



ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

DETAILED PROJECT REPORT FOR FDR



Name of the Road :- Restoration work of the road from
Bhagwanpur to Totaha via Prateep Tard

DISTRICT - Vaishali

DIVISION - Hajipur

BLOCK - Bhagwanpur

TOTAL LENGTH OF ROAD

: 10.60 KM

CONSTRUCTION COST

: 1.495 Lac

Submitted By :-
Executive Engineer
RWD Work Division, Hajipur

Restoration work of the road from Bhagwanpur to Totaha via Pratap Tirdal.

(1) Providing, laying, spreading and compacting of Thomas metal - do - do - all complete job.

In km 1st. $7.00 \times 5.00 \times 1.20 = 42.00 \text{ m}^3$

less for Pipe - $2 \times 3.14 \times (0.415)^2 \times 5 = 5.41$

In km 3rd Near Katwa Pul $= 7 \text{ M} \times \frac{6.7 + 4.5}{2} \times \frac{0.45 + 0.3}{2} = 14.70$

$= 8 \text{ M} \times \frac{6.7 + 4.5}{2} \times \frac{0.45 + 0.3}{2} = 16.80 \text{ m}^3$

Total = 68.09 m³

@ RS 2033.34 / m³

RS 1,38,450/-

(2) Providing and laying of R.C.C pipe NP₃ of 600mm dia - do - job.

4 x 2.5 M = 10 M @ RS 1104.11 / M RS 11,041/-

Total RS 1,49,491 = 00

Say RS 1,49,500 = 00

S.M.
6.10.20
J.E
R.W.D
(w) Section
Bhagwanpur

Pratap
6.10.20
A.E
R.W.D
(w) Sub-Div
Bhagwanpur

Lay
E.B/TD
R.W.D
(w) Division
Hayipur.

Technically approved for RS 1,49,500 = 00 (Rupees One Lakh Forty Nine Thousand Five Hundred) only

W.M.
21.12.20
S.E
R.W.D
(w) Circle
Muzaffarpur

Inspection Report for Flood Damage Work

Date

1. Name of MUs - E.E R.W.D Hasipur
2. Name of Block/Road - Bhagwanpur, Bhagwanpur to Talaha via Pratap road.

A. For Road

1. Damage Location/Chainage : 1st km & 3rd km
2. Damage Length : 22 M
3. Nature of Damage : Flood
4. Details of Restoration Works :
 - i. Material being used in Restoration works : Brick bats
 - ii. Equipments/Tools being used in Restoration works :
 - iii. Procedure taken up in Restoration works :
 - iv. Restored Length :

B. For Bridge

1. Damage Location/Chainage :
2. Damage Length :
3. Nature of Damage :
4. Details of Restoration Works :
 - i. Material being used in Restoration works :
 - ii. Equipments/Tools being used in Restoration works :
 - iii. Procedure taken up in Restoration works :
 - iv. Restored Length :

Me
6.10.20
Signature of JE/AE/EE

Raj
6/10
Signature

Raj
6/10
Signature

(Name of Inspector)

Chapter 1
LOADING, UNLOADING, CARRIAGE CRUSHING OF MATERIALS AND SETTING OUT

Notes

1. Rates are for net quantities after deduction of wastage
2. Part of km beyond 1 km will be payable for the full km

Sl. No.	Reference to MORD Specifications	Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)																																					
1.2		Loading and Unloading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work																																									
	(i)	<p>Loading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by mechanical means including a load upto 30 m</p> <p>Placing tipper at loading point, loading with front end loader excluding time for haulage and return trip</p> <p>Unit = cum</p> <p>Taking output = 5.5 cum</p> <p>Time required for</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">i)</td> <td style="width: 60%;">Positioning of tipper at loading point</td> <td style="width: 10%;">Min</td> <td style="width: 10%;">1.00</td> <td style="width: 15%;"></td> </tr> <tr> <td>ii)</td> <td>Loading by front end loader 1 cum bucket capacity @ 45 cum per hour</td> <td>Min</td> <td>7.33</td> <td></td> </tr> <tr> <td>iii)</td> <td>Manoeuvring, reversing, dumping and turning for</td> <td>Min</td> <td>0.00</td> <td></td> </tr> <tr> <td>iv)</td> <td>Waiting time, unforeseen contingencies, etc.</td> <td>Min</td> <td>2.00</td> <td></td> </tr> <tr> <td></td> <td>Total</td> <td>Min</td> <td>10.33</td> <td></td> </tr> </table> <p>a) Machinery</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">(i)</td> <td style="width: 60%;">Tipper 10 t capacity</td> <td style="width: 10%;">hour</td> <td style="width: 10%;">0.218</td> <td style="width: 10%;">1,043.00</td> <td style="width: 10%;">227.37</td> </tr> <tr> <td>(ii)</td> <td>Front end-loader 1 cum bucket capacity @ 45 CUM PER HOUR</td> <td>hour</td> <td>0.122</td> <td>1,403.00</td> <td>171.17</td> </tr> </table> <p>b) Overheads @ 5.0% on (a) 22.91</p> <p>c) Contractor's Profit @ 10.0% on (a+b)</p> <p>Cost for 5.5 cum = a+b+c 422.45</p> <p>Total 422.45</p> <p>Rate per cum = (a+b+c)/5.5 76.81</p>	i)	Positioning of tipper at loading point	Min	1.00		ii)	Loading by front end loader 1 cum bucket capacity @ 45 cum per hour	Min	7.33		iii)	Manoeuvring, reversing, dumping and turning for	Min	0.00		iv)	Waiting time, unforeseen contingencies, etc.	Min	2.00			Total	Min	10.33		(i)	Tipper 10 t capacity	hour	0.218	1,043.00	227.37	(ii)	Front end-loader 1 cum bucket capacity @ 45 CUM PER HOUR	hour	0.122	1,403.00	171.17				
i)	Positioning of tipper at loading point	Min	1.00																																								
ii)	Loading by front end loader 1 cum bucket capacity @ 45 cum per hour	Min	7.33																																								
iii)	Manoeuvring, reversing, dumping and turning for	Min	0.00																																								
iv)	Waiting time, unforeseen contingencies, etc.	Min	2.00																																								
	Total	Min	10.33																																								
(i)	Tipper 10 t capacity	hour	0.218	1,043.00	227.37																																						
(ii)	Front end-loader 1 cum bucket capacity @ 45 CUM PER HOUR	hour	0.122	1,403.00	171.17																																						
	(ii)	<p>Unloading of Earth, Sand, lime, moorum, Aggregate, Stone Boulder, Brick Aggregate, kankar, Building Rubbish, Manure, Crushed Slag, Flyash, Stone for Masonry Work by mechanical means</p> <p>Unit = cum</p> <p>Placing tipper at loading point, loading with front end loader excluding time for haulage and return</p> <p>Unit = cum</p> <p>Taking output = 5.5 cum</p> <p>Time required for</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">i)</td> <td style="width: 60%;">Positioning of tipper at loading point</td> <td style="width: 10%;">Min</td> <td style="width: 10%;">1.00</td> <td style="width: 15%;"></td> </tr> <tr> <td>ii)</td> <td>loading by front end loader 1 cum bucket capacity @ 100 cum per hour</td> <td>Min</td> <td>2.00</td> <td></td> </tr> <tr> <td>iii)</td> <td>Waiting time, unforeseen contingencies, etc.</td> <td>Min</td> <td>2.00</td> <td></td> </tr> <tr> <td></td> <td>Total</td> <td>Min</td> <td>5.00</td> <td></td> </tr> </table> <p>a) Machinery</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">(i)</td> <td style="width: 60%;">Tipper 10 t capacity</td> <td style="width: 10%;">hour</td> <td style="width: 10%;">0.08</td> <td style="width: 10%;">1,043.00</td> <td style="width: 10%;">83.44</td> </tr> </table> <p>b) Overheads @ 6.0% on (a) 5.01</p> <p>Cost for 5.5 cum = a+b+c 88.45</p> <p>Rate per cum = (a+b+c)/5.5 16.08</p>	i)	Positioning of tipper at loading point	Min	1.00		ii)	loading by front end loader 1 cum bucket capacity @ 100 cum per hour	Min	2.00		iii)	Waiting time, unforeseen contingencies, etc.	Min	2.00			Total	Min	5.00		(i)	Tipper 10 t capacity	hour	0.08	1,043.00	83.44															
i)	Positioning of tipper at loading point	Min	1.00																																								
ii)	loading by front end loader 1 cum bucket capacity @ 100 cum per hour	Min	2.00																																								
iii)	Waiting time, unforeseen contingencies, etc.	Min	2.00																																								
	Total	Min	5.00																																								
(i)	Tipper 10 t capacity	hour	0.08	1,043.00	83.44																																						

BRICK BATS PITCHING MANUAL MEANS

6.6.1 WRD Bihar	Labour for laying dry graded Jhama Khoa or stone filter under Brick Pitching or Boulder Pitching in slope or apron including light ramming etc. all complete as per approved design, specification and direction of E/I.			
	Unit :- Per Cum			
	Taking Output = 1 Cum			
	Unskilled Mazdoor	Nos.	0.7945	287.00
	Add 6% Overhead Charges			13.68
	Rate for 1 Cum			241.70
	Rate per Cum (Rs.) -			241.70
1.4 RCD	Cost of Haulage excluding Loading & Unloading			
	Haulage of materials by tipper excluding cost of loading, unloading and stacking.			
	Unit = t.km			
	Taking output 10 t load and lead 10 km = 100 t.km			
	Case-I : Surfaced Road			
	Speed with load: 25 km per hour			
	Speed while returning empty: 35 km per hour			
	a) Machinery.			
	Tipper 10 t capacity			
	Haulage with load	hour	0.40	1043.00
	Empty return trip	hour	0.29	1043.00
	b) Overhead charges @ 0.06 on (a)			43.18
	Cost for 100 t.km = a+b+c			762.85
	Rate per t.km = (a+b+c)/100			7.60
	Say Rs. -			7.60
	Case-III: Katcha Track and Track in River Bed/Nallah Bed and Choe Bed			
	a) Machinery			
	Haulage with load			
	Haulage with load	hour	1.00	1043.00
	Empty return trip	hour	0.67	1043.00
	b) Overhead charges @ 0.06 on (a)			104.51
	Cost for 100 t.km = a+b			1846.32
	Rate per t.km = (a+b)/100			18.46
	Say Rs. -			18.46

BRICK BATS PITCHING MANUAL MEANS

1.1 RCD	Loading and Unloading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by Mechanical Means			
	Rate per cum = (a+b+c)/5.5			92.89
Note:-	Unloading will be done manually.			
1.	Supplying for Brick Bats (with OH)			
A.	Basic Rate of Brick Bats	Per Cum	1259.00	1259.00
	Add overhed Charges		6%	75.54
	Total -			1334.54
	Surface Lead	KM	7	
	Unsurface Lead	KM	1	
	Factor (10/5.5)	Cum	1.8182	
B.	Carriage (with OH)			
	(1.8182 x 7 x 7.6) + (1.8182 x 1 x 18.46) + 92.89			223.18
C.	Cost of Labour for Pitching and Light Ramming as per WRD SOR 6.6.1 (with OH)			241.70
	Total (A+B+C) -			1799.42
	Total Cost per Cum		Rs.-	1799.42
	Add GST 12% & LC 1%		Rs.-	233.92
				2033.34

Sl. No.	MORP Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
9.3	1100	Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets Clause 1106, 600 MM DIA Unit = m Taking output = 7.5 m (3 pipes of 2.5 m length each) a) Material i) Sand at site ii) Cement at site iii) RCC pipe NP 3 pipe including collar at site b) Labour Mate Mason (1st class) Mazdoor (Unskilled) c)Overheads @ 6% on (a+b) d)Contractor's profit @ 10% on (a+b+c) Cost for 7.5m = (a+b+c+d) Rate per m =(a+b+c+d)/7.5				
			cum	0.024	1367.04	32.81
			ton	0.018	5713.66	102.85
			m	7.50	775.32	5814.93
			day	0.04	305.00	12.20
			day	0.12	388.00	46.56
			day	0.96	287.00	275.52
						377.09
						666.20
						7328.15
						977.09
		Total Cost	M			977.09
9.3	1100	Providing and Laying Reinforced Cement Concrete Pipe NP3 as per design in Single Row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets Clause 1106, 1000 MM DIA Unit = m Taking output = 7.5 m (3 pipes of 2.5 m length each) a) Material i) Sand at site ii) Cement at site iii) RCC pipe NP 3 pipe including collar at site b) Labour Mate Mason (1st class) Mazdoor (Unskilled) c)Overheads @ 6% on (a+b) d)Contractor's profit @ 10% on (a+b+c) Cost for 7.5m = (a+b+c+d) Rate per m =(a+b+c+d)/7.5				
			cum	0.04	1367.04	54.68
			ton	0.03	5713.66	171.41
			m	7.50	3007.58	22556.85
			day	0.09	305.00	27.45
			day	0.25	388.00	97.00
			day	2.00	287.00	574.00
						1408.88
						2489.03
						27379.30
						3650.57
		Total Cost	m			3,650.57
11.4	800 & 1200	Providing concrete for plain/reinforced concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203				
		I. P.C.C grade M 10				
		(i) Nominal mix 1:3:6 Unit = cum				
		a) Material				
		Cement	t	0.250	5,158.00	1,289.50
		Coarse sand	cum	0.48	175.80	84.38
		40 mm aggregate	cum	0.576	494.15	284.63
		20 mm aggregate	cum	0.288	604.91	174.21
		10 mm aggregate	cum	0.096	668.80	64.20
		b) Labour				
		Mate	day	0.08	305.00	24.40
		Mason (1st Class)	day	0.10	388.00	38.80
		Mazdoor (Unskilled)	day	1.63	287.00	467.81
		Bhisti	day	0.27	287.00	77.49
		c) Machinery				
		Mechanical concrete mixer 0.4/0.28 cum capacity fitted with water measuring device and preferably also with load cell.	hour	0.40	86.30	34.52
		d) Formwork @ 4% on cost of material, labour and machinery (a+b+c)				101.60
		e) Overheads @ 6 % on (a+b+c+d)				158.49
		f) Contractor's profit @ 10% on (a+b+c+d+e)				280.00
		Rate per cum = (a+b+c+d+e+f)				3080.05
		Carrige cost-				
		Cement	t	0.250	555.66	138.92
		Coarse sand	cum	0.48	1,191.24	571.80
		Aggregate	cum	0.960	1,928.32	1,851.19
		Rate per cum including Carrige				5,641.95
		Rate per cum = a+b+c+d+e+f	cum			5641.95

Name of work! - Restoration work of the road from Bhagwanpur to Totaha Via Pratap Tadol in R.M 1st.

Block - Bhagwanpur , Dist - Vaishali

R.W.D (W) Division, Hajipur



Unnamed Road, Bhagwanpur, Bihar 844114, India

Latitude
25.8733765°

Longitude
85.2822597°

Local 03:14:08 PM
GMT 09:44:08 AM

Altitude -16.133606 meters
Sunday, 23-08-2020



Unnamed Road, Bhagwanpur, Bihar 844114, India

Latitude
25.8732662°

Longitude
85.2822711°

Local 12:59:28 PM
GMT 07:29:28 AM

Altitude -6.13382 meters
Sunday, 23-08-2020

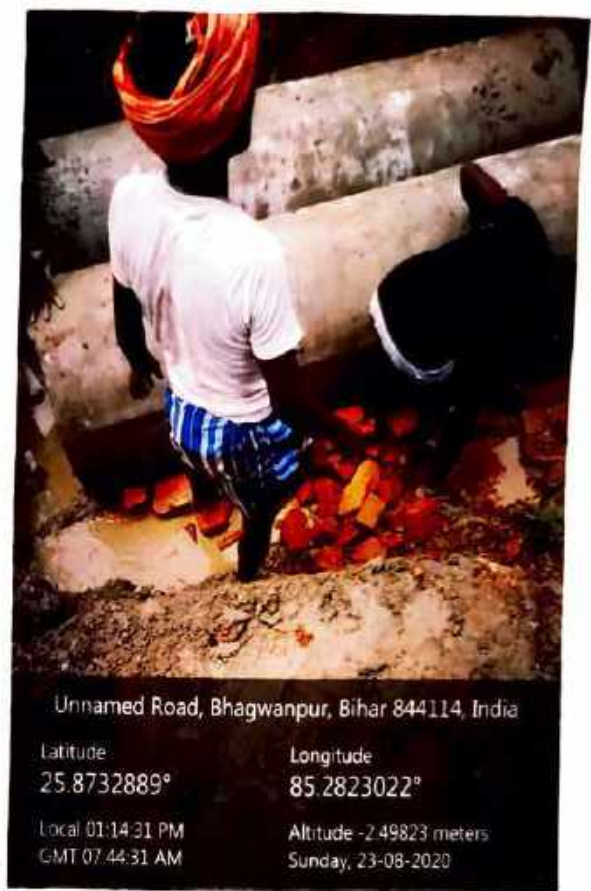
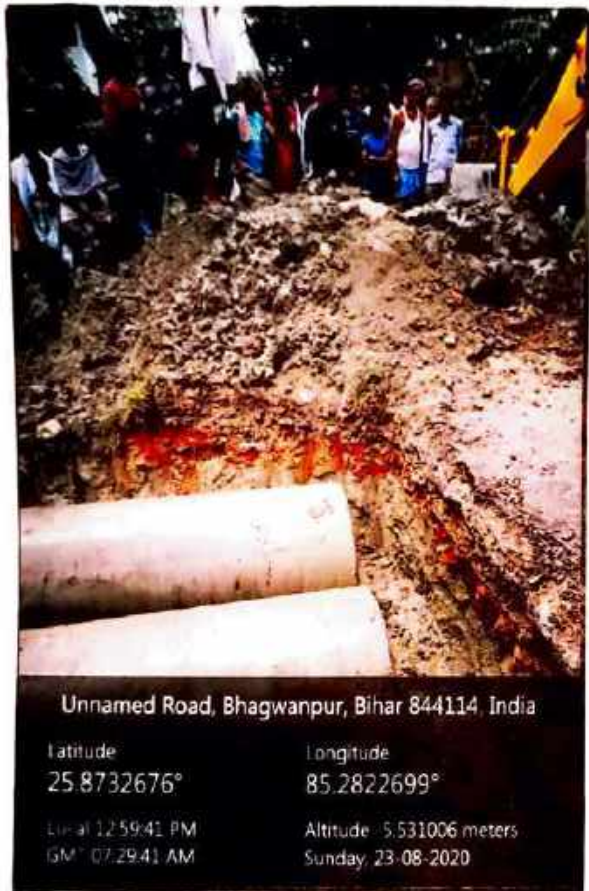
May
6.10.20
J.E

Rain
6/10/20
AB

Jan
9/10

Name of work:- Restoration work of the road from Bhagwanpur to Total via Poutap Tawal in K.M 1st.

Block - Bhagwanpur, Dist - Vaishali
R.W.D (W) Dision, Hajipur.



Σ Mas
6/10/20
J.E

Rain
6/10/20
A.E

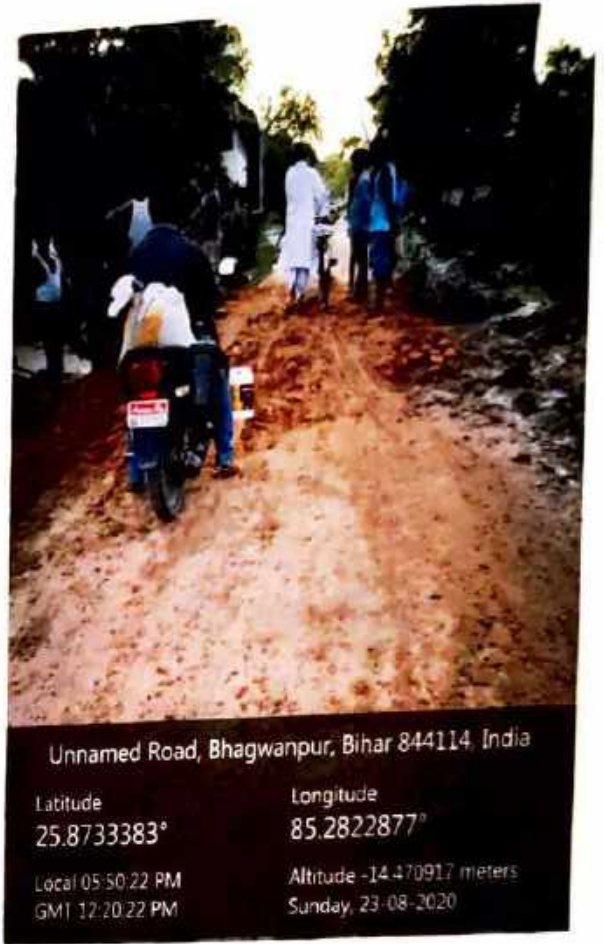
9
6/10

Name of work: - Restoration work of the road
from Bhagwanpur to Tataha via
Pratap Teraad in km 1st

Block - Bhagwanpur

Dist - Vaishali

R.I.A.D (w) Division, Hajipur.



Unnamed Road, Bhagwanpur, Bihar 844114, India

Latitude
25.8733383°

Longitude
85.2822877°

Local 05:50:22 PM
GMT 12:20:22 PM

Altitude -14.470917 meters
Sunday, 23-08-2020

→ Mas
6.10.20
JE

Rains
6/10/20
AG

~~Ray
6/10~~