



Govt. of Bihar

R.W.D. WORKS CIRCLE, GAYA

*Detailed Estimate for
F.D.R. of Nardiganj To
Bikku Road.
(Temporary Restoration)*

Under- P.M.G.S.Y.

District - Nawada

Block - Nardiganj

Estimated Cost - Rs. 3,97,600/-

Prepared By :-

Executive Engineer

R.W.D. Works Division,

NAWADA

प्रतिवेदन

जिला :- नवादा
कार्य प्रमण्डल का नाम :- नवादा
प्रखण्ड का नाम :- नारदीगंज
कार्य का नाम :- Flood Damage Repair of Nardiganj To Bikku MR Road. (Temporary Restoration)
मद :- FDR
प्राक्कलित राशि :- रु० 3,97,600 / -

Flood Damage Repair of Nardiganj To Bikku MR Road (Temporary Restoration) हेतु प्रस्तुत प्राक्कलन कार्यपालक अभियंता, ग्रामीण कार्य विभाग, कार्य प्रमण्डल, नवादा के निर्देशानुसार तैयार किया गया है।

पथ के 1.10 पथांश पर जिला स्तर पर पूर्व से निर्मित Slab Culvert पूर्णतः क्षतिग्रस्त हो जाने के कारण आवागमन बाधित हो गया था।

स्थल के आवश्यकतानुसार क्षतिग्रस्त पुलिया को बन्द करते हुए Diversion का निर्माण तीन अदद RCC Hume Pipe के उपर Brick Bat डालकर कराया गया है। वर्तमान में पथ में आवागमन सुचारु है।

डाइवर्सन के निर्माणार्थ हेतु कुल **3,97,600.00** रुपये लागत आई है। कार्य हित एवं जन हित में प्राक्कलन की प्रावैधिक एवं प्रशासनिक स्वीकृति अपेक्षित है।

कनीय अभियंता
ग्रामीण कार्य विभाग

सहायक अभियंता
ग्रामीण कार्य विभाग

कार्यपालक अभियंता
ग्रामीण कार्य विभाग
कार्य प्रमण्डल, नवादा

Flood/Rain Damaged Road as per MIS (2021-22)

S.No	District	Division	Road Name	Scheme	Road Status	Is Maintenance (Y/N)	Is Agreement (Y/N)	Length (In Km.)	Length of Damage Part Due to Flood	Tentative Restoration Amount (In Lac)	Actual Restoration Amount (In Lac)	Remarks	Block
1	Nawada	Nawada	T05 PMGSY ROAD to AJALAT BIGHA VIYA AGARWATI BHAWAN	MMGSY[SC]	On Going	No	Yes	3.22	0.06	6.5	6.5	Guide wall 60m and CC Pavement Flank about 100m Damaged due to Heavy rain fall.	HISUA
2	Nawada	Nawada	L066-T05 TO MILKI (TRACK57)	PMGSY	Completed	Yes	Yes	2.13	0.04	6	6	Road damaged due to river meandering.	Nardiganj
3	Nawada	Nawada	NARDIGANJ - BIKU	New MR	Completed	No	No	3.95	0.025	5	5	Slab Culvert with approach road Damaged due to heavy rain fall.	Nardiganj
4	Nawada	Nawada	Construction of Road from Kadirganj Sakulachak Road to Village - Bishunpur	MMGSY OLD	Completed	No	No	2	0.01	3	3	The Slab Culvert which is about 15 Year Old made up by Panchayat Scheme damaged due to Heavy water pressure of flow.	Nawada Sadar
5	Nawada	Nawada	L092-NAWADA KUNJ ROAD TO MOHIUDDINPUR (TRACK56)	PMGSY	Completed	Yes	Yes	2	0.07	12	12	Shoulders, Embankment and also surface damaged due to heavy Rainfall	Nawada Sadar

GENERAL ABSTRACT OF COST

Name of Road : FDR of Nardiganj To Bikku MR Road

Circle - Gaya

District - Nawada

Division - Nawada

Block - Nardiganj

S.N.	DESCRIPTION	AMOUNT	
1	HUME PIPE	Rs	43720.00
2	BRICK BAT'S	Rs	281621.00
3	SAND FILLING	Rs	6680.00
	SUB TOTAL	Rs	332021.00
	G.S.T. @ 12 %	Rs	39843.00
	LABOUR CESS @ 1 %	Rs	3320.00
	SEIGNIORAGE FEE	Rs	22335.00
	GRAND TOTAL	Rs.	397519.00
	Say -	Rs.	397600.00

JE
R.W.D

A.E
R.W.D

Executive Engineer
R.W.D., Works Division
Nawada

provisionally Technically sanctioned for Rs 397600/-
(Three Lakh ninety seven thousand six hundred only)

Superintending Engineer
Rural Works Department
Works Circle, Gaya

COST ESTIMATE FOR EMERGENT REPAIR OF DAMAGED Road DUE TO FLOOD

Name of Work FDR of Nardiganj To Bikku MR Road Block - Nardiganj District - Nawada

Sl.No	Item's of Work										Qty		Rate		Unit	Amount		
1	2										3		4		5	6		
1	Providing and laying reinforced cement concrete pipe NP3 culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, back filling, concrete and massonary works in head walls and parapets clause 1106.																	
	1000 mm dia Hume Pipe		1	x	3	x	2.50	M=	7.50	M								
										7.50	M	7.50	M	Rs.	5,829.33	/M	Rs.	43720.00
2	Sand Filling in foundation trenches as per drawing and technical specification caluse 305.3. 9																	
		1	x	14.00	Mx	4.50	Mx	0.10	M=	6.30	Cum							
		1	x	6.00	Mx	4.00	Mx	0.15	M=	3.60	Cum							
		1	x	10.00	Mx	3.50	Mx	0.10	M=	3.50	Cum							
										13.40	Cum	13.40	Cum	Rs.	498.53	/Cum	Rs.	6680.00
3	Providing laying, spreading and filling Brick Bat's in Flood damage area for making the road motarable as per specification and direction of E/I.																	
		1	x	13.00	Mx	4.50	Mx	1.60	M=	93.60	Cum							
		1	x	8.00	Mx	4.00	Mx	1.30	M=	41.60	Cum							
		1	x	9.00	Mx	3.50	Mx	1.35	M=	42.53	Cum							
	Less for Pipe	7.50	Mx	0.7857	x	1.23	Mx	1.23	M=	8.92	Cum							
										186.65	Cum	186.65	Cum	Rs.	1,508.82	/Cum	Rs.	281621.00
Total -																		332021.00

J.E.
R.W.D.

A.E.
R.W.D.

Executive Engineer
R.W.D., Works Division
Nawada

CALCULATION OF SEIGNOIRAGE FEE

Name of Road FDR of Nardiganj To Bikku MR Road

Block -

Nardiganj

Length of Road -

Sl. No.	SDB Sl. No.	MoRD Ref. No	Description	Unit	Quantity	Rate	Amount (In Rs.)	Total Material Required	Material Amount	Seigniorage Fee @ 10 %
1			Providing laying, spreading and filling Brick Bat's in Flood damage area for making the road motarable as per specification and direction of E/I.							
			Unit - Cum							
			Material							
			Brick Bat	Cum	1.20	987.00	1184.40			
			Rate Per Cum = (a) =				1184.40			
			Total Cost =	Cum			1184.40	186.65	221068.26	22106.83
2	9.3	1100	Providing and laying RCC pipe NP3 for culverts on first class bedding of PCC M-10 material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works back filling, concrete and masonry works in head wall and parapets Clause 1106.							
			1000 mm dia							
			Unit - M (Taking Output = 7.50 M)							
		(a)	Material							
			Sand	Cum	0.04	0.00	0.00			
			Cost for 7.50 M = (a)				0.00			
			Rate per M = (a) / 7.50 =				0			
			Total Cost =	Cum			0.00	7.50	0.00	0.00
3			Sand Filling in foundation trenches as per drawing and technical specification caluse 305.3. 9							
			Unit - Cum							
			Material							
			Sand	Cum	1.20	141.85	170.22			
			Rate Per Cum = (a) =				170.22			
			Total Cost =	Cum			170.22	13.40	2280.95	228.10
			Seigniorage Fee @ 10 % on Construction Material Cost :-							22334.93

J.E.
R.W.D.

23/10/2024

A.E.
R.W.D.

23.10.2024
Executive Engineer
R.W.D., Works Division
Nawada

	Providing laying, spreading and compacting of Brick Bat by kn 80-100 static roller as per Specification & direction of E/I.. (Rate Approved vide S.E., RWD, Works Circle No- Dt.)					
	Unit- Cum (Taking output - 3 00 cum.)					
	a) Labour					
	Semi-Skilled (As Mate)	day	0.48	304.00	145.92	Sl. - 14
	Mazdoor (Skilled)	day	2.00	370.00	740.00	Sl. - 15
	Mazdoor (Unskilled)	day	10.00	292.00	2920.00	Sl. - 13
					3805.92	
	b) Machinery					
	Three Wheel 80-100 kn Static Roller	day	3.75	901.00	3378.75	Sl.-24
	Water Tanker 6 kl capacity	day	0.00		0.00	
					3378.75	
	c) Material					
	Aggregate					
	Brick Bat with carriage (300 x 1.20 = 360.00)	cum	360.00	1237.39	445460.40	Sl. - 03
	Water	kl	0.00	73.60	0.00	
					445460.40	
	Cost for 300 cum = (a+b+c)				452645.07	
	Rate per cum = (a+b+c) / 300				1508.82	

	Empty Cement Bag with Local Sand. (Rate Approved vide S.E., RWD, Works Circle, Gaya No- 1120 Dt. 25.06.2021)					
	Unit - Bag					
	Labour for filling of Sand in Empty Cement Bag and placing in position	No	0.02	292.00	5.84	Sl. - 13
	b) Material					
	Cost of empty cement Bag (As per Approved Rate)	No	1.00	3.50	3.50	Sl. - 01
	Rate of Sand with Carriage (Assuming 1.20 cft or 0.034 cum Sand in 1 bag)	cum	0.034	342.44	11.64	Sl. - 04
	Add for Miscellenous item's		L.S.		0.07	
					21.05	
	Rate per Bag = (a+b)					

	Supplying and labour for cutting 62 mm to 75 mm dia bamboo poles to size and making shoes as per specification and direction etc. complete job as per specification and direction of E/I. (Rate Approved vide S.E., RWD, Works Circle, Gaya No- 1120 Dt. 25.06.2021)					
	Unit - Per M (Taking Output - 140 m)					
	Assuming (20 nos pile work 1.525 m deep) Total depth sunk- 20 x 1.525 = 30.50 m					
	a) Labour	day	0.25	351.00	87.75	Sl. - 19
	Carpentor Gr-II	day	2.500	292.00	730.00	Sl. - 13
	Mazdoor Unskilled (For Pilling)					
		/M	140.000	17.75	2485.00	Sl. - 02 (i)
	b) Material				3302.75	
	Cost for 140 M				23.59	
	Rate Per M (a+b)/140					

Analysis of Rate

9.3	1100 B	Analysis of Rate for Providing and Laying Hume Pipe					
		Providing and laying reinforced cement concrete pipe NP4 culverts on first class bedding of granular material in single row including fixing collar filling, concrete and massonary works in head walls and parapets clause 1106. (Rate Approved vide S.E., RWD, Works Circle No- 1120 Dt. 25.06.2021)					
		Unit - M					
		Taking output = 7.50 m.(3 pipes of 2.5 0m length)					
		B - 600 mm dia					
		a) Labour					
		Semi-Skilled (As Mate)	Day	0.04	304.00	12.16	Sl. - 14
		Mazdoor (Unskilled)	Day	0.96	292.00	280.32	Sl. - 13
						292.48	
		b) Material					
		RCC pipe NP4/NP3 concrete pipe including carriage	m	7.50	2385.01	17887.58	Sl. - 06
						17887.58	
		Cost for 7.50 m (a+b+c+d)				18180.06	
		Rate per m (a+b+c+d) / 7.50				2424.01	

		B - 1000 mm dia					
		a) Labour					
		Semi Skilled (As Mate)	Day	0.09	304.00	27.36	Sl. - 14
		Mazdoor (Unskilled)	Day	2.00	292.00	584.00	Sl. - 13
						611.36	
		b) Material					
		RCC pipe NP4/NP3 concrete pipe with carriage	m	7.50	5747.82	43108.65	Sl. - 07
						43108.65	
		Cost for 7.50 m (a+b+c+d)				43720.01	
		Rate per m (a+b+c+d) / 7.50				5829.33	

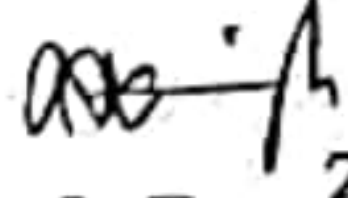
		Sand Filling					
		Unit - Cum					
		a) Material					
		Sand Assuming 20 % for Voids	Cum	1.20	342.44	410.93	Sl. - 04
		b) Labour					
		Unskilled Labour	Day	0.30	292.00	87.60	Sl. - 13
						498.53	
		Rate per Cum (a+b)					

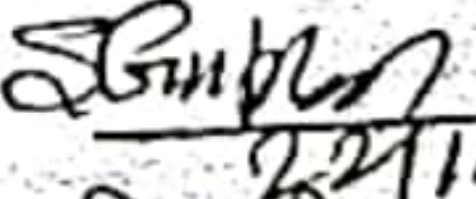
Flood/Rain Damaged Road as per MIS (2021-22)

S/No	District	Division	Road Name	Scheme	Road Status	Is Maintenance (Y/N)	Is Agreement (Y/N)	Length (In Km.)	Length of Damage Part Due to Flood	Tentative Restoration Amount (In Lac)	Actual Restoration Amount (In Lac)	Remarks	Block
1	Nawada	Nawada	T05 PMGSY ROAD to AJALAT BIGHA VIYA AGARWATI BHAWAN	MMGSY[SC]	On Going	No	Yes	3.22	0.06	6.5	6.5	Guide wall 60m and CC Pavement Flank about 100m Damaged due to Heavy rain fall	HISUA
2	Nawada	Nawada	L066-T05 TO MILKI (TRACK57)	PMGSY	Completed	Yes	Yes	2.13	0.04	6	6	Road damaged due to river meandering.	Nardiganj
3	Nawada	Nawada	NARDIGANJ - BIKU	New MR	Completed	No	No	3.95	0.025	5	5	Slab Culvert with approach road Damaged due to heavy rain fall.	Nardiganj
4	Nawada	Nawada	Construction of Road from Kadirganj Sakulachak Road to Village - Bishunpur	MMGSY OLD	Completed	No	No	2	0.01	3	3	The Slab Culvert which is about 15 Year Old made up by Panchayat Scheme damaged due to Heavy water pressure of flow.	Nawada Sadar
5	Nawada	Nawada	L092-NAWADA KUNJ ROAD TO MOHIUDDINPUR (TRACK56)	PMGSY	Completed	Yes	Yes	2	0.07	12	12	Shoulders, Embankment and also surface damaged due to heavy Rainfall	Nawada Sadar

बाढ़ क्षतिग्रस्त पथों का अंतर प्रमंडलीय जांच प्रतिवेदन हेतु प्रपत्र

1	निरीक्षी पदाधिकारी का नाम एवं पदनाम	श्री शिवशंकर गुप्ता, कार्यपालक अभियंता, ईमांगंज
2	निरीक्षण की तिथि	22.11.2021
3	पथ का नाम (शीर्ष के साथ)	नारदीगंज से बिक्कु (PMGSY)
4	पथ की लंबाई	3.95 कि०मी०
5	कार्य प्रमंडल का नाम	नवादा
6	प्रखण्ड का नाम	नारदीगंज
7	पथ की स्थिति	पूर्ण
8	पथ अनुरक्षण अवधि में है	नहीं
9	क्षतिग्रस्त भाग की लंबाई	30 मीटर
10	क्षतिग्रस्त भाग में कराये गये कार्य का विवरणी (लंबाई x चौड़ाई x उंचाई)	Brick Bat Sand Hume Pipe (1000mm) 30 x 4.50 m (av.) x 1.46 m (av.) 30 x 4.00 m (av.) x 0.120 m (av.) 1 x 3 x 2.50 m = 7.50 m
11	Temporary Restoration में किस-किस सामग्रियों का उपयोग किया गया है, उसका विवरणी	Hume Pipe (1000mm NP3), Brick Bat, Sa
12	अभ्युक्ति	यातायात चालु Satisfactory


 AE 22.11.21
 RWD Imamganj


 निरीक्षी पदाधिकारी का हस्ताक्षर
 पदनाम सहित