



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

FDR

PLAN HEAD FDR(2245) (2021-2022)



ESTIMATE FOR REPAIR OF ROAD BREACHES (DAMAGE BY FLOOD) FOR MOTARABLE WORK IN RAMPUR TO KHORAMPUR

DISTRICT	:-	Saran	
DIVISION	:-	Marhaura	
BLOCK	:-	Marhaura	
TOTAL LENGTH OF ROAD	:-	9.584	KM
TOTAL COST OF CONSTRUCTION	:-	9.589	Lac
TOTAL COST OF PROJECT	:-	9.589	Lac

FDR(2021-2022)

प्रतिवेदन

पथ का नाम:- Rampur To Khorampur
पथ की लम्बाई:- KM.
पथ के क्षतिग्रस्त भाग की लम्बाई:-0.067 KM.
प्रखंड:-मदौरा जिला :-सारण
प्रमंडल:-ग्रामीण कार्य विभाग कार्य प्रमंडल,मदौरा
अंचल:-ग्रामीण कार्य विभाग कार्य अंचल,छपरा
प्राक्कलित राशि:- 958892 रु

प्रस्तुत प्राक्कलन गत माह जिला क्षेत्र अंतर्गत बाढ़ एवं अतिवृष्टिसे क्षतिग्रस्त पथो के मोटरेबुल कार्य हेतु कुल रुपये 958892.000 लाख मात्र के लिए तैयार किया गया है।

958450.200

विदित है की गत जून

महीने से सितम्बर अक्टूबर महीने तक लगातार अन्तराल पर जिला क्षेत्र अंतर्गत असामयिक रूप से पथ क्रस्ट काफी क्षतिग्रस्त हो गया जिससे पथो पर आवागमन बुरी प्रभावित हो गया। ऐसी परिस्थिति में पथो पर आम जनता को सुलभ आवागमन प्रदान करने हेतु विभागीय उच्चाधिकारियोंसे प्राप्त आदेश एवं इस संबंधमें विभाग से निर्गत दिशा निर्देश के अलोक में तत्काल प्रभाव से प्रभावित पथो में कटाव/क्षतिग्रस्त भाग में अवश्यकतानुसार Brick Bats भरकर चलने लायक बनाया गया है।

इस प्रकार कटाव/क्षतिग्रस्त भाग

में अवश्यकतानुसार Brick Bats इत्यादि मदों का प्रावधान करते हुए प्राक्कलन कुल रुपये 958892.000 लाख का तैयार किया गया है जो कार्य हित में आवश्यक एवं जनपयोगी है।

प्राक्कलन वर्तमान अनुसूचित दर पर तैयार किया गया है, जिस पर स्वीकृति अपेक्षित है।

कनीय अभियंता

सहायक अभियंता

कार्यपालक अभियंता

Inspection Report For Flood Damage Work

Date:

1. Name of PIU - *E.E. R.W.D (W) Marhaura.*
2. Name of Block/Road - *Amara - Marhaura - Marhaura to work in Rampur To Klorampur.*

A. For Road

1. Damage Location/ Chainage :- *1.10 km.*
2. Damage Length :- *0.0874.*
3. Nature of Damage :- *Road cutting due to flood.*
4. Details of Restoration :- *Bamboo, Bridge Mats, Local sand.*
- I. Materials being used in restoration : *Bamboo, Bridge Mats, Local sand.*
- II. Equipment/Tools being used in restoration works : *Tractor, G.S. 6, Trolley etc.*
- III. Procedure taken up in restoration works : *Supplying logg, filling, filling.*
- IV. Restored Length : *0.087 km.*

B. For Bridge

1. Damage Location/ Chainage :-
2. Damage Length :-
3. Nature of Damage :-
4. Details of Restoration :-
- I. Materials being used in restoration :
- II. Equipment/Tools being used in restoration works :
- III. Procedure taken up in Restoration works :
- IV. Restored Length :

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Signature of AE/JE/EE

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Executive Engineer
Rural Works Department
Works Division, Marhaura

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(Name of Inspector)

RWD (W) - SONEPUR

FDR

GENERAL ABSTRACT OF COST

Block:- arhaura

District:- Saran

Length of Road:--

Name of Road:--

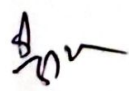
Estimate for Repair of Road Breaches (Damage By Flood) For Motarable Work in Rampur To Khorampur

SL. No.	Item of Work	Amount
		9.584
A	TOTAL COST :	9.589 Lacs
	TOTAL :	9.589 Lacs

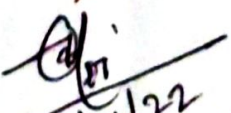
9.584 Lacs


Junior Engineer


Asstt. Engineer


Executive Engineer

T/S. for Rs. 9.584/- Lacs.
(Rupar. Nine Lacs fifty eight thousand four hundred) only.


15/01/22
Superintending Engineer
Rural (Works) Deptt.
Works Circle, Chapra

Name Of Road :-			Estimate for Repair of Road Breaches (Damage By Flood) For Motorable Work in Rampur To Khorampur			Block :-	Marhaura	DISTRICT:-	Saran	LENGTH :-	2.725 KM	
Sl. No.	SDB SL. NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)	
1	8.1.3.2 (iii)		Providing brick bats including spreading laying.Labour for dry graded jhama khoa folter under Brick Pitching or boulder pitching in slope or apron including light ramming etc. All complete job as per approved design specification and directionof E/I,including carriage cost of bricks.									
			Quantity As Per Annexure-1(For Brick Bats)	Cum					Total Quantity=	392.00	2,300.58	9,01,828.00
2			Local Sand For Voids Filling Filling and Spreading local sand over brick bats as per drawing and technical specification clause 305.3.9									
			Quantity As Per Annexure-2(For Local Sand)	Cum					Total Quantity=	31.00	652.27	20,221.00
3		A	Supply For Bamboo Vartical Bamboo									
					70	x	3.50	=	245.00			
			Runers		15	x	3.00	=	45.00			
								=	290.00			
					290.00	/	6.00	=	48.33			
			Chachari				No.	=	48.00			
					208	x	2.00	=	0.00			
					0.00	/	1.413	=	0.00			
							No.	=	0.00			
							Total	=	48.00			
							5% Add Westage	=	2.00			
							Total	=	50.00	141.00	7,050.00	
4	5.7.7		Bamboo Piles Labour for cutting 62 mm to 75 mm dia bamboo piles to size and making shoes and driving etc complete job as per Vartical Bamboo			67	x	3.5	234.50			
								M	234.50	15.44	3,620.00	
5	5.7.8		Bamboo Waven Chachari Labour for fitting and fixing split bamboo woven chachari inn position with 20 swg G.I. wire or 75 mm to 100 mm long									
				M		67	x	2.00	134.00			
									134.00	34.82	4,666.00	

Sl. No.	SDH SL. NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)
			Bamboo Runers								
6	5.7.9		Labour for fitting and fixing 62 mm to 75 mm dia bamboo runers in position at every vertiacal pile with 150 mm long								
				5	x	20	x	0.075	7.50	34.82	261.15
			Fitting & Fixing						7.50	26.37	221.50
			For Vartical Bamboo	M		35	x	3.00	105.00		
			Bamboo for Runner						7.50		
			Bamboo for sty Chachari						0.00		
			Bamboo For Chachari	2	x	70	x	25	3500.00		
			Total Bamboo						3612.50	5.75	20,784.00
									TOTAL COST IN RS.=		20,50,092.00

04/12/21

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RWD

31/12/21

AE
RWD

01/01/22

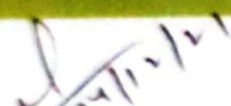
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ANNEXTURE-1

Name Of Road :- Estimate for Repair of Road Breaches (Damage By Flood) For Motarable Work in Rampur To Khorampur

Block:- Marhaura

Sl. No.	Description	Nos.	LENGTH (m)	WIDTH (m)Av.	HEIGHT (m)Av.	UNIT	QUANTITY
1	"	1	8.50	3.80	0.75	CUM	24.23 m3
2	"	1	3.20	4.50	0.80	CUM	11.52 m3
3	"	1	2.90	3.90	0.70	CUM	7.92 m3
4	"	1	43.10	(2.3+2.8+1.5)/3	1.50	CUM	142.23 m3
5	"	1	14.30	2.00	1.20	CUM	34.32 m3
6	"	1	11.70	3.15	1.00	CUM	36.86 m3
7	"	1	15.00	2.80	1.20	CUM	50.40 m3
8	"	1	12.75	3.90	1.70	CUM	84.53 m3
TOTAL QUANTITY FOR BRICK BATS=							392.00 m3


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ANNEXTURE-2

Name Of Road :- Estimate for Repair of Road Breaches (Damage By Flood) For Motarable Work in Rampur To Khorampur

Block:- Marhaura

S. No.	Description	Nos.	LENGTH (m)	WIDTH (m)Av.	HEIGHT (m)	UNIT	QUANTITY
1	"	1	8.50	3.80	0.10	CUM	3.23 m ³
2	"	1	3.20	4.50	0.10	CUM	1.44 m ³
3	"	1	2.90	3.90	0.10	CUM	1.13 m ³
4	"	1	43.10	$\frac{(2.3+2.8+1.5)}{3}$	0.10	CUM	9.48 m ³
5	"	1	14.30	2.00	0.10	CUM	2.86 m ³
6	"	1	11.70	3.15	0.10	CUM	3.69 m ³
7	"	1	15.00	2.80	0.10	CUM	4.20 m ³
8	"	1	12.75	3.90	0.10	CUM	4.97 m ³
TOTAL QUANTITY FOR LOCAL SAND =							31.00 m³

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Brick Bats Pitching Manual Means

Sl. No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
	Labour for dry graded jhama khoa folter 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
	Add 6% Overhead Charge				54.72
	Rate for 2.832 Cum				966.72
	Rate Per Cum(Rs.)=				341.36
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) Surface Road				
	Speed With load :15 km / hour.				
	a)Machinery.				
	Tractor 3.6 tonnes Capacity				
	Time Taken For onward haulage with load	hour	0.667	652.00	434.88
	Time Taken For empty return trip	hour	0.400	652.00	260.80
	b) Overhead Charges @0.06 on (a)				41.74
	Cost for 36 t km=(a+b+c)/36				737.43
	Say RS.-				20.48
	ii) Unsurface Gravel 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	652.00	543.12
	Time Taken For empty return trip 0.50	hour	0.500	652.00	326.00
	b) Overhead Charges @0.06 on (a)				52.15
	Cost for 36 t km=(a+b+c)/840.34				921.26
	Rate per t.km = (a+b+c)/3623.34				25.59
	Say RS.-				25.59

1.1 RCD	Loading and Unloading of Stone Boulder / Stone aggregate / sand / kanker / Moorum				
	Placing Tractor at loading point, loading with frontloader, dumping, turnig for return trip, excluding for haulage and return trip.				
	Unit = cum				
	Taking output = 2.25 cum				
	Time required for				
	i) Positioning of Tracter at loading Point		1 Min		
	ii) Loading by front end loader 1cum bucket @ capacity 25 cum per hour		5 Min		
	iii) Maneuvering, reverse, dumping and turnig for return		0 Min		
	iv) Wating time, unforeseen Contingencies etc.		0 Min		
	Total		6 Min		
	a) Labour				
	Mate	Day	0.03	316.00	9.48
	Mazdoor for loading and unloading	Day	0.72	304.00	218.88
	b) Machinery				
	Tractor 3.60 tonnes capacity	hour	0.10	652.00	65.20
	Front end loader 1 cum bucket capacity @ 25 cum/hour	hour	0.08	#####	265.68
	c) Overhead charges @ 0.06 on (a+b)				33.55
	Cost for 2.25 cum = a+b+c+d				592.80
	Cost for 2.25 cum = (a+b+c+d)/2.25				263.47
Note-	Unloading will be done manually.				
1	Suplying for Brick Bats (With OH)				
A	Basic Rate of Brick Bats	Per Cum	#####		1006.00
	Add overhead Charges 6%		0.06		60.36
	Total-				1066.36
	Surface Lead	km	7.00		
	Unsurface Lead	km	1.00		
	Factor(3.6/2.25)	cum	1.60		
B	Carriage (with OH)				
	(1.6 x 7 x 20.48) + (1.6 x 1 x 25.59) + 263.47				533.83
C	Cost of Labour for Pitching and Light Ramming as per WRD SOR 6.6.1 (with OH)				341.36
	Total (A+B+C)-				1941.55
	Add 1% Labour Cess (A+B+C)				19.42
	Add 12% GST(A+B+C)				232.99
	Add 10% cost of Material for seigniorage Fee		1.00	106.64	106.64
	Total Cost per Cum	Rs:-			2300.58

Analysis for Carriage by Road & Rail

FORM F8

Name of Road:--

Estimate for Repair of Road Breaches (Damage By Flood) For Motorable Work in Rampur To Khorampur

District:--

Saran

Block :- Marhaura

Sl No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km				Loading & Unloading Cost	Carriage Cost by Rail Road	Total	Min Total
				Pukka / Surface		Katcha					
3	Local Sand	Cum	Local	$\frac{8.00}{4.99} \times 10.10 \times 2.00 \text{ Km} = \text{Rs } 32.38$		$\frac{8.00}{4.99} \times 24.30 \times 1.00 \text{ Km} = \text{Rs } 38.96$		113.67			Rs. 185.01

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Analysis of Rates (FORMAT F8)

Filling and Spreading Local Sand Over Brick Bats As Per Drawing and Technical Specification Clause 305.3.9

1 Fine Sand Filling

Unit = cum

a) Labour

Mate

Mazdoor Unskilled

day	0.01	310.00		3.10
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day	0.30	304.00		91.20
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b) Material

Sand assuming 20% voids

day	1.20	141.75		170.10
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c) Overheads @6 % on (a+b)

15.86

d) Contractor's profit @ 10% on (a+b+c)

28.03

Rate per cum = a+b+c+d

308.29

Carriage cost:-

Fine Sand

nos.	1.20	185.01		222.01
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Cost per cum including Carriage

530.30

Labour cess 1%

5.30

GST 12%

63.64

Seignorage 10%

53.03

TOTAL COST cum

652.27

Analysis of Rates (FORMAT F8)

Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
		(A) Labour of fillin new E.C bags with local sand (Volume of filled bag 1.2 cft and weight 50 kg) stching on two lines by approved nylon thread with stitching machine & generators stacking the bags and placing in nylon crate of size (1m x1m x1m) with a lead of 150 m including supply of nylon thread etc placing the filled crates in water protion within a lead of 30m all complete as per approved design specifiaction and direction of E/I (5.7.39.3 &5.7.49) New EC bags carriages of local sand by boat 1/2 km lead Unit = Each Bag Taking OutPut Of 100 Nos. Filled New Bags In 4 Nos. N.C				
	a)	Labour	Nos	1.67	304.00	507.68
		Unsskilled Labour For Filling Stching & Stacking	Nos	3.00	304.00	912.00
		Unskilled Laber For Carrying & Placing	Nos	0.33	385.00	127.05
		Skilled Labour For Stching				
		Material For Stching	nos	2.00	30.00	60.00
		Stiching Roll (Nylon)				
		Hire Charges Of Machine	Day	0.33	50.00	16.50
		Hire Charge Of Stiching Machine	Hrs	2.67	74.00	197.58
		Hire Charge Of Generator 3KVA				218.50
		Over Heads @ 12 % on (a+b+c)				203.93
		C. Profit @ 10 % on (a+b+c+d)				2243.24
	d)	Cost for 100 Nos. = a+b+c+d				560.81
		Rate Per cum=(a+b+c+d) (A x 120/100x4)	cum			
		CARRIAGE		0.450	185.01	83.25
		Carriage for Local Sand				644.06
		Rate per cum with carriage				644.06
		Total Cost	CUM			644.06
		Labour for cutting 62 mm to 75 mm dia bamboo piles to size and making shoes and driving etc complete job as per specification and direction of E/I.				
5.7.6		Unit = Per M Taking Out put = 10 Joint (Assuming 10 Joints)				
	a)	Materials	nos	20.00	32.88	657.60
		Nut And Bolts 16 mm Dia 225mm Long With Washer etc.				
	b)	Laber	nos	0.50	408.00	204.00
		Carpenter Grll	nos	0.25	304.00	76.00
		Unskilled Mazdoor				112.51
	c)	Overheads @ 12%				105.01
	d)	Contractor's profit @ 10% on (a+b+c+d)				115.51
	e)	Rate Per cum=(a+b+c+d)/10	Per M			115.51
		Total Cost	Per M			115.51
5.7.7		Labour for cutting 62 mm to 75 mm dia bamboo piles to size and making shoes and driving etc complete job as per specification and direction of E/I.				
		Unit = Per M Taking Out put = 30.50 M (Assuming 20 nos, Pile Sunk 1.525 Mtr Deep)				
	b)	Laber	nos	0.25	408.00	102.00
		Carpenter Grll	nos	2.50	304.00	760.00
		Unskilled Mazdoor				103.4
	c)	Overheads @ 12%				96.5
	d)	Contractor's profit @ 10% on (a+b+c+d)				34.8
	e)	Rate Per cum=(a+b+c+d)/30.5	Per M			34.8
		Total Cost	Per M			34.8

Analysis of Rates (FORMAT F8)

Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
7.8		Labour for fitting and fixing split bamboo woven chachari inn position with 20 swg G.I. wire or 75 mm to 100 mm long nails alternatively including cost of G.I. wire or nails complete job as per specification and direction of E/L.				
		Unit = Per M Taking Out put = 9.30 M (Assuming 20 nos, Pile Sunk 1.525 Mtr Deep)				
	a)	Materials				
		75 mm To 100 mm Lon Nails	Kg	0.25	61.74	15.44
	b)	Laber				
		Carpenter Gril	nos	1.00	408.00	408.00
		Unskilled Mazdoor	nos	1.00	304.00	304.00
	c)	Overheads @ 12%				87.29
	d)	Contractor's profit @ 10% on (a+b+c+d)				81.47
	e)	Rate Per cum=(a+b+c+d)/9.30	Per M			96.37
		Total Cost	Per M			96.37
5.7.9		Labour for fitting and fixing 62 mm to 75 mm dia bamboo runers in position at every vertiacal pile with 150 mm long nails or 38 swg G.I wire including cost of G.I wire or nails complete job as per specification and direction of E/L.				
		Unit = Per M Taking Out put = 30.50 M				
	a)	Materials				
		75mm To 100 mm Lon Nails	Kg	0.25	61.74	15.44
	b)	Laber				
		Carpenter Gril	nos	0.125	408.00	51.00
		Unskilled Mazdoor	nos	0.250	304.00	76.00
	c)	Overheads @ 12%				17.09
	d)	Contractor's profit @ 10% on (a+b+c+d)				15.95
	e)	Rate Per cum=(a+b+c+d)/30.5	Per M			5.75
		Total Cost	Per M			5.75

Supply of verticle runners 62 mm to 75 mm dia bamboo runners in position at every vertical pile with 150 mm long nails or 38 swg G.I. wire including cost of G.I. wire or nails complete job as per specification and direction of E/I.

Unit =Per m

Taking output = 30.50 m

a) **Labour**

Carpenter

day	0.125	408.00	51.00
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Unskilled mazdoor

day	0.25	304.00	76.00
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b) **Materials**

150 mm long nails

Kg	0.56	61.74	30.87
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Bamboo of 62 mm to 75 mm dia

M	30.50	24.94	760.52
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c) **Overheads on (a+b)**

=@	6%		55.10
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d) **Contractor's profit on (a+b+c)**

=@	10%		97.35
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Cost for 30.50 m = a+b+c+d

Rate per m = (a+b+c+d)/30.50

			1070.84
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			35.11
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e) **Carriage**

150 mm long nails

Kg	0.016	0.42	0.01
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Bamboo of 62 mm to 75 mm dia

M	1.00	3.47	105.88
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FINISHED RATE

M			141.00
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04/12/21
J.E.

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