



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

ESTIMATE FOR FLOOD DAMAGED REPAIR

Bihar(बिहार)Map



Name of the Road :-

Koyalwa To Bind Toli (Rescined)

DISTRICT	:	Lakhisarai	
DIVISION	:	Lakhisarai	
BLOCK	:	Piparia	
TOTAL LENGTH OF ROAD	:	3.636	KM
PART-A TOTAL COST OF RESTORATION	:	11.473	Lac
AVERAGE COST PER KM	:	3.155	Lac
TOTAL COST OF PROJECT	:	11.473	Lac

Submitted By:
Executive Engineer
RWD WORKS DIVISION
Lakhisarai

स्थल निरीक्षण प्रतिवेदन

वर्ष 2021-22 के बाढ़ में क्षतिग्रस्त पथों में कराये गए मोटरेबुल कार्य की जाँच।

पथ का नाम :- कोयलवा से बिन्द टोली (Resumed)

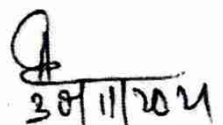
पथ की लम्बाई :- 3.636 कि०मी०

प्राक्कलित राशि :- 11.473/- लाख

अधीक्षण अभियंता, ग्रामीण कार्य विभाग, कार्य अंचल, मुंगेर के पत्रांक 1162 दिनांक 16.11.2021 द्वारा प्राप्त निदेश के अनुपालन में आज दिनांक 21.11.2021 को ग्रामीण कार्य विभाग, कार्य प्रमंडल, लखीसराय के अधीन बाढ़ से क्षतिग्रस्त पथ का निरीक्षण सहायक अभियंता श्री लौडिक प्रसाद राय के साथ वर्ष 2021-22 में बाढ़ में क्षतिग्रस्त पथ का कराये गए मोटरेबुल कार्य का स्थल निरीक्षण किया। जाँच के समय कार्य प्रखंडल, लखीसराय के सहायक अभियंता श्री संदीप कुमार एवं श्री ब्रजेश कुमार सिंह, कनीय अभियंता श्री श्याम सुन्दर प्रसाद एवं श्री रंजीत कुमार उपस्थित रहे।

उक्त पथ के निरीक्षण के दौरान पाया गया कि पथ में बने बड़े गड्ढों में Moorum से भरकर उसके उपर G.S.B. (Gr.II) (जगह-जगह 200mm एवं 150mm मुटाई में) डालकर सम्पीडन का कार्य कराया गया है, जिसका शत प्रतिशत जाँच किया गया है, एवं उक्त पथ के प्राक्कलन एवं मापीपुस्त में दर्ज की गई मापी को कार्य स्थल के अनुसार पाया।


सहायक अभियंता
ग्रा०का०वि०, कार्य प्रमं०
खड़गपुर-तारापुर


कार्यपालक अभियंता
ग्रा०का०वि०, कार्य प्रमं०
खड़गपुर-तारापुर

तकनीकी प्रतिवेदन

पथ का नाम :- कोयलवा से बिन्द टोली (Rescined)

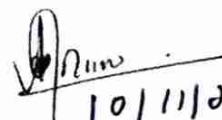
पथ की लम्बाई :- 3.636 कि०मी०

प्राक्कलित राशि :- 11.473 / - लाख

उपर्युक्त पथ को मोटरेबुल करने हेतु मरम्मत का प्राक्कलन, माह अगस्त 2021 में हुई भारी बारिश एवं बाढ़ से पथ कई दिनों तक पथ पानी में डूबा हुआ था एवं बाढ़ का पानी बहाव होने से बड़े-बड़े आकार का Pot holes बन गया था, एवं पथ में कटाव भी हो गया था। उक्त पथ लखीसराय जिला के पिपरिया प्रखण्ड में पड़ता है। बाढ़ आने के कारण पूरा प्रखण्ड जलमग्न हो गया था, जिस कारण इस पथ काफी क्षतिग्रस्त हुआ। सचिव महोदय, ग्रामीण कार्य विभाग, बिहार, पटना का पत्रांक- मु०अ०-4(मु०) विविध कार्य-23-60/2020-1937 दिनांक 07.07.2021 द्वारा प्राप्त निदेश के अनुसार क्षतिग्रस्त पथांश का फोटोग्राफ State MIS पर अपलोड करने के पश्चात् पथ का मोटरेबुल कार्य पूर्ण कराकर निदेशानुसार फोटोग्राफ State MIS पर अपलोड करने के उपरान्त कराये गए कार्यों को मापी पुस्त में दर्ज कराकर प्राक्कलन तैयार किया गया है। प्रस्तुत प्राक्कलन अद्यतन अनुसूचित दर एवं सामग्रियों के औसत लीड के आधार पर बनाया गया है। पथ में बने बड़े गड्ढों को Brick Bats से भरकर उसके उपर G.S.B. (Gr.II) (जगह-जगह 150mm - 200mm की मुटाई में) भरकर सम्पीडन किया गया एवं पथ को मोटरेबुल कराया गया, जिसका तकनीकी अनुमोदन अपेक्षित है।


कनीय अभियंता


10/11/2021
सहायक अभियंता


10/11/2021
कार्यपालक अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रमंडल, लखीसराय।

Koyalwa To Bind Toli



ESTIMATE FOR FLOOD DAMAGED REPAIR

NAME OF ROAD : Koyalwa To Bind Toli (Rescined)

DISTRICT Lakhisarai

BLOCK Piparia

DIVISION Lakhisarai

LENGTH OF ROAD (in Km) 3.636

CD STRUCTURES

Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
PART-A	RESTORATION COST	
		4.574
1	First Class Bedding Filling	5.178
2	GSB GR-II	9.752
	SUB TOTAL OF Restoration	0.098
	LABOUR CESS 1% of cost	1.170
	GST 12 % of cost	0.454
	SEIGNORAGE FEE @ 10 % on Minor Mines	11.473
	TOTAL OF Restoration	11.473
	TOTAL COST OF PROJECT IN LACS =	11.473

Deduct Contractor profit 9.1%.

Rs. 1.044 lakhs

Total: 10.429 lakhs

JE
RWD

AE
RWD

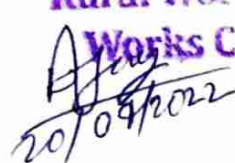
EE
RWD

T.S Amount

Construction Cost : Rs. 11.473 lakh
Deduct Contractor profit 9.1% : Rs - 1.044 lakh

Total: Rs 10.429 lakh

Ref. E.E. Letter No. 548 dt. 18.4.2022
Technically Sanctioned for Rs. 10.429 lakh
(Rupees Ten lakh Forty two
thousand nine hundred Only.
for construction work & 5 Years Maintenance

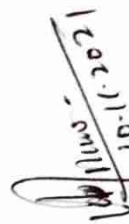

Superintending Engineer
Rural Works Department
Works Circle, Munger

20/04/2022

Name of Road:- Koyalwa To Bind Toli

Sl. No.	SDB SL.No	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)
Sub Head : PAVEMENT LAYERS - GSB & WBM ITEMS											
1			Brick Bats								
			Emergent Repair by Filling Brick Bats in Flood damaged Stretch of the Road for making it Motorableas per S/D of E/I								
			Qty as per Measurement	cum					218.58		
				Net Qty					218.58	2,092.45	4,57,368.00
2	4.1	401	Granular Sub-base with Well Graded Material (Table 400.1)								
		(ii)	For Grading II Material								
			Construction of granular sub-base by providing well graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.								
			Qty as per Measurement	Cum					360.49		
			Net GSB Qty						360.49	1,436.38	5,17,801.00
										TOTAL =	9,75,169.00
										TOTAL COST OF PAVEMENT IN RS. (A+B+C+D+E+F)=	9,75,169.00


JE
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10.11.2021
RWD

Pot Measurement GSB Gr-II

Name of Road:- Koyalwa To Bind Toli

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
1st Km.				
2	1	2	0.2	0.8
2	1	1	0.2	0.4
1	5	3.75	0.2	3.75
1	3	3.75	0.2	2.25
2	2	1.5	0.2	1.2
1	15	1.5	0.2	4.5
2 nd Km.				
2	2	2	0.2	1.6
3	3	1.5	0.2	2.7
2	2.3	1.2	0.2	1.1
2	2	1.2	0.2	0.96
1	2.3	1.2	0.2	0.55
1	7	3.75	0.2	5.25
3	2.5	1.5	0.2	2.25
2	1.5	1.5	0.2	0.9
1	2	2	0.2	0.8
1	6	0.5	0.2	0.6
2.5 nd Km.				
2	300	1.5	0.2	180
1	50	3.75	0.2	37.5
1	41	3.75	0.2	30.75
1	13	3.75	0.2	9.75
1	3	2	0.2	1.2
1	5	1	0.2	1
1	30	5	0.2	30
1	23	3.3	0.2	15.18
1	30	3.75	0.2	22.5
3	2.5	2	0.2	3

Total

360.49

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Pot Measurement Brick Bats

Name of Road:- Koyalwa To Bind Toli

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
1st Km.				
1	3	3.75	0.45	5.06
5	2	1.5	0.45	6.75
1	15	1.5	0.45	10.13
2nd Km.				
4	2	2	0.45	7.2
8	2.3	1.2	0.45	9.94
6	2	1.2	0.45	6.48
4	2.3	1.2	0.45	4.97
1	7	3.75	0.45	11.81
5	2.5	1.5	0.45	8.44
5	1.5	1.5	0.45	5.06
1	41	4.2	0.45	77.49
1	13	5	0.45	29.25
1	5	1	0.45	2.25
1	20	3.75	0.45	33.75
Total				218.58

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10.11.2021

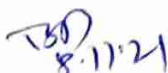
Name of Road :-

Koyalwa To Bind Toli

SEIGNIORAGE FEE

Material	Unit	Quantity	Basic rate	Amount	Seigniorage fee
GSB 26.5-9.5	m3	161.50	604.91	97692.67	9769.27
GSB 9.5-2.36	m3	115.36	514.58	59360.30	5936.03
Local sand	m3	184.57	141.85	26181.38	2618.14
Coarse sand	m3	0.00	200.80	0.00	0.00
Brick Bats	m3	262.00	1032.00	270384.00	27038.40
				453618.36	45361.84


JE 8/11/21


AE 8.11.21

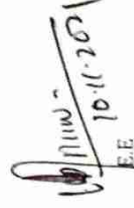

EE 10.11.2021

Name of Road
Koyalwa To Blind Toll

Sl. No.	Description	Unit	Quantity	Material Analysis (Minor Mines)																			
				Earth	GSB 53-9.5	GSB 26.5-9.5	GSB 9.5-2.36	Local sand	Agg-63-45 G2	Screening B	Moorm	53-22.4 G3	Agg 13.2 mm	agg 9.5-4.75	agg 4.75 below	agg 40	agg 20	agg 10	Stone Agg	Stone spalls	Coarse sand	Cement	Brick Bats
1	Brick Bat filling	m3	218.58																				262.00
2	GSB Grading II	m3	360.49			161.5	115.4	184.57															
				0.00	0.00	161.50	115.36	184.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	262.00


J.E. 8/11/24


A.E. 8.11.24


E.E. 10.11.2021

Analysis for Carriage by Road & Rail

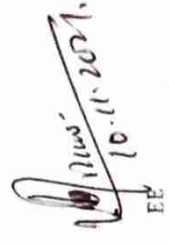
Sl No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km			Loading & Unloading Cost	Carriage Cost by Rail Head	Total *
				Pucka / Surface	Katcha				
1	Stone Metal Gr-I & Gr-II	Cum	Shelkhpura	$\frac{8.00}{4.59} \times 7.94 \times 39.00 \text{ Km} = \text{Rs } 539.71$	$\frac{8.00}{4.59} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$		210.23		Rs. 749.94
2	Stone Metal Gr-III / GSB	Cum	Shelkhpura	$\frac{8.00}{4.99} \times 7.94 \times 39.00 \text{ Km} = \text{Rs } 496.45$	$\frac{8.00}{4.99} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$		210.23		Rs. 706.68
3	Stone Aggregate / Chips	Cum	Shelkhpura	$\frac{8.00}{4.99} \times 7.94 \times 11.00 \text{ Km} = \text{Rs } 140.02$	$\frac{8.00}{4.99} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$		210.23	1358.11	Rs. 1708.36
4	Stone Boulder	Cum	Shelkhpura	$\frac{8.00}{4.80} \times 7.94 \times 39.00 \text{ Km} = \text{Rs } 516.10$	$\frac{8.00}{4.80} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$		210.23		Rs. 726.33
5	Coarse Sand	Cum	Kiul River	$\frac{8.00}{4.99} \times 7.94 \times 24.00 \text{ Km} = \text{Rs } 305.51$	$\frac{8.00}{4.99} \times 19.23 \times 1.00 \text{ Km} = \text{Rs } 30.83$		113.70		Rs. 450.04
6	Binding Material/Moorum	Cum	Shelkhpura	$\frac{8.00}{6.00} \times 7.94 \times 39.00 \text{ Km} = \text{Rs } 412.88$	$\frac{8.00}{6.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$		113.70		Rs. 526.58
7	Local Sand	Cum	Local	$\frac{8.00}{4.99} \times 7.94 \times 2.00 \text{ Km} = \text{Rs } 25.46$	$\frac{8.00}{4.99} \times 19.23 \times 1.00 \text{ Km} = \text{Rs } 30.83$		113.70		Rs. 169.99
8	Brick	1000 Nos	Local	$\frac{8.00}{2.00} \times 7.94 \times 7.00 \text{ Km} = \text{Rs } 222.32$	$\frac{8.00}{2.00} \times 19.23 \times 1.00 \text{ Km} = \text{Rs } 76.92$		477.52		Rs. 776.76
9	Cement	MT	Local	$\frac{8.00}{8.00} \times 7.94 \times 14.00 \text{ Km} = \text{Rs } 111.16$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$		316.50		Rs. 427.26
10	Steel	MT	Local	$\frac{8.00}{8.00} \times 7.94 \times 14.00 \text{ Km} = \text{Rs } 111.16$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$		337.28		Rs. 448.44
11	Bitumen Emulsion	MT	Barauni	$\frac{8.00}{8.00} \times 7.94 \times 90.00 \text{ Km} = \text{Rs } 714.60$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$		361.31		Rs. 1075.91
12	Bitumen	MT	Barauni	$\frac{8.00}{8.00} \times 7.94 \times 90.00 \text{ Km} = \text{Rs } 714.60$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$		361.31		Rs. 1075.91
13	Hume Pipe (1000 mm)	m	Lakhisarai	$\frac{8.00}{10.00} \times 7.94 \times 30.00 \text{ Km} = \text{Rs } 190.56$	$\frac{8.00}{10.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$		81.88		Rs. 272.44
14	Hume Pipe (600 mm)	m	Lakhisarai	$\frac{8.00}{25.00} \times 7.94 \times 30.00 \text{ Km} = \text{Rs } 76.22$	$\frac{8.00}{25.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$		35.09		Rs. 111.31
15	Brick Bat	Cum	Local						Rs. 1032.00

* Subjected to Verification of Lead

Cost of Haulage Excluding Loading & Unloading as per SOR	
Type of Road	Per Ton. Km by Tipper
For Surface Road	10.10
Unsurface Gravel Road	12.10
Kachha Road	24.30


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Analysis for Carriage Through Railway from Quarry Site to Work Site

Mirzachawki to Kiul

Material -Stone Aggregate / Chips

Quarry Site to Mirzachawki Railway Yard (By Road)

Truck / Surface	=	$\frac{8.00}{4.99}$	x	7.94	x	4.00 Km	=	Rs 50.92
Insurface Gravel Road	=	$\frac{8.00}{4.99}$	x	9.56	x	0.00 Km	=	Rs 0.00
Kachha Road	=	$\frac{8.00}{4.99}$	x	19.23	x	0.00 Km	=	Rs 0.00
Loading & Unloading	=						=	Rs 210.23

(i) Total "A" = Rs 261.15

Mirzachawki Railway Yard to Kiul Railway Yard = 157.00 Km

Railway freight charge from Mirzachawki Railway	=	For 1 MT	157.00 Km	=	Rs 316.10	=	Rs 316.10
Busy Season charge 12% of Railway freight charge	=	For 1 MT		=	12%	=	Rs 37.93
Railway Development Charge to 5% of Railway freight	=	For 1 MT		=	5%	=	Rs 15.81
Railway Terminal Charge Rs 40/- Per Tonne Per	=	For 1 MT	2	x	Rs 40.00	=	Rs 80.00
Sub-Total	=	For 1 MT		=		=	Rs 449.84
Add GST 1%	=	For 1 MT		=		=	Rs 0.00
Total	=	For 1 MT		=		=	Rs 449.84

Rate for Railway freight Charge	"B"	For 1 Cum	=	Rs 449.84 x 1.60	=	Rs 719.75
		Add 12% Overhead	=	12%	=	Rs 86.37
		Add 10% Contractor Profit	=	10%	=	Rs 80.61

(ii) Gross Rate for Railway freight Charge	=	For 1 Cum	=	Rs 886.73
(iii) Loading & Unloading Cost	=	For 1 Cum	=	Rs 210.23
Carriage Cost from Quarry to Kiul Railway Yard	=	For 1 cum	=	Rs 261.15 + Rs 886.73 + Rs 210.23 = 1358.11
(i) + (ii) + (iii)				

Schedule XLV-Form No. 134

N/W motorable of road Koyalure to

Bind Toli

P. Lekhisanani

DIVISION

Piparia

SUB-DIVISION

693

MEASUREMENT BOOK

આમાર કામ બાધા છે. તેથી
માર્ગી કુલ 675 મી કુલ 100 ફીટ
દે બે 12R મોડ્યુલમાં બનાવેલા
કસ્ટોમરે બોલાવેલ વિન્ડોમાં
પરો નિર્માણ કામ હેતુ મોડ્યુલમાં
સી AE સી પ્રોજેક્ટ કામ હેતુ
માર્ગ દો/બોર્ડ સિંગલ બાધા છે


11/10/2021
Executive Engineer
Rural Works Department
Work Division, Lakhisarai

Sch. XLV—Form No. 134

R.W.D (W) Lakhisarai DIVISION
Pipariya SUB-DIVISION

Measurement Book

No. 

— 693

Name of Officer _____

Date of first entry _____

Date of last entry _____

[illegible]

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
	17	7.00	3.75	0.45	11.81
	57	2.50	1.5	0.450	8.44
	57	1.50	1.50	0.450	5.06
	17	41.00	4.20	0.450	77.49
	17	13.00	5.00	0.45	29.25
	17	5.00	1.00	0.45	2.25
	17	20.00	2.75	0.45	33.75
					218.38
					m ²
2. <u>Finalizing laying 2 Compounds</u>					
GSI					
15.00 11.00					
18					

1st km	27	1.00	2.00	0.2	0.80 m ³
	2	1.00	1.00	0.2	0.40
	17	5.00	3.75	0.2	3.75
	17	3.00	3.75	0.2	2.25
	27	2.00	1.50	0.2	1.20
	17	15.00	1.50	0.2	4.50
2nd km	27	2.00	2.00	0.2	1.60
	37	3.00	1.50	0.2	2.70
	27	2.30	1.20	0.2	1.10
	27	2.00	1.20	0.2	0.96
	17	2.30	1.2	0.2	5.75
	37	2.50	1.50	0.2	2.25
	27	1.50	1.50	0.2	0.900
	17	2.00	2.00	0.2	0.600

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
3rd Km	2	300.00	71.50	70.2	180.00
	1	50.00	73.75	70.2	37.50
	1	41.00	73.75	70.2	30.75
	1	13.00	73.75	70.2	9.75
	1	3.00	2.00	70.2	1.20
	1	5.00	1.00	70.20	1.00
	1	30.00	5.00	70.2	30.00
	1	23.00	73.75	70.2	15.18
	1	30.00	73.75	70.2	22.50
	3	2.50	72.00	70.2	3.00
					360.40 m ²

15.11.24
AE

15.11.24
AE

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
<u>ABSTRACT OF COST</u>					
1. <u>Grounding laying and filling Back Bet</u> VTMBP (2)					
248.58 m ³ Cms 2492.45/m ³ 457368.2					
2. <u>Grounding GSN Goff in ports filling</u> VTMBP (3)					
360.49 m ³ Cms 1436.38/m ³ 517801.2					
					15975169.2
<u>Add 1.1. Labo Cms + m 9752.2</u>					
<u>Add 12.1. GST + PS 1,17,020.2</u>					
<u>Add 10.1. Seeg storage</u>					
<u>Back Bet</u>					
262.20 x 1032.20 x 10.1 + m 27038.2					
<u>GSD</u>					
26.5 mm to 9.5 mm					
161.50 m ³ x 60491 x 10.1 + m 9769.2					
9.5 mm to 2.36 mm					
115.36 x 514.58 x 10.1 + m 5936.2					
<u>Local seal</u>					
184.57 m ³ x 141.85 x 10.1 + m 2618.2					
					151147302.2

Continuation

[Signature]
10/12/21

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CP.
H

Inspection Report for Flood Damage Work

Date :- 30.11.2021

Name of PIU :- E E RWD Kharagpur - Tarapur

Name of Block/ Road :- Papanigra / Koyalwa to Bind Tely (Resumed work)

A. For Road

1. Damage Location/ Chainage :- ch. 600 to 900 m, 1600 to 1900, 3500 to 3573 m
2. Damage Length :- 0.673 km
3. Nature of Damage :- Breaches at one point and Road crust badly damaged
4. Details of Restoration Works :- Brick bats fill and GSB coat fill
 - (i) Material being in Restoration works :- Brick bats, GSB coat
 - (ii) Equipment's /Tools being used in Restoration works :- JCB, Tractor & Roller
 - (iii) Procedure take up in Restoration works :- Fill up of Brick bats & GSB coat layer wise
 - (iv) Restored Length :- 0.673 km

B. For Bridge :-

1. Damage Location/ Chainage :-
2. Damage Length :-
3. Nature of Damage :-
4. Details of Restoration Works :-
 - (i) Material being in Restoration works :-
 - (ii) Equipment's /Tools being used in Restoration works :-
 - (iii) Procedure take up in Restoration works :-
 - (iv) Restored Length :-

X

30/11/2021

Signature
(Name of Inspection)