

FDR 2021-22

पथ का नाम :- TO1 kurthu to Mushahari

पथ की लम्बाई :-

प्राक्कलित राशि :- Rs 35680 = 00

प्रतिवेदन

माह मई के अंतिम सप्ताह से लेकर माह अक्टूबर के तीसरे सप्ताह तक लगातार भारी वर्षा, परिणामस्वरूप आयी बाढ़ के चलते अधिकांश पथ अंशतः अथवा पूर्णतः जलमग्न हो गये, पथ में कटाव हो गया एवं यातायात बाधित हो गया।

जनहित, कार्यहित एवं आसन्न पंचायत आम चुनाव एवं विभागीय सचिव महोदय के आदेश (पत्रांक- मु0अ0-4(मू0) विविध कार्य-23-60/2020-1937 पटना, दिनांक-07.07.2021) के आलोक में क्षतिग्रस्त पथों को ईट टुकड़ों से भरकर यातायात बहाल किया गया।

जलस्तर कम होने एवं पानी का बहाव बन्द होने के पश्चात् आदेशानुसार किये गये कार्य के अनुसार प्राक्कलन तैयार कर घटनोत्तर स्वीकृति हेतु समर्पित की जा रही है। कार्यहित में प्राक्कलन की स्वीकृति अपेक्षित है।

प्राक्कलन को कार्य अंचल, दरभंगा द्वारा स्वीकृत अद्यतन दर के आधार पर तैयार कर अग्रेतर कार्रवाई हेतु समर्पित की जाती है।

3-11-21

कनीय अभियंता
ग्रा0का0वि0, कार्य प्रशाखा,
अलीनगर
दिनांक 24/11/21

3/11/21

सहायक अभियंता
ग्रा0का0वि0 कार्य अवर प्रमंडल,
अलीनगर
दिनांक 24/11/21

3/11/21

कार्यपालक अभियंता
ग्रामीण कार्य विभाग
कार्य प्रमंडल, बेनीपुर

Name of work: Detailed Estimate for FDR to the Road from TO1 kurthu to mushahare for the year 2021-22.

(A). Pro. 2 billing the brick-bats including the cost of bricks-bats and labour all complete job as per specification and direction of E/z.c.

$$\begin{aligned} \checkmark \text{ Ch. } 3.00 \text{ km } 1 \times 25.0 \text{ m} \times 0.300 \text{ m} \times 0.600 \text{ m} &= 4.50 \text{ m}^3 \checkmark \\ 1 \times 23.0 \text{ m} \times 0.300 \text{ m} \times 1.00 \text{ m} &= 6.90 \text{ m}^3 \checkmark \\ \hline &11.40 \text{ m}^3 \checkmark \end{aligned}$$

$$@ \text{ Rs } 2004/96 \text{ per m}^3 \text{ ————— Rs } 22856 = 54$$

(B) Labour for cutting 62mm to 75mm dia bamboo piles to size and making shoes and driving etc all complete job as per direction and specification of E/z.c

$$28 \text{ Nos} \times 1.2 \text{ m} = 33.60 \text{ m}$$

$$@ 31 = 20 / \text{m} \text{ ————— Rs } 1048 = 32$$

(C) Labour for bitting and bixing 62mm to 75mm bamboo runners E/z.c

$$6 \text{ Nos} \times 23.0 \text{ m} = 138.0 \text{ m}$$

$$\Rightarrow 23.0 \text{ Nos.}$$

$$@ 141 = 50 / \text{m} \text{ ————— Rs } 3254 = 50$$

$$\text{Rs } 27159 = 36$$

D.T.n

B.F.

Rs 27159=36

(1) Labour for filling empty cement bags with local sand stitching the bags and placing including supply of suti and EC bags etc. E/2 c

90 Nos

@ 36=90 / bags ————— Rs 3321=00

Rs 30480=36

Add 12% GST ————— (+) Rs 3658=00

Add 1% LC ————— (+) Rs 366=00

Add 10% SF

11.40 m² x 1032 x 0.1 ————— (+) Rs 1176=00

Rs 35680=00

Checked & Verified

18-12-2021
AE

33
10/11/21
EE

3-11-21
AE

3/11/21
AE

3/11/21
EE

Technically Sanctioned for the Rs. 35680.00
(Rupees thirty five thousand six hundred eighty only)

Superintending Engineer
PWD, Works Circle, Darbhanga

	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
	BRICK BATS PITCHING MANUAL MEANS				
	Labour for laying dry graded Jhama Khoa or stone filter under Brick pitching or Boulder Pitching in slope or apron including light ramming etc. all complete as per approved design, specification and Direction of E/I				
	Unit = Per Cum				
	Taking output = 2.832 Cum				
a)	Labour				
	Mazdoor (Unskilled)	Nos.	3.00	304.00	912.00
b)	Over Heads @ 12% on (a)				109.44
	Cost for 2.832 cum				1,021.44
	Rate per cum (Rs)				360.68
	Total Cost	cum			360.68
1.4 RCD	Cost of Haulage Excluding Loading and Unloading				
	Haulage of materials by Tractor excluding cost of loading, unloading and stacking				
	Unit = t.Km				
	Taking output = 3.60 tonnes load and lead 10 km=36.0 t.km				
	(i) Surface Road				
	Speed with Load:15 km/hour				
	Speed while Returning empty:25km/hour.				
a)	Machinery				
	Tractor 3.6 tonne capacity				
	Time taken for onward haulage with load	hour	0.667	612.00	408.20
	Time taken for empty return trip.	hour	0.400	612.00	244.80
b)	Over Heads @ 12% on (a)				78.36
	Cost for 36 t Km=a+b				731.36
	Rate per t.km=(a+b)/36				20.32
	Total Cost	t.Km			20.32
	(ii) Unsurfaced Graveled Road				
	Speed with Load:12 km/hour				
	Speed while Returning empty:20km/hour.				
a)	Machinery				
	Tractor 3.6 tonne capacity				
	Time taken for onward haulage with load	hour	0.833	612.00	509.80
	Time taken for empty return trip.	hour	0.500	612.00	306.00
b)	Over Heads @ 12% on (a)				97.90
	Cost for 36 t Km=a+b				913.69
	Rate per t.km=(a+b)/36				25.38
	Total Cost	t.Km			25.38
	(iii) Katcha Track and Track in River Bed/Nallah Bed and Choe Bed				
	Speed with Load:10 km/hour				
	Speed while Returning empty:15km/hour.				
a)	Machinery				
	Tractor 3.6 tonne capacity				
	Time taken for onward haulage with load	hour	1.000	612.00	612.00
	Time taken for empty return trip.	hour	0.667	612.00	408.20
b)	Over Heads @ 12% on (a)				122.42
	Cost for 36 t Km=a+b				1,142.63
	Rate per t.km=(a+b)/36				31.74
	Total Cost	t.Km			31.74

DESCRIPTION		Unit	Quantity	Rate	Amount in Rs
Loading and Unloading of Stone Boulder/Stone aggregates/Sand/Kanker/Moorum					
Placing Tractor at Loading point, loading with front loader, dumping turning for return trip, excluding for haulage and return trip					
Unit = Cum					
Taking output = 2.25 Cum					
Time Required for					
i) Positioning of Tractor at loading point		1 Min			
ii) Loading by Front end loader 1 Cum Bucket Capacity @ 25 Cum per hour		5 Min			
iii) Maneuvering, reversing, dumping and turning for return		0 Min			
iv) Waiting time, unforeseen contingencies etc		0 Min			
Total		6 Min			
a) Labour					
Mate		day	0.03	321.00	9.63
Mazdoor for loading and unloading		day	0.72	304.00	218.88
b) Machinery					
Tractor 3.6 tonne capacity		hour	0.1	612.00	61.20
Front end-loader 1 cum bucket capacity @25 cum/hour		hour	0.083	1594.00	132.30
c) Over Heads @ 12% on (a+b)					
Cost for 2.25 cum=(a+b+c)					50.64
Rate per cum (Rs)					472.65
Note:- Unloading will be done manually					210.07
1 Supplying for Brick Bats (with OH)					
A. Basic Rate of Brick Bats		Per Cum		1032.00	1032.00
Add overhead charges			12%		123.84
Total					1155.84
Surface Lead		KM	7		
Katcha Track and Track in River Bed/Nallah Bed and Choe Bed		KM	1		
Factor(3.6/2.25)		Cum	1.6		
B. Carriage(with OH)					
((1.6*7*20.32)+(1.6*1*31.74)+(210.07))					488.438
C. Cost of Labour for Pitching and Light Ramming as per WRD SOR 6.6.1(with OH)					
					360.68
Total (A+B+C)					2004.96
For (7km.p+1kmk)= without (GST+LC+SF)					2004.96
For (6km.p+1kmk)= without (GST+LC+SF)					1972.45
For (5km.p+1kmk)= without (GST+LC+SF)					1939.93
For (4km.p+1kmk)= without (GST+LC+SF)					1907.42
For (3km.p+1kmk)= without (GST+LC+SF)					1874.91

Sl. No.		DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
5.7.7	WRD SOR	Labour for cutting 62 mm to 75 mm dia 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				
		Labour				
		Carpenter Gr II	Nos	0.25	364	91.00
		Unskilled mazdoor for pilling	Nos	2.5	304	760.00
		Add Overhead charge 12 %				102.12
						953.12
		Rate	M			31.25
		Say Rs	M			31.20
2	5.7.8 WRD SOR	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 or nails complete job as per specification and direction of E / I.				
		Unit :- Per M2				
		Taking Out put:- 9.30 Sqm				
		(Assuming strip of 3.05x3.05 = 9.30 sqm)				
		Materials				
		75 mm to 100 mm long nails (BCD)	Kg	0.25	58	14.50
		Labour				
		Carpenter Gr II	Nos	1	364	364.00
		Unskilled mazdoor	Nos	1	304	304.00
		Add Overhead charge 12 %				81.90
						764.40
		Rate	M			82.19
		Say Rs	M			82.20
3	5.7.9 WRD SOR	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.				
		Unit :- Per M				
		Taking Out put:- 30.50 Mtr				
		Materials				
		75 mm to 100 mm long nails (BCD)	Kg	0.5	58	29.00

			Labour			
		Carpenter Gr II				
		Unskilled mazdoor	Nos	0.125	364	45.50
			Nos	0.25	304	76.00
		Add Overhead charge 12 %				18.06
						168.56
		Rate	M			5.53
		Say Rs	M			5.50
4		Supply Of Bamboo				
	A	Bamboo 6m to 8 m	Nos	1	141.5	141.5
		Gross Truck Capacity(Unit Per%)(280Per Trip)				
		Gross Tractor Capacity(Unit Per%)(183Per Trip)				
		Carriage Including Loading and Unloading				
1.4 RCD		Cost of Haulage Excluding Loading and Unloading				
		Haulage of materials by Tractor excluding cost of loading, unloading and stacking				
		Unit = t.Km				
		Taking output = 3.60 tonnes load and lead 10 km=36.0 t.km				
		(i) Surface Road				
		Speed with Load:15 km/hour				
		Speed while Returning empty:25km/hour.				
	a)	Machinery				
		Tractor 3.6 tonne capacity				
		Time taken for onward haulage with load	hour	0.667	612.00	408.20
		Time taken for empty return trip.	hour	0.400	612.00	244.80
		Cost for 36 t Km=a				653.00
		Rate per t.km=(a+b)/36				18.14
		Total Cost	t.Km			18.14
		(ii) Unsurfaced Graveled Road				
		Speed with Load:12 km/hour				
		Speed while Returning empty:20km/hour.				
	a)	Machinery				
		Tractor 3.6 tonne capacity				
		Time taken for onward haulage with load	hour	0.833	612.00	509.80
		Time taken for empty return trip.	hour	0.500	612.00	306.00
		Cost for 36 t Km=a				815.80
		Rate per t.km=(a+b)/36				22.66
		Total Cost	t.Km			22.66
		(iii) Katcha Track and Track In River Bed/Nallah Bed and Choe Bed				
		Speed with Load:10 km/hour				
		Speed while Returning empty:15km/hour.				
	a)	Machinery				
		Tractor 3.6 tonne capacity				
		Time taken for onward haulage with load	hour	1.000	612.00	612.00
		Time taken for empty return trip.	hour	0.667	612.00	408.20
		Cost for 36 t Km=a				1,020.20
		Rate per t.km=(a+b)/36				28.34
		Total Cost	t.Km			28.34
4.3 WRD SOR		Loading and Unloading of Bamboo				

		Unit= Tonne				
		Taking Output = 3.6 tonnes				
	a	Labour				
		Mate	N s	0.03	321	9.63
		Mazdoor for Loading and Unloading	N s	0.72	304	218.88
	b	Machinery				
		Tractor 3.6 Tonne capacity	H ur	0.72	612.00	440.64
						669.15
		Rate	M			185.88
		Surface Lead	Kl l	2		
		Katcha Track and Track in River Bed/Nallah Bed and Choe Bed	Kl l	1		
		Factor(8/280)	N s	0.02857		
		Carriage(without OH)				7.16
	B	$((0.02857*2*18.14)+(0.02857*1*28.34)+(185.88*0.02857))$				148.66
		A+B				17.84
		Add Overhead charge 12 %				166.50
		Rate	N			166.50
		Say Rs	N			
Sr.No.27 5 WRD SOR		Supply Of EC bags including Carriage				
		Materials				
		Old Empty Cement Bags (Synthetic)(Annexure I)	Per 100 Nos			292
						35.04
		Add Overhead charge 12 %				327.04
		Rate	N			327.00
		Say Rs	N			
5.7.40.1 WRD SOR		Labour for filling empty cement bags with local sand, stitching the bags and placing including supply of sutli and EC Bags etc. at site in dry portion all complete as per approved design, specifications and direction of E/I Including Cost and Carriage of Sand				
		Unit=Per 100Nos				
		Taking Out put:- 100 nos				
	a	For filling & stitching & stacking				
		Unskilled mazdoor for filling sand into bags and sewing	Nos	2	304	608
		Sutali	Kg	0.5	19.75	9.875
						617.875
	F					
	b	Labour rates for carrying filled E.C Bags				
		Unskilled mazdoor for carrying filled bags and placing to work site	Nos	3	304	912
	G					

	c	Cost of Sand & Carriage by Tractor				
	T	Cost of Sand	Cum	1	141.85	141.85
		Carriage Including Loading and Unloading				
1.4 RCD		Cost of Haulage Excluding Loading and Unloading				
		Haulage of materials by Tractor excluding cost of loading, unloading and stacking				
		Unit = t.Km				
		Taking output = 3.60 tonnes load and lead 10 km=36.0 t.km				
		(i) Surface Road				
		Speed with Load:15 km/hour				
		Speed while Returning empty:25km/hour.				
	a)	Machinery				
		Tractor 3.6 tonne capacity				
		Time taken for onward haulage with load	hour	0.667	612.00	408.20
		Time taken for empty return trip.	hour	0.400	612.00	244.80
		Cost for 36 t Km=a				653.00
		Rate per t.km=(a+b)/36				18.14
		Total Cost	t.Km			18.14
		(ii) Unsurfaced Graveled Road				
		Speed with Load:12 km/hour				
		Speed while Returning empty:20km/hour.				
	a)	Machinery				
		Tractor 3.6 tonne capacity				
		Time taken for onward haulage with load	hour	0.833	612.00	509.80
		Time taken for empty return trip.	hour	0.500	612.00	306.00
		Cost for 36 t Km=a				815.80
		Rate per t.km=(a+b)/36				22.66
		Total Cost	t.Km			22.66
		(iii) Katcha Track and Track in River Bed/Nallah Bed and Choe Bed				
		Speed with Load:10 km/hour				
		Speed while Returning empty:15km/hour.				
	a)	Machinery				
		Tractor 3.6 tonne capacity				
		Time taken for onward haulage with load	hour	1.000	612.00	612.00
		Time taken for empty return trip.	hour	0.667	612.00	408.20
		Cost for 36 t Km=a				1,020.20
		Rate per t.km=(a+b)/36				28.34
		Total Cost	t.Km			28.34
1.1RCD		Loading and Unloading of Stone Boulder/Stone aggregates/Sand/Kanker/Moorum				
		Placing Tractor at Loading point,loading with frontloader,dumping turning for return				
		Unit = Cum				
		Taking output = 2.25 Cum				
		Time Required for				
		i) Positioning of Tractor at loading point	1 Min			
		ii) Loading by Front end loader 1 Cum Bucket Capacity @ 25 Cum per hour	5 Min			
		iii) Maneuvering, reversing,dumping and turning for	0 Min			
		iv) Waiting time,unforseen contingencies etc	0 Min			
		Total	6 Min			
	a)	Labour				

		Mate	day	0.03	321.00	9.63
		Mazdoor for loading and unloading	day	0.72	304.00	218.88
		b) Machinery				
		Tractor 3.6 tonne capacity	hour	0.1	612.00	61.20
		Front end-loader 1 cum bucket capacity @25 cum/	hour	0.083	1594.00	132.30
		Cost for 2.25 cum=(a+b)				422.01
		Rate per cum (Rs)				187.56
	Note:-	Unloading will be done manually				
		Surface Lead	KM	2		
		Katcha Track and Track in River Bed/Nallah Bed and Choe Bed	KM	1		
		Factor(3.6/2.25)	Cum	1.6		
		U Carriage(without OH)				
		((1.6*2*18.14)+(1.6*1*28.34)+(187.56))				290.952
	V	T+U				432.802
	H	Cost of Sand & Carriage By Tractor per for 100nos bag				1,471.53
		For 100 Bags 3.4 Cum Sand Required				
	I	Cost of EC Bag per 100nos				292
		Total(F+G+H+I)				3293.40
		Add Overhead charge 12 %				395.21
						3688.61
		Rate	No			36.8861
		Say Rs	No			36.90
		Supply of Sand Bag(withot OH)				
	A	Basic Rate of Sand Bag	Nos	1	8.48	8.48
		1 No. Cement Bag Filled with 40 Kg/1.2 Cft Sand				
		Conversion Factor 1m3 =35.3146667ft3				
		1 Cubic Meter= Cubic Foot/35.3146667				
		2 Cubic Meter= 1.2/35.3146667				
		3 Cubic Meter= 0.034				
		Hence 1 Bo. Sand Bag Filled with 0.034 Cum sand				
		Tractor				
		Surface Lead	KM	2		
		Katcha Track and Track in River Bed/Nallah Bed and Choe Bed	KM	1		
		Factor(3.6/2.25)	Cum	1.6		
		B Carriage(without OH)				
		((1.6*2*18.14)+(1.6*1*28.34)+(187.56))				290.952
		Cost of Carriage of Sand in Filling of Sand Bag	No	1		9.89
	12.9 RCD	Labour for filling empty cement bags with local sand, stitching the bags and placing including supply of sutli and EC Bags etc, as per specifications and direction of E/I				
		Unit=Per Bag				

Taking Out put:- 750 Bags

Unskilled mazdoor for filling sand into bags and sewing

Sutali

Nos

15

304

4560.00

Kg

3.75

19.75

74.06

Rate Per Bag

4634.06

D Labour rates for carrying filled E.C Bags

Unskilled mazdoor for carring filled bags and placing to work site

Nos

22.5

304

6840

Rate Per Bag

9.12

Total(A+B+C+D)

33.67

Add Overhead charge 12 %

4.04

Rate

No

37.71

Say Rs

No

37.70

(15)

Inspection Report of Flood Damage work

Name of PIUs:- RWD Works Division, Benipur

Name of Block/Road:- Ghanshyampur/-To, Kuthi to Mushahi.

A. For Road

1. Damage Location Chainage:- 3.0 km
2. Damage Length :- 48.0 m
3. Nature of Damage :- Road cut & Flanks.
4. Details of Restoration Works
 - i. Material being used in Restoration works:- Brick-bats, Bamboo
 - ii. Equipment's /Tools being used in Restoration works:- Tractor & JCB
 - iii. Procedure taken up in Restoration works:- Filling & Levelling.
 - iv. Restored Length:- 48.0 m.

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 works:-
 - ii. Equipment's /Tools being used in Restoration works:-
 - iii. Procedure taken up in Restoration works:-
 - iv. Restored Length:-
- work found satisfactory.

Signature of JE/AE/BE

Signature
(Name of Inspection)