



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

ESTIMATE FOR FLOOD DAMAGED REPAIR

Bihar(बिहार)Map



Name of the Road :-

NH-80 Dariyapur To Aliwali

DISTRICT	:	Lakhisarai	
DIVISION	:	Lakhisarai	
BLOCK	:	Barahiya	
TOTAL LENGTH OF ROAD	:	3.000 2.81	KM
TOTAL COST	:	22.384	Lac
AVERAGE COST PER KM	:	7.461	Lac
TOTAL COST OF PROJECT	:	22.384	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 :- NH-80 दरियापुर से आलीवाली

पथ की लम्बाई :- 2.810 कि०मी०

प्राक्कलित राशि :- 22.384 / - 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।

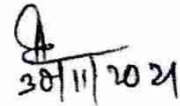
उक्त पथ के निरीक्षण के दौरान पाया गया कि पथ में बने बड़े गड्ढों में Moorum से भरकर उसके उपर G.S.B. (Gr.II) (जगह-जगह 200mm एवं 150mm मुटाई में) डालकर सम्पीडन का कार्य कराया गया है, जिसका शत प्रतिशत जाँच किया गया है, एवं उक्त पथ के प्राक्कलन एवं मापीपुस्त में दर्ज की गई मापी को कार्य स्थल के अनुसार पाया।



सहायक अभियंता

ग्रा०का०वि०, कार्य प्रमं०

खड़गपुर-तारापुर



कार्यपालक अभियंता

ग्रा०का०वि०, कार्य प्रमं०

खड़गपुर-तारापुर

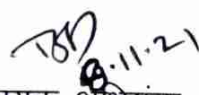
पथ का नाम :- NH-80 दरियापुर से आलीवाली

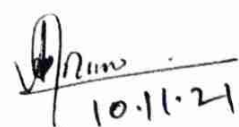
पथ की लम्बाई :- 2.810 कि०मी०

प्राक्कलित राशि :- 22.384/- 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 बड़हिया 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


सहायक अभियंता


कार्यपालक अभियंता
ग्रामीण कार्य विभाग,
कार्य प्रमंडल, लखीसराय।

NH-80 Dariyapur To aliwali



NH-80 Dariyapur To aliwali



ESTIMATE FOR FLOOD DAMAGED REPAIR

NAME OF ROAD : NH-80 Dariyapur To Aliwali

DISTRICT Lakhisarai

BLOCK Barahiya

DIVISION Lakhisarai

LENGTH OF ROAD (in Km) 3.000

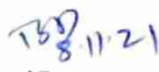
CD STRUCTURES

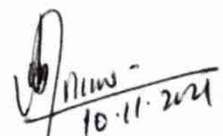
Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
PART-A	RESTORATION COST	
1	EARTHWORK / SAND FILLING	0.000
2	Brick Bat Filling	14.998
3	GSB GR-II	3.906
	SUB TOTAL	18.903
	LABOUR CESS 1% of cost	0.189
	GST 12 % of cost	2.268
	SEIGNORAGE FEE @ 10 % on Minor Mines	1.023
	TOTAL	22.384
	TOTAL COST OF PROJECT IN LACS =	22.384

Deduct Contractor Profit 9.1%. = 2.037 Lakh

Total = 20.347 Lakh


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T.S Amount
Const. Cost: Rs. 22.384 lakh
Deduct Contractor profit 9.1% = 2.037 lakh
Total = Rs. 20.347 lakh

Ref. E.E. Letter No. 548 dt. 18.4.2022
Technically Sanctioned for Rs. 20.347 lakh
(Rupees Twenty lakh thirty
five thousand seven hundred Only.
for construction work & 5 Years Maintenance


Superintending Engineer
Rural Works Department
Works Circle, Munger

Ajay
20/09/2022

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 BAT Filling								
			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					716.75		
			Net Qty						716.75	2,092.45	14,99,766.00
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					266.46		
			Net GSB Qty						266.46	1,465.71	3,90,553.00
TOTAL =										18,90,319.00	
TOTAL COST OF PAVEMENT IN RS. (A+B+C+D+E+F)=										18,90,319.00	


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Pot Measurement GSB Gr-II

Name of Road:- NH-80 Dariyapur To Aliwali

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
1st Km.				
1	16	3.75	0.2	12
2	15	2	0.2	12
1	5	1	0.2	1
2	3.5	1	0.2	1.4
1	20	2	0.2	8
7	5.1	1.2	0.2	8.57
1	30	1.5	0.2	9
1	10	4.5	0.2	9
2	21	4.5	0.2	37.8
2	5	1	0.2	2
2	7	2.5	0.2	7
1	1.5	1.5	0.2	0.45
1	35	3.75	0.2	26.25
2	15	1	0.2	6
2	25	2	0.2	20
1	25	2	0.2	10
1	10	1	0.2	2
2	5	1	0.2	2
2	7	2.5	0.2	7
1	1.5	1.5	0.2	0.45
1	30	3.75	0.2	22.5
6	8	2	0.2	19.2
2 nd Km.				
2	5	1	0.2	2
1	15	1.5	0.2	4.5
2	30	1	0.2	12
1	10	3.75	0.2	7.5
2	10	1.5	0.2	6
2	5	2	0.2	4
1	2	1	0.2	0.4
10	2.5	1	0.2	5
4	2	0.9	0.2	1.44
Total				266.46

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JR

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8/11/21
AE

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10/11/2021

Pot Measurement Brick Bats

Name of Road:- NH-80 Dariyapur To Aliwali

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
1st Km.				
1	10	4.5	0.85	38.25
1	35	8	1.35	378
1	25	2	0.85	42.5
1	10	1.5	0.8	12
1	7	2.5	0.8	14
1	20	8	1.2	192
1	10	2	0.85	17
1	6	1.5	1	9
1	5	2	1.4	14
Total				716.75


8/11/21
J.R.

T.B.
8.11.21
A.E.


M.W.
10.11.2021

Name of Road :-

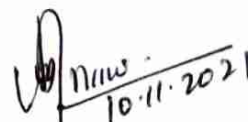
NH-80 Dariyapur To Aliwali

SEIGNIORAGE FEE

Material	Unit	Quantity	Basic rate	Amount	Seigniorage fee
Earth	m3	0.00	34.82	0.00	0.00
GSB 26.5-9.5	m3	119.37	604.91	72210.57	7221.06
GSB 9.5-2.36	m3	85.27	514.58	43876.80	4387.68
Local sand	m3	136.43	141.85	19352.24	1935.22
Agg-63-45 G2	m3	0.00	480.64	0.00	0.00
Screening B	m3	0.00	397.73	0.00	0.00
Moprum	m3	0.00	159.97	0.00	0.00
Coarse sand	m3	0.00	200.80	0.00	0.00
Brick Bats	m3	860.00	1032.00	887520.00	88752.00
				1022959.61	102295.96


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NH-80 Darlyapur To Allwall

Name of Road

Sl. No.	Description	Unit	Quantity	Material Analysis (Minor Mines)																Brick	Bats	
				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
1	Construction of Embankment	m3	0.00	0.00																		
2	Brick Bat filling	m3	716.75																			860.00
3	GSB Grading II	m3	266.46			119.4	85.3	136.43														
				0.00	0.00	119.37	85.27	136.43	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	860.00

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J.E
8/11/24

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8-11-24

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E.E
10-11-2024

Analysis for Carriage by Road & Rail

Name of Road:-- NH-80 Dariyapur To Aliwali

District:- Lakhisarai

Block:- Barahiya

Sl No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km			Carriage Cost by Rail Head	Loading & Unloading Cost	Total
				Pucka / Surface	Katcha				
1	Stone Metal Gr-I & Gr-II	Cum	Sheikhpura	$\frac{8.00}{4.59} \times 7.94 \times 42.00 \text{ Km} = \text{Rs } 581.23$	$\frac{8.00}{4.59} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			210.23	Rs 791.46
2	Stone Metal Gr-III / GSB	Cum	Sheikhpura	$\frac{8.00}{4.99} \times 7.94 \times 42.00 \text{ Km} = \text{Rs } 534.64$	$\frac{8.00}{4.99} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			210.23	Rs 744.87
3	Stone Aggregate / Chips	Cum	Sheikhpura	$\frac{8.00}{4.99} \times 7.94 \times 18.00 \text{ Km} = \text{Rs } 229.13$	$\frac{8.00}{4.99} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			210.23	Rs 1797.47
4	Stone Boulder	Cum	Sheikhpura	$\frac{8.00}{4.80} \times 7.94 \times 42.00 \text{ Km} = \text{Rs } 555.80$	$\frac{8.00}{4.80} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			210.23	Rs 766.03
5	Coarse Sand	Cum	Kiul River	$\frac{8.00}{4.99} \times 7.94 \times 29.00 \text{ Km} = \text{Rs } 369.15$	$\frac{8.00}{4.99} \times 19.23 \times 1.00 \text{ Km} = \text{Rs } 30.83$			113.70	Rs 513.68
6	Binding Material/Moorum	Cum	Sheikhpura	$\frac{8.00}{6.00} \times 7.94 \times 42.00 \text{ Km} = \text{Rs } 444.64$	$\frac{8.00}{6.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			113.70	Rs 558.34
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 166.96
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	$\frac{8.00}{8.00} \times 7.94 \times 12.00 \text{ Km} = \text{Rs } 95.28$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			316.10	Rs 411.38
10	Steel	MT	Local	$\frac{8.00}{8.00} \times 7.94 \times 12.00 \text{ Km} = \text{Rs } 95.28$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			337.28	Rs 432.56
11	Bitumen Emulsion	MT	Barauni	$\frac{8.00}{8.00} \times 7.94 \times 88.00 \text{ Km} = \text{Rs } 698.72$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			361.31	Rs 1060.03
12	Bitumen	MT	Barauni	$\frac{8.00}{8.00} \times 7.94 \times 88.00 \text{ Km} = \text{Rs } 698.72$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			361.31	Rs 1060.03
13	Hume Pipe (1000 mm)	m	Lakhisarai	$\frac{8.00}{10.00} \times 7.94 \times 28.00 \text{ Km} = \text{Rs } 177.86$	$\frac{8.00}{10.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			81.88	Rs 259.74
14	Hume Pipe (600 mm)	m	Lakhisarai	$\frac{8.00}{25.00} \times 7.94 \times 28.00 \text{ Km} = \text{Rs } 71.14$	$\frac{8.00}{25.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$			35.09	Rs 106.23
15	Brick Bat	Cum	Local						Rs 1032.00

Cost of Haulage Excluding Loading & Unloading as per SOR

Type of Road	Per Ton. Km by Tipper	Per Ton. Km by Truck
For Surface Road	10.10	7.94
Unsurface Gravel Road	12.10	9.56
Kachha Road	24.30	19.23

* Subjected to Verification of Lead

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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)

$$\text{Pucca / Surface} = \frac{8.00}{4.99} \times 7.94 \times 4.00 \text{ Km} = \text{Rs } 50.92$$

$$\text{Un-surface Gravel Road} = \frac{8.00}{4.99} \times 9.56 \times 0.00 \text{ Km} = \text{Rs } 0.00$$

$$\text{Kachha Road} = \frac{8.00}{4.99} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$$

$$\text{Loading \& Unloading} = \text{Rs } 210.23$$

$$(i) \text{ Total "A"} = \text{Rs } 261.15$$

Mirzachawki Railway Yard to Kiul Railway Yard = 157.00 Km

$$\text{Railway freight charge from Mirzachawki Railway} = \text{For 1 MT } 157.00 \text{ Km} = \text{Rs } 316.10 = \text{Rs } 316.10$$

$$\text{Busy Season charge 12\% of Railway freight charge} = \text{For 1 MT} = 12\% = \text{Rs } 37.93$$

$$\text{Railway Development Charge to 5\% of Railway freight} = \text{For 1 MT} = 5\% = \text{Rs } 15.81$$

$$\text{Railway Terminal Charge Rs 40/- Per Tonne Per} = \text{For 1 MT } 2 \times \text{Rs } 40.00 = \text{Rs } 80.00$$

$$\text{Sub-Total} = \text{For 1 MT} = \text{Rs } 449.84$$

$$\text{Add GST 1\%} = \text{Rs } 0.00$$

$$\text{Total} = \text{For 1 MT} = \text{Rs } 449.84$$

$$\text{Rate for Railway freight Charge "B"} = \text{For 1 Cum} = \text{Rs } 449.84 \times 1.60 = \text{Rs } 719.75$$

$$\text{Add 12\% Overhead} = 12\% = \text{Rs } 86.37$$

$$\text{Add 10\% Contractor Profit} = 10\% = \text{Rs } 80.61$$

$$(ii) \text{ Gross Rate for Railway freight Charge} = \text{For 1 Cum} = \text{Rs } 886.73$$

$$(iii) \text{ Loading \& Unloading Cost} = \text{For 1 Cum} = \text{Rs } 210.23$$

Carriage Cost from Quarry to Kiul Railway Yard

$$(i) + (ii) + (iii) = \text{For 1 cum} = \text{Rs } 261.15 + \text{Rs } 886.73 + \text{Rs } 210.23 = 1358.11$$

FDR

Schedule XLV-Form No. 134

N/W: - mobile of road from NH80 - Darjeeling

- for to Ali wali

Q/S 121/10712/1542

Q/S 121/10712/1542

DIVISION

SUB-DIVISION

MEASUREMENT BOOK

682

100 પાનાના સ્ટે 682 નું
 કામ 100 પાનાના સ્ટે 682 નું
 સંપૂર્ણ કરવામાં આવેલું છે
 N.H-50 હાથપાડા સ્ટે 3000 મી.
 ઉપર નિર્માણ કામ હેઠળ મુજબ
 પ્રમાણે A.E. ની બાબતે કામ
 નીચે મુજબ નિર્માણ થયેલું છે
 જેના બાબતે

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

Sch. XLV—Form No. 134

Lakhisarai DIVISION
 Borkiya SUB-DIVISION

Measurement Book

No. 682

Name of Officer _____

Date of first entry _____

Date of last entry _____

Name to work
Situation of work
Agency by which work is executed
Date of measurement
No. and date of agreement
(These four lines should be repeated at the commencement of the measurements relating to each work)

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Continuation

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P.T.O

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
2. Pondip granular					
Sub base (cont)					
	1	16.00	7.75	0.2	12.00
	2	15.00	2.00	0.2	12.00
	1	5.00	1.00	0.2	1.00
	2	3.50	1.00	0.2	1.40
	1	20.00	2.00	0.2	8.00
	7	75.17	1.20	0.2	8.57
	1	30.00	1.50	0.2	9.00
	1	70.00	4.50	0.2	9.00
	2	21.00	4.50	0.2	37.80
	2	5.00	1.00	0.2	2.00
	2	7.00	2.50	0.2	7.00
	1	1.50	1.50	0.2	0.45
	1	35.00	3.75	0.2	26.25
	2	15.00	1.00	0.2	6.00
	2	25.00	2.00	0.2	20.00
	1	25.00	2.00	0.2	10.00
	1	10.00	1.00	0.2	2.00
	2	5.00	1.00	0.2	2.00
	2	7.00	2.50	0.2	7.00
	1	1.50	1.50	0.2	0.45
	1	30.00	3.75	0.2	22.50
	6	8.00	2.00	0.2	19.20
2nd km	2	5.00	1.00	0.2	2.00
	1	15.00	1.50	0.2	4.50
	2	30.00	1.00	0.2	12.00

Continuation

This image shows a full page of blank graph paper. It features a uniform grid of squares formed by thin black lines. The grid covers most of the page, leaving small margins at the top, bottom, and sides. There are no markings, text, or drawings on the paper.

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
<u>ABSTRACT OF COST</u>					
1. <u>Princip 2 by 10 Allis</u>					
1. <u>Brick bats</u>					
<u>VTMBP ①</u>					
<u>① 716.75 m³ @ Rs 2092.95/m³ Rs 1499763.44</u>					
2. <u>Princip Granular sub-base</u>					
2. <u>Gravel</u>					
<u>VTMBP ② ③</u>					
<u>266.46 m³ @ Rs 1465.71/m³ Rs 390553.41</u>					
<u>Rs 1890316.44</u>					
<u>Add 1% laborers + Rs 18903.44</u>					
<u>Add 12% GST + Rs 226838.44</u>					
<u>Add Scaffolding fee 10%</u>					
<u>Brick Bats</u>					
<u>860.40 m² x 1032.00 x 10% + Rs 88752.44</u>					
<u>Cost 26.5 mm to 9.5 mm</u>					
<u>119.37 x 604.91 x 10% + Rs 7221.44</u>					
<u>Cost 9.5 mm to 2.36 mm</u>					
<u>85.27 m³ @ Rs 514.58 x 10% + Rs 4367.44</u>					
<u>Gravel</u>					
<u>136.47 x 141.85 x 10% + Rs 1935.44</u>					
<u>Rs 2278352.44</u>					

Continuation

15.11.21
JE15.11.21
AE15.11.2021
E.C.