



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

ESTIMATE FOR FLOOD DAMAGED REPAIR

Bihar(बिहार)Map



Name of the Road :-

Adarsh Laxmipur To Lal Diara

DISTRICT	:	Lakhisarai	
DIVISION	:	Lakhisarai	
BLOCK	:	Barahiya	
TOTAL LENGTH OF ROAD	:	6.200 7.20	KM
PART-A TOTAL COST OF RESTORATION	:	23.960	Lac
AVERAGE COST PER KM	:	3.865	Lac
TOTAL COST OF PROJECT	:	23.960	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 :- आदर्श लक्ष्मीपुर-लाल दियारा

पथ की लम्बाई :- 7.000 कि०मी०

प्राक्कलित राशि :- 23.960/-लाख

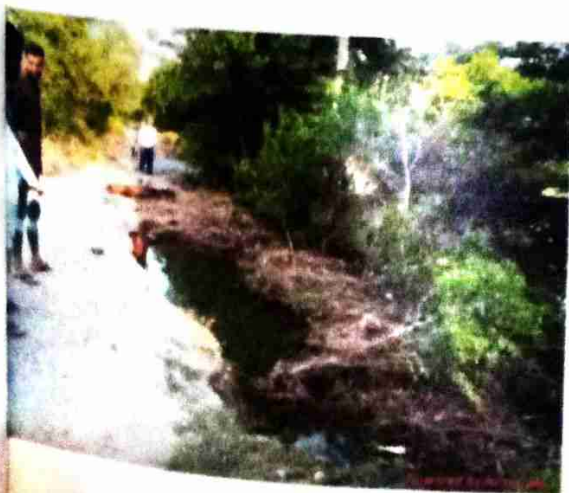
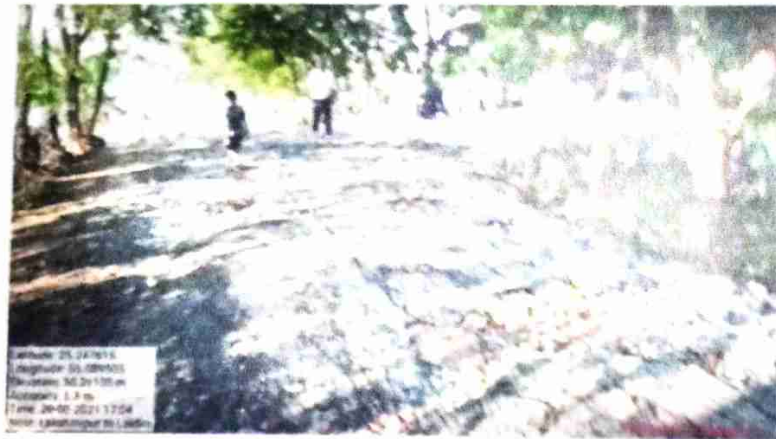
अधीक्षण अभियंता, ग्रामीण कार्य विभाग, कार्य अंचल, मुंगेर के पत्रांक 1162 दिनांक 16.11.2021 द्वारा प्राप्त निदेश के अनुपालन में आज दिनांक 21.11.2021 को ग्रामीण कार्य विभाग, कार्य प्रमंडल, लखीसराय के अधीन बाढ़ से क्षतिग्रस्त पथ का निरीक्षण सहायक अभियंता श्री लौडिक प्रसाद राय के साथ वर्ष 2021-22 में बाढ़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

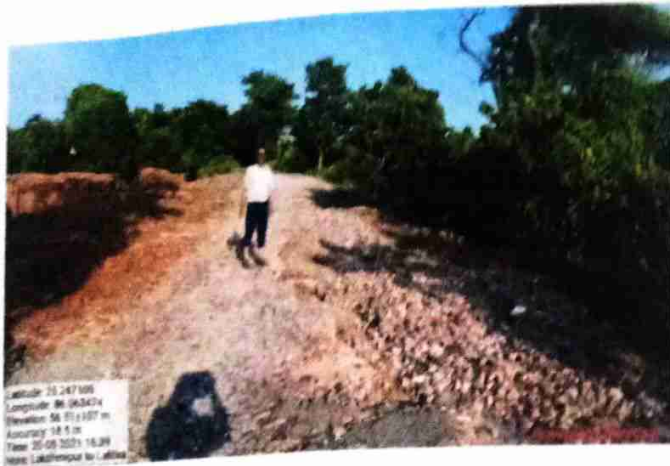
Adarsh Laxmipur To Lal Diara



Adarsh Laxmipur To Lal Diara



Adarsh Laxmipur To Lal Diara



ESTIMATE FOR FLOOD DAMAGED REPAIR

NAME OF ROAD :

Adarsh Laxmipur To Lal Diara

DISTRICT

Lakhisarai

BLOCK

Barahiya

DIVISION

Lakhisarai

LENGTH OF ROAD (in Km)

6.200 7.2

CD STRUCTURES

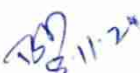
Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
PART-A	RESTORATION COST	
1	EARTHWORK	0.000
2	Brick Bat Filling	13.507
3	GSB GR-II	6.791
	SUB TOTAL OF Restoration	20.298
	LABOUR CESS 1% of cost	0.203
	GST 12 % of cost	2.436
	SEIGNORAGE FEE @ 10 % on Minor Mines	1.023
	TOTAL OF Restoration	23.960
	TOTAL COST OF PROJECT IN LACS =	23.960

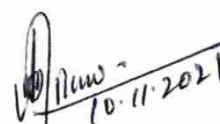
Deduct Contractor profit 9.1%

- 2.180 Lakh

Total = 21.780 Lakh


JE
RWD

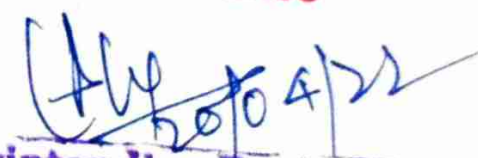

AE
RWD


EE
RWD

T.S Amount

Construction Cost : Rs - 23.960 Lakh
Deduct Contractor Profit 9.1% = Rs - 2.180 Lakh
Total Rs. 21.780 Lakh

Ref E.E. Letter No. 548 dt. 18.4.2022
Technically Sanctioned for Rs. 21.780 Lakh
(Rupees Twenty one Lakh
Seventy eight thousand) Only.
for construction work & 5 Years Maintenance


Superintending Engineer
Rural Works Department
Works Circle, Munger


20/09/2022

Name of Road:- Adarsh Laxmipur To Lal Diara

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					645.53		
2	4.1	401	Granular Sub-base with Well Graded Material (Table 400.1)						645.53	2,092.45	13,50,742.00
		(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					439.83		
			Net GSB Qty						439.83	1,543.92	6,79,062.00
										TOTAL =	20,29,804.00
										TOTAL COST OF PAVEMENT IN RS. (A+B+C+D+E+F)=	20,29,804.00


JE
8/11/24
RWD


AE
8.11.24
RWD


EE
10.11.2024
RWD

Pot Measurement GSB Gr-II

Name of Road:- Adarsh Laxmipur To Lal Diara

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
1st Km.				
2	1.5	1.5	0.15	0.68
1	35	3.75	0.15	19.69
2	10	3.75	0.15	11.25
1	26	3.75	0.15	14.63
1	30	3.75	0.15	16.88
1	26	4	0.15	15.6
1	30	3.75	0.15	16.88
1	20	3.75	0.15	11.25
1	15	1.8	0.15	4.05
6	1.5	1.5	0.15	2.03
2nd Km.				
1	30	1.5	0.15	6.75
1	25	1.5	0.15	5.63
1	15	1.5	0.15	3.38
1	20	3	0.15	9
1	32	6	0.15	28.8
2	30	6	0.15	54
1	30	1.5	0.15	6.75
1	15	2.5	0.15	5.63
8	1.5	1	0.15	1.8
1	5	1.5	0.15	1.13
1	20	1.5	0.15	4.5
1	10	1.5	0.15	2.25
4th Km.				
1	2	2	0.15	0.6
1	30	5	0.15	22.5
1	30	5	0.15	22.5
1	30	3	0.15	13.5
1	18	3.75	0.15	10.13
1	30	6	0.15	27
5th Km.				
1	15	1.5	0.15	3.38
1	5	3	0.15	2.25
10	2	2	0.15	6

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8/11/21
JRE

TSD
8.11.21
AE

[Signature]
10.11.2021

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
6th Km.				
1	30	3.75	0.15	16.88
1	15	6	0.15	13.5
1	15	4	0.15	9
1	7	4	0.15	4.2
7th Km.				
1	30	3.75	0.15	16.88
1	10	2.5	0.15	3.75
2	5	3	0.15	4.5
1	20	2	0.15	6
1	5	5	0.15	3.75
1	10	4	0.15	6
2	5	2.5	0.15	3.75
2	2	2	0.15	1.2

Total

439.83

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8/11/21
SE

TBD
8.11.21
AE

[Signature]
10.11.2021

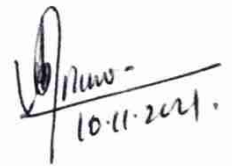
Pot Measurement Brick Bats

Name of Road:- Adarsh Laxmipur To Lal Diara

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
1st Km.				
1	26	4	0.6	62.4
2nd Km.				
1	28	6	0.8	134.4
2	28	6	0.6	201.6
1	15	2.5	0.45	16.88
1	5	3	1	15
4th Km.				
1	20	5	0.45	45
1	20	6	0.6	72
5th Km.				
1	5	3	0.6	9
6th Km.				
1	10	6	0.45	27
1	7	4	0.3	8.4
7th Km.				
1	10	2.75	0.6	16.5
1	10	2.5	0.45	11.25
2	5	3	0.45	13.5
1	10	2	0.45	9
2	2	2	0.45	3.6
Total				645.53


8/11/21
JE

TSD
8.11.21
AE


10.11.2021

Name of Road :-

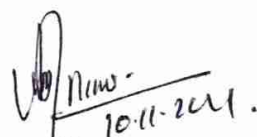
Adarsh Laxmipur To Lal Diara

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	197.04	604.91	119193.79	11919.38
GSB 9.5-2.36	m3	140.75	514.58	72424.87	7242.49
Local sand	m3	225.19	141.85	31943.62	3194.36
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
53-22.4 G3	m3	0.00	511.44	0.00	0.00
Brick Bats	m3	775.00	1032.00	799800.00	79980.00
				1023362.28	102336.23


JE 8.11.21


AE 8.11.21


EE 10.11.21

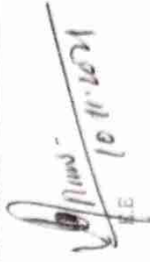
Name of Road

Adarsh Laxmipur To Lal Diara

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	Moorum	53-22.4 G3	Agg 13.2 mm	agg 9.5-4.75	agg 4.75 below	agg 40	agg 20	agg 10	Stone	stone spall	Coarse sand	cement
1	Construction of Embankment	m3	0.00	0.00																		
2	Brick Bat filling	m3	645.53																			775.00
3	GSB Grading II	m3	439.83			197	140.7	225.19														
				0.00	0.00	197.04	140.75	225.19	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	775.00


J.E. 8/11/24


A.E. 8/11/24


J.E. 10/11/24

Analysis for Carriage by Road & Rail

Name of Road:-- Adarsh Laxmipur To Lal Diara

District:- Lakhisarai

Block :- Barahiya

Sl No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km		Matcha	Loading & Unloading Cost	Carriage Cost by Rail Road	Total
1	Stone Metal Gr-I & Gr-II	Cum	Shekhpura	$\frac{8.00}{4.59} \times 7.94$	$\times 50.00 \text{ Km} = \text{Rs } 691.94$	$\frac{8.00}{4.59} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	210.23		Rs. 902.17
2	Stone Metal Gr-III / GSB	Cum	Shekhpura	$\frac{8.00}{4.99} \times 7.94$	$\times 50.00 \text{ Km} = \text{Rs } 636.47$	$\frac{8.00}{4.99} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	210.23		Rs. 846.70
3	Stone Aggregate / Chips	Cum	Shekhpura	$\frac{8.00}{4.99} \times 7.94$	$\times 28.00 \text{ Km} = \text{Rs } 356.42$	$\frac{8.00}{4.99} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	210.23	1358.11	Rs. 1524.76
4	Stone Boulder	Cum	Shekhpura	$\frac{8.00}{4.80} \times 7.94$	$\times 50.00 \text{ Km} = \text{Rs } 661.67$	$\frac{8.00}{4.80} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	210.23		Rs. 871.90
5	Coarse Sand	Cum	Kiul River	$\frac{8.00}{4.99} \times 7.94$	$\times 37.00 \text{ Km} = \text{Rs } 470.99$	$\frac{8.00}{4.99} \times 19.23 \times 1.00 \text{ Km} = \text{Rs } 30.83$	113.70		Rs. 615.52
6	Binding Material/Moorum	Cum	Shekhpura	$\frac{8.00}{6.00} \times 7.94$	$\times 50.00 \text{ Km} = \text{Rs } 529.33$	$\frac{8.00}{6.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	113.70		Rs. 643.03
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	$\frac{8.00}{8.00} \times 7.94$	$\times 26.00 \text{ Km} = \text{Rs } 206.44$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	316.10		Rs. 322.54
10	Steel	MT	Local	$\frac{8.00}{8.00} \times 7.94$	$\times 26.00 \text{ Km} = \text{Rs } 206.44$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	337.28		Rs. 543.72
11	Bitumen Emulsion	MT	Barauni	$\frac{8.00}{8.00} \times 7.94$	$\times 96.00 \text{ Km} = \text{Rs } 762.24$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	361.31		Rs. 1123.55
12	Bitumen	MT	Barauni	$\frac{8.00}{8.00} \times 7.94$	$\times 96.00 \text{ Km} = \text{Rs } 762.24$	$\frac{8.00}{8.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	361.31		Rs. 1123.55
13	Hume Pipe (1000 mm)	m	Lakhisarai	$\frac{8.00}{10.00} \times 7.94$	$\times 33.00 \text{ Km} = \text{Rs } 209.62$	$\frac{8.00}{10.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	81.88		Rs. 291.50
14	Hume Pipe (600 mm)	m	Lakhisarai	$\frac{8.00}{25.00} \times 7.94$	$\times 33.00 \text{ Km} = \text{Rs } 83.85$	$\frac{8.00}{25.00} \times 19.23 \times 0.00 \text{ Km} = \text{Rs } 0.00$	35.09		Rs. 118.94
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

JE 8/11/21
RWD

AE 8/11/21
RWD

10.11.2021
EH
RWD

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

Molecule of wood from Adarsh Carghmit
Lal Diya

DIVISION

Lakshmi Garai

SUB-DIVISION

Barabhiya

MEASUREMENT BOOK

-681

68/1 में कुल 100 पट्टी है, जिनमें 22
 योजनागत खंडिया पट्टी में
 अर्द्धशुल्कीय लाल रंग का
 पथ निर्माण कार्य हेतु योजना पत्रादी
 HE श्री कांजेश कुमार सिंह के
 नाम से निर्गत किया जा रहा है।


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

Sch. XLV—Form No. 134

लखीसराय DIVISION
खंडिया SUB-DIVISION

Measurement Book

No.

Name of Officer _____

Date of first entry _____

Date of last entry _____

Name of 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:— Measurable of
Road from Aditya Lakshmi
to Lal Bazar

~~Measurable~~

Record Entry

1. Providing & laying Brick

Note

$$1 \times 26.00 \times 4.00 \times 0.6 = 62.40 \text{ m}^3$$

$$2 \times 28.00 \times 6.00 \times 0.8 = 134.40 \text{ m}^3$$

$$2 \times 28.00 \times 6.00 \times 0.6 = 201.60$$

$$1 \times 15.00 \times 2.50 \times 0.45 = 16.88$$

$$1 \times 5.00 \times 3.00 \times 1.00 = 15.00$$

$$412 \text{ km } 1 \times 20.00 \times 5.00 \times 0.15 = 45.00$$

Continuation

Particulars	Totals of actual measurements				Continuity of work
	No.	1	2	3	
17 20.00 + 6.00 + 0.60 =					72.00
512 km 17 15.00 + 3.00 + 0.60 =					9.00
612 km 17 10.00 + 6.00 + 0.45 =					23.00
17 7.00 + 4.00 + 0.30 =					8.40
712 km 16 72.75 + 0.60 =					16.50
16 72.75 + 0.45 =					11.25
27 5.00 + 3.00 + 0.45 =					13.50
17 10.00 + 2.00 + 0.45 =					9.00
27 2.00 + 2.00 + 0.45 =					3.60
					645.33
					m ³

2. Gravel 500 m³
 Subbase 6-5

17 1.50 + 1.50 + 0.15 =					0.68 m ³
17 35.00 + 3.75 + 0.15 =					19.69
27 10.00 + 3.75 + 0.15 =					11.25
17 20.00 + 3.75 + 0.15 =					14.63
17 30.00 + 3.75 + 0.15 =					16.88
17 26.00 + 4.00 + 0.15 =					15.60
17 20.00 + 3.75 + 0.15 =					16.88
17 20.00 + 3.75 + 0.15 =					11.25
17 15.00 + 1.80 + 0.15 =					4.05
67 1.50 + 1.50 + 0.15 =					2.03
2nd km 17 30.00 + 1.50 + 0.15 =					6.25
17 25.00 + 1.50 + 0.15 =					5.63
17 15.00 + 1.50 + 0.15 =					3.38
17 20.00 + 3.00 + 0.15 =					9.00

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
	1	32.7	6.7	0.15	28.80
	2	30.7	6.7	0.15	54.7
	1	30.7	1.50	0.15	6.75
	1	15.7	2.50	0.15	5.63
	8	1.5	1.7	0.15	1.80
	1	5.7	1.50	0.15	1.13
	1	20.7	1.5	0.15	4.50
	1	10.7	1.50	0.15	2.25
4th km	1	2.7	2.7	0.15	0.60
	1	30.7	5.7	0.15	22.50
	1	30.7	5.7	0.15	22.50
	1	30.7	0.7	0.15	13.50
	1	18.7	3.75	0.15	10.13
	1	70.7	6.7	0.15	27.7
5th km	1	15.7	1.5	0.15	3.38
	1	5.7	3.7	0.15	2.35
	10	2.7	2.7	0.15	6.7
6th	1	30.7	3.75	0.15	16.88
	1	16.7	6.7	0.15	13.50
	1	15.7	4.7	0.15	4.20
7th km	1	30.7	3.75	0.15	16.88
	1	10.7	2.5	0.15	3.75
	2	5.7	3.7	0.15	4.50
	1	20.7	2.7	0.15	6.7
	1	5.7	5.7	0.15	3.75
	1	10.7	4.7	0.15	6.7
	2	5.7	2.50	0.15	3.75
	2	2.7	2.7	0.15	1.20
Continuation					439.82 m ²

15.11.21
JE

15.11.21
AE

ABSTRACT OF COST

1. Princip 2 layers

Brick Bats

VTM 178 (2)

645.53 m³ @ 2092.48/m³ = 1350739.2

2. Princip Granular

2

Sub base C&H

VTM 178 (3)

232.83 m³ @ 1503.92/m³ = 679062.0

Rs 2029801.2

Add 6% C&H 1-1.

+ Rs 20298.0

Add GST 12%.

+ Rs 243576.0

Rs 2293675.2

Add Seigniorage fee 10%.

Brick Bats

775 m³ @ 1032.00 x 10% = 197995.0

GSB 26.5 to 95 mm

197.09 x 640.91 x 10% = 11919.0

9.5 to 25 mm

140.75 x 519.58 x 10% = 7292.0

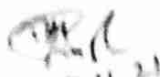
Local Road

225.19 m³ @ 141.85 x 10% = 3194.00

Continuation

Rs 2396010.2


15/11/21
J.E.


15/11/21
A.E.


15/11/21
E.E.