

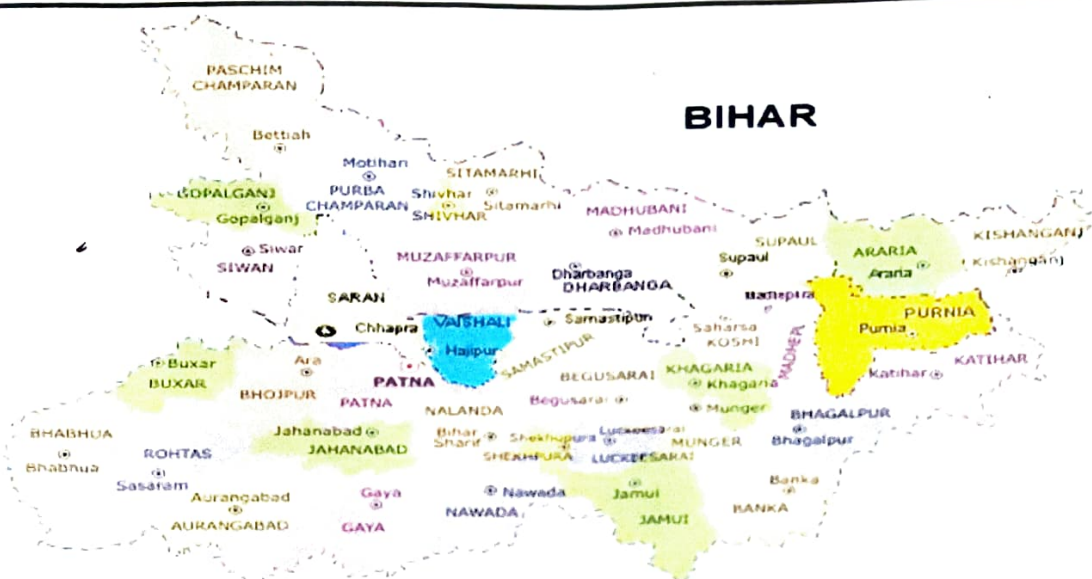


ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

2022-23

FLOOD DAMAGED REPORT



L037 - T02 To Piparahi Sultan

DISTRICT	:-	Sitamarhi	
DIVISION	:-	Belsand	
BLOCK	:-	Bairganiya	
TOTAL LENGTH OF ROAD	:-	0.134	KM
TOTAL COST OF SURFACE RENEWAL <i>Temporary Restoration</i>	:-	14.971 16.3594	Lac
TOTAL COST OF PROJECT	:-	14.971 16.3594	Lac

FLOOD DAMAGED REPORT

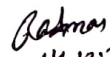
GENERAL ABSTRACT OF COST

Block:- Bairganiya District:- Sitamarhi
Length of Road:- 0.134 KM
Name of Road:- L037 - T02 To Piparahi Sultan

SL. No.	Item of Work	Amount
A	TOTAL COST OF CONSTRUCTION	16,35,940 18,71,500 14,971 Lacs
		16,35,940 18,71,500
	TOTAL	: 14,971 Lacs

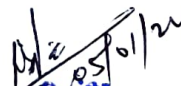

12/12/23
Junior Engineer


14/12/23
Asstt. Engineer


14.12.2023
Executive Engineer

SE
RWD

T/S:- Technically sanctioned for Rs. 16,35,940.00 for FDR.
[Rupees sixteen lakh thirty five thousands nine hundred forty only].


05/01/24
महोदय अभियंता
ग्रामीण कार्य विभाग, कार्य संवर्धन
सीतामढ़ी

05/01/24

GENERAL ABSTRACT OF COST FOR MAINTENANCE OF ROAD

NAME OF ROAD :
DISTRICT
BLOCK
DIVISION
LENGTH OF ROAD (in Km)

L037 - T02 To Piparahi Sultan
Sitamarhi
Bairganiya
Belsand
0.134

Sl. No.	DESCRIPTION	Amount	1 % Labour Cess	18 % GST	1% Labour Cess & 18% GST AMOUNT (LAKHS)
1	Earth Work	1.12 1.375	0.011 0.014	0.2002 0.248	1.3222 1.637
1	Brick Bats	12.04 14.36 11.205	0.1204 0.112	2.55 2.17 2.017	15.0704 13.334 17.083
	SUB TOTAL OF SURFACE RENEWAL	13.76 12.581	0.126	2.265	16.3594 14.971 18.778
	TOTAL COST OF PROJECT IN LACS =	12.581	0.126	2.265	14.971 16.3594 18.778
		13.76	1.384	2.4702	16.3594

QW
12/12/23
JE
RWD

Safina
14/12/23
AE
RWD

Asran
14.12.2023
EE
RWD

Sl. No.	SDB SL. NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)
1	3.14	303.1	Construction of Embankment with Material Obtained from Borrow Pits								
			Construction of embankment with approved material obtained from borrow pits with a lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 1000 m as per Technical Specification Clause 301.5								
				Cum	1	26.00	5.80 (av)	1.50 (av)	226.20		
					1	11.00	5.50 (av)	0.70 (av)	42.35		
					1	11.00	5.00 (av)	0.60 (av)	33.00		
					1	16.00	1.50 (av)	1.30 (av)	31.20		
					1	10.00	5.15 (av)	1.45 (av)	74.68		
					1	15.00	5.00 (av)	0.60 (av)	45.00		
					1	26.00	5.00 (av)	0.30 (av)	39.00		
					1	4.00	4.50 (av)	1.12 (av)	20.16		
				Cum	1	15.00	4.00 (av)	0.30 (av)	18.00		
			For 1000 m lead @ 100 %						529.59	210.803 259.71	111 623.16 1,37,540.00
2	3.2	301.4	Brick Bats								
			Providing brick bats including spreading laying hand packing and compacting with C.I. Hammer in layers not exceeding 75 mm thick including cost of light barriers, danger signals, chowkidar, taxes, royalty etc. all complete job as per specification and direction of E/I including carriage cost of bricks.								
				Cum	1	26.00	6.5+5.1 2.0	2.0+1.5 2.0	263.90		
				Cum	1	11.00	6.0+5.0 2.0	1.0+0.6 2.0	48.40		
				Cum	1	13.5+8.5 2.0	5.00	1.4+0.6 2.0	55.00		
				Cum	1	16.00	1.50	1.8+1.0 2.0	33.60		
				Cum	1	10.00	5.5+4.8 2.0	1.6+1.4 2.0	77.25		
				Cum	1	15.00	5.00	1.00	75.00		
				Cum	1	26.00	5.00	0.30	39.00		
				Cum	1	4.00	4.50	1.00	18.00	2012.67	1264 258.66
				Cum	1	15.00	4.00	0.30	18.00	2288.619	14 35 74.52
									628.15	1,783.64	11,20,519.00
											1375857.87
											12,58,059.00
			A) SUB TOTAL OF CRUST =								

12/11/23

14/12/23
A.C

14.12.2023

1573251.58
Sgt: 1325558.00

Analysis for Carriage by Road & Rail

Name of Road:--

L037 - T02 To Piparahi Sultan

District:-

Sitamarhi

Block :- **Bairganiya**

Sl No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km		Loading & Unloading Cost	Carriage Cost by Rail Head	Total	Total Minimum
				Pucka / Surface	Katcha				
7	Local Sand	Cum	Local	$\frac{8.00}{4.99} \times 12.10 \times 2.00 \text{ Km} = \text{Rs } 38.80$	$\frac{8.00}{4.99} \times 29.30 \times 1.00 \text{ Km} = \text{Rs } 46.97$	121.65		Rs. 207.42	Rs. 207.42
8	Brick	1000 Nos	Local	$\frac{8.00}{2.00} \times 7.94 \times 7.00 \text{ Km} = \text{Rs } 222.32$	$\frac{8.00}{2.00} \times 19.22 \times 1.00 \text{ Km} = \text{Rs } 76.88$	506.68		Rs. 805.88	Rs. 805.88

JE
RWDAE
RWDEE
RWD

OK
12/12/23

Se. P. a
14/12/23

Bakma
14.12.2023

BASIC RATES
(A) Labour

Sl. No.	Description of Labour	Unit	Rate (Rs.)
L-01	Bhisti	day	395.00
L-02	Bitumen Sprayer	day	415.00
L-03	Head Blacksmith	day	531.00
L-04	Blaster	day	653.00
L-05	Carpenter 1st Class	day	531.00
L-06	Chips spreader	day	474.00
L-07	Chiseller	day	608.00
L-08	Dresser (Skilled)	day	500.00
L-09	Driller	day	474.00
L-10	Electrician	day	502.00
L-11	Fitter	day	539.00
L-12	Mason (1st class)	day	531.00
L-13	Mason (2nd Class)	day	474.00
L-14	Mate	day	419.00
L-15	Mazdoor (Unskilled)	day	395.00
L-16	Mazdoor (Semi skilled)	day	411.00
L-17	Mazdoor (Skilled)	day	500.00
L-18	Painter (1st class)	day	502.00
L-19	Plumber	day	502.00
L-20	Surveyor	day	479.00
L-21	White Washer	day	502.00

(Basic Rates taken from SOR, 17th edition, Road Construction Department, Govt of Bihar effective from 01/04/2023) & Revised Again 27/09/23 ,Revised Labour Rate 18-10-2023

**BASIC RATES
(B) Material**

Sl. No.	SOR Code	Description	Unit	Basic Rate as Per SOR	Add Royalty Royalty	Final Basic rate
M-001	M-056	AC pipe 100 mm	m	45.34		45.34
M-002	M-031	Aggregate - For 37.5 mm Maximum size - 22.4 mm to 5.6 mm	cum	751.46	150.00	901.46
M-003	M-033	Aggregate - For 37.5 mm Maximum size - 45 mm to 22.5 mm	cum	950.04	150.00	1,100.04
M-004	M-029	Aggregate - For 37.5 mm Maximum size - Below 5.6 mm	cum	279.97	150.00	429.97
M-005	M-031	Aggregate - For 53 mm Maximum size - 22.5 mm to 5.6 mm	cum	751.46	150.00	901.46
M-006	M-037	Aggregate - For 53 mm Maximum size - 63 mm to 45 mm	cum	842.33	150.00	992.33
M-007	M-029	Aggregate - For 53 mm Maximum size - Below 5.6 mm	cum	279.97	150.00	429.97
M-008	M-039	Aggregate - Grading I (40 mm nominal Size) 10 mm - 5 mm	cum	445.16	150.00	595.16
M-009	M-045	Aggregate - Grading I (40 mm nominal Size) 25 mm - 10 mm	cum	751.46	150.00	901.46
M-010	M-048	Aggregate - Grading I (40 mm nominal Size) 37.25 mm - 25 mm	cum	950.04	150.00	1,100.04
M-011	M-029	Aggregate - Grading I (40 mm nominal Size) 5 mm and below	cum	279.97	150.00	429.97
M-012	M-039	Aggregate - Grading II (19 mm nominal Size) 10 mm - 5 mm	cum	445.16	150.00	595.16
M-013	M-045	Aggregate - Grading II (19 mm nominal Size) 25 mm - 10 mm	cum	751.46	150.00	901.46
M-014	M-030	Aggregate - Grading II (19 mm nominal Size) 5 mm and below	cum	279.97	150.00	429.97
M-015	M-050	Aggregate 10 mm	cum	445.16	150.00	595.16
M-016	M-052	Aggregate 20 mm	cum	1,057.76	150.00	1,207.76
M-017	M-054	Aggregate 40 mm	cum	842.33	150.00	992.33
M-018	M-007	Aggregate- Crushable type such as moorum or Gravel for Grading I	cum	78.62	83.00	161.62
M-019	M-007	Aggregate- Crushable type such as moorum or Gravel for Grading II	cum	78.62	83.00	161.62
M-020	M-007	Aggregate- Crushable type such as moorum or Gravel for Grading III	cum	78.62	83.00	161.62
M-021	M-038	Aggregate-Grading I 90 mm to 45 mm	cum	842.33	150.00	992.33
M-022	M-037	Aggregate-Grading II 63 mm to 45 mm	cum	842.33	150.00	992.33
M-023	M-035	Aggregate-Grading III 53 mm to 22.4 mm	cum	950.04	150.00	1,100.04
M-024	M-030	Aggregates 22.4 mm to 2.36 mm for wet mix macadam	cum	539.23	150.00	689.23
M-025	M-033	Aggregates 45 mm to 22.4 mm for wet mix macadam	cum	950.04	150.00	1,100.04
M-026	M-059	Aluminium sheeting (1.5 mm thick)	sqm	8,995.00		8,995.00
M-027	M-062	Aluminium Studs 100 mm x 100 mm fitted with lense reflectors	Nos.	209.95		209.95
M-028		Bamboo (1st Class) 85 mm - 100 mm dia, 2.0 m long	No.	15.00		15.00
M-029		Bamboo (1st Class) 85 mm - 100 mm dia, 2.5 m long	No.	20.00		20.00
M-029		Bamboo (1st Class) 85 mm - 100 mm dia, 3.0 m long	No.	20.00		20.00
M-030		Bamboo (1st Class) 85 mm - 100 mm dia, 4.5 m - 5.5 m long	No.	50.00		50.00
M-029		Bamboo (2nd Class) 75mm dia, 1.8 m - 2.5 m long	No.	15.00		15.00
M-030		Bamboo (2nd Class) 75mm dia, 2.1 m - 3.0 m long	No.	20.00		20.00
M-031	M-063	Barbed wire	kg	83.51		83.51
M-032	M-007	Binding Material (Moorum)	cum	78.62	83.00	161.62

Sl. No.	SOR Code	Description	Unit	Basic Rate as Per SOR	Add Royalty Royalty	Final Basic rate
M-033	M-072	Binding wire	kg	46.00		46.00
M-034	M-078	Bitumen (Crumb Rubber Modified)	tonne	62,040.00		62,040.00
M-035		Bitumen (Natural Rubber Modified)	tonne	41,271.30		41,271.30
M-036		Bitumen (Polymer Modified)	tonne	-		-
M-037	M-074	Bitumen (S-65) VG-30 (Muzaffarpur) Excluding the cost of empty drum @ 1051.48/per MT	t	55,208.52		55,208.52
M-038	M-075	Bitumen (S-90) VG-30 (Muzaffarpur) Excluding the cost of empty drum @ 1051.48/per MT	t	54,408.52		54,408.52
M-039	M-077	Bitumen Emulsion (RS-1) (Muzaffarpur) Excluding the cost of empty drum @ 1051.48/per MT	t	49,766.52		49,766.52
M-040	M-077	Bitumen Emulsion (SS-1) (Muzaffarpur) Excluding the cost of empty drum @ 1051.48/per MT	t	51,055.52		51,055.52
	M-292	Waste Plastic	t	16,974.40		16,974.40
M-041	M-119	Bituminous sealant	litre	30.54		30.54
M-042	M-147	Random Rubble Stone	kg	536.03	150.00	686.03
M-043		Blasting material	kg	781.83		781.83
M-044	M-182	Bond stone (400 mm x 150 mm x 150 mm)	No.	10.48		10.48
M-045	M-079	Brick 1st Class	No.	5.327	0.045	5.372
M-046		Cement (OPC - 43 Grade) (Excluding the cost of Empty Bag @ Rs 3.80 Per Bag)	t	6,211.00		6,211.00
M-047		Cement Primer	litre	125.53		125.53
M-048		Chlorprene Elastomer or Closed Cell Foam Sealing Element	m	-		-
M-049	M-164	Compensation for earth taken from private land (Including royalty @ Rs. 33.0 per cum & compensation @ Rs. 1.81 per cum)	cum	2.25	33.00	35.25
M-050	M-085	Compressible Fibre Board	sqm	1,628.09		1,628.09
M-051	M-087	Copper plate	kg	527.00		527.00
M-052		Corbelling Stones (300 mm x 150 mm x 150 mm)	No.	-		-
M-053	M-088	Corrosion Resistant Structural Steel Grating	kg	75.30		75.30
M-054	M-090	Credit for excavated rock found suitable for use	cum	84.11	25.23	109.34
M-055		Crow bars 40 mm dia (hire charges)	hour	5.00		5.00
M-056	M-020	Crushed Sand or Grit Passing 2.36 mm and retained on 180 micron	cum	114.78	150.00	264.78
M-057		Crushed Slag	cum	775.57		775.57
M-058	M-025	Crushed Stone Aggregate 26.5 mm to 75 micron	cum	751.46	150.00	901.46
M-059	M-051	Crushed Stone chipping 13.2 mm nominal size	cum	445.16	150.00	595.16
M-060	M-049	Crushed Stone Chipping 6.7 mm size 100% passing 11.2 mm and retained on 2.36 mm	cum	279.97	150.00	429.97
M-061	M-049	Crushed Stone Chipping 6.7 mm size 100% passing 9.5 mm and retained on 2.36 mm	cum	279.97	150.00	429.97
M-062	M-050	Crushed Stone chipping 9.5 mm nominal size	cum	445.16	150.00	595.16
M-063	M-034	Crushed Stone Coarse Aggregate Passing 53 mm and retained on 2.8 mm	cum	615.01	150.00	765.01
M-064	M-091	Curing compound	litre	38.00		38.00
M-065		Debonding strips	m	45.00		45.00
M-066		Edge Stone (450 mm x 350 mm x 100 mm)	No.	-		-

SL No.	SOR Code	Description	Unit	Basic Rate as Per SOR	Add Royalty Royalty	Final Basic rate
M-067		Edge Stone (450 mm x 350 mm x 200 mm)	No.	-		-
M-068	M-094	Elastomeric bearing assembly	Nos.	24,050.00		24,050.00
M-069	M-094	Electric Detonator	each	5.75		5.75
M-070	M-098	Epoxy Paint	litre	690.00		690.00
M-071	M-097	Epoxy Primer	litre	120.00		120.00
M-072	M-168	Farmyard manure	cum	646.00		646.00
M-073		Fevicol adhesive	kg	125.00		125.00
M-074	M-011	Filter media	cum	539.23	150.00	689.23
M-075	M-020	Fine aggregate/Crushed sand 2.36 mm to 75 micron	cum	114.78	150.00	264.78
M-076	M-103	Galvanised angle	kg	59.83		59.83
M-077		Galvanised angle Section 100 mm x 100 mm of 12 mm thickness	kg	42.70		42.70
M-078	M-104	Gelatine 80 per cent	kg	806.85		806.85
M-079	M-056	GI Pipe 100 mm dia	m	522.42		522.42
M-080	M-056	GI Pipe 50 mm dia	m	211.02		211.02
M-081	M-102	GI wires	kg	96.39		96.39
M-082	M-049	Graded stone aggregate	cum	279.97	150.00	429.97
M-083	M-003	Granular material (Natural occurring, soil gravel mixture / quarry waste, kankar, laterite, dhandla	cum	17.03	150.00	167.03
M-084	M-054	Hand Broken Metal 40 mm size	cum	842.33	150.00	992.33
M-085		Indigo	kg	416.00		416.00
M-086		Interlocking Blocks with 60 mm thickness	sqm	-		-
M-087		Interlocking Blocks with 80 mm thickness	sqm	-		-
M-088	M-140	Joint filler board	sqm	400.00		400.00
M-089	M-120	Jute netting, open weave 25 mm square opening	sqm	39.61		39.61
M-090		Jute rope 12 mm dia	m	43.28		43.28
M-091	M-031	Key Aggregates passing 22.4 mm and retained on 2.8 mm	cum	539.23	150.00	689.23
M-092	M-190	Lime	t	3,000.00		3,000.00
M-093	M-190	Lime putty	t	3,000.00		3,000.00
M-094	M-094	Local Wood Piles (1st Class) 150-200 mm dia, 6m long	No.	525.75		525.75
M-095		Local Wood Piles (1st Class) 100 mm x 75 mm	cum	42,224.54		42,224.54
M-096	M-002	Loose stone	cum	536.03	150.00	686.03
M-097	M-101	MS clamps	Nos.	18.01		18.01
M-098	M-181	MS Flat / Structural Steel	t	60,255.00		60,255.00
M-099		MS Sheet Tube (47 mm x 47 mm x 12 SWG Sheet)	kg	43.62		43.62
M-100		MS Sheet 1.5 mm thick	sqm	416.00		416.00
M-101		MS Sheet 2 mm thick	sqm	832.00		832.00
M-102	M-129	Nuts, Bolts and Rivets	t	80.28		80.28

Sl. No.	SOR Code	Description	Unit	Basic Rate as Per SOR	Add Royalty Royalty	Final Basic rate
M-103	M-130	Paint (Synthetic Enamel)	litre	280.93		280.93
M-104	M-182	Plasticizer	litre	29.00		29.00
M-105	M-137	Polythene sheet (125 micron)	sqm	18.25		18.25
M-106	M-138	Polythene Sheathing	Nos.	18.25		18.25
M-107	M-002	Quarried Stone 150-200 mm size	cum	536.03	150.00	686.03
M-108	M-149	RCC Pipe NP3 (1200 mm dia)	m	6,763.89		6,763.89
M-109	M-148	RCC Pipe NP3 (1000 mm dia)	m	5,787.23		5,787.23
M-110		RCC Pipe NP3 (750 mm dia)	m	4,675.50		4,675.50
M-111		RCC Pipe NP3 (600 mm dia)	m	2,441.65		2,441.65
M-112		RCC Pipe NP3 (500 mm dia)	m	-		-
		RCC Pipe NP3 (300 mm dia)	m	553.00		553.00
M-113	M-149	RCC Pipe NP4 (1200 mm dia)	m	6,763.89		6,763.89
M-114	M-148	RCC Pipe NP4 (1000 mm dia)	m	5,787.23		5,787.23
M-115		RCC Pipe NP4 (750 mm dia)	m	-		-
M-116		RCC Pipe NP4 (600 mm dia)	m	2,441.65		2,441.65
M-117		RCC Pipe NP4 (300 mm dia)	m	553.00		553.00
M-118		Red-oxide Primer	litre	226.49		226.49
M-119	M-131	Road marking paint	litre	280.93		280.93
M-120	M-005	Sand (Coarse)	cum	427.80	75.00	502.80
M-121	M-006	Sand (Fine)	cum	69.75	75.00	144.75
M-122	M-163	Seeds	kg	42.95		42.95
M-123	M-176	Steel Pipe 50 mm dia	m	271.83		271.83
M-124	M-083	Steel Reinforcement (HYSD Bars)	t	52,775.75		52,775.75
M-125	M-125	Steel Reinforcement (MS Round Bars)	t	59,067.00		59,067.00
M-126	M-083	Steel Reinforcement (TMT Bars)	t	52,775.75		52,775.75
M-127	M-001	Stone Boulder of size 150 mm and below	cum	536.03	150.00	686.03
M-128	M-051	Stone Chips 12 mm size	cum	445.16	150.00	595.16
M-129	M-042	Stone Chips 13.2 mm to 5.6 mm	cum	445.16	150.00	595.16
M-130	M-040	Stone Crushed Aggregate 11.2 mm to 0.09 mm	cum	279.97	150.00	429.97
M-131		Stone for Coarse Rubble Masonry 1st Sort	cum	-		-
M-132		Stone for Coarse Rubble Masonry 2nd Sort	cum	-		-
M-133	M-147	Stone for Random Rubble Masonry	cum	536.03	150.00	686.03
M-134		Stone for Stone Set Pavement (300 mm x 200 mm x 150 mm)	No.	-		-
M-135	M-041	Stone Screening - Type A 13.2 mm for Grading-1	cum	279.97	150.00	429.97
M-136	M-042	Stone Screening - Type A 13.2 mm for Grading-2	cum	279.97	150.00	429.97
M-137	M-040	Stone Screening - Type B 11.2 mm for Grading-2	cum	279.97	150.00	429.97

SL No.	SOR Code	Description	Unit	Basic Rate as Per SOR	Add Royalty Royalty	Final Basic rate
M-138	M-041	Stone Screening - Type B 11.2 mm for Grading-3	cum	279.97	150.00	429.97
M-139	M-001	Stone spall	cum	536.03	150.00	686.03
M-140		Traffic cones	No.	-		-
M-141	M-189	Water	kl	60.30		60.30
M-142	M-021	Well graded Granular Base Material - Grading A 2.36 mm below	cum	114.78	150.00	264.78
M-143	M-025	Well graded Granular Base Material - Grading A 26.5 mm to 4.75 mm	cum	751.46	150.00	901.46
M-144	M-028	Well graded Granular Base Material - Grading A 53 mm to 26.5 mm	cum	950.04	150.00	1,100.04
M-145	M-021	Well graded Granular Base Material - Grading B 2.36 mm below	cum	114.78	150.00	264.78
M-146	M-025	Well graded Granular Base Material - Grading B 26.5 mm to 4.75 mm	cum	751.46	150.00	901.46
M-147	M-019	Well graded Granular Base Material - Grading C 2.36 mm below	cum	114.78	150.00	264.78
M-148	M-015	Well graded Granular Base Material - Grading C 9.5 mm to 4.75 mm	cum	445.16	150.00	595.16
M-149	M-019	Well Graded Material for Sub-Base - Grading I 2.36 mm below	cum	114.78	150.00	264.78
M-150	M-012	Well Graded Material for Sub-Base - Grading I 53 mm to 9.5 mm	cum	781.75	150.00	931.75
M-151	M-016	Well Graded Material for Sub-Base - Grading I 9.5 mm to 2.36 mm	cum	279.97	150.00	429.97
M-152	M-019	Well Graded Material for Sub-Base - Grading II 2.36 mm below	cum	114.78	150.00	264.78
M-153	M-026	Well Graded Material for Sub-Base - Grading II 26.5 mm to 9.5 mm	cum	751.46	150.00	901.46
M-154	M-016	Well Graded Material for Sub-Base - Grading II 9.5 mm to 2.36 mm	cum	279.97	150.00	429.97
M-155	M-019	Well Graded Material for Sub-Base - Grading III 2.36 mm below	cum	114.78	150.00	264.78
M-156	M-023	Well Graded Material for Sub-Base - Grading III 4.75 mm to 2.36 mm	cum	114.78	150.00	264.78
M-157	M-024	Well Graded Material for Sub-Base - Grading III 9.5 mm to 4.75 mm	cum	445.16	150.00	595.16
M-158		Wooden sleepers (250 mm x 250 mm x 125 mm) (hire charges)	No.	5.00		5.00
RCD						-
M-118	M-118	Hot applied thermoplastic compound (Sp. Gravity - 2.10)	litre	213.34		213.34
M-152	M-153	Reflectorising glass beads	kg	80.71		80.71
M-146	M-146	Stone crushed aggregates 13.2 mm to 0.09 mm	cum			-
		Slow-curing bitumen emulsion	kg	125.53		125.53
M-146	M-161	Sapling 2 m high 25 mm dia	each	28.64		28.64
M-146	M-135	Pesticide	Kg	89.55		89.55
M-146	M-092	Delineators from ISI certified firm as per the standard drawing given in IRC - 79	each	600.00		600.00

BASIC RATES
(C) USAGE RATES OF PLANT & MACHINERY

Sr. No.	SOR Code	Description of		Output of Machine		Usage Rates in Rs.	
		Machine	Activity	Unit	Output	Unit	Rate
PM-001	PM-15001	Air Compressor 210 cfm	Supplying compressed air	cfm	250.00	per hour	440.00
PM-002	P&M-024	HMP 30-40 TPH	BM, DBM, SDBC, PM	Cum/h	17.00	per hour	31,459.00
PM-003	P&M-002	Batch mix Plant 30 cum capacity	Concrete mixing	Cum/h	20.00	per hour	3,672.00
PM-004	PM-26001	Bitumen boiler oil fired	Bitumen Spraying				
		200 litre		litre / h	400.00	per hour	552.00
		1000 litre		litre / h	2000.00	per hour	552.00
PM-005	PM-24001	Bitumen pressure distributor	Applying bitumen tack coat	sqm/h	1750.00	per hour	1,350.00
PM-006	PM-21001	Concrete mixer 0.28/0.4 cum	Mixing of ingredients	cum/h	2.50	per hour	334.00
PM-007	PM-63002	Crane upto 3.5T	Lifting of materials			per hour	831.00
PM-008	PM-1003	Dozer D 50	Dozing/cutting/ Clearing	cum/h	200.00	per hour	2,997.00
				cum/h	100.00		2,997.00
PM-009	PM-22005	Electric generator set, 125 KVA	Electricity generation	KVA	100.00	per hour	1,642.00
PM-010	PM-25001	Emulsion Sprayer with Tractor	Spraying of Emulsion			per hour	1,350.00
PM-011	P&M-017	Front end-loader 1 cum bucket capacity @ 45 cum/hour	Loading Aggregates	cum/h	45.00	per hour	1,419.00
			Loading Soil	cum/h	100.00		1,419.00
PM-012	P&M-031	Hydraulic broom with tractor	Surface cleaning	sqm/h	1250.00	per hour	794.00
PM-013	PM-3005	Hydraulic Excavator 0.9 cum	Excavation	cum/h	100.00	per hour	2,272.00
PM-014	PM-2146	Hydraulic self propelled chip spreader	Surface Dressing	sqm/h	1500.00	per hour	1,674.00
PM-015	P&M-084	Jack Hammer with tractor	Pavement breaking & rock drilling	cum/h	05. to 1	per hour	939.30
PM-016	PM-42001	Joint Cutting Machine with 2-3 blades	Cutting of Joints	h		per hour	342.00
PM-017		Mixall 6-10 t capacity	Mixing of bituminous materials	t/h	8.00	per hour	2,218.00
PM-018	P&M-032	Motor Grader	Scarifier & levelling	cum/h	200.00	per hour	2,786.00
	P&M-054	Tractor Mounted Grader			100.00		573.20
PM-019	PM-44001	Needle vibrator	Vibrating cement concrete mix	cum/h	3.50	per hour	386.00
PM-020	PM-1583	Paver finisher	Laying/spreading	t/h	75.00	per hour	2,141.00
PM-021	PM-46001	Plate compactor	Compaction	cum/h		per hour	396.00
PM-022	P&M-086	Plate vibrator	Compaction	cum/h		per hour	469.70
PM-023		Screed vibrator	Compaction	cum/h		per hour	102.65
PM-024	PM-8001	Smooth wheeled 80-100 kN tandem roller	Compaction of Sub-base/ Asphalt	cum/h	30.00	per hour	1,593.00
PM-025	PM-16001	Stone crusher (Integrated) of 250 TPH	Crushing of Spalls	t/h	250.00	per hour	13,721.00
PM-026	P&M-044	Three wheel 80-100 kN Static Roller	Compaction/ Rolling				1,593.00

Sr. No.	SOR Code	Description of		Output of Machine		Usage Rates in Rs.	
		Machine	Activity	Unit	Output	Unit	Rate
			Earth:- Embankment or sub-grade	cum/h	80/70	per hour	1,593.00
			Sub-base G-I	cum/h	10.00		1,593.00
			Sub-base G-II/G-III	cum/h	8.00		1,593.00
			WMM	cum/h	16.00		1,593.00
			BUSG	cum/h	10.00		1,593.00
			BM 50/75 mm	cum/h	12.00		1,593.00
			Premix 20 mm	sqm/h	250.00		1,593.00
			Seal Coat	sqm/h	500.00		1,593.00
			Surface Dressing 1st Coat	sqm/h	400.00		1,593.00
			Surface Dressing 2ndCoat	sqm/h	500.00		1,593.00
PM-027	PM-6004	Tipper 5.5 cum/10 t	Carriage	cum/trip	5.50	per hour	1,426.00
PM-028	P&M-053	Tractor with Disc Harrows	Pulverisation of soil	cum/h	80.00	per hour	549.10
PM-029	PM 12001&14 001	Tractor with ripper @ 60 cum per hour	Ripping Pavements, uprooting trees	cum/h	60.00	per hour	650.00
PM-030	PM-12001	Tractor with trolley/with Grading equipment	Transportation of materials	t/trip	3 to 5	per hour	676.00
PM-031	PM 12001&13 001	Tractor with Rotavator	Scarifier	cum/h	25.00	per hour	646.00
PM-032	P&M-057	Truck 10 t capacity	Carriage	cum/trip	5.50	per hour	934.30
PM-033	PM-10001	Vibratory roller 80-100 kN	Compaction of soil WMM	cum/h	100.00	per hour	2,053.00
			Compaction of BM	cum/h	60.00		2,053.00
PM-034	PM-11003	Water tanker 6 kl capacity (Truck Mounted)	Carriage of water	litre / h	12000.00	per hour	752.00
PM-035	P&M-062	Wet mix plant (Pug Mill)	Wet Mix	cum/h	25.00	per hour	1,822.30
RCD							
P&M-036	PM-40001	Road marking machine	Road marking	Sqm/h	100.00	per hour	1,411.00
P&M-037	P&M-022	Hot Mix Plant - 100 TPH	DBM/BM/SDBC/P remix	Cum/h	2.70	per hour	51,299.00
P&M-038	PM-90003	Sensor Paver Finisher	Paving of DBM/BM/SDBC/P remix	Cum/h	40.00	per hour	6,411.00
P&M-039	PM-22004	250 KVA Generator Set	Generation of Electric Energy	KVA	200.00	per hour	3,130.00
P&M-040	P&M-047	Tipper 5 Cum	Transportation of Soil, GSB, WMM, Hotmix etc.	Capacity in Cum	5.50	Tonne.Km	9.78
P&M-040	PM-9001	Tandem Road Roller	Rolling of Asfalt Surface	Cum/h	30.00	per hour	2,053.00

Analysis of Rates (FORMAT F8)

Sl. No.	SDB SL No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
32	3.40	302	Construction of Embankment with Material Obtained from Borrow Pits				
		(A)	Construction of embankment with approved material obtained from borrow pits with a lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 1000 m as per Technical Specification Clause 301.5				
			Unit = cum				
			Taking output = 100 cum				
		a)	Labour				
			Mate				
			Mazdoor (Unskilled)	day	0.04	419.00	16.76
		b)	Machinery	day	1.00	395.00	395.00
			Hydraulic Excavator 0.9 cum bucket capacity @ 60 cum per hour				
			Tipper 5.5 cum with 10 t capacity	hour	1.67	2272.00	3794.24
			Add 10 % of the cost of carriage by tipper	hour	4.50	1426.00	6417.00
		c)	Material				641.70
			Water				
			Compensation for earth taken from private land	kl	12.00	60.30	723.60
		d)	Overheads @ 12%				
		e)	Contractor's profit @ 10% on (a+b+c+d)	cum	100.00	35.25	3525.00
			Cost for 100 cum = a+b+c+d+e				2529.63
							2360.99
							25970.87
							259.71
			Rate per cum = (a+b+c+d+e)/100=				
			Total Cost	CUM			259.71

1.1	Brick bats pitching manual means				
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 =2.832 cum				
a	Labour				
	Mazdoor unskilled				
b	Overhead @12% on a	Nos	3	388	1164
	Cost for 2.832 cum(a+b)				139.68
	Rate per cum				1303.68
					460.339

1.4 RCD	Cost of haulage excluding loading and unloading				
	Haulage of materials by tractor excluding cost of loading, unloading and stacking				
	Unit tKm				
	Taking output = 3.6 tonnes load and lead 10Km = 36.0 tKm				
	(i) Surface Road				
	Speed load : 15 Km/hr				
	Speed with returning empty 25Km/ hr				
a	Machinery				
	tractor 3.6 tonnes capacity				
	time taken for onward haulage with load	hour	0.667	676	450.892
	time taken for entry return trip	hour	0.4	676	270.4
					721.292
b	Overhead @ 12% on a				86.55504
	Cost for 36 tKm =(a+b)				807.847
	Rate per t.km = (a+b)/ 36				22.4402
	(ii) Unsurfaced gravel road				
	Speed with load 12 Km/hr				
	Speed while returning empty 20 Km/hr				
a	Machinery				
	tractor 3.6 tonnes capacity				
	time taken for onward haulage with load	hour	0.833	676	563.108
	time taken for entry return trip	hour	0.5	676	338
					901.108
b	Overhead @ 12% on a				108.133
	Cost for 36 tKm =(a+b)				1009.241
	Rate per t.km = (a+b)/ 36				28.03447

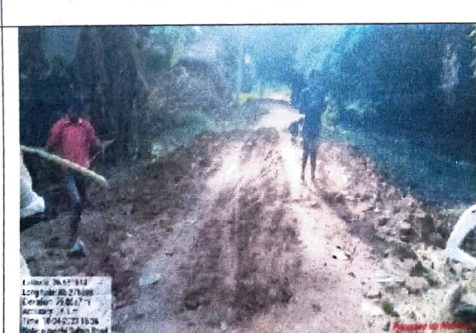
	katcha track and track in river bed				
	Speed with load :10 Km/hr				
	Speed while returning empty 15km/hr				
a	Machinery				
	tractor 3.6 tonnes capacity				
	time taken for onward haulage with load	hour	1	676	676
	time taken for entry return trip	hour	0.667	676	450.892
					1126.892
					135.227
b	Overhead @ 12% on a				1262.119
	Cost for 36 tKm =(a+b)				35.05886
	Rate per t.km = (a+b)/ 36				

RCD		Loading and unloading of stone boulder/ stone aggregate/sand/kankar/morum			
	placing tractor at loading point				
	unit = cum				
	taking output = 2.25 cum				
	time required for				
	i) positioning of tractor at loading point	1 min			
	loading by front end loader 1 cum bucket capacity @ 25 cum per hour	5 min			
	maneuring reversing dumping and turning	0 min			
	waiting time, unforeseen contingencies etc	0 min			
	total				
	Labour				
	Mate	day	0.03	417	12.51
a	Mazdoor for loading and unloding	day	0.72	388	279.36
					291.87
	Machinery				
	Tractor 3.6 tonne capacity	hour	0.1	673	67.3
b	Front end loader 1 cum bucket capacity @	hours	0.083	1419	117.777
					185.077
	Over Head @12% on (a+b) + C.P. (10%)				57.23364
	Cost for 2.25 cum= (a+b+c)				534.1806
	Rate per cum (Rs)				237.4136

$57.23364 + 47.69 = 104.92364$
 $534.1806 + 104.92364 = 639.10424$
 $639.10424 / 2.25 = 283.6019$
 $283.6019 + 211.9 = 495.5019$

Note ;		Unloading will be done mannually			
	1 Supplying for brick bat with OH				
a	basic rate of brick bat	per cum	1081	1033	
	Add overhead charges @ 12% + C.P. (10%)			123.96	
	total			1156.96	
	Total			1259.13	
	surface lead	Km	7		
	katcha track and track in river bed/ nallah	Km	1		
	Factor (3.6/2.25)	Cum	1.6		
b	Carriage with OH				
	$(1.6*7*22.44) + (1.6*1*35.03) + 237.413$			544.7896	
c	Cost of labour for pitching and light ramming as per WRD SOR 6.6.1 (with OH)			460.339	
	Total (A+B+C)			2162.089	
	BRICK BATS				
	For (7 km.p+1 km.k)= without (GST+LC+SF)			2162.089	

$2162.089 + 2285.615 = 4447.704$
 $4447.704 / 2.25 = 1976.7573$
 $1976.7573 + 2012.67 = 3989.4273$
 $3989.4273 + 2012.67 = 6002.10$
 $6002.10 + 2395 = 8397.10$

2.3		Site Photographs	
NAME OF ROAD =L037-T02 Se Piprahi Sultan			
BLOCK :- Bairganiya DISTRICT :-Sitamarhi		LENGTH OF ROAD:=0.134km DIVISION:- Belsand	
1	 Latitude: 26.511181 Longitude: 85.275066 Elevation: 71.5748 m Accuracy: 1.5 m Time: 18-04-2023 15:28 Water: piprahi Sultan Road	2	 Latitude: 26.511181 Longitude: 85.275066 Elevation: 71.5748 m Accuracy: 1.5 m Time: 18-04-2023 15:28 Water: piprahi Sultan Road
3	 Latitude: 26.511181 Longitude: 85.275066 Elevation: 71.5748 m Accuracy: 1.5 m Time: 18-04-2023 15:28 Water: piprahi Sultan Road	4	 Latitude: 26.511181 Longitude: 85.275066 Elevation: 71.5748 m Accuracy: 1.5 m Time: 18-04-2023 15:28 Water: piprahi Sultan Road
5	 Latitude: 26.511181 Longitude: 85.275066 Elevation: 71.5748 m Accuracy: 1.5 m Time: 18-04-2023 15:28 Water: piprahi Sultan Road	6	 Latitude: 26.511181 Longitude: 85.275066 Elevation: 71.5748 m Accuracy: 1.5 m Time: 18-04-2023 15:28 Water: piprahi Sultan Road
7	 Latitude: 26.511181 Longitude: 85.275066 Elevation: 71.5748 m Accuracy: 1.5 m Time: 18-04-2023 15:28 Water: piprahi Sultan Road	8	 Latitude: 26.511181 Longitude: 85.275066 Elevation: 71.5748 m Accuracy: 1.5 m Time: 18-04-2023 15:28 Water: piprahi Sultan Road

Q12
12/12/23
26

Sama
14/12/23
A.E

Rashmi
14.12.2023

9	 Latitude: 26.517824 Longitude: 85.571871 Altitude: 25.71410 m Accuracy: 14.6 m Time: 18-12-2023 15:26 Photo captured: Satish Road	10	 Latitude: 26.518187 Longitude: 85.571808 Altitude: 25.71417 m Accuracy: 18.1 m Time: 18-12-2023 15:26 Photo captured: Satish Road
11	 Latitude: 26.557616 Longitude: 85.575472 Altitude: 25.95118 m Accuracy: 17.2 m Time: 18-12-2023 15:26 Photo captured: Satish Road	12	 Latitude: 26.548187 Longitude: 85.575479 Altitude: 26.2443 m Accuracy: 37.5 m Time: 18-12-2023 15:26 Photo captured: Satish Road
13	 Latitude: 26.557873 Longitude: 85.575589 Altitude: 25.9461 m Accuracy: 14.9 m Time: 18-12-2023 15:25 Photo captured: Satish Road	14	 Latitude: 26.552871 Longitude: 85.575628 Altitude: 26.2443 m Accuracy: 17.5 m Time: 18-12-2023 15:25 Photo captured: Satish Road
15	 Latitude: 26.557871 Longitude: 85.575589 Altitude: 25.9461 m Accuracy: 17.7 m Time: 18-12-2023 15:25 Photo captured: Satish Road	16	 Latitude: 26.557886 Longitude: 85.575628 Altitude: 26.2443 m Accuracy: 17.5 m Time: 18-12-2023 15:25 Photo captured: Satish Road

Q13
12/12/23
N

Sabha
14/12/23
AUC

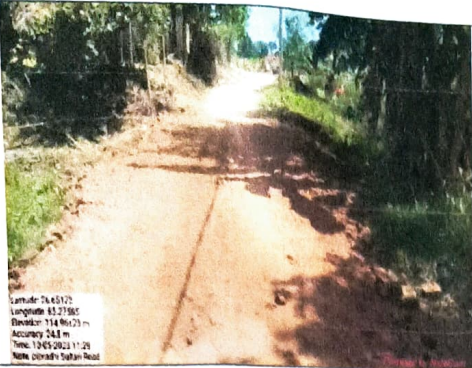
Ratna
14.12.2023

17	 Latitude: 06 44'10" N Longitude: 102 22'24" E Altitude: 83.7 m Accuracy: 15.8 m Time: 18-04-2023 15:25 Note: project Sathan Road	18	 Latitude: 06 45'29" N Longitude: 102 22'42" E Altitude: 74.1 m Accuracy: 18.4 m Time: 17-04-2023 15:12 Note: project Sathan Road
19	 Latitude: 06 45'29" N Longitude: 102 22'42" E Altitude: 74.1 m Accuracy: 18.4 m Time: 17-04-2023 15:12 Note: project Sathan Road	20	 Latitude: 06 45'29" N Longitude: 102 22'42" E Altitude: 74.1 m Accuracy: 18.4 m Time: 17-04-2023 15:12 Note: project Sathan Road
21	 Time: 18-05-2023 13:46 Note: project Sathan Road	22	 Latitude: 06 44'43" N Longitude: 102 22'42" E Altitude: 76.1 m Accuracy: 13.8 m Time: 17-04-2023 15:04 Note: project Sathan Road
23	 Time: 18-05-2023 11:27 Note: project Sathan Road	24	 Latitude: 06 45' 07" N Longitude: 102 22'17" E Altitude: 78.5 m Accuracy: 38.7 m Time: 17-04-2023 14:57 Note: project Sathan Road

12/12/23
M

14/12/23
A.F

14.12.2023

25	 Latitude: 26.61472 Longitude: 85.27985 Elevation: 114 Meters Accuracy: 24.8 m Time: 18/09/2023 11:29 Name: pinnath Sultan Road	26	 Latitude: 26.60297 Longitude: 85.27179 Elevation: 77 Meters Accuracy: 19.5 m Time: 18/09/2023 11:30 Name: pinnath Sultan Road
27	 Latitude: 26.62045 Longitude: 85.27944 Elevation: 101 Meters Accuracy: 29.0 m Time: 18/09/2023 11:30 Name: pinnath Sultan Road	28	 Latitude: 26.65244 Longitude: 85.27294 Elevation: 80 Meters Accuracy: 7.7 m Time: 18/09/2023 11:42 Name: pinnath Sultan Road
29	 Latitude: 26.68276 Longitude: 85.27286 Elevation: 87 Meters Accuracy: 19.1 m Time: 18/09/2023 11:50 Name: pinnath Sultan Road	30	 Latitude: 26.68276 Longitude: 85.27286 Elevation: 87 Meters Accuracy: 19.1 m Time: 18/09/2023 11:50 Name: pinnath Sultan Road
31	 Latitude: 26.65108 Longitude: 85.27333 Elevation: 78 Meters Accuracy: 17.8 m Time: 18/09/2023 12:02 Name: pinnath Sultan Road	32	 Latitude: 26.65108 Longitude: 85.27333 Elevation: 78 Meters Accuracy: 17.8 m Time: 18/09/2023 12:02 Name: pinnath Sultan Road


 12/12/23
 26


 14/12/23
 A/E


 16/12/2023