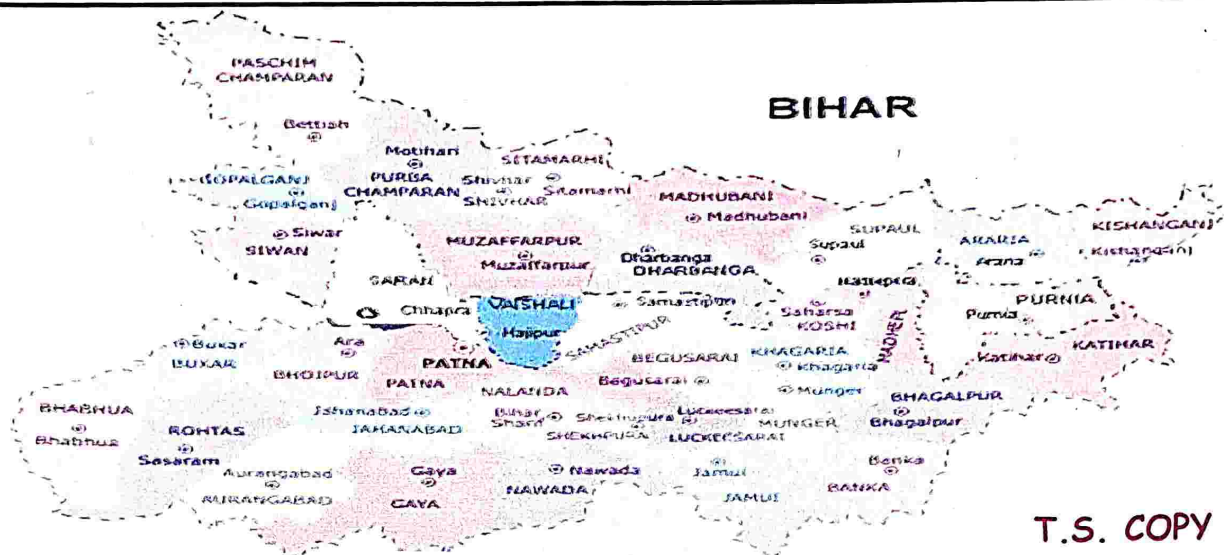




ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

DETAILED PROJECT REPORT FOR MAINTENANCE OF ROAD



NAME OF THE ROAD :- CHHAPRA BIHARI TO KHAIRWA

DISTRICT - EAST CHAMPARAN

BLOCK - PAKRI DAYAL

TOTAL LENGTH OF ROAD	:	1.600	KM
AVERAGE COST PER KM	:	35.142	Lac
PART-A TOTAL COST OF INTIAL RECTIFICATION IN SURFACE RENEUAL	:	56.227	Lac
ADD LABOUR CESS @ 1% (A)	:	0.562	Lac
ADD GST @ 18% (A)	:	10.121	Lac
SEIGNIORAGE FEE	:	0.557	Lac
PART-B TOTAL COST OF 5 YEAR ORDINARY MAINTENANCE	:	12.758	Lac
ADD LABOUR CESS @ 1% (B)	:	0.128	Lac
ADD GST @ 18% (B)	:	2.296	Lac
SEIGNIORAGE FEE	:	0.043	Lac
EMERGENT COST 10% OF CONSTRUCTION	:	6.747	Lac
TOTAL COST OF PROJECT	:	89.439	Lac

SUBMITTED BY:- EXECUTIVE ENGINEER

R.W.D. WORKS DIVISION, PAKARIDAYAL.

PREPARED BY:- SUPERSTAR DESIGNER PVT. LTD.

Flat No. 403, Bhuvaneshwaram Building

Nageshwar Colony, Near Boring Road Chauraha

Patna - 80001 (Bihar) ☎ - 8434040125/8825398707

GENERAL ABSTRACT OF COST FOR MAINTENANCE OF ROAD

NAME OF ROAD : Chhapra Bihari To Khairwa

DISTRICT East Champaran

BLOCK Pakri Dayal

LENGTH OF ROAD (in Km) 1.600

LENGTH OF BT PAVEMENT 1400.00

LENGTH OF CC PAVEMENT 200.00

CD STRUCTURES

HUME PIPE 0

RCC CULVERT 0

Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
PART-A	INITIAL RECTIFICATION INCLUDING SURFACE RENEWAL	
1	PREPARATORY WORKS ,SITE CLEARANCE , DISMANTLING	
2	EARTHWORK	0.246
3	GSB	3.688
4	WBM GRADE II	1.039
5	WBM GRADE III	2.999
6	PRIME COAT	4.924
7	TACK COAT	0.745
8	PATCH WORK USING MIX SEAL SURFACING	1.349
9	SEMI-DENSE BITUMINOUS CONCRETE	4.204
10	BITUMINOUS MACADAM	20.065
11	CC PAVEMENT	0.000
12	DRAINS & CROSS DRAINS	11.412
13	PROTECTION WORKS	0.000
14	ROAD FURNITURES , KM STONES , TRAFFIC & DIRECTION SIGN, PROJECT LOGO AND PLANTATION OF TREE	0.000
15	4.880	
	CROSS DRAINAGE STRUCTURES	
I	HUME PIPE	
II	BOX CULVERT	0.000
III	DISMENALING OF CULVERT	0.000
IV	REPAIR WORK	0.000
	SUB TOTAL OF INTIAL RECTIFICATION INDLUCDING SURFACE RENEWAL =	0.677
	AVERAGE COST PER KM (IN LACS) =	56.227
PART-B	5 YEAR ORDINARY MAINTENANCE COST	35.142
	I st Year	0.891
	II nd Year	1.153
	III rd Year	4.788
	IV th Year	2.392
	V th Year	2.833
	SUB TOTAL OF 5 YEAR ORDINARY MAINTENANCE COST =	12.057
	TOTAL COST OF 5 YEAR ORDANARY MAINTENANCE PER MONTH (IN LACS)	0.201
	ADD LABOUR CESS @ 1% (A+B)	
	ADD GST @ 18% (A+B)	0.683
	ADD SEIGNIORAGE FEE	12.291
		0.608
	EMERGENT COST 10% OF CONSTRUCTION	6.747
	TOTAL COST OF PROJECT IN LACS =	88.613

J.E. 15/12/23

A.E.

15/12/23 E.E.

M/R UNDER 3054

GENERAL ABSTRACT OF COST

SL. No.	Item of Work	Amount
A	COST OF CONSTRUCTION	56.227 Lacs
	SEIGNIORAGE FEE	0.557 Lacs
	ADD LABOUR CESS @ 1%	0.562 Lacs
	ADD GST @ 18%	10.121 Lacs
	TOTAL COST OF CONSTRUCTION (A)	67.467 Lacs
B	COST OF FIVE YEAR MAINTENANCE	12.057 Lacs
	SEIGNIORAGE FEE	0.051 Lacs
	ADD LABOUR CESS @ 1%	0.121 Lacs
	ADD GST @ 18%	2.170 Lacs
	TOTAL COST OF FIVE YEAR MAINTENANCE (B)	14.399 Lacs 15.225
C	AVERAGE COST PER KM	35.142 Lacs
D	EMERGENT COST 10% OF CONSTRUCTION	6.747 Lacs
	गुरुत्वन जहाँ की मात्रा तकनीकी अनुमान	
	TOTAL मात्रा सामग्री के अनुमान	88.613 Lacs 81.894


15.12.23
Junior Engineer

Asstt. Engineer

Executive Engineer

C/S

23.12.2023
Superintending Engineer
Rural Works Department
Works Circle, Motihari

20/12/2023

A.A. - Length - 1.60 Km. Amount - 89.75 Lacs. vide Letter No - 6115
dated - 4.12.23.

const. cost -	67.39 Lacs.
5 year maint. cost -	15.62 "
	83.01 Lacs.
E.R. cost. -	6.74 "
G. Total cost -	89.75 Lacs.

Technically Sanctioned of Road Length 1.60 KM for Rs. 82.69
(0 Crore Eighty Two Lacs Sixty Nine Thousand) only
Sanctioned of Estimate does not mean Sanction of rates.
Conditions and dimensions laid down in attached technical notes
with the DPE is to be followed strictly.

[Signature]
28-12-23
A.E.
RWD

[Signature]
E.E.
RWD

[Signature]
C.E.-3
RWD, PATNA

Abstract of Cost for Culverts

Name of Road : Chhapra Bihari To Khairwa

Length of Road : 1.600

District: East Champaran
Block: Pakri Dayal

S.No	S.No.	Particulars	Details	Total Cost (in Lakh)
A		Construction of Rural Road (Pavement Cost)	1.600	55.550
B		Construction of CD Works		
		No.	Cost	Amount
1		Single Row 600MM Dia Hume Pipe Culvert	0	162989
2		Single Row 1000MM Dia Hume Pipe Culvert	0	328507
3		Two Row 1000MM Dia Hume Pipe Culvert	0	433932
4		RCC BOX CULVERT - 1 x1M x1M	0	370767
5		RCC BOX CULVERT - 1 x1.5M x1.5M	0	490974
6		RCC BOX CULVERT - 1 x2M x2M	0	784930
7		RCC BOX CULVERT - 1 x3M x3M	0	1286716
8		RCC BOX CULVERT - 1 x4M x4M	0	1733727
9		RCC BOX CULVERT - 1 x5M x5M	0	2271274
10		RCC BOX CULVERT - 2 x1M x1M	0	518658
11		RCC BOX CULVERT - 3 x2M x2M	0	1217466
12		RCC BOX CULVERT - 2 x3M x3M	0	1552981
13		RCC BOX CULVERT - 2 x4M x4M	0	2121545
14		RCC BOX CULVERT - 2 x3M x3M	0	1552981
15		RCC BOX CULVERT - 3 x5M x5M	0	4956241
16		RCC BOX CULVERT - 3 x4M x4M	0	2777051
17		RCC BOX CULVERT - 3 x5M x5M	0	3774630
		Cost of Repairing of CD Structures	2	67710.00
		Cost of Dismantling of CD Structures	0	0
		Total Cost of CD(in Lakh)		0.677
C		Amount Required for Maintenance of Road for Five years after Completion of Project	1.600	12.058
		Cost of Pavement	55.550	Lakh
		Cost of CD Works	0.677	Lakh
		Cost of Pavement per KM	34.72	Lakh
		Cost of CD per KM	0.42	Lakh
		(A) Total Cost of Road Project	56.227	Lakh
		Add Labour Cess @ 1% (A)	0.562	Lakh
		Add GST @ 18% (A)	10.121	Lakh
		Seigniorage Fee	0.557	Lakh
		(B) Maintenance Cost	12.057	Lakh
		Add Labour Cess @ 1% (B)	0.121	Lakh
		Add GST @ 18% (B)	2.170	Lakh
		Seigniorage Fee	0.051	Lakh
		(C) Emergent Cost on (A)	6.747	Lakh
		Grand Total	88.613	Lakh

J.E.

A.E.

E.E.

SUMMARY OF 5 YEARS ORDINARY MAINTENANCE COST

DISTRICT:-

East Champaran

BLOCK:-

Pakri Dayal

NAME OF ROAD:-

Chhapra Bihari To Khairwa

LENGTH OF ROAD (KM):-

1.600

Particulars	Amount in Rs.	Amount in (Lakh)
1st Year Maintenance cost	88,486.00	0.885
2nd Year Maintenance cost	1,79,891.00	1.799
3rd Year Maintenance cost	4,80,045.00	4.800
4th Year Maintenance cost	2,40,678.00	2.407
5th Year Maintenance cost	2,86,680.00	2.867
Total Cost of 5 years Maintenance	12,75,780.00	12.758

ESTIMATE FOR 5 YEARS MAINTENANCE WORKS

Total Length Of Road (L)=	1600	m
Length Of the Flexible Pavement (Lf) =	1400	m
Length Of the Regid Pavement (Lc) =	200	m
Width Of the Road (Br) =	3.75	m
Width Of the Shoulder (Bs) =	1.125	m
No. Of Hume Pipe Culvert =	0	
No. Of Slab Culvert =	2	
Length of Drain=	0	m

Multiplying Factor for Commercial Vehicle 15 to 45 per days = 1.25 {ref. - as per guidelines issued by NRRDA }

No.	SOR No.	Description of Items	Unit	% Taken	Yearly Estimate d Qty.	Rate (Rs.)	Amount (Rs.)
1	15.1	Restoration of Rain cuts/Berms with soil.moorum etc.(Qty=L*Bs*0.3*%taken) X 1.25	Cum	6.0%	70.88	483.31	34,255.00
2	15.2	Making up of Berms/shoulder, stripping excess soil from the shoulder surfaces to achieve level etc. (Qty=L*Br*%taken) X 1.25	Sqm	10.0%	450.00	71.83	32,324.00
3	15.5	Repair of Pot holes filled with 75 mm WBM X 1.25	Sqm	0.0%	0.00	565.78	0.00
4	15.3(ii)	Patch repair over Pot holewith SDBC with seal coat Type B (Qty=L*Br*%taken) X 1.25	Cum	0.0%	0.00	15155.88	0.00
5	15.3(iii)	Patch repair over bituminous surface with SDBC with seal coat Type B (Qty=L*Br*%taken) X 1.25	Cum	0.5%	0.82	15155.88	12,433.00
6	15.6	Maintenance of Drains	M	-	0.00	4.06	0.00
7	15.7 (i)	Maintenance of C/D Works (Hume Pipe Culvert)	No.	1	0.00	1602.22	0.00
8	15.7 (ii)	Maintenance of C/D Works (Slab Culvert)	No.	1	2.00	3249.77	6,500.00
9	15.9	Maintenance of Road signs	Km	10%	0.16	1466.65	235.00
0	15.11	Maintenance of 200 m and km stones	Km	12%	0.19	969.06	186.00
1	15.12	(I)Cutting of branches of trees and shrubs	No.	-	3.00	165.12	495.00
		(ii) Cutting of shrubs from roadway	No.	-	14.00	10.15	142.00
		(iii) Trimming of grass and weeds	Sqm	18%	567.00	3.38	1,916.00
		Maintenance of trees by the road side (Avenue trees) by mixing the soil with decayed farm yard/sludge manure, watering, fixing the tree guard and maintaining the plants for additional 1st year.	Each	0%	0.00	0.00	0.00
12	15.13	White washing of parapet walls of CD work and tree trucks	Sqm	-	0.00	23.41	0.00
Estimate For First Year Maintenance Work						Rs.	88,486.00