



GENERAL ABSTRACT OF COST

Block:-

Buxar

District:- Buxar

Name of Road :- NH-84 Buxar Golamber to Dumraon vai Jaso Nadaon Kulharia Surundha path

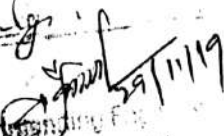
SL.No.	Item of work	Amount
A	COST OF CONSTRUCTION	2.89 Lacs
	ADD 1% LABOUR CESS	0.03 Lacs
	ADD 12% GST	0.35 Lacs
	TOTAL COST OF CONSTRUCTION	3.25 Lacs
	TOTAL COST	3.27 Lacs


Junior Engineer


Asstt. Engineer


Executive Engineer

RECEIVED, 2019-2020
Three Lac & Twenty Seven
thousand only


Superintending Engineer
Rural Works Department
Buxar District

GENERAL ABSTRACT OF COST FOR MANTENANCE OF ROAD

NAME OF THE ROAD:

NH-84 Buxar Golamber to Dumraon val Jaso Nadaon Kulharia Surundha path

DISTRICT

Buaxr

BLOCK

Buxar

DIVISION

Buxar

SL.No.	DISCRIPTION	AMOUNT (LAKHS)
1.	Construction of GSB	2.89
	Cost of construction	2.89


23/11/19

Junior Engineer


23/11/19

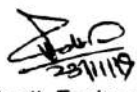
Asstt. Engineer


27/11/19

Executive Engineer

DISCRIPTION	UNIT	QTY.	RATE	AMOUNT
Granular Sub-base with Well Graded Material (Table 400.1) (by mix in place method) 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 motivator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401.	M3	111.09	2607.42 2510.95	289450.00
Total cost :				289450.00


Junior Engineer


Asstt. Engineer


Executive Engineer

Details of PCC

1st km

$$1.22 \times 1.83 \times 0.10 = 0.22 \text{ m}^3$$

$$1.83 \times 2.44 \times 0.10 = 0.45 "$$

$$1.83 \times 1.22 \times 0.10 = 0.22 "$$

$$3.35 \times 1.83 \times 0.10 = 0.61 "$$

$$2.44 \times 2.44 \times 0.10 = 0.60 "$$

$$3.05 \times 2.13 \times 0.10 = 0.65 "$$

$$5.18 \times 3.05 \times 0.10 = 1.58 "$$

$$25.0 \times 3.05 \times 0.15 = 11.44 "$$

$$2.44 \times 1.50 \times 0.10 = 0.37 "$$

$$18.29 \times 3.05 \times 0.15 = 8.37 "$$

$$2.44 \times 1.50 \times 0.10 = 0.37 "$$

$$5.00 \times 0.91 \times 0.10 = 0.46 "$$

$$7.62 \times 0.60 \times 0.10 = 0.46 "$$

$$3.05 \times 1.20 \times 0.10 = 0.37 "$$

$$6.10 \times 0.91 \times 0.10 = 0.56 "$$

$$4.88 \times 1.50 \times 0.10 = 0.73 "$$

$$5.49 \times 1.50 \times 0.10 = 0.82 "$$

$$3.66 \times 1.22 \times 0.10 = 0.45 "$$

$$14.0 \times 3.05 \times 0.15 = 6.41 "$$

$$7.62 \times 1.83 \times 0.10 = 1.39 "$$

$$3.05 \times 1.22 \times 0.10 = 0.37 "$$

$$2.44 \times 1.22 \times 0.10 = 0.30 "$$

$$3.05 \times 1.50 \times 0.10 = 0.46 "$$

$$3.66 \times 1.50 \times 0.10 = 0.55 "$$

2nd km

$$3.66 \times 1.50 \times 0.10 = 0.55 "$$

$$3.05 \times 1.50 \times 0.10 = 0.46 "$$

$$1.22 \times 1.22 \times 0.10 = 0.15 "$$

$$3.05 \times 1.22 \times 0.10 = 0.37 "$$

$$1.22 \times 1.22 \times 0.10 = 0.15 "$$

$$2.44 \times 1.0 \times 0.10 = 0.24 "$$

$$3.05 \times 1.0 \times 0.10 = 0.31 "$$

$$1.83 \times 0.90 \times 0.10 = 0.16 "$$

$$2.74 \times 1.50 \times 0.10 = 0.41 "$$

$$\underline{41.01 \text{ m}^3}$$

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J.E.

Dr.

$$3.66 \times 3.05 \times 0.10 = 1.12 \text{ m}^3$$

$$2.44 \times 1.50 \times 0.10 = 0.37 \text{ m}^3$$

$$9.15 \times 2.44 \times 0.15 = 3.35 \text{ m}^3$$

$$9.15 \times 2.44 \times 0.15 = 3.35 \text{ m}^3$$

$$9.15 \times 3.00 \times 0.15 = 4.12 \text{ m}^3$$

$$3.35 \times 2.44 \times 0.10 = 0.82 \text{ m}^3$$

3rd km

$$3.05 \times 0.46 \times 0.10 = 0.14 \text{ m}^3$$

$$2.44 \times 1.22 \times 0.10 = 0.30 \text{ m}^3$$

$$4.50 \times 1.50 \times 0.10 = 0.68 \text{ m}^3$$

$$0.90 \times 0.90 \times 0.10 = 0.08 \text{ m}^3$$

$$1.82 \times 1.22 \times 0.10 = 0.22 \text{ m}^3$$

$$0.61 \times 3.0 \times 0.10 = 0.18 \text{ m}^3$$

$$3.0 \times 1.50 \times 0.10 = 0.45 \text{ m}^3$$

$$2.44 \times 1.50 \times 0.10 = 0.37 \text{ m}^3$$

$$2.44 \times 1.50 \times 0.10 = 0.37 \text{ m}^3$$

$$5.00 \times 3.00 \times 0.15 = 2.25 \text{ m}^3$$

$$4.57 \times 2.44 \times 0.10 = 1.12 \text{ m}^3$$

$$9.15 \times 2.44 \times 0.15 = 3.35 \text{ m}^3$$

$$3.0 \times 3.0 \times 0.10 = 0.90 \text{ m}^3$$

$$2.44 \times 0.90 \times 0.10 = 0.22 \text{ m}^3$$

$$3.0 \times 1.50 \times 0.10 = 0.45 \text{ m}^3$$

$$3.66 \times 1.22 \times 0.10 = 0.45 \text{ m}^3$$

4th km:

$$4.50 \times 1.20 \times 0.10 = 0.54 \text{ m}^3$$

$$7.60 \times 1.50 \times 0.10 = 1.14 \text{ m}^3$$

$$3.65 \times 3.0 \times 0.10 = 1.10 \text{ m}^3$$

$$2.44 \times 2.44 \times 0.10 = 0.60 \text{ m}^3$$

$$27.0 \times 3.0 \times 0.10 = 8.10 \text{ m}^3$$

$$30.0 \times 3.0 \times 0.10 = 9.00 \text{ m}^3$$

$$4.50 \times 2.44 \times 0.10 = 1.10 \text{ m}^3$$

87.25 m³

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JM

87.25 m³

$$6.0 \times 1.20 \times 0.10 = 0.72 "$$

$$2.40 \times 3.0 \times 0.10 = 0.72 "$$

$$3.0 \times 2.40 \times 0.10 = 0.72 "$$

$$3.0 \times 1.80 \times 0.10 = 0.54 "$$

$$4.50 \times 1.20 \times 0.10 = 0.54 "$$

$$3.0 \times 2.40 \times 0.10 = 0.72 "$$

$$3.0 \times 1.80 \times 0.10 = 0.54 "$$

$$3.65 \times 2.40 \times 0.10 = 0.88 "$$

$$10.0 \times 2.40 \times 0.15 = 3.60 "$$

$$3.0 \times 2.40 \times 0.10 = 0.72 "$$

$$3.65 \times 1.60 \times 0.10 = 0.58 "$$

$$1.80 \times 1.20 \times 0.10 = 0.43 "$$

$$2.40 \times 1.20 \times 0.10 = 0.29 "$$

$$4.50 \times 1.20 \times 0.10 = 0.54 "$$

$$3.60 \times 1.20 \times 0.10 = 0.43 "$$

$$16.50 \times 2.40 \times 0.15 = 5.94 "$$

Sth m. $6.10 \times 0.90 \times 0.10 = 0.55 "$

$$4.50 \times 1.20 \times 0.10 = 0.54 "$$

$$2.40 \times 1.80 \times 0.10 = 0.43 "$$

$$7.60 \times 1.20 \times 0.10 = 0.91 "$$

$$0.60 \times 2.44 \times 0.10 = 0.15 "$$

$$2.44 \times 2.44 \times 0.10 = 0.60 "$$

$$3.00 \times 1.20 \times 0.10 = 0.36 "$$

$$0.90 \times 2.10 \times 0.10 = 0.19 "$$

$$2 \times 1.80 \times 2.44 \times 0.10 = 0.88 "$$

$$3.00 \times 1.20 \times 0.10 = 0.36 "$$

$$1.50 \times 3.0 \times 0.10 = 0.45 "$$

$$2 \times 1.80 \times 1.20 \times 0.10 = 0.43 "$$

111.01 m³

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Analysis of Rates (FORMAT F8)

MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs.	SI
303	Construction of Subgrade and Earthen Shoulders					3
	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)	Labour					
	Mate	day	0.04	293.00	11.72	
	Mazdoor (Unskilled)	day	1.00	277.00	277.00	
b)	Machinery					
	Hydraulic excavator 0.9 cum bucket capacity @ 100 cum per hour	hour	1.67	1958.00	3269.86	
	Tipper 5.5 cum capacity, 4 trips per hour	hour	4.50	1018.00	4581.00	
	Add 10 % of the cost of carriage to cover loading & unloading	cum			458.10	
	Dozer D-50 for spreading @ 100 cum per hour	hour	0.50	3319.00	1659.50	
	Tractor mounted grader arrangement for grading @ 100 cum per hour	hour	1.00	546.00	546.00	
	Water tanker with 6 kl capacity	hour	2.00	183.00	366.00	
c)	Material					
	Three wheel 80-100 kN Static Roller @ 70 cum per hour	hour	1.43	781.00	1116.83	
	Water	kl	12.00	40.00	480.00	
	Compensation for earth taken from private land	cum	100.00	23.78	2378.00	
d)	Overheads @ 6 % on (a+b+c)				908.64	
e)	Contractor's profit @ 10% on (a+b+c+d)				1605.27	
	Cost for 100 cum = a+b+c+d+e				17657.92	
	Rate per cum = (a+b+c+d+e)/100				176.58	
	Total Cost	sqm			176.58	
4.10	401 Granular Sub-base with Well Graded Material (Table 400.1)					
	(By mix in place method) 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.					
(ii)	For Grading II Material					
	Unit = cum					
	Taking output = 300 cum					
a)	Labour					
	Mate	day	0.48	293.00	140.64	
	Mazdoor (Skilled)	day	2.00	352.00	704.00	
	Mazdoor (Unskilled)	day	10.00	277.00	2770.00	
b)	Machinery					
	Tractor mounted grader arrangement for grading @ 100 cum per hour	hour	12.00	546.00	6552.00	
	Three wheel 80-100 kN static roller @ 10 cum per hour	hour	30.00	781.00	23430.00	
	Tractor with Rotavator 25 cum per hour	hour	12.00	570.00	6840.00	
	Water tanker 6 kl capacity	hour	5.00	183.00	915.00	
c)	Material					
	Well graded granular sub-base material as per Table 400.1	cum	134.40	550.85	74034.24	
	26.5 mm to 9.5 mm @ 35 per cent	cum	96.00	411.33	39487.68	
	9.5 mm to 2.36 mm @ 25 per cent	cum	153.60	116.85	17948.16	
	2.36 mm below @ 40 per cent - Local Sand	kl	30.00	40.00	1200.00	
	Water				17404.48	
d)	Overheads @ 6 % on (a+b+c)				18446.39	
e)	Contractor's profit @ 10% on (a+b+c+d)				202909.31	
	Cost of GSB for 300 cum				676.34	
	A) Cost of GSB without carriage per cum	cum				
f)	CARRIAGE					
	Carriage for GSB material	Cum	0.768	2409.17	1850.24	
	Carriage for material below 2.36 mm (Local Sand)	Cum	0.512	157.83	80.81	
	Rate per cum with carriage				2607.40	
	Total Cost	CUM			2607.40	

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b. 2346-66
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Type of Road

Coarse and Fine Aggregates

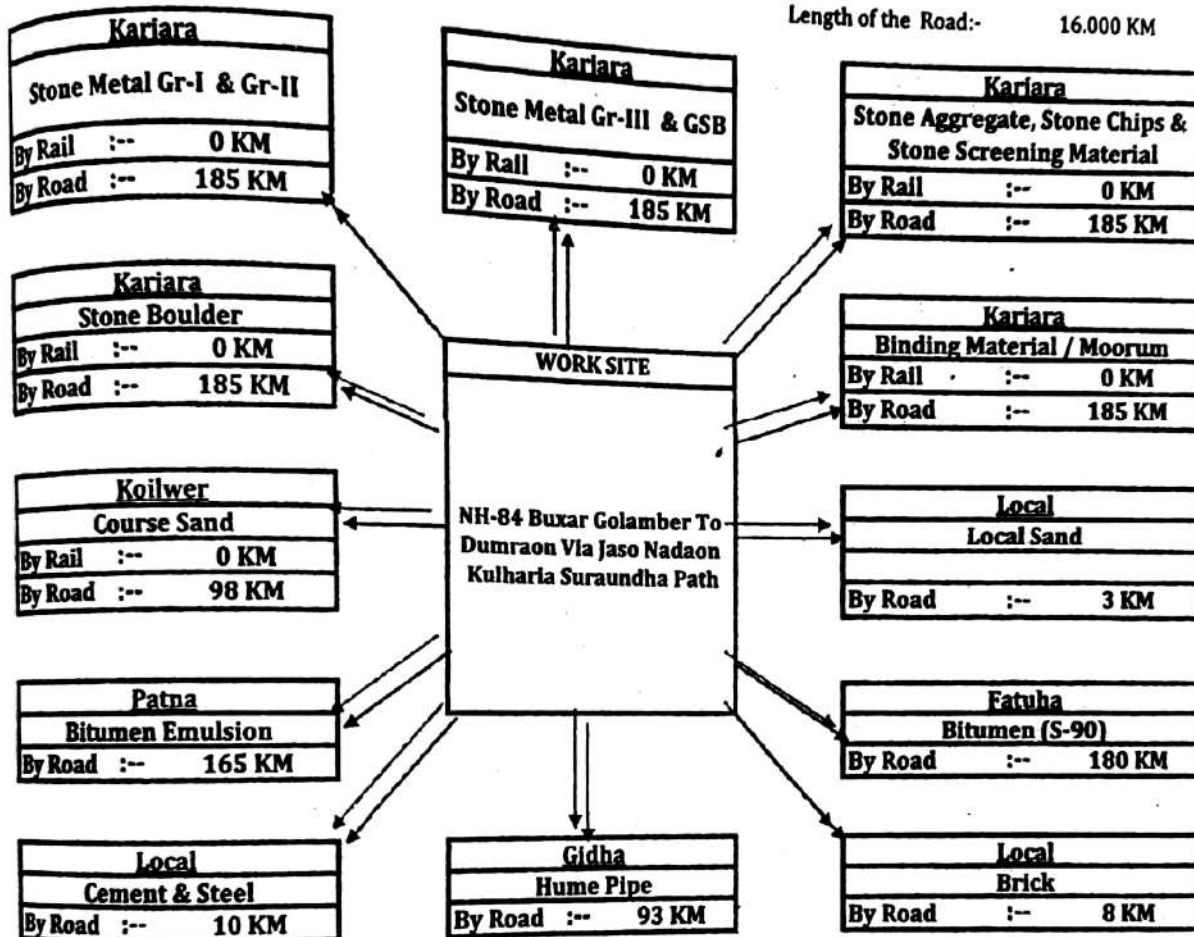
Information regarding the source of aggregate and sand will be gathered. The stone aggregates shall be procured from Karjara & Karjara where as the locally available sand shall be used. The source and the lead distance from the quarry to project site will be finalized in discussion with the PIU. The aggregates and sand where available and acceptable shall be used for bituminous work, concrete works, other pavement works.

Figure -3

Quarry Map

Name of Road :- NH-84 Buxar Golamber To Dumraon Via Jaso Nadaon Kulharia Suraundha Path
Block :- Buxar
District :- Buxar

Length of the Road:- 16.000 KM



* Subjected to Verification of Lead

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9/11/19

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A.E.

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9/11/19

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S.E.
23/11/19

S.E.

Analysis for Carriage by Road & Rail

Name of Road:--

NH-84 Buxar Golamber To Dumraon Via Jaso Nadaon Kulharla Suraundha Path

District:-

Buxar

Block :- Buxar

No	Item with Source	Unit	Source Up to	Carriage Cost & Lead In Km		Katcha		Loading & Unloading Cost	Carriage Cost by Rail Head	Total
				Pucka / Surface						
1	Stone Metal Gr-I & Gr-II	Cum	Karlara	8.00 4.59	x 7.47	x 185.00 Km = Rs 2408.63	8.00 4.59	x 18.09 x 0.00 Km = Rs 0.00	193.62	Rs. 2602.25
2	Stone Metal Gr-III / GSB	Cum	Karlara	8.00 4.99	x 7.47	x 185.00 Km = Rs 2215.55	8.00 4.99	x 18.09 x 0.00 Km = Rs 0.00	193.62	Rs. 2409.17
3	Stone Aggregate / Chips	Cum	Karlara	8.00 4.99	x 7.47	x 185.00 Km = Rs 2215.55	8.00 4.99	x 18.09 x 0.00 Km = Rs 0.00	193.62	Rs. 2409.17
4	Stone Boulder	Cum	Karlara	8.00 4.80	x 7.47	x 185.00 Km = Rs 2303.25	8.00 4.80	x 18.09 x 0.00 Km = Rs 0.00	193.62	Rs. 2496.87
5	Course Sand	Cum	Koliwer	8.00 4.99	x 7.47	x 98.00 Km = Rs 1173.64	8.00 4.99	x 18.09 x 1.00 Km = Rs 29.00	104.88	Rs. 1307.52
6	Binding Material/Moorum	Cum	Karlara	8.00 6.00	x 7.47	x 185.00 Km = Rs 1842.60	8.00 6.00	x 18.09 x 0.00 Km = Rs 0.00	104.88	Rs. 1947.48
7	Local Sand	Cum	Local	8.00 4.99	x 7.47	x 2.00 Km = Rs 23.95	8.00 4.99	x 18.09 x 1.00 Km = Rs 29.00	104.88	Rs. 157.83
8	Brick	1000 Nos	Local	8.00 2.00	x 7.47	x 7.00 Km = Rs 209.16	8.00 2.00	x 18.09 x 1.00 Km = Rs 72.36	441.62	Rs. 723.14
9	Cement	MT	Local	8.00 8.00	x 7.47	x 10.00 Km = Rs 74.70	8.00 8.00	x 18.09 x 0.00 Km = Rs 0.00	317.64	Rs. 392.34
0	Steel	MT	Local	8.00 8.00	x 7.47	x 10.00 Km = Rs 74.70	8.00 8.00	x 18.09 x 0.00 Km = Rs 0.00	337.70	Rs. 412.40
1	Bitumen Emulsion	MT	Patna	8.00 8.00	x 7.47	x 165.00 Km = Rs 1232.55	8.00 8.00	x 18.09 x 0.00 Km = Rs 0.00	365.00	Rs. 1597.55
2	Bitumen	MT	Fatuha	8.00 8.00	x 7.47	x 180.00 Km = Rs 1344.60	8.00 8.00	x 18.09 x 0.00 Km = Rs 0.00	365.00	Rs. 1709.60
3	Hume Pipe (1000 mm)	m	Gidha	8.00 10.00	x 7.47	x 93.00 Km = Rs 555.77	8.00 10.00	x 18.09 x 0.00 Km = Rs 0.00	75.69	Rs. 631.46
4	Hume Pipe (600 mm)	m	Gidha	8.00 25.00	x 7.47	x 93.00 Km = Rs 222.31	8.00 25.00	x 18.09 x 0.00 Km = Rs 0.00	32.44	Rs. 254.75

Cost of Haulage Excluding Loading & Unloading as per : aa

* Subjected to Verification of Lead

Type of Road	Per Ton. Km by Tipper	Per Ton. Km by Truck
For Surface Road	8.20	7.47
Unsurface Gravel Road	9.90	8.99
Kachha Road	19.80	18.09

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