

RURAL WORKS DEPARTMENT



GOVERNMENT OF BIHAR

CIRCLE – R.W.D. works Circle, Kishanganj

DIVISION – R.W.D. works Division , Kishanganj-1

Name of Work - BASTAKOLA PMGSY ROAD TO BAIRBANNA

Block - Kochadhaman

Estimated cost - Rs 478220.00

Year : 2020-21

Inspection Report for flood damage work

Date:

1. Name of PIUs- Kishanganj - 1

2. Name of Block/Road- Bastakola pmsy road to Bairbanna

A. For Road

1. Damage Location/Chainage :

2. Damage Length : 64 m.

3. Nature of Damage : Damage and deep side cutting

4. Details of Restoration :

i Material being used in Restoration

sand, cement bags,
Bamboo, Brick bats.

ii Equipment/Tools being used in Restoration works:

Tractor

iii Procedure taken up in Restoration works

manual

iv Restored Length

64 m.

B. For Bridge

1. Damage Location/Chainage :

2. Damage Length :

3. Nature of Damage :

4. Details of Restoration :

i Material being used in Restoration :

ii Equipment/Tools being used in Restoration works:

iii Procedure taken up in Restoration works :

iv Restored Length :

14-12-20

Signature of JE/AE/EE

14/12/20
AE

14/12/20

14/12/20

Signature

कार्यपालक अभियन्ता
(Name of Inspector)
ग्रामीण कार्य विभाग
कार्य प्रमण्डल, अररिया

Detailed Estimate

BASTAKOLA PMGISY ROAD TO BAIRBANNA

Name of work :-

Name of work :-		BASTAKULA PMST ROAD TO BAKRABATI							
Sl No	Item	No	Length	Width	Height	Qty	Unit	Rate	Amount
1	Providing and cutting of 62 mm to 75 mm dia bamboo piles to size and making shoes, all complete job ----E/I	75	1.50		-	112.50			
		32	2.50		-	80.00			
		Total				192.50	RM	50.20	9664.00
2	Providing, fitting and fixing 62 mm to 75 mm dia bamboo runners in position at every vertical pile with 150 mm long nails or 38 avg G.I. wire including cost of G.I. wire or nails complete job as per specification and direction of E/I	4	12.00		-	128.00			
		6	25.00		-	150.00			
		Total				278.00	RM	28.53	7931.00
3	Providing and filling empty cement bags with local sand, stitching the bags and placing including supply of sutli etc. all complete job ----E/I	1	19.00	0.45	1.20	10.26			
		3	5.00	2.50	1.20	45.00			
		1	35.00	1.20	1.50	63.00			
		3	5.00	1.10	2.10	34.65			
		Total				152.91	cum		
		5400.02 cft				Say 4500.00	Nos	38.14	171630.00
4	Providing laying and spreading brick bats in Road ditches all complete as per approved design, specifications and direction of E/I	1	19.00	0.60	0.70	7.98			
		3	5.00	1.15	0.60	10.35			
		1	35.00	1.20	1.00	42.00			
		3	5.00	1.30	2.50	48.75			
		Total				109.08	cum	2145.02	233979.00
TOTAL								423204.00	
Add 12 % GST								Rs 50784.00	

Add 12 % GST	Rs 50784.00
Add 1 % L. Ces	Rs 4232.00
Total Cost	Rs 478220.00

SAY RS. 478200/-

Pravin
10-12-20
J.E
RWD
Kishanganj-1

Pravin
10/12/20
A.E
R.W.D
Kishanganj-1

C
14/12/20
E.E
R.W.D
Kishanganj - 1

Technically approved for ₹ 478200/-

(Rs. Four Lacs ^{Eight} Seven Thousand and TWO

Hundred) only

FW
25/11/20

अधीक्षण अभियन्ता
ग्रामीण कार्य विभाग
कार्य अंचल, किशनगंज

LEAD CHART

S.L. No.	Name of material	Source	Mode of transport	From	To	Lead in K.M		Loading	Unloading	Total Loading + Unloading
						Surface Road	Katcha Road			
1	2		3	4	5	6	7	8	9	10
1	Bricks	Local Kiln	By road	Local Kiln	Site	7	1	203.05	203.05	406.10
2	Fine sand	Local source	By road	Local	Site	2	1	59.43	37.10	96.53
3	Coarse Sand	Chopra	By road	Chopra	Site	80	0	59.43	37.10	96.53
4	Boulder	Siliguri	By road	Siliguri	Site	120	0	118.86	59.43	178.29
6	Stone metal for GSB	Siliguri	By road	Siliguri	Site	120	0	118.86	59.43	178.29
7	Seel	Local	By road	Local	Site	5	0	118.86	59.43	178.29
8	Hume pipe (1000 mm	Purnia	By road	Purnia	Site	90	0	41.62	28.00	69.62
9	Hume pipe (600 mm	Purnia	By road	Purnia	Site	90	0	17.84	12.00	29.84
10	Bamboo 62 to 75 mm	Local	By road	Local	Site	5	5	1,112.00	1,112.00	2,224.00


 10-12-2018
 J.E.
 RWD
 Kishanganj-1


 A.E.
 R.W.D
 Kishanganj-1


 14/12/20
 E.E.
 R.W.D
 Kishanganj-1

FDR 2020
RATE ANALYSIS

Sl. No.	SDS No.	MOOD	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
1	302	(i)	Excavation in cutting in soil by manual means with lead up to 50 m Excavation for roadway in soil using manual means for carrying of cut earth to embankment site with a lift upto 1.5 m and lead upto 50 m as per technical specification clause 302.3 Unit = cum Taking output = 120 cum				
		a)	Labour	day	1.80	305.00	549.00
			Male	day	45.00	287.00	12915.00
			Machinery (Unskilled)				
		b)	Overheads @ 6 % on (a)				0.00
		c)	Contractor's profit @ 0% on (a+b)				13.464.00
		c)	Cost for 120 cum = a+b+c				112.20
			Rate per cum = (a+b+c)/120				112.20
			Total Cost	CUM			112.20
2	3.3	301.5	Construction of embankment with material obtained from road way cutting Construction of embankment with approved materials deposited at site and obtained from roadway cutting and excavation from drain and foundation of other structures graded and compacted to meet requirement of Tables 300.1 and 300.2 as per Technical Specification Clause 301.5 Unit = cum Taking output = 100 cum				
		a)	Labour	day	0.02	305.00	6.10
			Male	day	0.50	287.00	143.50
			Mazdoor (Unskilled)				
		b)	Machinery	hour	0.50	3,337.90	1,668.95
			Dozer D-50 for spreading @ 100 cum per hour	hour	1.00	573.20	573.20
			Tractor mounted grader arrangement for grading @ 100 cum per hour	hour	2.00	184.00	368.00
			Water tanker 6 kl capacity	hour	1.25	803.00	1,003.75
			Three wheel 80-100 kN Static Roller				
		c)	Material	kl	12.00	40.00	480.00
			Water	cum	100.00	34.81	3,481.00
			Compensation for earth				
		d)	Overheads @ 6 % on (a+b+c)				0.00
		e)	Contractor's profit @ 10% on (a+b+c+d)				7,724.50
			Rate for 100 cum = a+b+c+d+e				77.25
			Rate per cum = (a+b+c+d+e)/100=				77.25
			Total Cost	CUM			77.25
			Grand total = 112.2 + 77.25 =	CUM			189.45
3	9.3	1100	Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row Providing and laying reinforced cement concrete pipe NP3 for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets Clause 1106.				
		A.	600 MM DIA Unit =m Taking output =7.5 m (3 pipes of 2.5 m length each)				
		a) Material					
		i) Sand at site	cum			175.80	0.00
		ii) Cement at site	ton			4850.80	0.00
		iii) RCC pipe NP 3 pipe including collar at site	m	7.50		2075.92	15569.40
		b) Labour					
		Male	day	0.04		305.00	12.20
		Mason (1st class)	day	0.12		388.00	46.56
		Mazdoor (Unskilled)	day	0.96		287.00	275.52
		c)Overheads @6 % on (a+b)					0.00
		d)Contractor's profit @ 0% on (a+b+c)					0.00
		e) Carriage					
		i) Sand at site	cum	0		2107.51	0.00
		ii) Cement at site	ton	0		5547.44	0.00
		iii) RCC pipe NP 3 pipe including collar at site	m	7.50		921.38	6910.35
		Cost for 7.5m = (a+b+c)					22814.03
		Rate per m =(a+b+c)/7.5					3041.87
		Total					3041.87
			Total Cost	M			3041.87
4	9.3	1100	Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row Providing and laying reinforced cement concrete pipe NP3 for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets Clause 1106.				
		B.	1000 MM DIA				

			Unit =m				
			Taking output =7.5 m				
			(3 pipes of 2.5 m length each)				
			a) Material				
			i) Sand at site	cum		175.80	0.00
			ii) Cement at site	ton		4850.80	0.00
			iii) RCC pipe NP 3 pipe including collar at site	m	7.50	2758.22	20686.65
			Jute	kg	7.50	33.66	252.45
			b) Labour				
			Fitter	day	1.00	395.00	395.00
			Mason (1st class)	day	2.00	388.00	776.00
			Mazdoor (Unskilled)	day	21.00	287.00	6027.00
			c)Overheads @6 % on (a+b)				
			d)Contractor's profit @ 0% on (a+b+c)				0.00
			e) Carriage				
			i) Sand at site	cum	0	2107.51	0.00
			ii) Cement at site	ton	0	5547.44	0.00
			iii) RCC pipe NP 3 pipe including collar at site	m	7.50	1030.28	7727.10
			Cost for 7.5m = (a+b+c+d)				35864.20
			Rate per m =(a+b+c+d)/7.5				4781.89
			Total				4781.89
			Total Cost	m			4781.89

5	9.5 (C)	1100	Providing and Laying Reinforced Cement Concrete Pipe NP3 as per Design In Double Row				
			Providing and laying reinforced cement concrete pipe NP3 for culverts on first class bedding of granular material in double row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets as per Clause 1106.				
			C.				
			2 X 1000 MM DIA				
			Unit =m				
			Taking output =7.5 m				
			(6 pipes of 2.5 m length each in two rows)				
			a) Material				
			i) Sand at site	cum		175.80	0.00
			ii) Cement at site	ton		4850.80	0.00
			iii) RCC pipe NP 3 pipe including collar at site	m	15.00	2758.22	41373.30
			Jute	kg	15.00	33.66	504.90
			b) Labour				
			Fitter	day	2.00	395.00	790.00
			Mason (1st class)	day	4.00	388.00	1552.00
			Mazdoor (Unskilled)	day	42.00	287.00	12054.00
			c)Overheads @6 % on (a+b)				
			d)Contractor's profit @ 0% on (a+b+c)				0.00
			e) Carriage				
			i) Sand at site	cum	0	2107.51	0.00
			ii) Cement at site	ton	0	5547.44	0.00
			iii) RCC pipe NP 3 pipe including collar at site	m	15.00	1030.28	15454.20
			Cost for 7.5m = (a+b+c)				71728.40
			Rate per m =(a+b+c)/7.5				9563.79
			Total				9563.79
			Total Cost	M			9563.79

6	WRD 5,7.40.1		Providing and Placing Sand bags including all material and 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				
			Unit :-	Per % nos			
			Taking Out put:-	100 nos			
		M-159	Cost of E.C. Bags	%	100	8.46	846.00
			Cost of Sand(100x1.2/35.31/120Cft)	cum	3.40	141.85	482.20
							1328.29
		b)	Overheads @ 0% on (a+b+c)				
		c)	Overheads @5 %				
		d)	Carriage of sand	cum	3.40	306.27	1041.32
		e)	For filling & stitching & stacking (Sub analysis below)				583.88
		f)	For Placing (Sub Analysis below)				861.00
			Rate Per % Bags				Rs.3814.49
			Final Rate Per % Bags				Rs.3814.50
			Sub Analysis				
			A) For filling & stitching & stacking				
			(a) Unskilled mazdoor for filling sand into bags and sewing	nos	2.00	287.00	574.00

			b) Sutali						
			c) Overheads @ 0% on (a+b+c)	Kg		0.50		19.75	9.88
			d) Overheads @ 5 %						
			Cost for 100 nos = a+b+c+d						583.88
			Rate per % Nos =						583.88
			Final Rate For filling & stitching & stacking			Per % nos	(a)		Rs.583.88
5.7.40.1		WRD	Labour rate for filling of E.C.Bags with stitching and stacking						
1			Sub Analysis						
			B For Placing						
			(a) Unskilled mazdoor for carrying filled bags and placing to work site	nos		3		287.00	861.00
			b) Overheads @0% on (a+b+c)						
			c) Overheads @5 %						861.00
			Cost for 100 nos = a+b+c						861.00
			Rate per % Nos =						861.00
			Final Rate			Per%Nos	(b)		Rs.861.00
			Only Labour Charge			Per%Nos			Rs.1444.66
7	5.7.7	WRD	Providing bamboo piles including 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/I.						
		5.7.7							
			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	nos		0.25		345.00	86.25
			Carpenter Gr II	nos		2.5		287.00	717.50
			Unskilled mazdoor for piling						
		(b)	Materials						
			Bamboo 75 mm to 62 mm dia	m		30.5		23.85	727.43
			Sub total						1521.19
		(c)	Overheads @5 %	%		15			1521.19
			Total for 30.5 Mtr Length						50.20
			Rate Per M						50.20
						Say Rs		Per M	50.20
8	5.7.9	WRD	Supplying 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, all material and Labour complete job as per specification and direction of E/I.						
			Unit :-	Per M					
			Taking Out put:-	30.50	Mtr				
		(a)	Materials						
			Cost of 150 mm long nails	Kg		0.5		55.84	27.92
			Bamboo 75 mm to 62 mm dia	m		30.5		23.85	727.43
		(b)	Labour						
			Carpenter Gr II	nos		0.125		345.00	43.13
			Unskilled mazdoor	nos		0.25		287.00	71.75
			Sub total						870.22
		(c)	Overheads @5 %			15 %			870.22
			Total for 30.5 Mtr Length						28.53
			Rate Per M						28.53
						Say Rs		Per M	28.53
9	5.7.8	WRD	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 or nails, bamboo Labour for complete job as per specification and direction of E/I.						
			Unit :-	Per M ²					
			Taking Out put:-	9.30	Sqm				
			(Assuming strip of 3.05x3.05 = 9.30 sqm)						

	(A)	Materials	75 mm to 100 mm long nails				
			Bamboo 75 mm to 62 mm dia	Kg	0.25	55.84	13.96
			(Bamboo @ 75mm = 3050/75 = 40.67 say 41 nos. X 3.05 = 125.05m Add for Lower Binder of Chachan 10 x 3.05 = 30.5 m Runner (@ 150mm C/C) 7 x 3.05 = 21.35m (Total = 143.35m, Hence, 176.9/6 = 30 Nos)				
				m	143.35	23.85	3418.90
			(B) Labour				
			Carpenter Gr II	nos	1	345.00	345.00
			Unskilled mazdoor	nos	1	287.00	287.00
			Sub total				4064.86
			(c) Overheads @ 5 %	15 %			
			Total for 9.30 SqM				4064.86
			Rate Per SqM				437.08

				Say Rs	Per M ²	437.08
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10	9.2 (i)	1100 & 800	Sand filling or Type B (First Class) Bedding Laying (First Class) bedding on well compacted sand, moorum or approved granular material as per Clause 1105 (ii) Filling in foundation trenches as per drawing and technical specification Clause 305.3.9				
		1.	Sand filling				
			Unit = cum				
		a)	Labour				
			Mate	day	0.01	305.00	3.05
			Mazdoor (Unskilled)	day	0.30	287.00	86.10
		b)	Material				
			Sand (assuming 20 per cent voids)	cum	1.20	141.85	170.22
		c)	Overheads @ 6 % on (a+b)				0.00
		d)	Overheads @ 5 %				
			<u>CARRIAGE COST</u>				
			sand	Cum	1.2	306.27	367.52
			Rate per cum = a+b+c				626.89
				Total Cost	CUM		626.89

11	WRD	5.7.40	Construction of granular sub base using jhama metal/ Brick Bat vide WRD Providing and laying dry graded jhama khoa? Brickbat or stone filter under brick pitching or boulder pitching in slope or apron including light ramming etc.all complete job as per specification and direction of E / I. Unit = cum Taking output = 2.832 cum				
		(a)	Labour				
			Mazdoor (Unskilled)	day	0.00	305.00	0.00
			Mazdoor (Unskilled)	day	3.00	287.00	861.00
			Sub total of Labour for 2.832 Cum				861.00
			Labour charge for 1.00 cum				304.03
		(b)	Material				
			Brick bat:	cum	1.200	1,062.00	1,275.60
		(e)	Carriage				
			Brick bat	cum	1.200	471.16	565.39
			Cost for 1.00 cum = a+b+c+d+e				2,145.02
			Rate per cum = (a+b+c+d+e)				Rs.2145.02
			Final Rate				Rs.2145.02

14/12/20