



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

ESTIMATE FOR FLOOD DAMAGED REPAIR

Bihar(बिहार)Map



Name of the Road :-

NH-80 Jaitpur Khutaha Road

DISTRICT	:	Lakhisarai	
DIVISION	:	Lakhisarai	
BLOCK	:	Barahiya	
TOTAL LENGTH OF ROAD	:	1.500 4.50	KM
TOTAL COST	:	5.467	Lac
AVERAGE COST PER KM	:	3.645	Lac
TOTAL COST OF PROJECT	:	5.467	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 जैतपुर से खुटहा पथ

पथ की लम्बाई :-4.500 कि०मी०

प्राक्कलित राशि :-5.467/- लाख

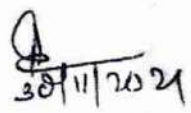
अधीक्षण अभियंता, ग्रामीण कार्य विभाग, कार्य अंचल, मुंगेर के पत्रांक 1162 दिनांक 16.11.2021 द्वारा प्राप्त निदेश के अनुपालन में आज दिनांक 21.11.2021 को ग्रामीण कार्य विभाग, कार्य प्रमंडल, लखीसराय के अधीन बाढ़ से क्षतिग्रस्त पथ का निरीक्षण सहायक अभियंता श्री लौडिक प्रसाद राय के साथ वर्ष 2021-22 में बाढ़ 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

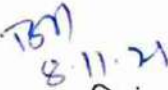
पथ का नाम :- NH-80 जैतपुर से खुटहा पथ

पथ की लम्बाई :-4.500 कि०मी०

प्राक्कलित राशि :-5.467 / - 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।

ESTIMATE FOR FLOOD DAMAGED REPAIR

NAME OF ROAD : NH-80 Jaitpur Khutaha Road

DISTRICT Lakhisarai

BLOCK Barahiya

DIVISION Lakhisarai

LENGTH OF ROAD (in Km) 1.500

CD STRUCTURES

Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
PART-A	RESTORATION COST	
1	Brick Bat Filling	2.414
2	GSB GR-II	2.232
	SUB TOTAL	4.645
	LABOUR CESS 1% of cost	0.046
	GST 12 % of cost	0.557
	SEIGNORAGE FEE @ 10 % on Minor Mines	0.218
	TOTAL	5.467
	TOTAL COST OF PROJECT IN LACS =	5.467

Deduct Contractor profit 9.1% = - 0.497

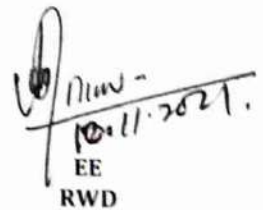
Total = 4.97 Lakh


8/11/17

JE
RWD


8/11/21

AE
RWD


10/11/2021
EE
RWD

T.S Amount

Construction Cost: Rs. 5.467 Lakh
Deduct Contractor Profit 9.1% = - 0.497 Lakh
Total = Rs. 4.97 Lakh

Ref. E.E. Letter No. 598 dt. 18.4.22
Technically Sanctioned for Rs. 4.97 Lakh
(Rupees four lakh ninety
seven thousand Only.
for construction work & 5 Years Maintenance

(Alp)
20/04/22
Superintendent
Rural Works Department
Works Circle, Munger
Ajay
20/04/22

Name of Road:- NH-80 Jaitpur Khutaha Road

SL No.	SDB SL.NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)
1			Sub Head : PAVEMENT LAYERS - GSB & WBM ITEMS								
			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					115.35		
2	4.1	401 (ii)	Granular Sub-base with Well Graded Material (Table 400.1) For Grading II Material	Net Qty					115.35	2,092.45	2,41,365.00
			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					148.31		
			Net GSB Qty						148.31	1,504.82	2,23,180.00
TOTAL =										4,64,545.00	
TOTAL COST OF PAVEMENT IN RS. (A+B+C+D+E+F)=										4,64,545.00	

JE
RWD

AE
RWD

EE
RWD

Pot Measurement GSB Gr-II

Name of Road:- NH-80 Jaitpur Khutaha Road

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
2nd Km.				
	2	2	0.15	9
15	2	3.75	0.15	11.25
1	20	1.5	0.15	3.38
6	2.5	3.75	0.15	8.44
1	15	1.5	0.15	2.97
6	2.2	1	0.15	1.2
1	8	1.5	0.15	2.25
1	10	1.5	0.15	4.5
2	10	3.75	0.15	5.91
1	10.5	2	0.15	3
1	10	2	0.15	9
15	2	2	0.15	2.93
1	6	0.5	0.15	0.38
1	5	1.5	0.15	4.39
13	1.5	3.75	0.15	15.19
1	27	1	0.15	0.75
1	5	1	0.15	2.7
1	18	1.5	0.15	50.63
15	15	1	0.15	2.93
13	1.5	1	0.15	0.75
1	5	3.75	0.15	1.13
1	2	3.75	0.15	5.63
1	10			
Total				148.31

[Signature]
8/11/21
JR

TSD
8-11-21
AE

[Signature]
10-11-2021

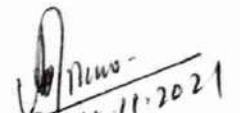
Pot Measurement Brick Bats

Name of Road:- NH-80 Jaitpur Khutaha Road

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
2nd Km.				
15	2	2	0.25	15
1	20	3.75	0.6	45
1	15	3.75	0.25	14.06
6	2.2	1.5	0.25	4.95
1	8	1	0.25	2
1	10.5	3.75	0.25	9.84
1	10	2	0.25	5
15	2	2	0.25	15
1	18	1	0.25	4.5
Total				115.35


8/11/21
JRE

780
8.11.21
AE


10.11.2021

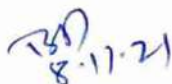
Name of Road :-

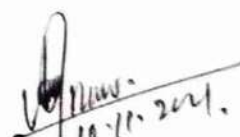
NH-80 Jaitpur Khutaha Road

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	66.44	604.91	40191.96	4019.20
GSB 9.5-2.36	m3	47.46	514.58	24421.56	2442.16
Local sand	m3	75.93	141.85	10771.34	1077.13
Agg-63-45 G2	m3	0.00	480.64	0.00	0.00
Screening B	m3	0.00	397.73	0.00	0.00
Moorum	m3	0.00	159.97	0.00	0.00
Coarse sand	m3	0.00	200.80	0.00	0.00
Brick Bats	m3	138.00	1032.00	142416.00	14241.60
				217800.86	21780.09


JE


AE


EE

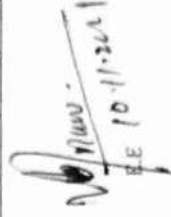
Name of Road

NH-80 Jaitpur Khutaha Road

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	115.35																				138.00
2	GSB Grading II	m3	148.31			66.44	47.5	75.93															
				0.00	0.00	66.44	47.46	75.93	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	138.00	


J.E.


A.E.


E.E.

Analysis for Carriage by Road & Rail

Name of Road:- NH-80 Jaitpur Khutaha Road

District:- Lakhisarai

Block :- Barahiya

Sl No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km			Total
				Pucka / Surface	Katcha	Loading & Unloading Cost	
1	Stone Metal Gr-I & Gr-II	Cum	Sheikhpura	$\frac{8.00}{4.59} \times 7.94 \times 46.00 \text{ Km} = \text{Rs } 636.58$	$\frac{8.00}{4.59} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	251.23	Rs 887.81
2	Stone Metal Gr-III / GSB	Cum	Sheikhpura	$\frac{8.00}{4.99} \times 7.94 \times 46.00 \text{ Km} = \text{Rs } 585.56$	$\frac{8.00}{4.99} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	230.23	Rs 815.79
3	Stone Aggregate / Chips	Cum	Sheikhpura	$\frac{8.00}{4.99} \times 7.94 \times 22.00 \text{ Km} = \text{Rs } 280.05$	$\frac{8.00}{4.99} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	211.23	Rs 491.28
4	Stone Boulder	Cum	Sheikhpura	$\frac{8.00}{4.80} \times 7.94 \times 46.00 \text{ Km} = \text{Rs } 608.73$	$\frac{8.00}{4.80} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	230.23	Rs 838.96
5	Coarse Sand	Cum	Kiul River	$\frac{8.00}{4.99} \times 7.94 \times 33.00 \text{ Km} = \text{Rs } 420.07$	$\frac{8.00}{4.99} \times 19.23 \times 1.00 \text{ Km} = \text{Rs } 30.83$	113.70	Rs 550.60
6	Binding Material/Moorum	Cum	Sheikhpura	$\frac{8.00}{6.00} \times 7.94 \times 46.00 \text{ Km} = \text{Rs } 486.99$	$\frac{8.00}{6.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	113.70	Rs 600.69
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 705.76
9	Cement	MT	Local	$\frac{8.00}{8.00} \times 7.94 \times 20.00 \text{ Km} = \text{Rs } 158.80$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	304.30	Rs 463.10
10	Steel	MT	Local	$\frac{8.00}{8.00} \times 7.94 \times 20.00 \text{ Km} = \text{Rs } 158.80$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	337.28	Rs 496.08
11	Bitumen Emulsion	MT	Barauai	$\frac{8.00}{8.00} \times 7.94 \times 94.00 \text{ Km} = \text{Rs } 746.36$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	341.37	Rs 1087.73
12	Bitumen	MT	Barauai	$\frac{8.00}{8.00} \times 7.94 \times 94.00 \text{ Km} = \text{Rs } 746.36$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	341.35	Rs 1087.71
13	House Pipe (1000 mm)	m	Lakhisarai	$\frac{8.00}{10.00} \times 7.94 \times 30.00 \text{ Km} = \text{Rs } 190.56$	$\frac{8.00}{10.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	80.88	Rs 271.44
14	House Pipe (600 mm)	m	Lakhisarai	$\frac{8.00}{25.00} \times 7.94 \times 30.00 \text{ Km} = \text{Rs } 76.32$	$\frac{8.00}{25.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	205.00	Rs 281.32
15	Brick Bat	Cum	Local				Rs 1052.00

* Subjected to Verification of Lead

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

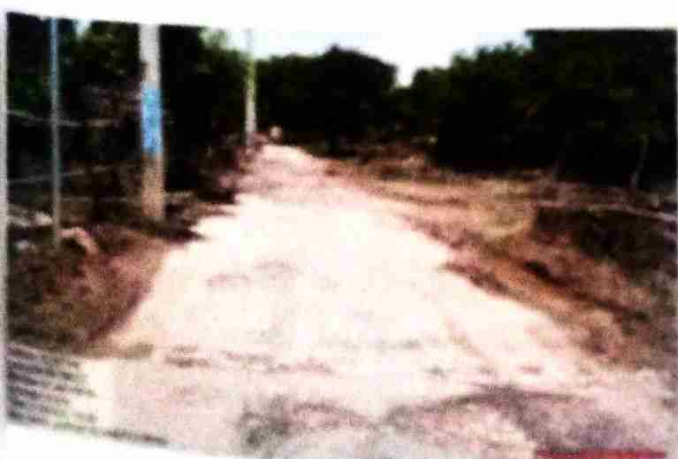
JE 3/11/24
RWD

ME
RWD

RE
RWD



NH-80 Jaitipur To Khutaha Road



NH-80 Jaitipur To Khutaha Road



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)

Pucka / Surface	=	$\frac{8.00}{4.99}$	x	7.94	x	4.00 Km	=	Rs 50.92
Unsurface 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%							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							
	(i) + (ii) + (iii)	=	For 1 cum	=	Rs 261.15 + Rs 886.73 + Rs 210.23	=		1358.11

^{FDR}
Schedule XLV Form No. 134

NH-80 Jailpur to Khatola

25/5/21 DIVISION

SUB-DIVISION

MEASUREMENT BOOK

695

से 673 में कुल 100 पये हैं, जो FDR
मोपना अर्थात् बडहिया पहाड़ के MH 80
जलालपुर रोड सुरक्षा पथ निर्माण।
कार्य हेतु मोपना/पगारी/सी कुजेर ठाकर
लिह के निधि लिया जाता है।


- 11/10/2021

Executive Engineer
Rural Works Department
Work Division, Lakhisarai

Sch. XLV—Form No. 134

Lakhisarai DIVISION

बडहिया SUB-DIVISION

Measurement Book

No. ~~695~~ 695

Name of Officer _____

Date of first entry _____

Date of last entry _____

1

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.)

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
Name of work — <i>Motorable of N/1480 Jailpur to Khutala Road</i>					
Agency: — <i>Amul Singh</i>					

Record Entry

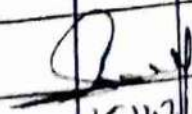
2 layer
 1. *Pondip Bazar Boly*

15	2.2	2.2	0.25	=	15.00 m ³
17	20.0	3.75	0.6	=	45.00 "
17	15.0	3.75	0.25	=	14.06 "
6	2.2	1.50	0.25	=	4.95 "
17	8.0	1.0	0.25	=	2.00 "
17	10.50	3.75	0.25	=	9.84 "
17	10.0	2.2	0.25	=	5.00 "
15	2.0	2.0	0.25	=	15.00 "
17	18.0	1.0	0.25	=	4.50 "

Continuation 115.35 m³

Particulars	Details of actual measurement				Contents of area
	No	L	B	D	
2. Pyramid granular					
Sub-base for II					
15 x 2.4 x 2.4 x 0.15					9.4 m ²
1 x 20.4 x 3.75 x 0.15					11.25 m ²
6 x 2.5 x 1.5 x 0.15					338 "
1 x 8.4 x 1.4 x 0.15					1.20 "
2 x 10.4 x 1.50 x 0.15					4.50 "
1 x 10.50 x 3.75 x 0.15					5.91 "
1 x 10.4 x 2.4 x 0.15					3.60 "
15 x 2.4 x 2.4 x 0.15					9.4 "
1 x 6.4 x 3.75 x 0.15					2.93 "
1 x 8.4 x 0.5 x 0.15					0.38 "
13 x 1.5 x 1.5 x 0.15					4.39 "
1 x 27.4 x 3.75 x 0.15					15.15 "

1 x 5.4 x 1.4 x 0.15					0.75 "
1 x 18.4 x 1.4 x 0.15					2.70 "
15 x 15.4 x 1.5 x 0.15					50.63 "
13 x 1.50 x 1.4 x 0.15					2.93 "
1 x 5.4 x 1.4 x 0.15					0.75 "
1 x 2.4 x 3.75 x 0.15					1.13 "
1 x 10.4 x 3.75 x 0.15					5.63 "
1 x 15.4 x 3.75 x 0.15					8.44 "
6 x 2.2 x 1.5 x 0.15					2.97 "
1 x 10.4 x 1.5 x 0.15					2.25 "
					148.31 m ³


 15.11.21
 SE


 15.11.21
 AE

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
<u>ABSTRACT OF COST</u>					
1 Prindip 2 Bayip, fillip					
1 Brick bats					
VTMPD					
115.35 m ³ @ Rs 2092.4 / m ³ Rs 241359.00					
2 Prindip granular substance					
2 Cost					
VTMPD					
148.31 m ³ @ Rs 1504.82 / m ³ Rs 223180.00					
					Rs 464539.00

Add 1. Labor Cost + Rs 4645.00

Add 2. f. Cost + Rs 55745.00

Add 10% Seigniorage fee 10%

Back Bats

138.00 x 1032.00 x 10% + Rs 14241.00

Costs Cost 11

26.50 to 9.5 mm

66.44 x 604.91 x 10% + 4019.00

9.5 to 2.36 mm

47.46 x 514.58 x 10% + 2442.00

Local Bats

75.93 m³ x 141.85 x 10% + Rs 1077.00

Rs 46608.00

Continuation

[Signature]
15-11-21
JE

[Signature]
15-11-21
AE

[Signature]
25-11-21
E.E

Inspection Report for Flood Damage Work

Date :- 30.11.2021

Name of PIU :- EERNW Khargpur to Tara Pur

Name of Block/ Road :- Barahiya / Restoration of Road from NH-80
Jait Pur to Khetara

A. For Road

1. Damage Location/ Chainage :- 1100 m to 1400 m
2. Damage Length :- 0.300 km
3. Nature of Damage :- Road crust damaged during flood & over
Topping
4. Details of Restoration Works :- Brick Bats, GSB, GWH
(i) Material being in Restoration works :- Brick Bats, GSB GWH
(ii) Equipment's /Tools being used in Restoration works :- JCB, Tractor, & Roller
(iii) Procedure take up in Restoration works :- Filling of Brick Bats, GSB GWH
(iv) Restored Length :- 0.300 km layer wise

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 :-

आर्थि संतोषजनक पाया।

30/11/2021

Signature
(Name of Inspection)