



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

BIHAR RURAL ROADS PROJECT

Bihar Rural Road Development Agency (BRRDA)

Head :- F.D.R.

YEAR (2024-25)

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

DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM PARSA YADAV TOLA TO KALMUNGRA.

Flood affected Length of Road	:-	0.426 Km
TOTAL COST OF PAVEMENT	:-	Rs. 40,11,715.71
TOTAL PROJECT COST	:-	Rs. 40,11,715.71

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 PARSA YADAV TOLA TO KALMUNGRA.

DISTRICT :- SUPAUL

BLOCK :- KISHANPUR

Head :- F.D.R.

Year :- 2024-25

Flood Affected Length of Road :- 0.426 Km

TOTAL COST OF PAVEMENT :- ₹ 40,11,715.71

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SUMMARY OF COST ESTIMATE FOR THE PROJECT

NAME OF ROAD :-	DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM PARSA YADAV TOLA TO KALMUNGRA.
DIVISION :-	SUPAUL
BLOCK :-	KISHANPUR
Flood Affected Length of Road :-	0.426 Km

Sr. No.	Description	Amount (In Rs.)
1	Brick Bats:--	32,33,196.45
	Total=	32,33,196.45
2	Add:GST@18% on amt. =	5,81,975.36
3	Add:-Labour Cess @1% amt. =	32,331.96
4	Add:S.F.@ 10% on Material =	1,64,211.94
	TOTAL RESTORATION COST OF THE PROJECT IN LACS=	40,11,715.71


 Junior Engineer
 RWD (W) Division, Supaul


 Assistant Engineer
 RWD (W) Division, Supaul


 Executive Engineer
 RWD (W) Division, Supaul

Technically Approved for Rs. 40,11,715 (Rupees Forty Lacs eleven thousand seven hundred sixteen rupees only)


 Superintendent
 Rural Works Department
 Works Circle Madhepura

Calculation of Seigniorage Fees

NAME OF ROAD :-
BLOCK :-
DISTRICT :-

DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM PARSA YADAV TOLA TO KALMUNGRA
KISHANPUR
SUPAUL

S.No	SOR NO	DESCRIPTION OF ITEMS	QTY	UNIT	RATE	AMOUNT	Add Seigniorage Fee 10%
1	M:11-5(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 achelve required density with all complete as per the direction of engineer in charge.					
		Brick Bats	1577.44	Cum	1041.00	1642119.38	164211.94
		Seigniorage Fees @10% of Basic Amount				Total Rs. =	164211.94



Junior Engineer
RWD (W) Division, Supaul


16/10/24

Assistant Engineer
RWD (W) Division, Supaul


16/10/24

Executive Engineer
RWD (W) Division, Supaul

Details of Measurement

Details of Measurement								Quantity-
Detail of Works	No.	Measurement						
		Length	Width(Avg)	Width	Height(Avg)	Height		
		In m.	In m.		In m.			
NAME OF ROAD :-		DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM PARSA YADAV TOLA TO KALMUNGRA.						
Item No. 1	Providing and laying of Brick bal obtained from chimney with mechanical means with all spreading, grading to required slope and compacted at OMC to achieve required density with all complete as per the direction of engineer in charge.							
Chainage in 80.000 to 520.000	1	32.00	$(2.0+2.8+3.0)/3$	2.60	$(1.2+1.4+1.3)/3$	1.30	108.160	
	1	35.00	$(2.5+2.0+1.5)/3$	2.00	$(1.5+1.4+1.6)/3$	1.50	105.000	
	1	45.00	$(2.2+3.0+2.6)/3$	2.60	$(1.8+1.0+1.1)/3$	1.30	152.100	
	1	56.00	$(3.0+3.2+3.0)/3$	3.07	$(1.4+1.2+1.6)/3$	1.40	240.427	
	1	40.00	$(2.5+3.0+2.0)/3$	2.50	$(1.2+1.6+1.4)/3$	1.40	140.000	
	1	38.00	$(3.0+2.0+2.8+2.5)/4$	2.58	$(1.6+1.2+1.6+1.4)/4$	1.45	141.883	
	1	65.00	$(2.6+3.0+3.2+2.8)/4$	2.90	$(1.2+1.8+1.2+1.0)/4$	1.30	245.050	
	1	55.00	$(3.2+2.4+3.0+2.0)/4$	2.65	$(1.8+1.6+1.4+1.2)/4$	1.50	218.625	
	1	60.00	$(3.0+2.5+3.2)/3$	2.90	$(1.6+0.9+1.4)/3$	1.30	226.200	
		426.00	Total (In Cum)				1577.444	

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 :-

BLOCK :-

DISTRICT :-

DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM PARSA YADAV TOLA TO
KALMUNGRA.
KISHANPUR
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 achelve required density with all complete as per the direction of engineer in charge.	1577.44	Cum	2049.64	3233196.45
		Total			Rs.	3233196.45


16/10/24

Junior Engineer
RWD (W) Division, Supaul


16/10/24

Assistant Engineer
RWD (W) Division, Supaul


16/10/24

Executive Engineer
RWD (W) Division, Supaul

Analysis for Carriage by Road & Rail

Name of Road:-- DETAILED ESTIMATE FOR TEMPORARY RESTORATION OF ROAD FROM PARSA YADAV TOLA TO KALMUNGRA.

Block :- KISHANPUR

SUPAUL

District:-

SI No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km			Loading & Unloading Cost	Carriage Cost by Rail Head	Total *
				Pucka / Surface	Katcha				
1	Stone Metal Gr-I & Gr-II	Cum	Shelkhpura	$\frac{8.00}{4.59} \times 11.70 \times 35.00 \text{ Km} = \text{Rs } 713.73$	$8.00 \times 28.20 \times 0.00 \text{ Km} = \text{Rs } 0.00$		89.90	1243.54	Rs. 2047.17
2	Stone Metal Gr-III / GSB	Cum	Shelkhpura	$\frac{8.00}{4.99} \times 11.70 \times 35.00 \text{ Km} = \text{Rs } 656.51$	$8.00 \times 28.20 \times 0.00 \text{ Km} = \text{Rs } 0.00$		89.90	1166.59	Rs. 1913.00
3	Stone Aggregate / Chips	Cum	Mirzachowki	$\frac{8.00}{4.99} \times 11.70 \times 35.00 \text{ Km} = \text{Rs } 656.51$	$8.00 \times 28.20 \times 0.00 \text{ Km} = \text{Rs } 0.00$		89.90	1166.59	Rs. 1913.00
4	Stone Aggregate / Chips	Cum	Mirzachowki	$\frac{8.00}{4.99} \times 11.70 \times 35.00 \text{ Km} = \text{Rs } 656.51$	$8.00 \times 28.20 \times 0.00 \text{ Km} = \text{Rs } 0.00$		89.90	1248.39	Rs. 1994.80
4	Stone Boulder	Cum	Shelkhpura	$\frac{8.00}{4.80} \times 11.70 \times 35.00 \text{ Km} = \text{Rs } 682.50$	$8.00 \times 28.20 \times 0.00 \text{ Km} = \text{Rs } 0.00$		89.90	1201.54	Rs. 1973.94
5	Coarse Sand	Cum	Jagdishpur	$\frac{8.00}{4.99} \times 7.47 \times 225.00 \text{ Km} = \text{Rs } 2694.59$	$8.00 \times 19.22 \times 0.00 \text{ Km} = \text{Rs } 0.00$		104.88		Rs. 2799.47
6	Binding Material/Moorum	Cum	Shelkhpura	$\frac{8.00}{6.00} \times 7.47 \times 35.00 \text{ Km} = \text{Rs } 348.60$	$8.00 \times 28.20 \times 0.00 \text{ Km} = \text{Rs } 0.00$		104.88		Rs. 453.48
7	Local Sand	Cum	Local	$\frac{8.00}{4.99} \times 7.47 \times 2.00 \text{ Km} = \text{Rs } 23.95$	$8.00 \times 17.82 \times 1.00 \text{ Km} = \text{Rs } 28.57$		104.88		Rs. 157.40
8	Brick	1000 Nos	Local	$\frac{8.00}{2.00} \times 7.94 \times 7.00 \text{ Km} = \text{Rs } 222.32$	$8.00 \times 19.22 \times 1.00 \text{ Km} = \text{Rs } 76.88$		417.46		Rs. 716.66
9	Cement	MT	Local	$\frac{8.00}{8.00} \times 7.94 \times 35.00 \text{ Km} = \text{Rs } 277.90$	$8.00 \times 19.22 \times 0.00 \text{ Km} = \text{Rs } 0.00$		299.38		Rs. 577.28
10	Steel	MT	Local	$\frac{8.00}{8.00} \times 7.94 \times 35.00 \text{ Km} = \text{Rs } 277.90$	$8.00 \times 19.22 \times 0.00 \text{ Km} = \text{Rs } 0.00$		318.00		Rs. 595.90
11	Bitumen Emulsion	MT	Barrauni	$\frac{8.00}{8.00} \times 7.94 \times 220.00 \text{ Km} = \text{Rs } 1746.80$	$8.00 \times 19.22 \times 0.00 \text{ Km} = \text{Rs } 0.00$		344.50		Rs. 2091.30
12	Bitumen	MT	Muzaffarpur	$\frac{8.00}{8.00} \times 7.94 \times 178.00 \text{ Km} = \text{Rs } 1413.32$	$8.00 \times 19.22 \times 0.00 \text{ Km} = \text{Rs } 0.00$		344.50		Rs. 1757.82
13	Hume Pipe (1000 mm)	m	Karjain	$\frac{8.00}{10.00} \times 7.94 \times 106.00 \text{ Km} = \text{Rs } 673.31$	$8.00 \times 19.22 \times 0.00 \text{ Km} = \text{Rs } 0.00$		73.32		Rs. 746.63
14	Hume Pipe (600 mm)	m	Karjain	$\frac{8.00}{25.00} \times 7.94 \times 106.00 \text{ Km} = \text{Rs } 269.32$	$8.00 \times 19.22 \times 0.00 \text{ Km} = \text{Rs } 0.00$		31.42		Rs. 300.74
15	Hume Pipe (300 mm)	m	Karjain	$\frac{8.00}{60.00} \times 7.94 \times 106.00 \text{ Km} = \text{Rs } 112.22$	$8.00 \times 19.22 \times 0.00 \text{ Km} = \text{Rs } 0.00$		31.42		Rs. 143.64
16	Brick Bats	Nos.	Local	$\frac{3.60}{2.25} \times 18.64 \times 7.00 \text{ Km} = \text{Rs } 208.80$	$3.60 \times 66.03 \times 2.00 \text{ Km} = \text{Rs } 211.30$		227.60		Rs. 647.70

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	Per Ton. Km by Tractor
For Surface Road		18.64
Unsurface Gravel Road		23.29
Kachha Road		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 / Thama metal	Cum	647.70

A. B. Tipu
Junior Engineer
RWD (W) Division, Supaul

16/10/24
Assistant Engineer
RWD (W) Division, Supaul

16/10/24
Superintending Engineer
Rural Works Department
Works Circle Madhepura

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	28.40	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	817.40	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 Bets	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	115.18	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	

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	per Day	50.00
	Hire Charge of stitching machine		Day	50.00	per Day	50.00
	Hire Charge of Manual Trolley		Day	50.00	per Day	50.00
	Hire Charge of 3KVA generator		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 = t.km				
		Taking output 3.60 Tonne load and lead 10 km = 36.0 t.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				419.54
		Time taken for onwards haulage with load	hour	0.667	629.00	251.60
		Time taken for empty return trip	hour	0.400	629.00	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				523.96
		Time taken for onwards haulage with load	hour	0.833	629.00	314.50
		Time taken for empty return trip	hour	0.500	629.00	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 jhama 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
							227.68
			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 (1 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 puts- 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 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) Sutli	Kg	0.5	19.75	9.88
					Total	755.88
		(c) Labour rate for Carring & Placing to work site of E.C.Bags				

SI No.	SOR No.	Description	Unit	Qty	Rate(Rs.)	Amount (Rs.)
		(a) Unskilled mazdoor for carring filled bags and placing to work site	Nos	3	373	1119.00
		Total (A+B+C)=				3743.32
		Add overhead chrage @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 loocal 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				39.85
	(a)	Nylon Crate				0.00
	(b)	Add Overhead charge @12%				39.85
		Total (a+b)				39.85
		Rate per nos.				
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 chrage @12%				0
						287.854
		total=				287.85
		Carraige cost for Local sand				292.22
		Rate per cum				580.07

Bill of Quantity

NAME OF ROAD :- DETAILED ESTIMATE FOR TEMPORARY
RESTORATION OF ROAD FROM PARSA YADAV
TOLA TO KALMUNGRA.

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 mechanical means with all spreading, grading to required slope and compacted at OMC to achieve required density with all complete as per the direction of engineer in charge.	1577.44	Cum	2049.64	3233196.45
					Total=	3233196.45
						581975.36
		Add @18% GST				32331.96
		Add @1% Labour Cess				164211.94
		Seigniorage Fees			Total Rs=	4011715.71
					Say	4011716.00


Executive Engineer
RWD (W) Div. Supaul

प्रतिवेदन

पथ का नाम
कार्य का नाम

:- Parsa Yadav Tola to Kalmugra
:- Temporary restoration work of Parsa Yadav Tola to Kalmugra (Part-I)

प्रस्तुत प्राक्कलन 27 September 2024 को किसानपुर प्रखण्ड में आयी भीषण बाढ़ से क्षतिग्रस्त Parsa Yadav tola to kalmugra पथ में यातायात चालू करने हेतु तैयार किया गया है जिसकी प्राक्कलित लागत राशि 4011715=00 है। उक्त पथ का निर्माण BKBDP योजनान्तर्गत हुआ था एवं योजना अनुरक्षण अवधि में बाढ़ है।

पथ के कटे (क्षतिग्रस्त) भाग में आवश्यकता अनुसार BRICKS 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।

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 (SUPAUL)
PARSA YADAV TOLA TO KALMUNTRA (BKBDP)

A. For Road

1. Damage Location/Chainage : 0 TO 520 CH

2. Damage Length : FULL BREACH

3. Nature of Damage :

4. Details of Restoration Works :

- Material being used in Restoration work : BRICK BATS, LOCAL SAND
- Equipment/Tools being used in Restoration work : JCB, TRACTOR
- Procedure taken up in Restoration work : PLACING OF MATERIAL
COMPACTION
- Restored Length : 520 MTR

B. For Bridge

1. Damage Location/Chainage :

2. Damage Length :

3. Nature of Damage :

4. Details of Restoration Works :

- Material being used in Restoration work :
- Equipment/Tools being used in Restoration work :
- Procedure taken up in Restoration work :
- Restored Length :

JE

AE

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

Signature

(Name of Inspector)

Executive Engineer
Rural Works Department
Works Division Udakishung




16/10/24


16/10/24

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



16/10/24

16/10/24

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



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 16/10/24

[Signature]
 16/10/24

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



Latitude: 26.302144
Longitude: 86.631133
Elevation: 70.42±11 m
Accuracy: 10.4 m
Time: 29-09-2024 10:21
Note: Parsa Yadav tolla se kailmunga

Powered by MotoCam



Latitude: 26.302274
Longitude: 86.631222
Elevation: 70.42±11 m
Accuracy: 10.4 m
Time: 29-09-2024 10:25
Note: Parsa Yadav tolla se kailmunga

Powered by MotoCam

[Signature]
16/10/24

[Signature]
16/10/24

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



[Signature]
 16/10/24

[Signature]
 16/10/24

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



Latitude: 26.302974
Longitude: 86.631643
Elevation: 75.42±9 m
Accuracy: 5.1 m
Time: 11-11-2024 13:53
Note: parsa yadav tola se katmungra

Powered by: NoteCam

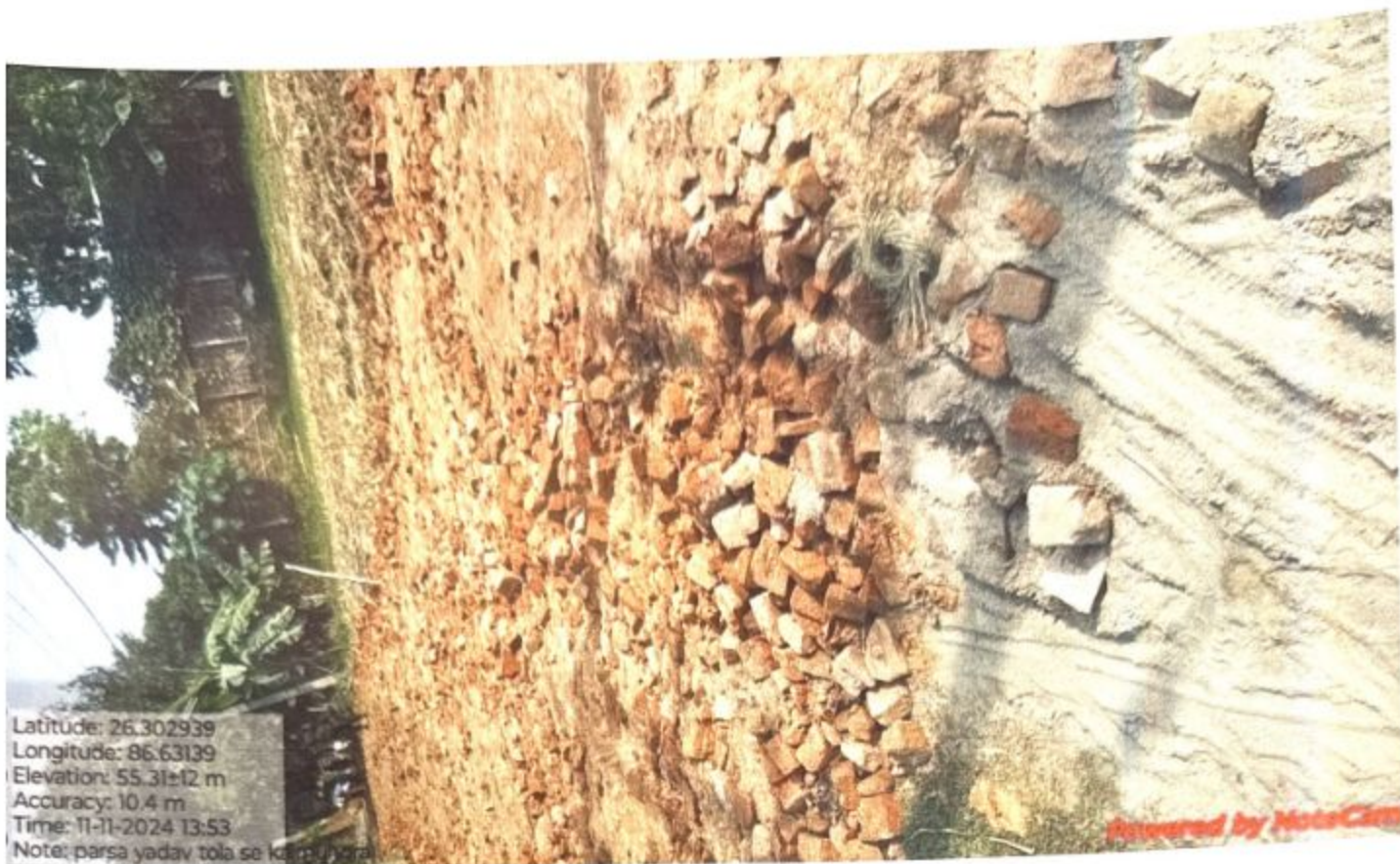
Handwritten signature
16/10/24



Note cam lite
Address : Katmungra, Bihar, India
Latitude : 26.30055371°
Longitude : 86.62958175°
Altitude : 58.0 meter
Date : 09/29/2024 05:50 pm
Accuracy : 3.7900925 meter
Time zone : IST
Note : L058 NH 57 se parsa yadav tola

Handwritten signature
16/10/24

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



16/10/24

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



16/10/24

16/10/24

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



Latitude: 26.302933
Longitude: 86.631421
Elevation: 63.8±7 m
Accuracy: 13.2 m
Time: 11-11-2024 13:54
Note: parsa yadav tola se kalmungra

Powered by NoteCam



Latitude: 26.300214
Longitude: 86.630604
Elevation: 73.87±35 m
Accuracy: 15.3 m
Time: 11-11-2024 13:30
Note: parsa yadav tola se kalmungra

बिहार सरकार
ग्रामीण कार्य विभाग(RWD)
बिहार कोशी बेसिन विकास परियोजना
(विश्व बैंक द्वारा सम्पोषित)
पथ का नाम:- परसा यादव टोला से कलमुंगरा
पथ की लम्बाई:-
पैकेज संख्या:- BKB DP/ RD/ SU- II
एकरारनामा राशि:- 15286800 = 00
एकरारनामा तिथि- 28-12-2016
पाँच वर्षीय अनुरक्षण की राशि-
कार्य प्रारंभ की तिथि- 18-11-2016
कार्य पूर्ण की तिथि - 17-05-2018
संवेदक का नाम:- रतन कुमार सिंह
कार्यपालक अभियंता का कार्यालय
ग्रामीण कार्य विभाग

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16/10/24

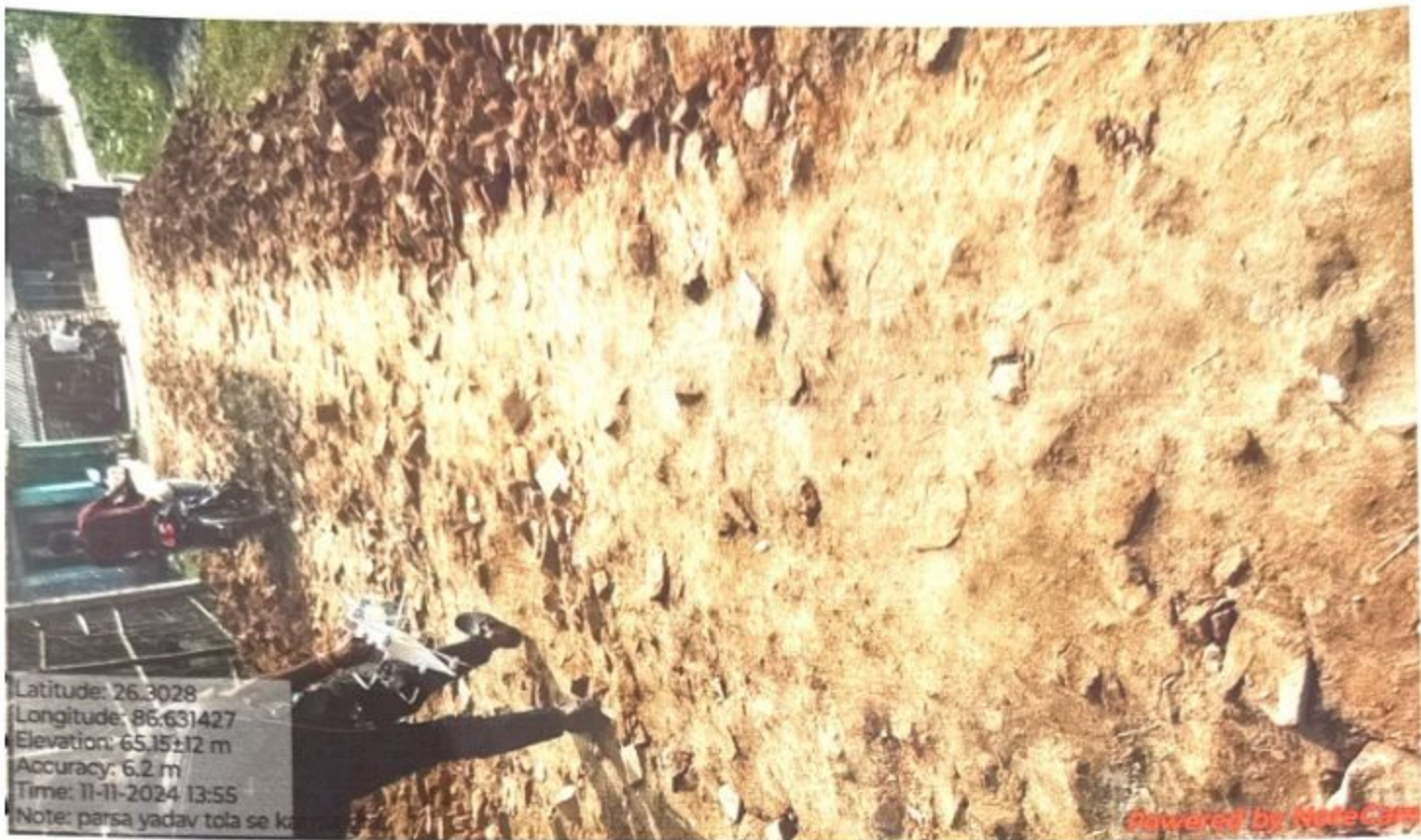
16/10/24

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



16/10/24

16/10/24
Executive Engineer
Rural Work's Department
Work's Division, Surajul



16/10/24

16/10/24

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



Latitude: 26.30257
Longitude: 86.631428
Elevation: 56.66±12 m
Accuracy: 7.3 m
Time: 11-11-2024 13:55
Note: parsa yadav tola se kalmungra

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Latitude: 26.302616
Longitude: 86.631412
Elevation: 58.76±9 m
Accuracy: 7.7 m
Time: 11-11-2024 13:55
Note: parsa yadav tola se kalmungra

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16/10/24

16/10/24

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



Latitude: 26.302987
Longitude: 86.631787
Elevation: 81.65±23 m
Accuracy: 8.8 m
Time: 11-11-2024 13:45
Note: parsa yadav tola se ka

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Latitude: 26.302551
Longitude: 86.631428
Elevation: 57.83±9 m
Accuracy: 6.5 m
Time: 11-11-2024 13:56
Note: parsa yadav tola se kalmungra

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16/10/24

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Executive Engineer
Rural Work's Department
Work's Division Sur



Latitude: 26.302999
Longitude: 86.631351
Elevation: 58.96±17 m
Accuracy: 19.7 m
Time: 10-11-2024 15:10
Note: Parsa Yadav Tola se kalmungra

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Latitude: 26.302974
Longitude: 86.631355
Elevation: 59.44±11 m
Accuracy: 10.2 m
Time: 10-11-2024 15:11
Note: Parsa Yadav Tola se kalmungra

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16/10/24

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16/10/24

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



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16/10/24

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