(15) (1)

ग्रामीण कार्य विभाग

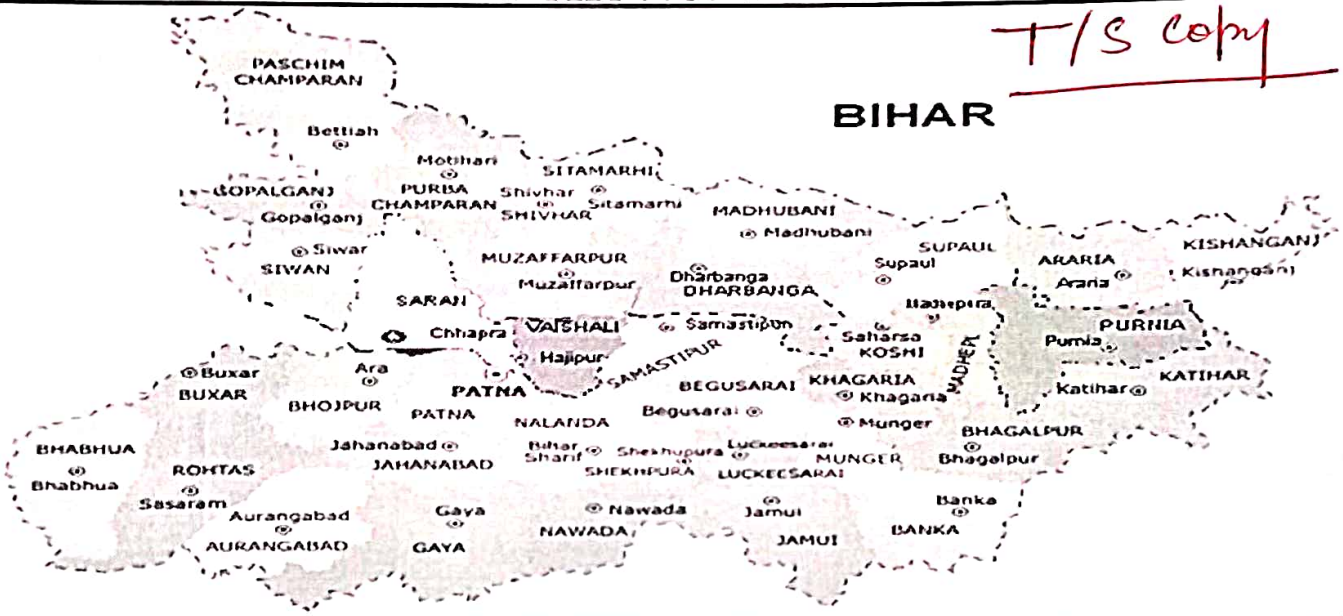
Rural Works Department, Govt of Bihar

~~AA COPY (For Emergent Situation)~~

DETAILED PROJECT REPORT
UNDER FDR
YEAR-2020-21

AA = Rs 26.674900 Lac

T/S Copy



Name of the Road :-

PERMANENT RESTORATION OF ROAD FROM Mohanpur To Mohanpur-2

DISTRICT	:	DARBHANGA	
DIVISION	:	DARBHANGA-2	
BLOCK	:	SINGHWARA	
ACTUAL LENGTH OF ROAD	:	1.400	KM
FLOOD AFFECTED LENGTH OF ROAD	:	0.481	KM
TOTAL COST OF PROJECT	:	26.942	Lac

SUBMITTED BY:-

EXECUTIVE ENGINEER
RWD (W) DIVISION DARBHANGA-2

UNDER FDR

(Year-2020-21)

GENERAL ABSTRACT OF COST

ck:-- SINGHWARA District:- DARBHANGA

ual Length of Road:-- 1.400 KM

ne of Road:-- PERMANENT RESTORATION OF ROAD FROM Mohanpur To Mohanpur-2

No.	Item of Work		Amount
	TOTAL COST OF CONSTRUCTION	:	23.37823 Lacs
	Add GST @ 12%	:	2.8054 Lacs
	Add Labour Cess @ 1%	:	0.2338 Lacs
	Add Seigniorage Fee @ 10% on Material Cost only	:	0.25751 Lacs
	TOTAL CONSTRUCTION COST INCLUDING GST, L.C & S.F.	:	26.6749 Lacs
	CONTINGENCY @ 1% FOR CONSTRUCTION COST ONLY	:	0.26675 Lacs
	TOTAL	:	26.942 Lacs

20.5.21

- Engineer
(W) Div. Darbhanga-2

20/05/2021

Asstt. Engineer
RWD(W) Div. Darbhanga-2

20-05-21

Executive Engineer
RWD(W) Div. Darbhanga-2

Technically sanctioned for Rs 26,67,490=00 (Rs Twenty six lac sixty seven thousand four hundred ninety only.

SE
RWD(W) Circle Darbhanga

25-05-21

Superintending Engineer
R.W.D. (W) CIRCLE, DARBHANGA

25/05/2021.

SUMMARY OF COST ESTIMATE FOR THE PROJECT

NAME OF ROAD : ~~PERMANENT RESTORATION OF ROAD FROM~~ Mohanpur To Mohanpur-2

DISTRICT: DARBHANGA
BLOCK: SINGHWARA
DIVISION: DARBHANGA-2
LENGTH OF ROAD: 1.400 KM

CD STRUCTURES

HUME PIPE: 0
RCC CULVERT: 0
BOX CELL CULVERT: 0

Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
1	PREPARATORY WORKS ,SITE CLEARANCE , DISMANTLING	0.000
2	EARTHWORK	0.475
3	GSB	3.794
4	WBM GRADE III	3.592
5	PRIME COAT	0.000
6	TACK COAT	0.000
7	MIX SEAL SURFACING	0.000
8	SEAL COAT	0.000
9	CC PAVEMENT	14.371
10	HARD SHOULDER	1.147
	SUB TOTAL OF PAVEMENT COST IN LACS =	**23.3782**
11	**CROSS DRAINAGE STRUCTURES**	
I	HUME PIPE	0.000
II	RCC	0.000
III	BOX	0.000
IV	CAUSEWAY	0.000
V	PROTECTION WORK	0.000
	SUB TOTAL OF CD STRUCTURES COST IN LACS =	**0.000**
	SUB TOTAL COST OF PROJECT IN LACS =	**23.378**
	ADD GST @ 12 % =	**2.805**
	ADD LABOUR CESS @ 1 % =	**0.234**
	Add Seigniorage Fee @ 10% =	**0.258**
	TOTAL COST OF PROJECT INCLUDING GST, L.C & S.F. IN LACS =	**26.675**
	CONTINGENCY @ 1% FOR CONSTRUCTION COST ONLY =	**0.267**
	TOTAL =	**26.942**

JE
RWD(W) Div. Darbhanga-2

AE
RWD(W) Div. Darbhanga-2

EE
RWD(W) Div. Darbhanga-2

CONSTRUCTION OF ROAD FROM Mohanpur TO Mohanpur-2 BLOCK : SINGHWARA LENGTH : 1.400 KM

Sl. No.	SDB SL .NO	MORD Ref.No	Description	Unit	NOS	LENGTH(m)	WIDTH(m)	HEIGHT(m)	QUANTITY(m^3)	RATE(In ₹)	AMOUNT (In ₹)
1	3.14	303.1	**Construction of Subgrade and Earthen Shoulders**								
			Construction of subgrade and earthen shoulders with approved material obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table 300.2 with lead upto 1000 m as per Technical Specification Clause 303.1.								
			Beside Flank (On Flood affected Portion)	Cum	2	481.00	1.375 Avg	0.250 Avg	330.69		
			For 1000 m lead @ 100 %						200.00	237.43	47,486.00
			Sub Head : PAVEMENT LAYERS - GSB & WBM ITEMS								
2	4.1	401	**Granular Sub-base with Well Graded Material (Table 400.1)**								
		(ii)	**(By mix in place method) For Grading I Material**								
			Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement 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.								
			Net GSB Qty		1	312.00	3.75	0.100	117.000	3,243.14	3,79,447.00
2	4.7	405	**WBM Grading 3 with screening Material (By Mechanical Means)**								
	(3-B)		Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheel roller 80-100 kN in stages to proper grade and camber, applying and brooming, stone screening to fill-up the interstices of coarse aggregate, watering and compacting to the required density Grading 3 as per Technical Specification Clause 405.								

Chainage in M		Length in Metre (As per pot measurment)
From	To	
~~0~~	~~8~~	~~8~~
10	~~26~~ 24	~~15~~ 14
175	220	45
350	385	35
410	430	20
540	581	41
~~600~~	~~650~~	~~50~~
~~690~~	~~750~~	~~60~~
800	875	75
~~900~~	~~950~~	~~50~~
1150	1218	68
1162	1176	14
Total Length=		~~481.00~~ 312.00

				312.00					
		Cum	1	481.00	3.750	0.075	135.28		
			Net WBM -3 Qty		Qty not measurement (Annexure-A)			87.750	4,093.11	3,59,170.00
			862					B) SUB TOTAL OF CRUST =		7,38,617.00

			[illegible] From Mohanpur To Mohanpur-2				BLOCK : SINGHWARA			LENGTH :	1.400 KM	
Sl. No.	SDB SL .NO	MORD Ref.No	Description	Unit	NOS	LENGTH(m)	WIDTH(m)	HEIGHT(m)	QUANTITY(m^3)	RATE(In ₹)	AMOUNT (In ₹)	
			SUB HEAD : CC PAVEMENT									
3	**6.4**	**1500**	**Cement Concrete Pavement**									
			Construction of un-reinforcedplain cement thickness as perdesign , over a prepared sub base with 43 grade cement or any other type as per clause 1501.2.2 M 30 grade coarse and fine aggregate maximum size of aggregate not exceding 25mm , mixed in a concrete of not less than 0.2cum capacity and appropriate weigh batcher using approved mix design ,laid in approved fixed side formwork (steel channel ,laying and fixing of 125 micron thick plythene film ,wedges ,steel plates including levelling the formwork as per drawing) spreading the concrete with shovels , rakes , compacted using needle, screed and plate vibrators and finished in continuous operation including provision of contraction and expansion , constrution joints ,applying debonding strips , primer , sealant , dowel bars , near approaches to bridge/ culvert and construction joints, admixtures as approved , curing of concrete slab for 14 days curing compound (where specified) and water finishing to lines and grade as per drawing and Technical specification clause 1501.									
			On Flood affected portion (Details are as above mentioned)	cum	1	312.00 481.00	3.750	0.160	288.60			
			Net Qty		Qty pot measurment (Annexure-A)				187.200	7,676.65	14,37,069.00	
4	**4.18**	**412**	**Hard Shouldering**									
			Laying brick soling layer on prepared sub-grade with brick on end edging according to lines, graded and cross-section shown on the drawing filling joints with sand and earth, spreading 25 mm thick layer of earth over brick soling, watering and rolliing the same with three wheel road roller 80-100 kN as per Technical Specification Clause 412									
			Hard Shouldering besides CC Portion	sqm	2.00	481.00	0.250		240.50			
			New Brick Area						240.50	476.72	1,14,651.00	
									C) SUB TOTAL OF CC PAVEMENT =		**15,51,720.00**	
									TOTAL COST OF PAVEMENT IN RS. (A+B+C)=		**23,37,823.00**	

20/05/2025

JE
RWD(W) Div. Darbhanga-2

AE
RWD(W) Div. Darbhanga-2

EE
RWD(W) Div. Darbhanga-2

ROAD FROM Mohanpur TO Mohanpur-2 BLOCK : SINGHWARA LENGTH : 1.400 KM

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs	Total material Qty. required	Total Material Amount	Add 10 % Seignlorage Fee
			EARTHWORK							
1	3.14	303.1	**Construction of Subgrade and Earthen Shoulders**							
			Construction of subgrade and earthen shoulders with approved material obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table 300.2 with lead upto 1000 m as per Technical Specification Clause 303.1.							
			Unit = cum							
			Taking output = 100 cum							
		a)	**Material**							
			Compensation for earth taken from private land	cum	100.00	34.82	3482.00			
			Cost for 100 cum = a				3482.00			
			Rate per cum = (a)/100				34.82			
			Total Cost	**cum**			**34.82**	**200**	**6964**	**696.00**
2	4.1	401	**Granular Sub-base with Well Graded Material (Table 400.1)**							
			(By mix in place method) For Grading I Material							
			Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement 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.							
		(i)	**For Grading I Material**							
			Unit = cum							
			Taking output = 300 cum							
		a)	**Material**							
			For well graded granular sub-base material as per Table							
			53 mm to 9.5 mm @ 50 per cent	cum	180.00	610.74	109933.20			
			9.5 mm to 2.36 mm @ 20 per cent	cum	72.00	506.92	36498.24			
			2.36 mm below @ 30 per cent - Course Sand	cum	108.00	175.80	18986.40			
			Cost for 300 cum = a				**165417.84**			
			Rate per cum = (a)/300	**cum**			**551.39**			
			Total Cost	**cum**			**551.39**	**117**	**64512.63**	**0**
3	4.7	405	**Water Bound Macadam with Stone Screening Type "B" Gr- III**							
	(3-B)		**WBM Grading 3**							
			Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheel roller 80-100 kN in stages to proper grade and camber, applying and brooming, stone screening to fill-up the interstices of coarse aggregate, watering and compacting to the required density Grading 3 as per Technical Specification Clause 405.							
		(A)	**By Machnical Means**							
			Unit = cum							
			Taking output = 360 cum							
		a)	**Material (Refer Tables 400.7, 8, 9 and 10)**							

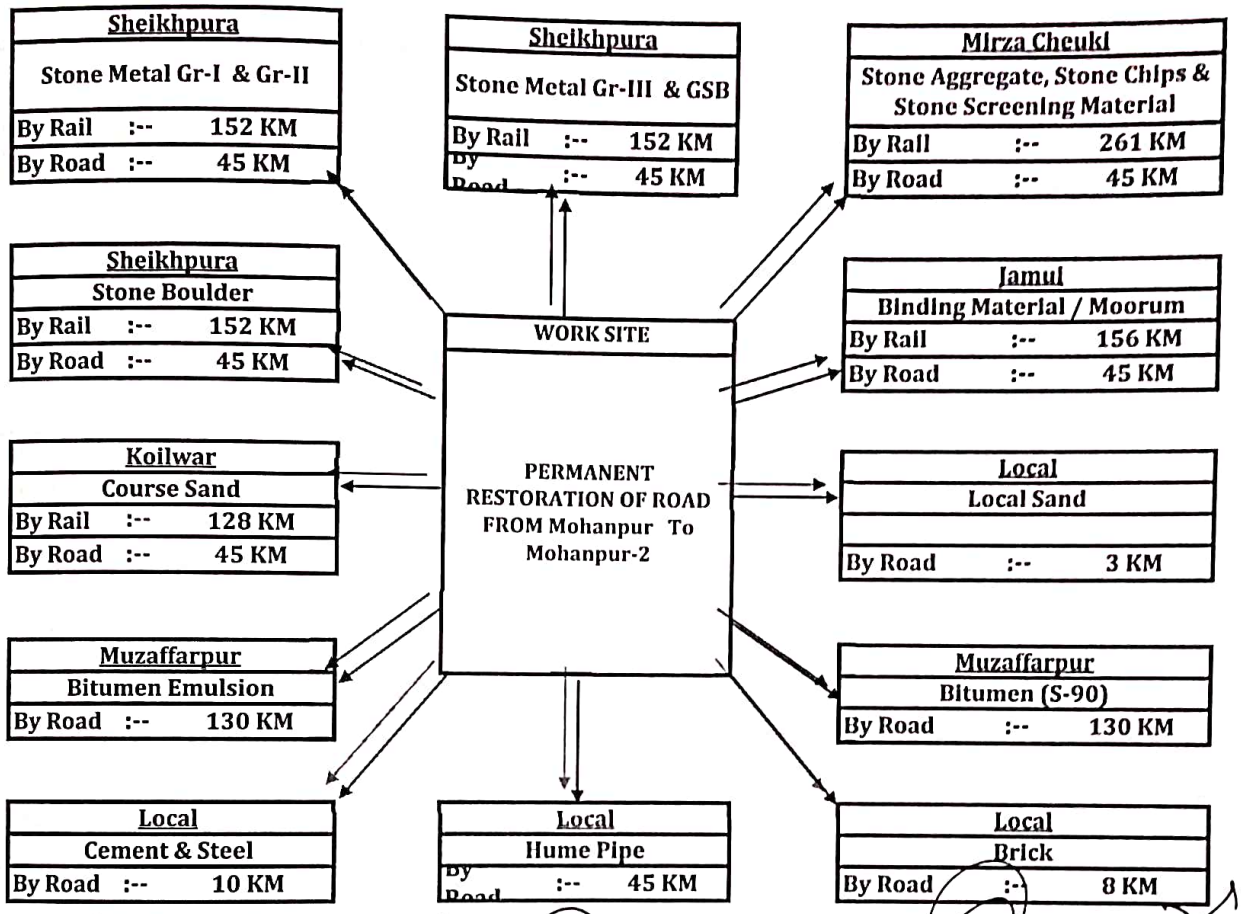
No.	No.	Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs	Total material Qty. required	Total Material Amount	Add 10 % Seigniorage Fee
			Aggregate				-			
			Grading 3 53 mm to 22.4 mm @ 0.91 cum per 10 sqm for compacted thickness of 75 mm	cum	435.60	503.85	219477.06			
			Stone Screening							
			Type B 11.2 mm for Grading 3 @ 0.18 cum per 10 sqm	cum	86.40	392.53	33914.59			
			Cost for 360 cum = a				**253391.65**			
			Rate per cum = (a)/360				**703.87**			
			Total Cost	**cum**			**703.87**	**87.75**	**61764.59**	**6176.00**
			CC PAVEMENT							
5	**6.4**	**1500**	**Cement Concrete Pavement**							
			Construction of un-reinforced, plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including provision of contraction and expansion, construction joints, applying debonding strips, primer, sealant, dowel bars, near approaches to bridge/culvert and construction joints, admixtures as approved, curing of concrete slabs for 14-days,using curing compound (where specified) and water finishing to lines and grade as per drawing and Technical Specification Clause 1501.							
			Unit = cum							
			Taking output = 75 cum (172.50 t)							
			(100 x 3.75 x 0.200)							
		a)	**Material**							
		(i)	Crushed stone coarse aggregates, grading will be as per Clause 1501.2.4.1 (Table 1500.1) of specifications @ 0.90 cum/cum of concrete	cum	67.50	572.92	38672.10			
		(ii)	Sand as per IS:383 and conforming to Clause 1500.2.4.2 @ 0.45 cum/cum of concrete	cum	33.75	175.80	5933.25			
			Rate per cum = (a)/75				594.74			
			Total Cost	**cum**			**594.74**	**187.2**	**111335.33**	**11134.00**
6	**4.18**	**412**	**Brick Soling (With New Brick)**							
			Laying brick soling layer on prepared sub-grade with brick on end edging according to lines, graded and cross-section shown on the drawing filling joints with sand and earth, spreading 25 mm thick layer of earth over brick soling, watering and rolliing the same with three wheel road roller 80-100 kN as per Technical Specification Clause 412.							
			Unit = sqm							
			Taking ouput = 150 sqm							
		(a)	**Material**							
			Brick 1st Class	No.	8160.00	5.13	41860.80			
			Brick 1st Class on edging	No.	1100.00	5.13	5643.00			
			Fine Sand	cum	5.66	141.85	802.87			
			Cost for 150 sqm = a				48306.67			
			Rate per sqm = (a)/150				**322.04**			
			Total Cost	**cum**			**322.04**	**240.5**	**77450.62**	**7745.00**
									Total Construction cost of Seigniorage Fee @ 10%	**25751.00**

Quarry Map

Name of Road :-- **PERMANENT RESTORATION OF ROAD FROM Mohanpur To Mohanpur-2**

Block :-- SINGHWARA
District :-- DARBHANGA-2

Length of the Road:- 1.400 KM



* Subjected to Verification of Lead

J.E

A.E. 20/05/2024

E.E 25-05-24

S.E.