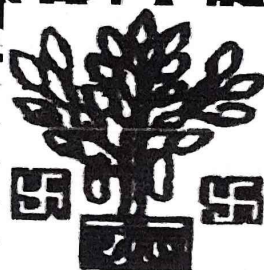


RURAL WORKS GOVT OF DEPARTMENT



Name of road -Ratan Jha to Bahramnagar

BLOCK

Runnisaidpur

FDR

Rs. 1301719.00

Year - 2019-20

NAME OF CIRCLE - R.W.D., WORKS CIRCLE, SITAMARHI

NAME OF DIVISION - R.W.D., (W) DIVISION, BELSAND

प्रतिवेदन

पथ का नाम:- रतन शांती रो बहरामगिर पथ

सालाना प्राक्कलन 2020 के जुलाई माह में रतन शांती रो प्रखंड में आई सी

बाद से क्षतिग्रस्त रतन शांती रो बहरामगिर

पथ में बाद से क्षतिग्रस्त मरम्मति मद से यातायात चालू करने हेतु तैयार किया गया है,

पथ की प्राक्कलित राशि Rs. 1301719.00 (तेरह लाख पच्चीस हजार) है।

पथ के क्षतिग्रस्त भाग में आवश्यकता अनुसार Brick Bats, Rabbish भरकर यातायात चालू करने का प्रावधान किया गया है।

प्राक्कलन वर्तमान अनुसूचित दर पर बनाया गया है।

11/01/21
उत्तीर्ण अभियंता
ग्रामीण कार्य विभाग, बेलसंड

11.01.2021
सहायक अभियंता
ग्रामीण कार्य विभाग, बेलसंड

11/01/21
कार्यपालक अभियंता
ग्रामीण कार्य विभाग, बेलसंड

DETAILED ESTIMATE FOR F.D.R.

General Abstract of Cost

Name of Road : Name of road -Ratan Jha to Bahramnagar
 Length of Road : 3.100 Km
 Block : Runnisaipur
 DISTRICT : SITAMARHI

S.No.	Particulars	Total Cost (in Thousands)
1	Total Cost for Motorable Roads	1151964.00
2	Labour cess @1%	11519.64
3	GST @12%	138235.68
	Total Cost of Road Repair	1301719.32
	Say	1301719.00

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 JE

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 11/01/2021
 AE

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 11/01/21
 EE

Technically approved for Rs 1301719=00 (Rupees thirleen Lacs one thousand seven hundred nineteen) only.

[Signature]
 10/5/21

अनुमोदित और जारी किया
 उत्तर 214 अंगु दिनांक 17/02/2021
 अंगु 214 अंगु दिनांक 09/05/2021 और
 अनुमोदित

INPUT DATA**DISTRICT****SITAMARHI****HABITATION CODE****BLOCK****Runnisaipur****ROAD DETAILS**

From (Chainage)

To (Chainage)

Flush Drain(Cum)

Road Connecting To

Brick Soling for Dismantling

CC Road for Dismantling

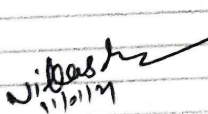
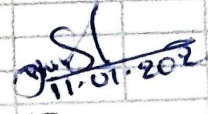
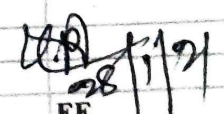
BT road for Dismantling

Name of road -Ratan Jha to Bahramnagar

Prepared By

Nikesh
11/01/21**Works Division, Belsand***11-01-2021*
KE

Schedule of Quantity

Name of road -Ratan Jha to Bahramnagar		Block		Runnisaidpur	
S.No	DESCRIPTION OF ITEMS		UNIT	RATE	AMOUNT
1	Sand Filling in Foundation Trenches as per Drawing & Technical Specification.	618.37	Cum	401.00	247965.57
2	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.				
	80% of brick bats	522.09	Cum	1546.00	807151.14
3	Single bamboo palasiding / walling of whole 2nd class bamboo (Jati or Bethua) 75mm dia and closely packed & driven including fitting fixing with half bamboo kamis horizontally in three rows with cane or tying with wire complete and struts 1.5 m apart longitudinally and providing brush wood as per drawing and technical specifications Clause 1302.5	0.00	m	172.62	0.00
4	Providing ,laying and placing empty cement bag filled with local sand including stiching with sutali etc. ----- do ----- do-----all complete job as per specification and direction of E/ I.(Including Royalty and all Taxes)	0.00	no.	23.12	0.00
5	Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row with old available pipe	0.00	m	3158.69	0.00
6	Providing Quarry Material Rabbish for filling the voids in bricks bats -----do----- all complete job as per specification and direction of E/I.				
	Taking 20% of rubbish only	130.52	Cum	742.00	96847.32
				Total	1151964.03
				Say	1151964.00
 JE		 AE		 EE	

Name of work-Ratan Jha to Bahramnagar

	Length(m3)	Width(m3)	Height (m3)	Quantity (m3)	
Local sand	18.300	2.300	3.580	150.682	
	15.100	1.580	3.900	93.046	
	16.000	1.900	4.200	127.680	
	18.00	2.100	3.900	147.420	
	25.200	1.580	2.500	99.540	
			Total	618.368	m3
Brick bats	6.400	7.000	2.050	91.840	
	6.00	3.750	0.850	19.125	
	29.000	1.1400	0.600	24.360	
	10.000	2.300	0.450	10.350	
	17.000	3.750	0.3750	23.906	
	19.000	3.750	0.375	26.718	
	17.500	5.300	2.100	194.775	
	16.100	3.750	1.450	87.543	
	18.300	2.300	0.900	37.881	
	15.100	1.580	0.650	15.507	
	16.600	1.900	0.950	29.963	
	18.000	2.100	1.450	54.810	
	25.200	1.580	0.900	35.834	
			Total	652.612	m3

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11.01.2021

BASIC RATES AS PER LATEST SOR AS ON 28/07/2016

(A) Labour

Sl. No.	Description of Labour	Unit	Rate (Rs.)
L-01	Bhisti	day	242
L-02	Bitumen Sprayer(semi skilled)	day	261
L-03	Blacksmith,special	day	295
L-04	Blaster, 2nd class	day	408
L-05	Carpenter 1st Class	day	330
L-06	Chips spreader, semi-skilled	day	295
L-07	Chiseller	day	309
L-08	Dresser (Skilled)	day	309
L-09	Driller, 2nd class	day	295
L-10	Electrician,skilled	day	312
L-11	Fitter, skilled	day	336
L-12	Mason (1st class)	day	342
L-13	Mason (2nd Class)	day	295
L-14	Mate, Semi skilled	day	284
L-15	Mazdoor (Unskilled)	day	268
L-16	Mazdoor (Semi skilled)	day	268
L-17	Mazdoor (Skilled)	day	340
L-18	Painter (1st class)	day	312
L-19	Plumber, Special	day	312
L-20	Surveyor	day	298
L-21	White Washer	day	312

Nibase
28/07/2016

BASIC RATES AS PER LATEST SOR AS ON 28/07/2016
(B) USAGE RATES OF PLANT & MACHINERY

Sr. No.	Description of		Output of Machine		Usage Rates in Rs.	
	Machine	Activity	Unit	Output	Unit	Rate
PM-001	Air Compressor 210 cfm	Supplying compressed air	cfm	210.00	per hour	437.00
PM002	Batch mix HMP 40-60 TPH	BM, DBM, SDBC, PM	t/h	50.00	per hour	21,633.00
PM003	Batch type HMP 30/40 TPH	BM, DBM, SDBC, PM	t/h	35.00	per hour	2,775.00
PM004	Bitumen boiler oil fired 200 ltr 1000 ltr	Heating of bitumen	litre / h	400.00	per hour	270.00
			litre / h	2000.00	per hour	270.00
PM005	Bitumen emulsion pressure distributor	Applying bitumen tack coat	sqm/h	1750.00	per hour	1,463.00
PM006	Concrete mixer 0.28/0.4 cum	Mixing of ingredients	cum/h	2.50	per hour	80.00
PM007	Crane upto 3.5T	Lifting of materials			per hour	1,163.00
PM-008	Dozer D 50	Dozing cutting	cum/h	200.00	per hour	3,009.00
		CLEANING	cum/h	100.00		3,009.00
PM009	Electric generator set, 125 KVA	Electricity generation	KVA	100.00	per hour	2,502.00
PM010	Emulsion sprayer with tractor	Spraying of Emulsion	sqm/h		per hour	1,091.00
PDM011	Front end-loader 1 cum bucket capacity @ 45 cum/hour	Loading soil/Aggregates	cum/h	45	per hour	1,291.00
		Loading Soil	cum/h	100.00		1,291.00
PM012	Hydraulic broom with tractor	Surface cleaning	sqm/h	1250.00	per hour	522.00
PM013	Hydraulic Excavator 0.9cum	Excavation	cum/h	100.00	per hour	1,775.00
PM014	Hydraulic self propelled chip spreader	Surface Dressing	sqm/h	1500.00	per hour	3,594.00
	Jack Hammer with tractor	Pavement breaking & rock drilling	cum/h	05. to 1	per hour	1,163.00
PM016	Joint Cutting Machine with 2-3 blades	Cutting of Joints	h		per hour	317.00
PM017	Mixall 6-10 t capacity	Mixing of bituminous materials	t/h	8.00	per hour	1,547.50
PM018	Motor Grader 3.35m blade	Scarifier & levelling	cum/h	200.00	per hour	2,674.00
PM054	Tractor Mounted Grader			50.00		481.00
PM019	Needle vibrator	Vibrating cement concrete mix	cum/h	3.50	per hour	76.35
PM020	Paver finisher Hydrostatic with sensor control 100TPH	Laying/DBM/BM/SDBC/	t/h	75.00	per hour	1,318.00
PM021	Plate compactor	Compaction	cum/h		per hour	423.00
PM022	Plate vibrator	Compaction	cum/h		per hour	423.00
PM023	Screed vibrator	Compaction	cum/h		per hour	102.64
PM024	Smooth wheeled 80-100 kN tandem roller	Compaction of Sub-base/ Asphalt	cum/h	30.00	per hour	736.00
PM025	Stone crusher (Integrated) of 200 TPH	Crushing of Spalls	t/h	200.00	per hour	11,820.00
PM026	Three wheel 80-100 kN Static Roller	Compaction/ Rolling			per hour	736.00
		Earth:- Embankment or sub-grade	cum/h	80/70		736.00
		Sub-base G-I	cum/h	10.00		736.00
		Sub-base G-II/G-III	cum/h	8.00		736.00
		WMM	cum/h	16.00		736.00
		BUSG	cum/h	10.00		736.00
		BM 50/75 mm	cum/h	12.00		736.00
		Premix 20 mm	sqm/h	250.00		736.00
		Seal Coat	sqm/h	500.00		736.00
		Surface Dressing 1st Coat	sqm/h	400.00		736.00
		Surface Dressing 2nd Coat	sqm/h	500.00		736.00
PM027	Tipper 5.5 cum/10 t	Carriage	cum/trip	5.50	per hour	957.00
PM028	Tractor with Disc Harrows (Rotovator)	Pulverisation of soil	cum/h	80.00	per hour	495.00
PM029	Tractor with ripper @ 60 cum per hour	Ripping Pavements, uprooting trees	cum/h	60.00	per hour	533.00
PM030	Tractor with trolley	Transportation of materials	t/trip	3 to 5	per hour	495.00
PM031	Tractor with Rotavator	Scarifier	cum/h	25.00	per hour	517.00
PM032	Truck 10 t capacity	Carriage	cum/trip	5.50	per hour	929.00
PM033	Vibratory roller 80-100 kN	Compaction of soil WMM	cum/h	100.00	per hour	1,915.00
		Compaction of BM	cum/h	60.00		1,915.00
PM034	Water tanker 6 kl capacity (Truck Mounted)	Carriage of water	litre / h	12000.00	per hour	166.00
PM035	Wet mix plant (75TPH)	Wet Mix	cum/h	25.00	per hour	1,643.00
PM043	Road Marking Machine	Wet Mix	cum/h	100.00	per hour	128.00

Vibha
11/01/21

BASIC RATES

Sl. No.	SOR Code	Description	Unit	Basic Rate as per SOR	Deduct Tax/Royalty	Basic Rate Exclusive Royalty	after GST 5%	Rate Including GST	Final Rate Including GST+Royalty
M-001		Bamboo (2nd Class) 75mm dia. 1.8 m - 2.5 m long	No.	17.58	15.63	15.63	28%	20.00	20.00
M-002	M-063	Cost of sand and empty bag	No.	7.19	1.75	5.44	5%	5.71	7.460
M-003	M-007	Brick bat	cum	958.65	11.60	947.05	5%	994.40	1,006.00
M-004	M-072	Binding wire	kg	59.37	52.77	52.77	18%	62.27	62.27
M-005	M-006	Sand (Fine)	cum	113.67	50.00	63.67	5%	66.85	116.85
		Rabbish	cum						303.85
		Hume Pipe 1000mm dia	m						2744.5

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11/01/21

RATE ANALYSIS FOR CARRIAGE OF BASE MATERIAL

				Runnalsapur				DISTRICT - SITAMADHI			
				BLOCK	Lead Distance (Km)		Unit	Carriage Cost per Km		Kaccha Road	SOURCE
S.NO	Material	Railway Freight (Rs)	Unsurfaced Road		Surface Road	Unsurfaced Road		Surface Road	Unsurfaced Road		
1	1 Fine Sand (Local Sand)	0	2	0	0	0	Cum	21.77	0.00	28.37	Local
2	2 Brick ball	0	7	0	0	0	1000 no	190.12	0.00	65.80	Local
3	3 Rubbish	0	7	0	0	0	Cum	76.20	0.00	28.37	Local
4	4 House Pipe	0	18	0	0	0	MT	97.78	0.00	0.00	Local

[Signature]
20.11.22

100 Single bamboo palasiding / walling of whole 2nd class bamboo (Jati or Bethua) 75mm dia and closely packed & driven including fitting fixing with half bamboo kamis horizontally in three rows with cane or tying with wire complete and struts 1.5 m apart longitudinally and providing brush wood as per drawing and technical specifications Clause 1302.5

A) Driven at least 600 mm below ground and 1200 mm above ground

Unit = Running metre

Taking Output = 3.00 metre

a) Materials

Materials

1st Class Bamboo 65 mm to 75 mm dia. (1.2 m to 3.0 m)	nos	9.00	15.00	135.00
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2nd Class Bamboo 65 mm to 75 mm dia. (1.2 m to 3.0 m)	nos.	1.50	20.00	30.00
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Binding Wire	kg	0.15	62.27	9.34
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Brush Wood (LS Rs 10.00)	LS			10.00
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b)

Labour

Mate	day	0.04	305.00	12.20
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Mazdoor (Unskilled)	day	1.00	287.00	287.00
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c)

Sundries (LS Rs 5.00)	LS			5.00
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d)

Overhead charges 6% on (a+b+c)				29.31
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e)

Contractor's profit @ 10% on (a+b+c+d)				0.00
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Cost for 3 metre = a+b+c+d+e				517.85
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Rate per metre = (a+b+c+d+e) / 3.00				172.62
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Add Cess 1%				0.00
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Finished Rate / m				172.62
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2

Providing laying and spreading brick bat in ditches —do—do— all complete job as per specification and direction of E/I.

Assuming = 300 sqm

a)

Material

Brick bat	cum	360.00	1021.23	367642.80
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b)

Labour for placing and spreading

Mazdoor (skilled)	nos.	2.00	364.00	728.00
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Mazdoor (Unskilled)	nos.	8.00	287.00	2296.00
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mate	nos.	0.40	305.00	122.00
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c)

Overhead charges 6% on (a+b)				22247.33
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d)

Contractor's profit @ 10% on (a+b+c)				0.00
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Total

393,036.13

Rate per cum =

1,310.12

e) Conversion of Bricks Bat into Brick

Carriage

$1.2/2.832 \times 850/1000 = 0.360$

Brick bat	cum	0.3602	654.91	235.88
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Total

1546.00

Add Cess 1%

15.46

Add GST 12%

185.52

Finished Rate Per cum

1,746.98

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11/11/11

Must

Providing laying and placing empty cement bag filled with local sand including stitching with sutali etc — do — do — all complete job as per specification and direction of E/I. (Including Royalty and all Taxes)

	a)	Material				
DM-159		Cost of sand and empty cement bag	nos	1.00	7.46	7.46
5.7.40.1	b)	Labour for carriage & placing to work site				
		Mazdoor (Unskilled)	nos.	0.05	287.00	14.35
	c)	Overhead charges 6% on (a+b)				1.31
	d)	Contractor's profit @ 10% on (a+b+c)				0.00
		Total				23.12
		Add Cess 1%				0.00
		Finished Rate				23.12

4 1100 Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row with old available pipe

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 Clause 1106. (With old available pipe)

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	305.00	27.45
	Mason (1st Class)	day	0.00	388.00	0.00
	Mazdoor (Unskilled)	day	2.00	287.00	574.00
b)	Material				
	Sand at site	cum	0.04	0.00	0.00
	Cement at site	t	0.03	0.00	0.00
	RCC pipe	m	7.50	2,744.50	20,583.75
c)	Overheads @ 6% (a+b)				1,271.11
d)	Contractor's profit @ 10% (a+b+c)				0.00
	Cost for 7.5 m = a+b+c+d				22,456.31
	Rate per m = (a+b+c+d)/7.5				2,994.17
e)	Carriage	m	1.00	164.52	164.52
	Total				3,158.69
	Add Cess 1%				0.00
	FINISHED RATE /M				3,158.69

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11-1-13
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Sand Filling in Foundation Trenches as per Drawing & Technical Specification.

a)	Material				
	fine sand (assuming 20% void)	Cum.	1.20	106.23	127.48
b)	Labour				
	Mate	day	0.01	305.00	3.05
	Mazdoor (Unskilled)	day	0.30	287.00	86.10
c)	Overhead charges 6% on (a+b)				13.00
d)	Contractor's profit @ 10% on (a+b+c)				0.00
	carriage		1.20	142.81	171.38
	Total				401.00
	Add Cess 1%				0.00
	Finished Rate/cum				401.00

Providing Quarry Material Rabbish for filling the voids in bricks bats —do— all complete job as per specification and direction of E/I.

Assuming Rate per cum

a)	Material				
	Rabbish	cum	1.20	322.96	387.55
b)	Labour for placing and spreading				
	Mazdoor (Unskilled)	nos.	0.30	287.00	86.10
	mate	nos.	0.01	305.00	3.05
c)	Overhead charges 6% on (a+b)				28.60
d)	Contractor's profit @ 10% on (a+b+c)				0.00
	Total				505.30
e)	Carriage				
	Rabbish	cum	1.20	197.24	236.69
	Total				742.00

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11/10/12

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कार्यपालक अभियंता का कार्यालय
ग्रामीण कार्य विभाग
कार्य प्रमंडल, शिवहर

क्रमांक- 214 अगस्त / शिवहर

दिनांक- 17/02/2021

उपक-

कार्यपालक अभियंता
ग्रामीण कार्य विभाग
कार्य प्रमंडल शिवहर।

सेवा में,

अधीक्षक अभियंता
ग्रामीण कार्य विभाग
कार्य अंचल सीतामढ़ी।

विषय- कार्य प्रमंडल बेलसंड के अधीन वर्ष 2020 के भयंकर बाढ़ से क्षतिग्रस्त पथों में
यातायात के पुनर्स्थापन हेतु तैयार किए गए प्रावकलन की जांच के संबंध में।

संदर्भ- भवदीय पत्रांक-900 दिनांक-12.09.2020

सह-सचिव,

उपयुक्त विषय पर प्रासंगिक पत्र में दिए गए निर्देश के अनुपालन में कार्य प्रमंडल
बेलसंड के अधीन वर्ष 2020 की भयंकर बाढ़ से क्षतिग्रस्त पथों में यातायात पुनर्स्थापन हेतु
किए गए कार्यों का स्थल निरीक्षण किया गया। इस पत्र के साथ सलग्न सूची के पथों का
स्थल जाँचोपसन्त प्रावकलन तकनीकी अनुमोदन हेतु समर्पित किया जा रहा है।

अनु-पथों की सूची (कुल 52 पथ) सलग्न।

विभागाध्यक्ष



कार्यपालक अभियंता
ग्रामीण कार्य विभाग
कार्य प्रमंडल शिवहर

कार्यपालक अभियंता का कार्यालय

ग्रामीण कार्य विभाग

कार्य प्रमंडल बेलसंड

बाढ़ से क्षतिग्रस्त पथों का प्राक्कलन की सूची।

Sl No	Division	Block	Name of Road	Total Cost (In Lakh)
1	Belsand	Runnisaidpur	Thumma To Belahi	12.26
2	Belsand	Runnisaidpur	Athari To Runni Via Kharka	14.91
3	Belsand	Runnisaidpur	Prem Nagar To Hanuman Nagar	4.72
4	Belsand	Runnisaidpur	NH-Gadha To Ptel Nagar	10.13
5	Belsand	Runnisaidpur	Bagari To Thumma	20.41
6	Belsand	Runnisaidpur	NH-77 Gadha To Dhanushi	6.34
7	Belsand	Runnisaidpur	Thumma To Khopi	6.21
8	Belsand	Runnisaidpur	Mahisar To Dilawarpur	2.88
9	Belsand	Runnisaidpur	Thumma To Athari	36.22
10	Belsand	Runnisaidpur	Balua To Bhulwariya	3.24
11	Belsand	Runnisaidpur	Maharani Sthan To Bagmati Bandh	11.59
12	Belsand	Runnisaidpur	Husainpur To Balan Tola	0.84
13	Belsand	Runnisaidpur	Khanua Ghat To Morang	3.52
14	Belsand	Runnisaidpur	Gidha To Phulwariya	3.01
15	Belsand	Runnisaidpur	Vinod Paswan House To Dhobahiya Tola	1.23
16	Belsand	Runnisaidpur	Ratan Jha To Bahram Nagar	13.23
17	Belsand	Runnisaidpur	Runni To Raksiya Path	1.12
18	Belsand	Runnisaidpur	Janar To Ramnagar	6.99
			Total	158.85

[Signature]
12-2-21