14

d
24/11
22

Name of Work:-

Estimate for Repair of Road breaches (Damaged by Flood) for
Motorability in H.L Bridge on place of old Culvert in patahi
jhanda chowk To sugapipar raoad

Appendix - II					
Measurement for surfacing the Breach with Brick Bats					
Sl. No.	Chainage	Length (M)	Av. Width (M)	Thickness (M)	Quantity (cum)
1	0.680	140.000	$5.50+4.50/2$	$1.50+0.900/2$	840.000
		Total			840.00
		Deduction for 4Nos old 1000 mm HP at 10 m ($3.142*0.36*10$)			-11.31
		Deduction for 0Nos old 600 mm HP at 0 m ($3.142*0.22*0$)			0.00
		Net Quantity of Brick Bats			828.69

S. A. S.
26/10/021
Junior Engineer

[Signature]
26/10/14
Asistant Engineer

[Signature]
29/11
Executive Engineer

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	304.00	912.00
	Rate for 2.832 Cum				912.00
	Rate per Cum (Rs.) -				322.03
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	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
	Say Rs. -				18.14
	(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	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				815.80
	Rate per t.Km = (a+b+c)/36				22.66
	Say Rs. -				22.66

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

S. A. L.
26/10/24
J-E

Q. P.
26/10/24
AD

Chapter 9

PIPE CULVERTS

Sr. No.	Reference to MORD Specifications	Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
9.3	1100	Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row				
		Providing and laying reinforced cement concrete pipe NP3 for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry				
		Unit = m				
		Taking output = 7.5 m				
		(3 pipes of 2.5 m length each)				
		(B) 1000 mm dia				
		a) Labour				
		Mate	day	0.09	321.00	28.89
		Mason (1st Class)	day	0.25	408.00	102.00
		Mazdoor (Unskilled)	day	2.00	304.00	608.00
		b) Material				
		Sand at site	cum	0.04	175.80	7.03
		Cement at site	t	0.03	5,325.60	159.77
		RCC pipe NP3 concrete pipe including collar at site	m	7.50	5,565.00	41,737.50
		Cost for 7.5 m = a+b+c+d				42,643.19
		Rate per m = (a+b+c+d)/7.5				5,685.76
		Carriage of Hume Pipe				
			M	1.00	400.74	400.74
		Rate per m = (with carriage)				6,086.50
		(C) 600 mm dia				
		a) Labour				
		Mate	day	0.05	321.00	16.05
		Mason (1st Class)	day	0.15	408.00	61.20
		Mazdoor (Unskilled)	day	1.20	304.00	364.80
		b) Material				
		Sand at site	cum	0.024	175.80	4.22
		Cement at site	t	0.018	5,325.60	95.86
		RCC pipe NP3 concrete pipe including collar at site	m	7.50	2,310.00	17,325.00
		Cost for 7.5 m = a+b+c				17,867.13
		Rate per m = (a+b+c)/7.5				2,382.28
		Carriage of Hume Pipe				
			M	1.00	162.90	162.90
		Rate per m = (with carriage)				2,545.18


 26/10/14


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 – Divrsion H.L Bridge on place of old Culvert in patahi jhanda chowk to sugapipar raoad.

(A) For Road

1. Damage Location/Chainage :- Approach Road.
2. Damage Length :- 140.00 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 :- 140.00 Meter.


06/11/2021
A2


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