



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

ESTIMATE FOR FLOOD DAMAGED REPAIR

Bihar(बिहार)Map



Name of the Road :-

NH-80 BHOLA TOLA TO LODIA

DISTRICT	:	Lakhisarai	
DIVISION	:	Lakhisarai	
BLOCK	:	Lakhisarai	
TOTAL LENGTH OF ROAD	:	1.901	KM
TOTAL COST	:	4.857	Lac
AVERAGE COST PER KM	:	2.555	Lac
TOTAL COST OF PROJECT	:	4.857	Lac

Submitted By:
Executive Engineer
RWD WORKS DIVISION
Lakhisarai

स्थल निरीक्षण प्रतिवेदन

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

पथ का नाम :- NH-80 भोला टोला से लोदिया

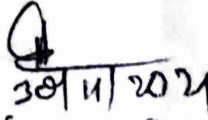
पथ की लम्बाई :- 1.901 कि०मी०

प्राक्कलित राशि :- 4.857 / - 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 मोटरबुल 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

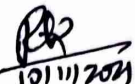
तकनीकी प्रतिवेदन

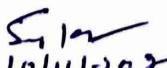
पथ का नाम :- NH-80 भोला टोला से लोदिया

पथ की लम्बाई :- 1.901 कि०मी०

प्राक्कलित राशि :- 4.857 / - लाख

उपर्युक्त पथ को मोटरेबुल करने हेतु मरम्मत का प्राक्कलन, माह अगस्त 2021 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 लखीसराय 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 Moorum से भरकर उसके उपर G.S.I (Gr.II) (जगह-जगह 150mm - 200mm की मुट्टाई में) भरकर सम्पीडन किया गया एवं पथ को मोटरेबुल कराया गया, जिसका तकनीकी अनुमोदन अपेक्षित है।


10/11/2021
कनीय अभियंता


10/11/2021
सहायक अभियंता


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

ESTIMATE FOR FLOOD DAMAGED REPAIR

NAME OF ROAD : NH-80 BHOLA TOLA TO LOPIA

DISTRICT Lakhisarai

BLOCK Lakhisarai

DIVISION Lakhisarai

LENGTH OF ROAD (in Km) 1.901

CD STRUCTURES

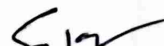
Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
PART-A	RESTORATION COST	
1	EARTHWORK / SAND / MOORUM FILLING	1.790
2	Brick Bat Filling	0.471
3	GSB GR-II	1.924
	SUB TOTAL	4.185
	LABOUR CESS 1% of cost	0.042
	GST 12 % of cost	0.502
	SEIGNORAGE FEE @ 10 % on Minor Mines	0.128
	TOTAL	4.857
	TOTAL COST OF PROJECT IN LACS =	4.857

Deduct Contractor profit 9.1%.

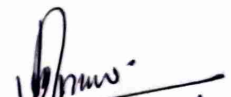
- 0.442 Lakh
Total 4.415 Lakh


20/11/2021

JE
RWD


10/11/2021

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RWD


10.11.2021

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RWD

T.S Amount

Construction Cost : Rs. 4.857 lakh

Deduct Contractor profit 9.1% : Rs - 0.442 lakh

Total : Rs = 4.415 lakh

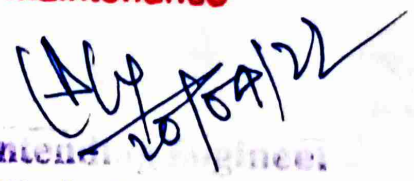
Ref. E.E. Letter No. 548 dt. 18.4.2022

Technically Sanctioned for Rs. 4.415 lakh

(Rupees Four lakh forty one

thousand five hundred) Only.

for construction work & 5 Years Maintenance


Superintendent Engineer

Rural Works Department

Works Circle, Munger


20/04/2022

Name of Road:- NH-80 BHOLA TOLA TO LOBIA

Sl. No.	SDB SL. NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (In Rs.)
1		1100	Type B (First Class) Bedding Laying (First Class) bedding on well compacted sand, moorum or approved granular material as per Clause 1105 (ii)								
			Qty as per Measurement	cum					175.00		
			Net Qty						175.00	1,022.82	1,78,994.00
			Sub Head : PAVEMENT LAYERS - GSB & WBM ITEMS								
2			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					22.50		
			Net Qty						22.50	2,092.45	47,080.00
3	4.1	401 (ii)	Granular Sub-base with Well Graded Material (Table 400.1) 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					131.26		
			Net GSB Qty						131.26	1,465.71	1,92,389.00
			TOTAL =								4,18,463.00

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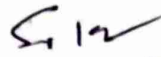
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Pot Measurement Moorum

Name of Road:- NH-80 BHOLA TOLA TO LOBIA

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
2	25	3.75	0.2	37.5
1	50	3.75	0.2	37.5
2	15	2	0.2	12
2	50	1	0.2	20
3	25	2	0.2	30
3	10	3	0.2	18
4	15	1	0.2	12
4	10	1	0.2	8
Total				175.00


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Pot Measurement GSB Gr-II

Name of Road:- NH-80 BHOLA TOLA TO LOBIA

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
2	25	3.75	0.15	28.13
1	50	3.75	0.15	28.13
2	15	2	0.15	9
2	50	1	0.15	15
3	25	2	0.15	22.5
3	10	3	0.15	13.5
4	15	1	0.15	9
4	10	1	0.15	6
Total				131.26

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10/11/2021
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V. M.
10.11.2021

Pot Measurement Brick Bats

Name of Road:- NH-80 BHOLA TOLA TO LOBIA

Nos.	Length (m)	Width (m)	Thickness (m)	Qty. (Cum.)
700 m.				
1	4	3.75	1.5	22.5
Total				22.50

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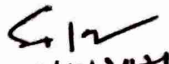
Name of Road :-

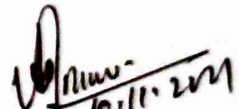
NH-80 BHOLA TOLA TO LOBIA

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	58.80	604.91	35571.42	3557.14
GSB 9.5-2.36	m3	42.00	514.58	21614.01	2161.40
Local sand	m3	67.21	141.85	9533.05	953.30
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/ Moorum	m3	210.00	159.97	33593.70	3359.37
Brick Bats	m3	27.00	1032.00	27864.00	2786.40
				128176.17	12817.62


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Name of Road

NH-80 BHOLA TOLA TO LOBIA

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 Agg	stone spalls	Coarse sand/Moorum	cement	Brick Bats
1	Brick Bat filling	m3	22.50																				27.00
2	GSB Grading II	m3	131.26			58.804	42	67.21															
3	Type B (First Class) Bedding / Moorum	m3	175.00																		210		
				0.00	0.00	58.80	42.00	67.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	210.00	0.00	27.00

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V. N.
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Name of Road:--

NH-80 BHOLA TOLA TO LOBIA

District:-

Lakhisarai

Block :- Lakhisarai

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	Sheikhpura	$\frac{8.00}{4.59}$	x 7.94	x 42.00 Km	= Rs 581.23	$\frac{8.00}{4.59}$	x 19.23	x 0.00 Km	= Rs 0.00	Rs. 791.46
2	Stone Metal Gr-III / GSB	Cum	Sheikhpura	$\frac{8.00}{4.99}$	x 7.94	x 42.00 Km	= Rs 534.64	$\frac{8.00}{4.99}$	x 19.23	x 0.00 Km	= Rs 0.00	Rs. 744.87
3	Stone Aggregate / Chips	Cum	Kiul	$\frac{8.00}{4.99}$	x 7.94	x 10.00 Km	= Rs 127.29	$\frac{8.00}{4.99}$	x 19.23	x 0.00 Km	= Rs 0.00	Rs. 1695.63
4	Stone Boulder	Cum	Sheikhpura	$\frac{8.00}{4.80}$	x 7.94	x 42.00 Km	= Rs 555.80	$\frac{8.00}{4.80}$	x 19.23	x 0.00 Km	= Rs 0.00	Rs. 766.03
5	Coarse Sand	Cum	Kiul River	$\frac{8.00}{4.99}$	x 7.94	x 35.00 Km	= Rs 445.53	$\frac{8.00}{4.99}$	x 19.23	x 1.00 Km	= Rs 30.83	Rs. 590.06
6	Binding Material/Moorum	Cum	Sheikhpura	$\frac{8.00}{6.00}$	x 7.94	x 42.00 Km	= Rs 444.64	$\frac{8.00}{6.00}$	x 19.23	x 0.00 Km	= Rs 0.00	Rs. 558.34
7	Local Sand	Cum	Local	$\frac{8.00}{4.99}$	x 7.94	x 2.00 Km	= Rs 25.46	$\frac{8.00}{4.99}$	x 19.23	x 1.00 Km	= Rs 30.83	Rs. 169.99
8	Brick	1000 Nos	Local	$\frac{8.00}{2.00}$	x 7.94	x 7.00 Km	= Rs 222.32	$\frac{8.00}{2.00}$	x 19.23	x 1.00 Km	= Rs 76.92	Rs. 776.76
9	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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RWD

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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)

Pucka / Surface	=	$\frac{8.00}{4.99}$	x	7.94	x	4.00 Km	=	Rs 50.92
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Unsurface Gravel Road	=	$\frac{8.00}{4.99}$	x	9.56	x	0.00 Km	=	Rs 0.00
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Kachha Road	=	$\frac{8.00}{4.99}$	x	19.23	x	0.00 Km	=	Rs 0.00
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Loading & Unloading	=						=	Rs 210.23
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(i)	=	Total	=	"A"	=	Rs 261.15		
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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
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Busy Season charge 12% of Railway freight charge	=	For 1 MT			=	12%	=	Rs 37.93
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Railway Development Charge to 5% of Railway freight	=	For 1 MT			=	5%	=	Rs 15.81
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Railway Terminal Charge Rs 40/- Per Tonne Per	=	For 1 MT	2	x	Rs 40.00	=	Rs 80.00
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Sub-Total	=	For 1 MT			=	Rs 449.84		
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Add GST 1%	=			=	Rs 0.00			
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Total	=	For 1 MT			=	Rs 449.84		
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Rate for Railway freight Charge	=	"B"	For 1 Cum	=	Rs 449.84 x	1.60	=	Rs 719.75
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Add 12% Overhead	=	12%	=	Rs 86.37				
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Add 10% Contractor Profit	=	10%	=	Rs 80.61				
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(ii) Gross Rate for Railway freight Charge	=	For 1 Cum			=	Rs 886.73		
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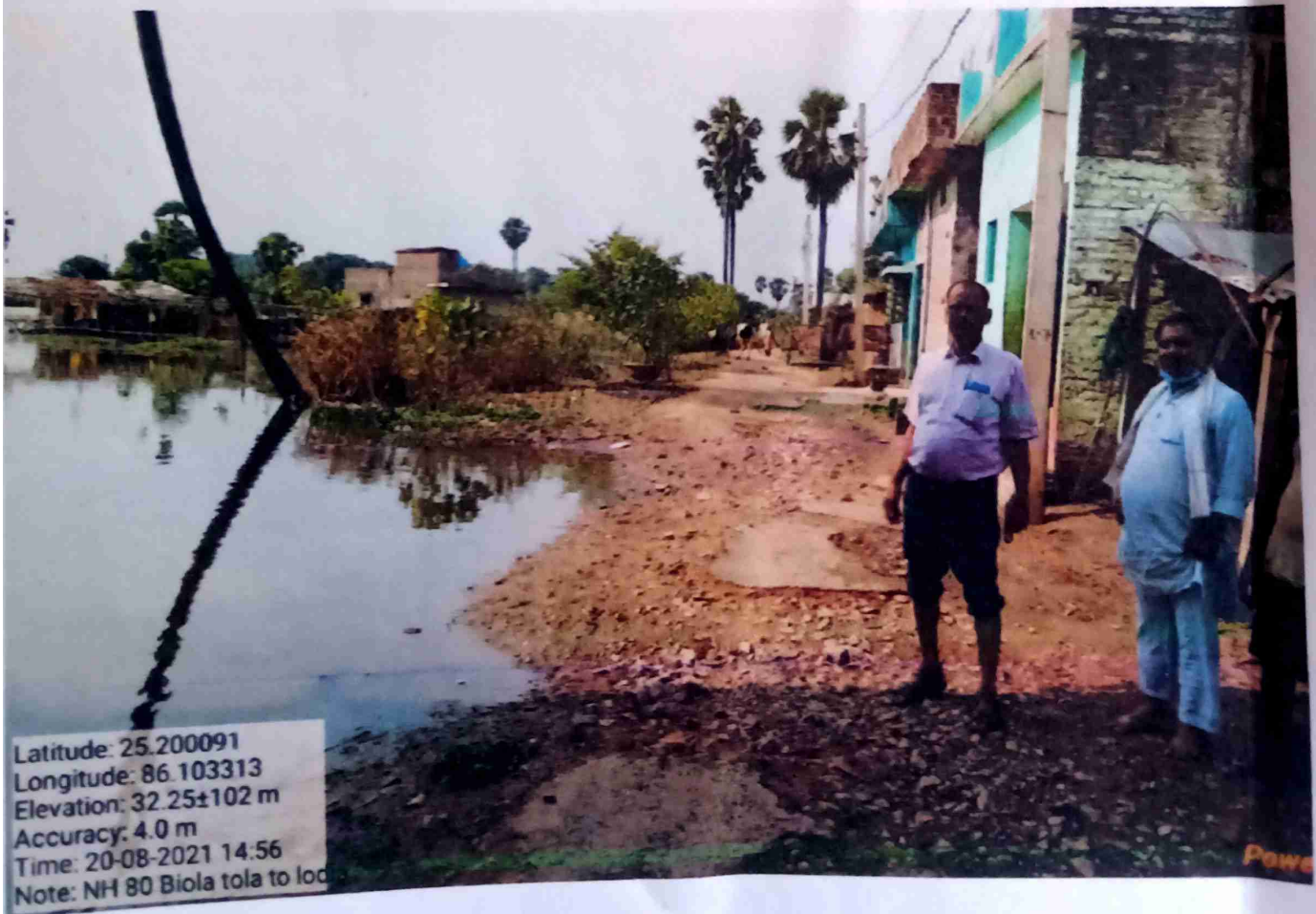
(iii) Loading & Unloading Cost	=	For 1 Cum			=	Rs 210.23		
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Carriage Cost from Quarry to Kiul Railway Yard	=	For 1 cum	=	Rs 261.15 +	Rs 886.73 +	Rs 210.23	=	1358.11
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(i) + (ii) + (iii)



Latitude: 25.198938
Longitude: 86.103452
Elevation: 42.61±98 m
Accuracy: 9.1 m
Time: 20-08-2021 14:51
Note: ~~Area of water body~~





Latitude: 25.208038
Longitude: 86.105069
Elevation: 61.56±98 m
Accuracy: 4.0 m
Time: 20-08-2021 15:09
Note: NH 80 Biola to lodia



Latitude: 25.206737
Longitude: 86.104847
Elevation: 43.49±105 m
Accuracy: 9.5 m
Time: 20-08-2021 15:07

Schedule XLV-Form No. 134

N1480 Bhola Tila to Ledia

DIVISION

LIAISON

~~Sub Army~~

SUB-DIVISION

Date - 11-10-2021

MEASUREMENT BOOK

M.B.No-690

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
26.1					
26.2					
26.3					
26.4					
26.5					
26.6					
26.7					
26.8					
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26.69					
26.70					
26.71					
26.72					
26.73					
26.74					
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26.91					
26.92					
26.93					
26.94					
26.95					
26.96					
26.97					
26.98					
26.99					
27.00					

Particulars	Details of actual measurement				Content of area
	No.	L.	B.	D.	
					80.2
					22.
					13.
					9.
					6.
					131.26

P/V Brick Pak 6'11" x 10'					
Brick of 10' x 10' x 10'					
1 x 4M x 3'15" x 1'5" = 22.15					
Re 5.11					
Wintson 10/1/2001					

435 2615 x 915 = 58.80 AS					
435 915 x 232M = 42.10 AS					
Localised = 67.21 AS					
A 163A 45M 9.0					
M 100M = 159.93 AS					
Brick Pak = 27 AS					

Particulars	Details of actual measurement			Contents of area
	No.	L.	B.	
Adjustment of case N.H. 20				
Bhola to 1/2 to 1/2 to 1/2 to 1/2				
Surf flood 2021				
1) P/V Noodanfeld				
in front of road				
$P_3 = 17.5 \text{ m}$				
$C = 1022.82 / 6 = 170.9$				
2 - Emergency Repair				
by 1/2 to 1/2 to 1/2 to 1/2				
in front of road				
$P_4 = 22.50 \text{ m}$				
$C = 2092.45 / 4 = 470.80$				
3. P/V layup spreading				
Compacting 1/2 to 1/2 to 1/2 to 1/2				
hole of road 1/2 to 1/2				
$P_4 = 131.26 \text{ m}$				
$C = 1465.71 / 6 = 192.38$				
$1\% \text{ (all cases)} = 41.85 =$				
$12\% \text{ (all cases)} = 50.216 =$				
SF 1/2 to 1/2 to 1/2 to 1/2				
$50.216 \times 604.91 \times 1 = 3557$				
$9.5 \text{ to } 2.36 \times 42 \text{ m} \times 514.58 = 2161$				
Local SW 67.24 x 1/2 to 1/2 to 1/2 to 1/2				
$9.53 =$				

25.11.2021
E.E.