



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

BIHAR RURAL ROADS PROJECT

Bihar Rural Road Development Agency (BRRDA)

Head :- F.D.R. (PHASE-I)

YEAR (2024-25)

STATE :- BIHAR
DISTRICT :- SUPAUL
BLOCK :- KISHANPUR
DIVISION :- SUPAUL

DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM PIRGANJ TO SISWA.

Flood affected Length of Road	:-	0.547 Km
TOTAL COST OF PAVEMENT	:-	Rs. 61,29,744.51
TOTAL PROJECT COST	:-	Rs. 61,29,744.51

Submitted By:
Executive Engineer
RWD (W) Division, Supaul

Prepared By:
Executive Engineer
RWD (W) Division, Supaul

Index of Road

NAME OF ROAD :- DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD
FROM PIRGANJ TO SISWA.

DISTRICT :- SUPAUL

BLOCK :- KISHANPUR

Head :- F.D.R. (PHASE-I)

Year :- 2024-25

Flood Affected Length of Road :- 0.547 Km

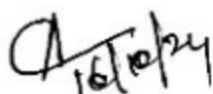
TOTAL COST OF PAVEMENT :- ₹ 61,29,744.51

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SUMMARY OF COST ESTIMATE FOR THE PROJECT

NAME OF ROAD :-	DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM PIRGANJ TO SISWA.
DIVISION :-	SUPAUL
BLOCK :-	KISHANPUR
Flood Affected Length of Road :-	0.547 Km

Sr. No.	Description	Amount (In Rs.)
1	Brick Bats:--	49,40,197.57
	Total=	49,40,197.57
2	Add:GST@18% on amt. =	8,89,235.56
3	Add:-Labour Cess @1% amt. =	49,401.98
4	Add:S.F.@ 10% on Material =	2,50,909.41
TOTAL RESTORATION COST OF THE PROJECT IN LACS=		61,29,744.51


 Junior Engineer
 RWD (W) Division, Supaul


 Assistant Engineer
 RWD (W) Division, Supaul


 Executive Engineer
 RWD (W) Division, Supaul

Technically Approved for Rs. 61,29,744=00 (Rupees Sixty
 one lacs twenty nine thousand seven hundred forty
 four rupees only)


 Superintending Engineer
 Rural Works Department
 Works Circle Madhepura

Calculation of Seigniorage Fees

NAME OF ROAD :-
BLOCK :-
DISTRICT :-

DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM PIRGANJ TO SISWA.
KISHANPUR
SUPAUL

S.No	SOR NO	DESCRIPTION OF ITEMS	QTY	UNIT	RATE	AMOUNT	Add Seigniorage Fee 10%
1	M:11-S(ii)	Providing & laying Brick Bat....					
		Providing and laying of Brick bat obtained from chimney with machanical means with all spreading, grading to required slope and compacted at OMC to acheive required density with all complete as per the direction of engineer in charge.					
		Brick Bats	2410.27	Cum	1041.00	2509094.11	250909.41
		Seigniorage Fees @10% of Basic Amount				Total Rs. =	250909.41


16/10/24

Junior Engineer
RWD (W) Division, Supaul


16/10/24

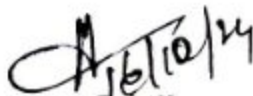
Assistant Engineer
RWD (W) Division, Supaul


12/11/24

Executive Engineer
RWD (W) Division, Supaul

Details of Measurement

Details of Measurement							
Detail of Works	No.	Measurement					Quantity.
		Length	Width(Avg)	Width	Height(Avg)	Height	
		In m.	In m.		In m.		
NAME OF ROAD :-	DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM PIRGANJ TO SISWA.						
Item No. 1	Providing and laying of Brick bat obtained from chimney with mechanical means with all spreading, grading to required slope and compacted at OMC to acheive required density with all complete as per the direction of engineer in charge.						
Chainage in 0.000 to 600.000	1	28.00	$(3.0+4.0+3.5)/3$	3.50	$(1.5+2.0+1.4)/3$	1.63	160.067
	1	45.00	$(3.75+4.0+3.75+3.5)/4$	3.75	$(1.5+2.2+0.8+1.8)/4$	1.58	265.781
	1	55.00	$(2.2+3.0+1.8+3.5)/4$	2.63	$(1.0+1.2+1.6)/3$	1.27	182.875
	1	60.00	$(3.0+3.2+3.5+4.0+2.5)/5$	3.24	$(2.5+1.5+1.8+2.2)/4$	2.00	388.800
	1	55.00	$(3.5+2.0+2.5+2.0)/4$	2.50	$(2.6+2.0+1.8)/3$	2.13	293.333
	1	45.00	$(2.5+2.8+3.0)/3$	2.77	$(2.0+1.6+1.5)/3$	1.70	211.650
	1	35.00	$(3.3+3.6+4.0)/3$	3.63	$(1.9+1.5+1.7)/3$	1.70	216.183
	1	40.00	$(2.6+3.2+3.0)/3$	2.93	$(1.6+0.8+1.2)/3$	1.20	140.800
	1	45.00	$(3.5+2.6+3.0)/3$	3.03	$(1.8+2.0+1.0+1.4)/4$	1.50	204.750
	1	55.00	$(3.0+2.0+2.8)/3$	2.60	$(1.2+0.8+0.9)/3$	0.97	138.233
	1	48.00	$(3.4+2.8+1.6)/3$	2.60	$(1.1+0.9+1.0)/3$	1.00	124.800
	1	36.00	$(3.1+2.8+2.4)/3$	2.77	$(1.1+0.5+0.9)/3$	0.83	83.000
		547.00	Total (In Cum)				2410.273


 Junior Engineer
 RWD (W) Division, Supaul


 Assistant Engineer
 RWD (W) Division, Supaul


 Executive Engineer
 RWD (W) Division, Supaul

Cost Estimate For Flood Restoration Work

NAME OF ROAD :- DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM PIRGANJ TO SISWA.

BLOCK :- KISHANPUR
DISTRICT :- SUPAUL

S.No	SOR NO	DESCRIPTION OF ITEMS	QTY	UNIT	RATE	AMOUNT
1	M:11-5(ii)	Providing and laying of Brick bat obtained from chimney with machanical means with all spreading, grading to required slope and compacted at OMC to acheive required density with all complete as per the direction of engineer in charge.	2410.27	Cum	2049.64	4940197.57
		Total			Rs.	4940197.57


Junior Engineer
RWD (W) Division, Supaul


Assistant Engineer
RWD (W) Division, Supaul


Executive Engineer
RWD (W) Division, Supaul

Analysis for Carriage by Road & Rail

Name of Road:-- DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM PIRGANJ TO SISWA.

District:-- SUPAUL

Block :- KISHANPUR

Sl No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km				Carriage Cost by Rail Head	Total *
				Pucka / Surface	Katcha	Unload in g Cost			
1	Stone Metal Gr-I & Gr-II	Cum	Shelkhpura	8.00 x 11.70 x 35.00 Km = Rs 713.73	x 28.20 x 0.00 Km = Rs 0.00	8.00	89.90	1243.54	Rs. 2047.17
2	Stone Metal Gr-III / GSB	Cum	Shelkhpura	4.59 x 11.70 x 35.00 Km = Rs 656.51	x 28.20 x 0.00 Km = Rs 0.00	4.59	89.90	1166.59	Rs. 1913.00
3	Stone Aggregate / Chips	Cum	Mirzachowki	8.00 x 11.70 x 35.00 Km = Rs 656.51	x 28.20 x 0.00 Km = Rs 0.00	8.00	89.90	1166.59	Rs. 1913.00
4	Stone Aggregate / Chips	Cum	Mirzachowki	4.99 x 11.70 x 35.00 Km = Rs 656.51	x 28.20 x 0.00 Km = Rs 0.00	4.99	89.90	1248.39	Rs. 1994.80
4	Stone Boulder	Cum	Shelkhpura	8.00 x 11.70 x 35.00 Km = Rs 682.50	x 28.20 x 0.00 Km = Rs 0.00	8.00	89.90	1201.54	Rs. 1973.94
5	Coarse Sand	Cum	Jagdishpur	4.80 x 7.47 x 225.00 Km = Rs 2694.59	x 19.22 x 0.00 Km = Rs 0.00	4.80	104.38		Rs. 2799.47
6	Binding Material/Moorum	Cum	Shelkhpura	8.00 x 7.47 x 35.00 Km = Rs 348.60	x 28.20 x 0.00 Km = Rs 0.00	8.00	104.38		Rs. 453.48
7	Local Sand	Cum	Local	6.00 x 7.47 x 2.00 Km = Rs 23.95	x 17.82 x 1.00 Km = Rs 28.57	6.00	104.38		Rs. 157.40
8	Brick	1000 Nos	Local	8.00 x 7.94 x 7.00 Km = Rs 222.32	x 19.22 x 1.00 Km = Rs 76.88	8.00	417.46		Rs. 716.66
9	Cement	MT	Local	2.00 x 7.94 x 35.00 Km = Rs 277.90	x 19.22 x 0.00 Km = Rs 0.00	2.00	299.38		Rs. 577.28
10	Steel	MT	Local	8.00 x 7.94 x 35.00 Km = Rs 277.90	x 19.22 x 0.00 Km = Rs 0.00	8.00	318.00		Rs. 595.90
11	Bitumen Emulsion	MT	Barauni	8.00 x 7.94 x 220.00 Km = Rs 1746.80	x 19.22 x 0.00 Km = Rs 0.00	8.00	344.50		Rs. 2091.30
12	Bitumen	MT	Muzaffarpur	8.00 x 7.94 x 178.00 Km = Rs 1413.32	x 19.22 x 0.00 Km = Rs 0.00	8.00	344.50		Rs. 1757.82
13	Hume Pipe (1000 mm)	m	Karjain	8.00 x 7.94 x 106.00 Km = Rs 673.31	x 19.22 x 0.00 Km = Rs 0.00	8.00	73.32		Rs. 746.63
14	Hume Pipe (600 mm)	m	Karjain	10.00 x 7.94 x 106.00 Km = Rs 269.32	x 19.22 x 0.00 Km = Rs 0.00	10.00	31.42		Rs. 300.74
15	Hume Pipe (300 mm)	m	Karjain	25.00 x 7.94 x 106.00 Km = Rs 112.22	x 19.22 x 0.00 Km = Rs 0.00	25.00	31.42		Rs. 143.64
16	Brick Bats	Nos.	Local	8.00 x 18.64 x 7.00 Km = Rs 208.80	x 66.03 x 2.00 Km = Rs 211.30	8.00	227.60		Rs. 647.70
				3.60 x 18.64 x 7.00 Km = Rs 208.80		3.60			
				2.25		2.25			

Cost of Haulage Excluding Loading & Unloading as per SOR

Type of Road	Per Ton. Km by Tipper	Per Ton. Km by Truck
For Surface Road	11.70	7.94
Unsurface Gravel Road	14.00	9.55
Kachha Road	28.20	19.22

* Subjected to Verification of Lead

Type of Road	Per Ton. Km by Tractor	Per Ton. Km by Tractor
For Surface Road	18.64	18.64
Unsurface Gravel Road	23.29	23.29
Kachha Road	66.03	66.03

Summary of Carriage Cost

Sl. No.	Particulars	Unit	Amount
1	Gr-III GSB	Cum	1913.00
2	Stone Metal Below 40 mm	Cum	1913.00
3	Stone Chips	Cum	1913.00
4	Screening Materials	Cum	1913.00
5	Gr-II	Cum	2047.17
6	Stone Metal above 40 mm	Cum	2047.17
7	Binding Material (Moorum)	Cum	453.48
8	a) Coarse Sand	Cum	2799.47
9	b) Coarse Sand at Site	Cum	3293.47
10	c) Local sand	Cum	157.40
11	d) Local Sand at Site	Cum	300.72
12	Boulder	Cum	1973.94
13	a) Cement	Ton	577.28
14	b) Cement at Site	Ton	6427.68
15	Geo Bags	Nos.	238.20
16	Bitumen (S-90) (FROM MUZAFFARPUR)	Ton	1757.82
17	Bitumen Emulsion SS & RS (FROM BARAUNI)	Ton	2091.30
18	a) Hume Pipe NP 3 (600 MM DIA)	m	300.74
19	b) Hume pie (600 dia) at site	m	2875.55
20	a)Hume Pipe NP 3 (1000MM DIA)	m	746.63
21	b)Hume Pipe NP 3 (1000MM DIA) at site	m	3504.85
22	Steel	Ton	595.90
23	Brick	per 1000	716.66
24	Brick Bats /hama metal	Cum	647.70

[Signature]
Junior Engineer
RWD (W) Division, Supaul

[Signature]
Assistant Engineer
RWD (W) Division, Supaul

[Signature]
Superintendent
Rural Works Division
Works Circle Muzaffarpur

Executive Engineer
RWD (W) Division, Supaul

SUMMARY OF RATE				
Sl. No.	Ref. Code No.	Description of Labour	Rate (Rs.)	Unit
1		Filling E.C. Bags	829.20	%nos.
2		Placing E.C. Bags	911.00	%nos.
3		Filling E.C. Bags and Placing	1553.80	%nos.
4		Filling Geo. Bags	26.40	each
5		Placing Geo. Bags	34.30	each
6		Filling Geo. Bags and Placing	81.00	each
7		Filling E.C. Bags and Placing in N.C	388.50	each
8		Filling E.C. Bags and Placing in B.A.Wire Crates	1243.00	each
9		Filling Geo. Bags and Placing in N.C	364.20	each
10		Filling Geo. Bags and Placing in B.A.Wire Crates(Beggy)	1638.90	each
11		Filling Geo. Bags and Placing in B.A.Wire Crates(Box)	2003.10	each
12		Filling Geo. Bags and Placing in Gabbin 1.8x1.8x0.5	1092.60	each
13		Filling Geo. Bags and Placing in Gabbin 1.8x1.8x0.6	728.40	each
14		Already Filled E.C. Bags Placing in N.C	231.15	each
15		Already Filled E.C. Bags Placing in B.A.Wire crates	739.68	each
16		Already Filled Geo. Bags Placing in N.C	205.80	each
17		Already Filled Geo. Bags Placing in B.A.Wire Crates(Beggy)	926.10	each
18		Already Filled Geo. Bags Placing in B.A.Wire Crates(Box)	1131.90	each
19		Already Filled Geo. Bags Placing in Gabbin 1.8x1.8x0.5	617.40	each
20		Already Filled Geo. Bags Placing in Gabbin 1.8x1.8x0.6	411.60	each
21		Supply of bamboo 75mm dia	162.70	each
22		Carriage of bamboo 75mm dia lead 5km us	8.70	each
23		Supply of bamboo 100 mm dia	173.70	each
24		Carriage of bamboo 100 mm dia lead 5km us	9.30	each
25		Supply of binding wire	75.04	Kg
26		Laying of porcupine Without boat	834.80	each
27		Laying of porcupine with boat	877.90	each
28		Bamboo piling with jet pump	38.20	each
29		Tree spur	358.00	each
30	M-189	Water	56.20	KL
31	e(ii)	Brick Bats	1041.00	per cum
32	M-006	Local/Fine Sand	143.32	per cum
33		Nails	55.84	per kg
34	222(i)	Bamboo 75mm dia 6m to 8m long	117.65	each
35	232	Sutali	19.75	per kg
36	M-120	Coarse Sand	494.00	per cum
	M-121	Sand (Fine)	143.32	per cum
37	M-081	Cement	5850.40	per mt
38		HP 1000mm dia NP3	2758.22	per mt
39		HP 600mm dia NP3	2574.81	per mt
40	M-159	Sand Bags (Cost of sand and empty cement bag)	8.46	per nos.
41	275	Old empty cement bag(synthetic)(Annexure-I)	292.00	per %nos.
42	276	Nylon Crate of size 1mx1mx1m	39.85	Each
43	M-017	Aggregate 40 mm	494.15	Cum
44	M-016	Aggregate 20 mm	604.91	Cum
45	M-015	Aggregate 10 mm	668.8	Cum
46	M-047	Cement Primer	115.16	litre
47	M-103	Paint (Synthetic Enamel)	516.42	litre
48	M-150	Well Graded Material for Sub-Base - Grading I 53 mm to 9.5 mm	516.42	Cum
49	M-151	Well Graded Material for Sub-Base - Grading II 9.5 mm to 2.36 mm	411.33	Cum
50	M-152	Well Graded Material for Sub-Base - Grading III 2.36 mm below	185.94	Cum
51	M-105	Polythene sheet (125 micron)	14.35	Sqm
52		G.I. wire 3.15 mm dia	69.3	per kg
53		Compensation for earth taken from private land	34.81	Cum
54		Stitching Role	30	Nos.

**BASIC RATES
(A) Labour**

Sl. No.	Description of Labour	Unit	Rate (Rs.)
		day	373.00
L-01	Bhisti	day	393.00
L-02	Bitumen Sprayer	day	503.00
L-03	Blacksmith	day	619.00
L-04	Blaster	day	503.00
L-05	Carpenter 1st Class	day	503.00
L-06	Carpenter 2nd Class	day	449.00
L-07	Chips spreader	day	577.00
L-08	Chiseller	day	472.00
L-09	Dresser (Skilled)	day	449.00
L-10	Driller	day	503.00
L-11	Electrician	day	511.00
L-12	Fitter	day	503.00
L-13	Mason (1st class)	day	449.00
L-14	Mason (2nd Class)	day	397.00
L-15	Mate	day	373.00
L-16	Mazdoor (Unskilled)	day	388.00
L-17	Mazdoor (Semi skilled)	day	472.00
L-18	Mazdoor (Skilled)	day	476.00
L-19	Painter (1st class)	day	476.00
L-20	Plumber	day	454.00
L-21	Surveyor	day	476.00
L-22	White Washer	day	476.00

BASIC RATES
(C) USAGE RATES OF PLANT & MACHINERY

Sr. No.	Description of		Output of Machine		Usage Rates in Rs.	
	Machine	Activity	Unit	Output	Unit	Rate
PM-008	Dozer - D 175 HP	Dozing cutting	cum/h	200.00	per hour	4,249.00
			cum/h	100.00		4,249.00
PM-013	Hydraulic Excavator 0.9 cum	Excavation	cum/h	100.00	per hour	2,272.00
			Day	50.00		50.00
	Hire Charge of stitching machine		Day	50.00	per Day	50.00
	Hire Charge of Manual Trolley		Hour	74.00	per Hour	74.00
PM-017	Front end-loader 1 cum bucket capacity	Loading Aggregates	cum/h	25.00	per hour	2,033.00
		Loading Soil	cum/h	60.00		2,033.00
PM-032	Motor Grader	Scarifier & levelling	cum/h	200.00	per hour	4,403.00
				50.00		1,100.75
	Tractor Mounted Grader		Hour	612.00	per Hour	612.00
	Time taken for onward haulage with load		Hour	612.00	per Hour	612.00
	Time taken for empty return trip.		Hour	612.00	per Hour	612.00
PM-033	Needle vibrator	Vibrating cement concrete mix	cum/h	3.50	per hour	386.00
PM-035	Paver finisher	Laying/spreading	Cum/h	40.00	per hour	2,141.00
PM-086	Plate compactor	Compaction	cum/h		per hour	469.70
PM-087	Plate vibrator	Compaction	cum/h		per hour	469.70
PM-088	Screed vibrator	Compaction	cum/h		per hour	102.64
PM-044	Smooth wheeled 80-100 kN tandem roller	Compaction of Sub-base/ Asphalt	cum/h	30.00	per hour	1,978.00
PM-045	Stone crusher (Integrated) of 200 TPH	Crushing of Spalls	t/h	200.00	per hour	27,581.30
PM-046	Three wheel 80-100 kN Static Roller	Compaction/ Rolling			per hour	1,518.00
		Earth:- Embankment or sub-grade	cum/h	80/70		1,518.00
		Sub-base G-I	cum/h	10.00		1,518.00
		Sub-base G-II/G-III	cum/h	8.00		1,518.00
		WMM	cum/h	16.00		1,518.00
PM-047	Tipper 5.5 cum/10 t	Carriage	cum/trip	5.50	per hour	1,426.00
PM-048	Tractor with Disc Harrows	Pulverisation of soil	cum/h	80.00	per hour	549.10
PM-049	Tractor with ripper @ 60 cum per hour	Ripping Pavements, uprooting trees	cum/h	60.00	per hour	629.00

FORM F8

Sr. No.	Description of		Output of Machine		Usage Rates in Rs.	
	Machine	Activity	Unit	Output	Unit	Rate
PM-050	Tractor with trolley/with Grading equipment	Transportation of materials	t/trip	3 to 5	per hour	629.00
PM-051	Tractor with Rotavator	Scarifier	cum/h	25.00	per hour	573.20
PM-052	Truck 10 t capacity	Carriage	cum/trip	5.50	per hour	934.50
PM-053	Vibratory roller 80-100 kN	Compaction of soil WMM	cum/h	100.00	per hour	2,338.00
		Compaction of BM	cum/h	60.00		2,338.00
PM-054	Water tanker 6 kl capacity (Truck Mounted)	Carriage of water	litre / h	12000.00	per hour	752.00
PM-055	Wet mix plant (Pug Mill)	Wet Mix	cum/h	25.00	per hour	1,822.30

Analysis of Rate						
Sl No.	SOR No.	Description	Unit	Qty	Rate(Rs.)	Amount (Rs.)
Carriage of materials (By Tractor)						
1	1.4	Cost of Haulage excluding Loading & Unloading				
	RCD	Haulage of materials by Tractor excluding cost of loading, unloading and stacking.				
		Unit = 1 km				
		Taking output 3.60 Tonne load and lead 10 km = 36.0 1 km				
		Case-I : Surfaced Road				
		Speed with load: 15 km per hour				
		Speed while returning empty: 25 km per hour				
		a) Machinery				
		Tractor 3.6 t capacity	hour	0.667	629.00	419.54
		Time taken for onwards haulage with load	hour	0.400	629.00	251.60
		Time taken for empty return trip				671.14
		Total				-
		Add OH@12%				671.14
						18.64
		Rate per Ton.km				
		Case-II: Unsurfaced Gravel Road				
		Speed with load: 12 km/hour				
		Speed for empty return trip: 20 km/hour				
		a) Machinery				
		Tractor 3.6 t capacity	hour	0.833	629.00	523.96
		Time taken for onwards haulage with load	hour	0.500	629.00	314.50
		Time taken for empty return trip				838.46
		Total				-
		Add OH@12%				838.46
						23.29
		Rate per Ton.km				
	(c)	Case-III: Katcha Track and Track in River Bed / Nallah Bed and Choe Bed				
		Speed with load : 10 km / hour				
		Speed with returning empty : 15 km / hour				
		(a) Machinery				
		Tipper 10 tonnes or 5.5 cum capacity	hour	1.000	1,426.00	1,426.00
		Time taken for empty return trip	hour	0.667	1,426.00	951.14
		Total				2,377.14
		Add OH@12%				-
		Cost for 36.0 t.km = a+b				2,377.14
		Rate per Ton.km				66.03
2	6.6.1.	Labour for laying Brick bats /dry graded ghama khoa or stone filter under Brick Pitching or Boulder pitching in slope or apron including light ramming etc. all complete job as per approved design, specification and direction of E/I				
	WRD	Unit = Per Cum				
		Taking output= 2.832 Cum				
		a) Labour				
		Mazdoor (Unskilled)	Nos	3.00	373.00	1,119.00
		b) Overheads @ 12% on (a)				0.00
		Rate for 2.832 Cum				1,119.00
		Rate Per Cum				395.13
3	1.1	Loading and Unloading of Stone Boulder, Stone aggregate, Sand, Kankar, Moorum, Brick Bats and Sand etc.				
	RCD	Unit = Per Cum				
		Taking output= 2.25 Cum				
		Time required for				
		i) Positioning of tipper at unloading point	day	1 Min		
		ii) Loading by front end loader 1 cum bucket capacity @ 25 cum per hour	day	5Min		
		iii) Maneuvering, reversing, dumping and turning for return		0Min		
		iv) Waiting time, unforeseen contingencies etc	hour	0Min		
		Total		6Min		
		a) Labour				
		Mate	day	0.03	397.00	11.91
		Mazdoor for Loading and unloading	day	0.72	373.00	268.56
		b) Machinery				
		Tractor 3.6 t capacity	Hour	0.10	629.00	62.90
		Front end loader 1 cum bucket capacity @ 25 cum per hour	Hour	0.08	2,033.00	168.74
						512.11
		Add OH@12%				-

Sl No.	SOR No.	Description	Unit	Qty	Rate(Rs.)	Amount (Rs.)
						512.11
						227.60
		Rate per Cum=(a+b+c)/2.25				
		Note:- Unloading will be done Manually.				
4	9.3	1100 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 works in head walls and parapets .				
		1000 mm dia Hume Pipe				
		Unit=m				
		Taking Output=7.5 m (3 pipes of 2.5 m length each)				
		a Material				
		Sand at site	cum	0.04	3,293.47	131.74
		Cement at site	ton	0.03	6,427.68	192.83
		RCC pipe NP3 pipe including collar at site	m	7.50	3,504.85	26,286.38
		b Labour				
		Mate	day	0.09	397.00	35.73
		Mason (I class)	day	0.25	503.00	125.75
		Mazdoor(Unskilled)	day	2.00	373.00	746.00
						27,518.42
		Add OH@12%				27,518.42
		Cost for 7.50 m =				27,518.42
		Rate per M=				3,669.12
5		(Providing and laying of brick bats obtained from chimney with machnical means with all spreading gradding to required slope and compacted at OMC to achieve required density with all completed as per direction of E/I)				
		Taking out put=100 cum				
		a) Labour				
		Cost of Labour for Pitching and Light Ramming as per WRD SOR 6.6.1 (with OH)	day	1.00	360.94	360.94
		b) Materials				
		Bricks Bats -Basic Rate Taken From RCD S.O.R. Schedule-M:11-5(ii) dt-30.01.2024	Cum	1	1041.00	1041.00
		Add:Carriage Charge for Brick bats				647.70
		Total Cost				2,049.64
		NET TOTAL COST PER CUM				2,049.64
		SAY Rs				2,049.64
6	5.7.7	Labour for cutting 62 mm to 75 mm dia sal bamboo piles to size and making shoes and driving etc.complete job as per specification and direction of E/L				
	WRD	Unit :- Per M				
		Taking Out put:- 30.50 Mtr (Assuming 20 nos. pile sunk 1.525 mtr deep) Total depth sunk 30.50 meter				
		(a) Labour				
		Carpenter Gr II	Nos	1.00	503.00	503.00
		Unskilled mazdoor for piling	Nos	3.00	373.00	1,119.00
						1,622.00
		Overheads @ 12%				1,622.00
						1,622.00
		Rate Per M				53.18
7	5.7.8	Providing fitting and fixing split bamboo woven chachari in position with 20 swg G.I. wire or 75 mm to 100 mm long nails alternatively including cost of G.I. wire 3.15 mm dia or nails complete job as per specification and direction of E / L.				
		Unit :- Per M2				
		Taking Out put:- 9.30 Sqm (Assuming strip of 3.05x3.05 = 9.30 sqm)				
		a Material				
		1 75 mm to 100mm long nail	kg	0.25	55.84	13.96
		2 Bamboo -75mm dia to 62 mm dia Bamboo @ 75mm = 3050/75 = 40.67 Say=41Nosx3.05=125.05M Add for Lower Binder of chachari 10x3.75=30.50M Runner @150mmc/c=7x3.05=21.35M Total length of Bamboo=176.9M Total No of Bamboo=176.9/6=30No	No	30	117.65	3529.5

SI No.	SOR No.	Description	Unit	Qty	Rate(Rs.)	Amount (Rs.)
		b Labour				
		Carpenter Gr II	Nos	1.00	503.00	503.00
		Unskilled mazdoor for piling	Nos	1.00	373.00	373.00
		Overheads @ 12% on labour charge (345.00+287.00)				-
						4,419.46
		Rate Per M2				475.21
8	5.7.8	Labour for fitting and fixing split bamboo n woven chachari in position with 20 swg G.I. wire or 75 mm to 100 mm long nails alternatively including cost of G.I. wire 3.15 mm dia or nails complete job as per specification and direction of E / I.				
	WRD	Unit :- Per M2				
		Taking Out put:- 9.30 Sqm				
		(Assuming strip of 3.05x3.05 = 9.30 sqm)				
		(a) Material				
		G.I. wire 3.15 mm dia	Kg	0.250	69.30	17.33
		(b) Labour				
		Carpenter Gr II	Nos	1.00	503.00	503.00
		Unskilled mazdoor for piling	Nos	1.00	373.00	373.00
						893.33
		Overheads @ 12%				-
						893.33
						893.33
		Rate Per M2				96.06
9	5.7.9	Labour for fitting and fixing 62mm 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.				
	WRD	Unit :- Per M				
		Taking Out put:- 30.50 Mtr				
		(a) Materials				
		Cost of 150 mm long nails	Kg	0.50	55.84	27.92
		(b) Labour				
		Carpenter Gr II	Nos	0.13	503.00	65.39
		Unskilled mazdoor for piling	Nos	0.25	373.00	93.25
						186.56
		Overheads @ 12%				-
						186.56
						186.56
		Rate Per M				6.12
10		Supplying bamboo 75 mm dia 6 m to 8 m long at..... complete job as per specification and direction of E / I.				
		Taking Out put:- 115 nos				
		(a) Material				
		Supplying bamboo 75 mm dia 6 m to 8 m long (Cost of bamboo)	Nos	115	162.70	18,710.50
		Add:Carriage Charge for Bamboo				292.22
		Add Labour for laying Bamboo				395.13
						19,397.85
		Overheads @ 12%				-
						19,397.85
						19,397.85
		Rate Per each Bamboo				168.68
11	5.7.40.1	Labour for filling empty cement bags with local sand, stitching the bags and placing including supply of sutli etc. all complete as per approved design, specifications and direction of E/I				
	WRD	Unit :- Per % nos				
		Taking Out put:- 100 nos				
		(a) Supplying of Sand bags (Cost of sand and Empty cement bag)	Nos	100	8.46	846.00
		Carraige cost for Local sand (100 no. of Bags=100x0.034m3	cum	3.4	300.72	1022.45
					Total	1868.45
		(b) For filling & stitching & stacking				
		(a) Unskilled mazdoor for filling sand into bags and sewing	Nos	2	373	746.00
		(b) Sutali	Kg	0.5	19.75	9.88
					Total	755.88
		(c) Labour rate for Carrig & Placing to work site of E.C.Bags				

SI No.	SOR No.	Description	Unit	Qty	Rate(Rs.)	Amount (Rs.)
		(a) Unskilled mazdoor for carrying filled bags and placing to work site	Nos	3	373	1119.00
		Total (A+B+C)=				3743.32
		Add overhead charge @12%				0.00
						3743.32
		Total Net Rs.				3743.32
		Rate per %				37.43
		Sand Each Bag			Say	Rs 37.43
12	5.7.40.2 WRD SOR Page 159	Labour for filling empty cement bags with local sand, stitching the bags and placing in Nylon crate of size (1 m x 1 m x 1 m) with lead of 150 M including supply of sutli etc. at site in dry portion all complete as per approved design, specification and direction of E/I				
		Unit :- Each N.C				
		Taking Out Put = 25 nos. filled E.C. Bags in each N/C				
		Cost of 25 nos of filled E.C.Bags (Vide Item no. 5.7.40.1	Nos	25	37.43	935.83
		Rate each				935.83
13		Supply of Nylon Crate of size 1mx1mx1m			39.85	39.85
		Material				
		(a) Nylon Crate				39.85
		(b) Add Overhead charge @12%				0.00
		Total (a+b)				39.85
		Rate per nos.				39.85
14	11.2	Sand filling in Foundation Trenches as per Drawing & Technical Specification				
		Unit = Per Cum				
	a	Material				
		Sand(assuming 20 percent voids)	cum	1.20	143.32	171.98
	b	Labour				
		Mate	day	0.01	397.00	3.97
		Mazdoor(Unskilled)	day	0.3	373.00	111.90
						287.85
		Add overhead charge @12%				0
						287.854
						287.85
		total=				292.22
		Carraige cost for Local sand				580.07
		Rate per cum				

प्रतिवेदन

पथ का नाम
कार्य का नाम

:- Pirganj to Siswa
:- Temporary restoration work of Pirganj to Siswa
(Part-I)

प्रस्तुत प्राक्कलन 27 September 2024 को किशोरा प्रखण्ड में आयी
भीषण बाढ़ से क्षतिग्रस्त Pirganj to Siswa पथ में
यातायात चालू करने हेतु तैयार किया गया है जिसकी प्राक्कलित लागत राशि 6129744.00
है। उक्त पथ का निर्माण NIABARD योजनान्तर्गत
हुआ था एवं योजना अनुसूक्षण अवधि से बहर है।
पथ के कटे (क्षतिग्रस्त) भाग में आवश्यकता अनुसार BRICK BATS एवं LOCAL
SAND देने के बाद यातायात चालू कराया गया है। पथ के विभिन्न हिस्से में
कराये गये कार्य का विवरणी स्पष्ट रूप से प्राक्कलन में दर्शाया गया है।

प्राक्कलन मदों का दर वर्तमान अनुसूचित दर के अनुसार है।

कनीय अभियंता,
ग्रामीण काय विभाग,
कार्य प्रशाखा, सुपौल।


06/11/2024
सहायक अभियंता,
ग्रामीण काय विभाग,
कार्य अवर प्रमण्डल, सुपौल।


कार्यपालक अभियंता,
ग्रामीण काय विभाग,
कार्य प्रमण्डल, सुपौल।

Inspection Report for Flood Damage Work

Date :

1. Name of PIUs :- **EE RWD WORKS DIVISION, SUPAUL**
2. Name of Block/Road :- **(KISHANPUR) PIRGANJ TO SISWA**

A. For Road

1. Damage Location/Chainage : **CH :- 0 to 600**
2. Damage Length : **547 mtr**
3. Nature of Damage : **FULL BREACH**
4. Details of Restoration Works :
 - i. Material being used in Restoration work : **BRICKS BATS, LOCAL SAND**
 - ii. Equipment/Tools being used in Restoration work : **JCB, TRACTOR, W. Tank**
 - iii. Procedure taken up in Restoration work : **PLACING MATERIAL, COMPACT**
 - iv. Restored Length : **550 mtr**

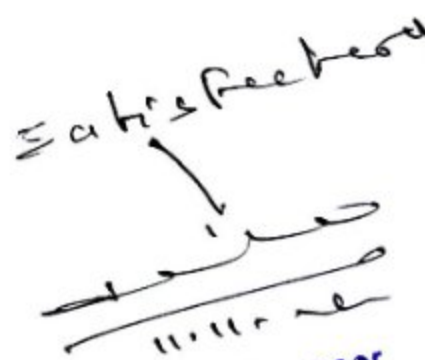
B. For Bridge

1. Damage Location/Chainage :
2. Damage Length :
3. Nature of Damage :
4. Details of Restoration Works :
 - i. Material being used in Restoration work :
 - ii. Equipment/Tools being used in Restoration work :
 - iii. Procedure taken up in Restoration work :
 - iv. Restored Length :

JE


11/11/2024
AE


EE
Executive Engineer
Rural Work's Department
Work's Division, Supaul


Signature
Executive Engineer
(Name of Inspector)
Rural Works Department
Works Division Udakishunganj

Bill of Quantity-(Phase-I)

NAME OF ROAD :- DETAILED ESTIMATE FOR TEMPORARY
RESTORATION OF ROAD FROM PIRGANJ TO
SISWA.

BLOCK :- KISHANPUR
DISTRICT :- SUPAUL

S.No	SOR NO	DESCRIPTION OF ITEMS	QTY	UNIT	RATE	AMOUNT
1	A/R	Providing & laying Brick Bat...				
		Providing and laying of Brick bat obtained from chimney with machanical means with all spreading, grading to required slope and compacted at OMC to acheive required density with all complete as per the direction of engineer in charge.	2410.27	Cum	2049.64	4940197.57
					Total=	4940197.57
						889235.56
		Add @18% GST				49401.98
		Add @1% Lebour Cess				250909.41
		Seigniorage Fees			Total Rs=	6129744.51
					Say	6129745.00


Executive Engineer
RWD (W) Div. Supaul




Executive Engineer
Rural Work's Department
Work's Division, Supaul



Latitude: 26.206299
Longitude: 86.627869
Elevation: 28.43±100 m
Accuracy: 22.9 m
Time: 10-01-2024 09:07
Note: Pirganj se Siswa

(Signature)

Executive Engineer
Rural Work's Department
Work's Division, Supaul



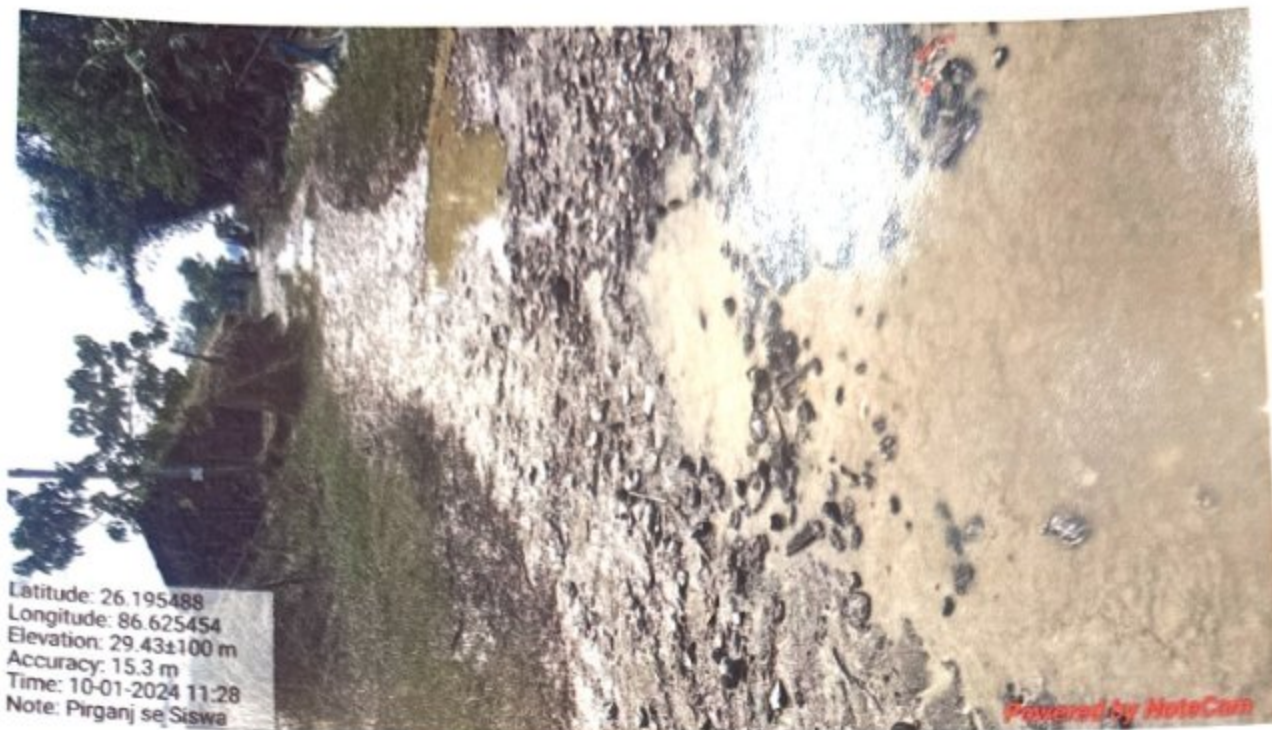
(Signature)

Executive Engineer
Rural Work's Department
Work's Division, Supaul



(Signature)

Executive Engineer
Rural Work's Department
Work's Division, Supaul



Latitude: 26.195488
Longitude: 86.625454
Elevation: 29.43±100 m
Accuracy: 15.3 m
Time: 10-01-2024 11:28
Note: Pirganj se Siswa

Powered by NoteCam



Latitude: 26.195663
Longitude: 86.624728
Elevation: 157.03±57 m
Accuracy: 14.0 m
Time: 10-01-2024 11:24
Note: Pirganj se Siswa

Powered by NoteCam


Executive Engineer
Rural Work's Department
Work's Division, Supaul




 Executive Engineer
 Rural Work's Department
 Work's Division, Surajit



(Signature)

Executive Engineer
 Rural Work's Department
 Work's Division, Surajit




Executive Engineer
Rural Work's Department
Work's Division, Su...



Latitude: 26.192289
Longitude: 86.625689
Elevation: 66.08±8 m
Accuracy: 7.9 m
Time: 17-10-2024 13:20
Note: Pirganj to Siswa

Powered by NoteCam



Latitude: 26.202122
Longitude: 86.626801
Elevation: 66.45±7 m
Accuracy: 5.3 m
Time: 17-10-2024 13:09
Note: Pirganj to Siswa

Powered by NoteCam


Executive Engineer
Rural Work's Department
Work's Division, Suraj



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11/11/2024

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Executive Engineer
Rural Work's Department
Work's Division, Suraj



11/11/24

Signature

Executive Engineer
Rural Work's Department
Work's Division, Sujaul



Latitude: 26.202073
Longitude: 86.626837
Altitude: 13.86±6 m
Accuracy: 4.1 m
Time: 10-11-2024 14:49
Note: Pirganj se Siswa

Powered by NoteCam



Latitude: 26.201891
Longitude: 86.62678
Elevation: 50.76±4 m
Accuracy: 3.8 m
Time: 10-11-2024 17:09
Note: Pirganj se Siswa

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11/11/24

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Executive Engineer
Rural Work



[Signature]
11/11/2024

[Signature]

Executive Engineer
Rural Work's Department
Work's Division, Supaul



Latitude: 26.209943
Longitude: 86.633683
Altitude: 3.8±100 m
Accuracy: 8.2 m
Time: 10-01-2024 12:39
Note: Pirganj se Siswa

Powered by NoteCam



Latitude: 26.201696
Longitude: 86.626589
Elevation: 53.51±7 m
Accuracy: 4.6 m
Time: 08-10-2024 13:29
Note: Pirganj se Siswa

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11/11/2024

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Executive Engineer
Rural Work's Department
Work's Division, Sujaul



Latitude: 26.20998
Longitude: 86.634655
Elevation: 20.81±100 m
Accuracy: 5.4 m
Time: 10-01-2024 12:43
Note: Pirganj se Siswa

Powered by NoteCam



Latitude: 26.210071
Longitude: 86.633293
Elevation: 27.12±66 m
Accuracy: 19.1 m
Time: 10-01-2024 12:38
Note: Pirganj se Siswa

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11/11/24

[Signature]
Executive Engineer
Rural Work's Department
Work's Division, Suraj



Latitude: 26.211368
 Longitude: 86.636286
 Elevation: 176.51±100 m
 Accuracy: 6.4 m
 Time: 10-01-2024 13:05
 Note: Pirganj se Siswa

Powered by NoteCam



Latitude: 26.210011
 Longitude: 86.63455
 Elevation: 20.21±30 m
 Accuracy: 5.5 m
 Time: 10-01-2024 12:43
 Note: Pirganj se Siswa

Powered by NoteCam

[Signature]
 11/11/24

[Signature]
 Executive Engineer
 Rural Work's Department
 Work's Division, Surajpur



Latitude: 26.195488
Longitude: 86.625454
Elevation: 29.43±100 m
Accuracy: 15.3 m
Time: 10-01-2024 11:28
Note: Pirganj se Siswa



Latitude: 26.204596
Longitude: 86.628308
Elevation: 35.93±101 m
Accuracy: 11.6 m
Time: 10-01-2024 09:12
Note: Pirganj se Siswa

[Signature]
11/11/24

[Signature]
Executive Engineer
Rural Work's Department
Work's Division, Supaul



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11/11/24

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Executive Engineer
Rural Work's Department
Work's Division, Supaul



[Signature]
 11/11/24

[Signature]
 Executive Engineer
 Rural Work's Department
 Work's Division, Suraul