

RURAL WORKS DEPARTMENT



GOVERNMENT OF BIHAR

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

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

Name of Work - Bastakol PMGSY Road to Koch Tola

Block - Kochadhaman

Estimated cost - Rs 945892.00

Year : 2020-21

Inspection Report for flood damage work

Date:

1. Name of PIUs- Kishanganj-2

2. Name of Block/Road- Bastakel pmgsy road to Koch 4019

A. For Road

1. Damage Location/Chainage :

2. Damage Length : 175 m.

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

Damage and deep side cutting

sand, cement bags,
Bamboo, brick bats

Tractor

manual

175 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 :

18-12-20

Signature of JE/AF/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

Name of work :-

Bastakol PMGSY Road to Koch Tola

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	105	2.65	-	-	278.25	RM	50.20	28024.00	
		140	2.00	-	-	280.00				
		Total				558.25				
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 swg G.I. wire including cost of G.I. wire or nails complete job as per specification and direction of E/I.	12	100.00	-	-	1200.00	RM	28.53	50898.00	
		8	73.00	-	-	584.00				
		Total				1784.00				
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	15.00	1.20	0.80	14.40	cum			
		1	10.00	1.20	0.65	7.80				
		1	10.00	1.10	1.25	13.75				
		1	22.00	1.30	0.40	11.44				
		1	106.00	1.20	0.60	76.32				
		1	10.00	0.50	0.35	1.75				
		Total				125.46				
4	Providing laying and spreading brick bats in Road ditches all complete as per approved design, specifications and direction of E/I	=	4430.62 cft			Say	3692.00	Nos	38.14	140813.00
		1	15.00	3.00	0.45	20.25				
		1	10.00	3.00	0.45	13.50				
		1	10.00	4.00	0.60	24.00				
		1	22.00	3.50	0.25	19.25				
		1	106.00	3.00	0.60	190.80				
		1	10.00	2.50	0.80	20.00				
		Total				287.80	cum	2145.02	617337.00	
TOTAL									837072.00	

Add 12 % GST	Rs 100449.00
Add 1 % L. Ces	Rs 8371.00
Total Cost	Rs 945892.00

Say Rs. 945900/-

P. S.
18-12-20

J.E
R.W.D
Kishanganj-1

Cham
10/12/20

A.E
R.W.D
Kishanganj-1

C
14/12/20

E.E
R.W.D
Kishanganj - 1

Technically approved for ₹ 945900/-

(Rs) Nine Lacs Four thousand and nine

Hundred only

Shre
25/12

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

[Signature]
10-12-02
J.E

RWD
Kishanganj-1

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10/12/00

A.E
R.W.D
Kishanganj-1

[Signature]
14/12/00

E.E
R.W.D
Kishanganj-1

FDR 2020
RATE ANALYSIS

Sl. No.	SDB Sl. No.	MORD Ref No.	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				
			Male	day	1.80	305.00	549.00
			Mazdoor (Unskilled)	day	45.00	287.00	12,915.00
		b)	Overheads @ 6 % on (a)				
		c)	Contractor's profit @ 0% on (a+b)				0.00
		c)	Cost for 120 cum = a+b+c				13,464.00
			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				
			Male	day	0.02	305.00	6.10
			Mazdoor (Unskilled)	day	0.50	287.00	143.50
		b)	Machinery				
			Dozer D-50 for spreading @ 100 cum per hour	hour	0.50	3,337.90	1,668.95
			Tractor mounted grader arrangement for grading @ 100 cum per hour	hour	1.00	573.20	573.20
			Water tanker 6 kl capacity	hour	2.00	184.00	368.00
			Three wheel 80-100 kN Static Roller	hour	1.25	803.00	1,003.75
		c)	Material				
			Water	kl	12.00	40.00	480.00
			Compensation for earth	cum	100.00	34.81	3,481.00
		d)	Overheads @ 6 % on (a+b+c)				
		e)	Contractor's profit @ 10% on (a+b+c+d)				0.00
			Rate for 100 cum = a+b+c+d+e				7,724.50
			Rate per cum = (a+b+c+d+e)/100=				77.25
			Total Cost	CUM			77.25
			Grand total = 112.20 + 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 (5 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)				
		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 ii) Cement at site iii) RCC pipe NP 3 pipe including collar at site Jute b) Labour Fitter Mason (1st class) Mazdoor (Unskilled) c)Overheads @6 % on (a+b) d)Contractor's profit @ 0% on (a+b+c) e) Carriage i) Sand at site ii) Cement at site iii) RCC pipe NP 3 pipe including collar at site Cost for 7.5m = (a+b+c+d) Rate per m =(a+b+c+d)/7.5 Total	cum cum m kg day day day m ton m		175.80 4850.80 2758.22 33.66 395.00 388.00 287.00 2107.51 5547.44 1030.28	0.00 0.00 20686.65 252.45 395.00 176.00 602 / 00 0.00 0.00 7727.10 35864.20 4 / 81.89 4781.89
			Total Cost	m			Rs. 781.80
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 ii) Cement at site iii) RCC pipe NP 3 pipe including collar at site Jute b) Labour Fitter Mason (1st class) Mazdoor (Unskilled) c)Overheads @6 % on (a+b) d)Contractor's profit @ 0% on (a+b+c) e) Carriage i) Sand at site ii) Cement at site iii) RCC pipe NP 3 pipe including collar at site Cost for 7.5m = (a+b+c) Rate per m =(a+b+c)/7.5 Total	cum ton m kg day day day m ton m		175.80 4850.80 2758.22 33.66 395.00 388.00 287.00 2107.51 5547.44 1030.28	0.00 0.00 41373.30 504.90 790.00 1552.00 12054.00 0.00 0.00 15454.20 71728.40 9563.79 9563.79
			Total Cost	M			9563.79
6	WRD 5.7.40.1	M-159	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 :- Taking Out put:- Cost of E.C. Bags Cost of Sand(100x1.2/35.31/120Cft) b) Overheads @ 0% on (a+b+c) c) Overheads @ 5 % d) Carriage of sand e) For filling & stitching & stacking (Sub analysis below) f) For Placing (Sub Analysis below) Rate Per % Bags Final Rate Per % Bags	Per % nos 100 nos Per % nos cum cum	100 3.40 3.40	8.46 141.05 306.27	846.00 482.29 1041.32 583.88 861.00 Rs.3814.49 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) Satali						
			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.	1	WRD	Labour rate for filling of E.C.Bags with stitching and stacking						
			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 %						
			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					Rs.1444.88	
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.						
			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					1531.19	
		(c)	Overheads @5 %	%		15			
			Total for 30.5 Mtr Length					1531.19	
			Rate Per M					50.20	
			Say no 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 %			
			Total for 30.5 Mtr Length					870.22	
			Rate Per M					28.53	
			Say no per M					28.53 Per M	
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	Kg	0.25	55.84	13.96
			Bamboo 75 mm to 62 mm dia				
			(Bamboo @ 75mm = 3050/75 = 40.67 say 41 nos. X 3.05 = 125.05m				
			And for Lower border 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	3416.90
		(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
10	9.2 (1)	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				
		i.	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)				
		d)	Overheads @ 5 %				0.00
			CARRIAGE COST				
			sand	Cum	1.2	306.27	367.52
			Rate per cum = a+b+c				626.05
			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

C
14/12/20