

RURAL WORKS DEPARTMENT



GOVERNMENT OF BIHAR

CIRCLE – R.W.D. works Circle, Chapra

DIVISION – R.W.D. works Division , Marhaura

Name of Work - Motrable of Road from Amnaur talab REO road to Nasing Bhanpur

Block - Amnaur

Estimated cost - Rs 1597289.00

Year : 2020-21

प्रतिवेदन

कार्य का नाम :- *Motable of Road from Amerour Taluk R E O Road*
To Hosing Bhanpur.

शीर्ष :- FDR

प्राक्कलित राशि :- 1597289/-

प्रखण्ड का नाम :- अमनौर

जिला-सारण।

प्रस्तुत प्राक्कलन शीर्ष PMGSY/MMGSY/GTSNY/NABARD/MR-3054 अर्तगत निर्मित/निर्माणाधीन पथ के गत महीने में इस जिला में आये बाढ़/अतिवृष्टि के कारण क्षतिग्रस्त हुए पथों को चलने लायक (Motarable) बनाने हेतु विभागीय दिशा-निर्देशानुसार कार्यपालक अभियंता, ग्रा0का0वि0, कार्य प्रमंडल मढ़ौरा के दिशा-निर्देशन में कुल रु0 1597289/- के लिए तैयार किया गया है।

आवश्यकतानुसार तत्काल प्रभाव से पथों को चलने लायक बनाने हेतु प्राक्कलन में Bricks Bats, Sand Bag, Hume-Pipe इत्यादी का प्रावधान आवश्यक लम्बाई, चौड़ाई एवं मोटाई में प्राक्कलन के अनुसार प्रावधान किया गया है।

योजना एवं कार्य की महत्ता के साथ-साथ जनहित के लिए अतिउपयोगी प्राक्कलन को कार्यहित में स्वीकृति हेतु प्रस्तुत किया जा रहा है।

Sh
02/11/20
10. Am

[Signature]
कार्यपालक अभियंता,
ग्रामीण कार्य विभाग,
कार्य प्रमंडल, मढ़ौरा।
[Signature]

Inspection Report for flood damage work

Date:

1. Name of PIUs- E.E. R.W.D (CO) Morshahi

2. Name of Block/Road- Armanour - Materials of Road from Armanour to Chel.
R.E.O. road to Nasir Dikhanpur.

A. For Road

1. Damage Location/Chainage : 7004 + 7504 + 890 + 2.50 + 2.70 + 2.86 + 3.11.

2. Damage Length : 156 m.

3. Nature of Damage : Cutting the Road due to Flood.

4. Details of Restoration :

i Material being used in Restoration

: Bricks, Bit & Sand filling.

ii Equipment/Tools being used in Restoration works:

: Tractor, J.C.P., Roller etc.

iii Procedure taken up in Restoration works

: Bricks, Bit & Sand filling.

iv Restored Length

: 156m. Simply laying. nothing else.

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

:

Signature of JE/AF/EE
27/4/20

Signature
Er. Akhilesh Kumar
(Name of Inspector)

EE
RWD (W) Division
SONEPOR

ABSTRACT OF COST

Name of Work - Motrable of Road from Amnaur talab REO road to Nasing Bhanpur

Block - Amnaur

S.L No.	Particulars	Amount (In Rs.)
A	Cost of Restoration work	Rs 1413530.00
B	Add 12 % GST on (A)	Rs 169624.00
C	Add 1 % L. Cess on (A)	Rs 14135.00
	Total Cost	Rs 1597289.00

15,97,289=



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T/A for Rs. 15,97,289=00 (Rupees fifteen Lac ninty Seven-thousand two hundred eighty nine) only.



अधीक्षण अभियंता
ग्रामीण कार्य विभाग
कार्य प्रमंडल, छपरा

Detailed Estimate

Name of work

Mottrable of Road from Amnaur talab REO road to Nasing Bhanpur

SI No	Item	No	Length	Width	Avg.H/D	Qty	Unit	Rate	Amount
1	Providing laying and spreading brick bats in Road ditches all complete as per approved design, specifications and direction of E/I	1	4.00	4.80	0.76	14.59			
		1	30.00	3.90	1.22	142.74			
		1	14.00	4.21	0.61	35.95			
		1	27.00	3.90	1.32	139.00			
		3	27.00	1.10	0.61	54.35			
		1	30.00	4.00	2.10	252.00			
		1	15.00	4.50	1.22	82.35			
		1	8.00	1.20	0.46	4.42			
		Total							
2	Filling and spreading local sand over brick bats as per drawing and technical specification Clause 305.3.9	1	4.00	4.80	0.10	1.92			
		1	30.00	3.90	0.10	11.70			
		1	14.00	4.21	0.10	5.89			
		1	27.00	3.90	0.10	10.53			
		3	27.00	1.10	0.10	8.91			
		1	30.00	4.00	0.10	12.00			
		1	15.00	4.50	0.10	6.75			
		1	8.00	1.20	0.10	0.96			
		Total							
TOTAL								1413530.00	


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ANALYSIS FOR CARRIAGE OF MATERIAL

(A) Name of the Work :- Restoration/Mottrable of Road from Amnaur talab REO road to Nasing Bhanpur

(B) Haulage Charge By 8 T Capacity Truck

- (i) For Surface Road :- Rs. 7.52 Per t per K.M
(ii) For Unsurface Toad :- Rs. 9.04 Per t per K.M
(iii) For Kutcha Road :- Rs. 18.19 Per t per K.M

1 CARRIAGE COST OF BAMBOO 62 MM TO 75 MM OF 6 To 8 M LONG

Lead as per Quarry Chart :- 5 P + 5 K

$$\text{Haulage Cost} = \frac{8}{3.00} \times [(7.52 \times 5.00) + (18.19 \times 5.00)] = 206.09$$

$$\begin{aligned} \text{Loading \& Unloading} &= \\ \text{Total per \% Nos} &= \frac{2224.00}{2430.09} \\ \text{Total per m} &= 3.47 \end{aligned}$$

2 CARRIAGE COST OF STONE BOULDER

Lead as per Quarry Chart :- 180 P + 0 K

$$\text{Haulage Cost} = \frac{8}{4.80} \times [(7.52 \times 180.00) + (18.19 \times 0.00)] = 2256.00$$

$$\begin{aligned} \text{Loading \& Unloading} &= 196.13 \\ \text{Total per M}^3 &= 2452.13 \end{aligned}$$

3 CARRIAGE COST OF GSB Material

Lead as per Quarry Chart :- 180 P + 0 K

$$\text{Haulage Cost} = \frac{8}{4.99} \times [(7.52 \times 180.00) + (18.19 \times 0.00)] = 2170.10$$

$$\begin{aligned} \text{Loading \& Unloading} &= 196.13 \\ \text{Total per M}^3 &= 2366.23 \end{aligned}$$

4 CARRIAGE COST OF HUME PIPE (1000 MM DIA)

Lead as per Quarry Chart :- 55 P + 0 K

$$\text{Haulage Cost} = \frac{8}{22.5} \times [(7.52 \times 55.00) + (18.19 \times 0.00)] = 330.88$$

$$\begin{aligned} \text{Loading \& Unloading} &= 76.58 \\ \text{Total per M} &= 407.46 \end{aligned}$$

5 CARRIAGE COST OF HUME PIPE (600 MM DIA)

Lead as per Quarry Chart :- 55 P + 0 K

$$\text{Haulage Cost} = \frac{8}{52.50} \times [(7.52 \times 55.00) + (18.19 \times 0.00)] = 63.02$$

$$\begin{aligned} \text{Loading \& Unloading} &= 32.82 \\ \text{Total per M} &= 95.84 \end{aligned}$$

(C) Haulage Charge By 3.60 l Tractor capacity

- (i) For Surface Road :- Rs. 18.70 Per l per K.M
(ii) For Unsurface Toad :- Rs. 23.30 Per l per K.M
(iii) For Kutcha Road :- Rs. 29.20 Per l per K.M

1 CARRIAGE COST OF BRICK BAT

Lead as per Quarry Chart :- 7 P + 1 K

$$\text{Haulage Cost} = \frac{3.60}{2.25} \times [(18.70 \times 7.00) + (29.20 \times 1.00)] = 256.16$$

$$\text{Unloading} = \frac{65.38}{321.54}$$

$$\text{Total per 1000 Nos.} = 321.54$$

2 CARRIAGE COST OF LOCAL SAND

Lead as per Quarry Chart :- 2 P + 1 K

$$\text{Haulage Cost} = \frac{3.60}{2.25} \times [(18.70 \times 2.00) + (29.20 \times 1.00)] = 106.56$$

$$\text{Unloading} = \frac{40.81}{147.37}$$

$$\text{Total per M}^3 = 147.37$$

3 CARRIAGE COST OF STEEL

Lead as per Quarry Chart :- 5 P + 0 K

$$\text{Haulage Cost} = \frac{3.60}{3.60} \times [(18.70 \times 5.00) + (29.20 \times 0.00)] = 93.50$$

$$\text{Loading \& Unloading} = \frac{325.46}{418.96}$$

$$\text{Total per Mt} = 418.96$$


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SUMMARY OF CARRIAGE COST OF MATERIAL

Restoration/Motrabale of Road from Amnaur talab REO road to Nasing Bhanpur

Name of work :-

S.I No.	Name of material	Unit	Source	Mode of Transport	Carriage Charge by Road	Total Carriage up to site
1	2	3	4	5	7	8
1	Bricks Bats	per m ³	Local Kiln	By Road	321.54	321.54
2	Fine sand	per m ³	Local source	By Road	147.37	147.37
3	Steel	per mt	Local	By Road	418.96	418.96
4	Boulder	per m ³	Sheikhpura	By Road	2452.13	2452.13
5	Stone metal <50 mm	per m ³	Sheikhpura	By Road	2366.23	2366.23
6	Hume pipe (1000 mm dia)	Per metre	Hajipur	By Road	407.46	407.46
7	Hume pipe (600 mm dia)	Per metre	Hajipur	By Road	95.84	95.84
8	Bamboo of 62 to 75 mm dia	Per metre	Local	By Road	3.47	3.47

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(ii) Unloading of Structural Steel, Steel Bars by manual means including a lead upto 30 m

Unit = t

Taking output = 10 t

a) Labour

Mate	day	0.07	305.00	21.35
Mazdoor (Unskilled)	day	1.80	287.00	516.60

b) Machinery

Truck	hour	1.00	934.30	934.30
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c) Overheads on (a+b) =@ 6% 88.34

d) Contractor's profit on (a+b+c) =@ 10% 156.06

Cost for 10 t = a+b+c+d 1716.64

Rate per t = (a+b+c+d)/10 171.66

1.9 Loading and Unloading of Hume Pipes

(i) Loading of RCC Hume pipes by mechanical means including a lead upto 30 m

A. 1000 / 1200 mm dia Hume pipe

Unit = per pipe

Taking output = 9 pipes

a) Labour

Mate	day	0.02	305.00	6.10
Mazdoor (Unskilled)	day	0.50	287.00	143.50

b) Machinery

Truck	hour	0.33	934.30	308.32
Crane	hour	0.33	1,289.30	425.47

c) Overheads on (a+b) =@ 6% 53.00

d) Contractor's profit on (a+b+c) =@ 10% 93.64

Cost for 9 pipes = a+b+c+d 1030.03

Rate per pipe = (a+b+c+d)/9 114.45

Rate per M = (a+b+c+d)/2.50 45.78

C. 600/450 mm dia Hume pipe

Unit = per pipe

Taking output = 21 pipe

a) Labour

Mate	day	0.02	305.00	6.10
Mazdoor (Unskilled)	day	0.50	287.00	143.50

b) Machinery

Truck	hour	0.33	934.30	308.32
Crane	hour	0.33	1,289.30	425.47

c) Overheads on (a+b) =@ 6% 53.00

d) Contractor's profit on (a+b+c) =@ 10% 93.64

Cost for 21 pipes = a+b+c+d 1030.03

Rate per pipe = (a+b+c+d)/21 49.05

Rate per M = (a+b+c+d)/2.5 19.62

(III) Unloading of RCC Hume pipes by mechanical means including a lead upto 30 m

A. 1000/1200 mm dia Hume pipe

Unit = per pipe

Taking output = 9 pipes

a) Labour

Mate	day	0.02	305.00	6.10
Mazdoor (Unskilled)	day	0.50	287.00	143.50

b) Machinery

Truck	hour	0.20	934.30	186.86
Crane	hour	0.20	1,289.30	257.86

c) Overheads on (a+b) =@ 6% 35.66

d) Contractor's profit on (a+b+c) =@ 10% 63.00

Cost for 9 pipes = a+b+c+d 692.98

Rate per M = (a+b+c+d)/9 277.19

Rate per pipe = (a+b+c+d)/9 77.00

Rate per M = (a+b+c+d)/9 30.80

C. 600/450 mm dia Hume pipe

Unit = per pipe

Taking output = 21 pipes

a) Labour

Mate	day	0.02	305.00	6.10
Mazdoor (Unskilled)	day	0.50	287.00	143.50

b) Machinery

Truck	hour	0.20	934.30	186.86
Crane	hour	0.20	1,289.30	257.86

c) Overheads on (a+b) =@ 6% 35.66

d) Contractor's profit on (a+b+c) =@ 10% 63.00

Cost for 21 pipes = a+b+c+d 692.98

Rate per pipe = (a+b+c+d)/21 33.00

Rate per M = (a+b+c+d)/9 13.20

BY Truck

1.10 Haulage excluding Loading & Unloading

Haulage of materials by tipper excluding cost of loading, unloading and stacking.

Unit = t.km

Taking output 10 t load and lead 10 km = 100 t.km

Case-I : Surfaced Road

Speed with load: 25 km per hour

Speed while returning empty: 35 km per hour

a) Machinery

Tipper 10 t capacity

Haulage with load	hour	0.40	934.30	373.72
Empty return trip	hour	0.29	934.30	270.95

b) Overheads on (a) =@ 6% 38.68

c) Contractor's profit on (a+b) =@ 10% 68.33

Cost for 100 t.km = a+b+c 751.68

Rate per t.km = (a+b+c)/100 7.52

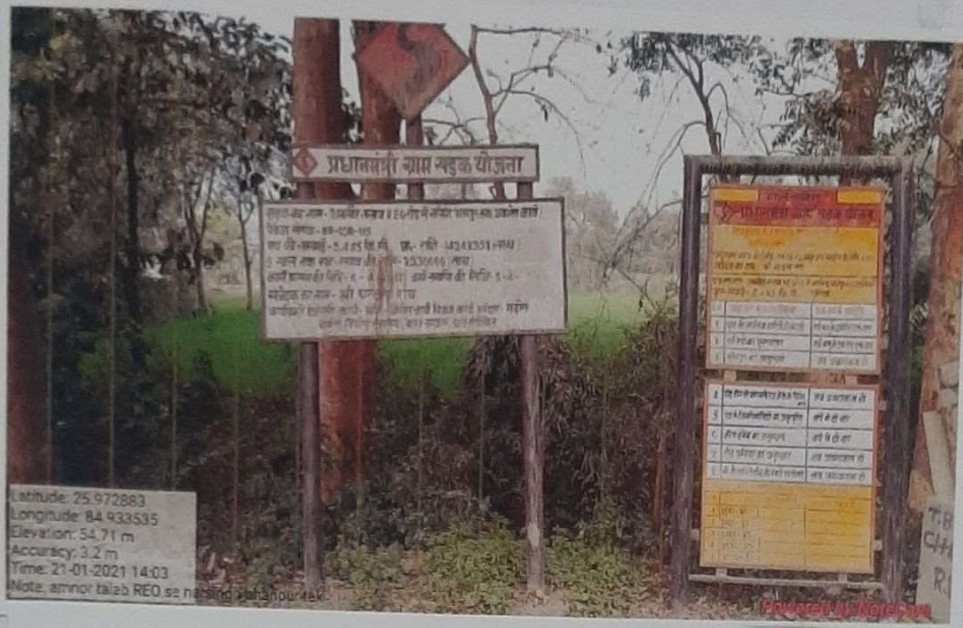
BASIC RATES

(A) Labour As per Notification dtd.- 06.05.20

Sl. No.	Description of Labour	Unit	Rate (Rs.)
L-01	Bhisti	day	287.00
L-02	Bitumen Sprayer	day	302.00
L-03	Blacksmith	day	345.00
L-04	Blaster	day	477.00
L-05	Carpenter 1st Class	day	388.00
L-06	Carpenter 2nd Class	day	345.00
L-06	Chips spreader	day	345.00
L-07	Chiseller	day	364.00
L-08	Dresser (Skilled)	day	364.00
L-09	Driller	day	345.00
L-10	Electrician	day	367.00
L-11	Fitter	day	395.00
L-12	Mason (1st class)	day	388.00
L-13	Mason (2nd Class)	day	345.00
L-14	Mate	day	305.00
L-15	Mazdoor (Unskilled)	day	287.00
L-16	Mazdoor (Semi skilled)	day	299.00
L-17	Mazdoor (Skilled)	day	364.00
L-18	Painter (1st class)	day	367.00
L-19	Plumber	day	367.00
L-20	Surveyor	day	349.00
L-21	White Washer	day	365.00

F.D.R

Name of Road $\Rightarrow$ Amnour Talab R.e.o To Narsingh Bhanpur
Block- Amnour



hp
21/1/21

20/1/21

F.D.R

Name of Roads Annour Talab Rao to Narsingh Bhanpur
Block $\Rightarrow$ Annour



hp
31-1-21
R

el
20/1/21