ग्रामीण कार्य विभाग

Rural Works Department, Govt of Bihar

ESTIMATE FOR EMERGENT REPAIR FOR RESTORATION OF TRAFFIC

Name of the Road

Ara - Sasaram PWD Road - Niuga Khelariya Upto Karakat PWD Road (At 2.20 Km)

		ROHTAS	
DISTRICT	:	~~Bikramganj~~	
DIVISION	:	Bikramganj	
BLOCK	:	Bikramganj	
PART-A TOTAL COST OF RESTORATION	:	6.571	Lac

Submitted By:
Executive Engineer
RWD WORKS DIVISION
Bikramganj

GENERAL ABSTRACT OF COST

NAME OF ROAD : Ara - Sasaram PWD Road - Niuga Khelariya Upto Karakat PWD Road (At 2.20 Km)

DISTRICT ~~Bikramganj~~ Rohtas

BLOCK Bikramganj

DIVISION Bikramganj

Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
1	EARTHWORK	1.193
2	Brick Bat Filling	4.133
3	Sand Filling With Empty Cement Bags	0.120
4	Bamboo Pilling	0.082
	Sub Total	**5.528**
	Labour Cess 1% of cost	0.055
	GST 12 % of cost	0.663
	Seigniorage Fee	0.324
	Total Cost of Restoration	**6.571**

26-10-2021
JE
RWD

26/10/21
AE
RWD

26/10/21
EE
RWD

Checked
20/11/21
EE
R.W.D.
Sasaram I

NAME OF Road:- Ara - Sasaram PWD Road - Niuga Khelariya Upto Karakat PWD Road (At 2.20 Km)

Sl. No.	SDB SL.NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)
1		303.1	**Construction of Embankment with Material Obtained from Borrow Pits**								
	3.4		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	15.00	(3.5+6)/2	2.700	192.38		
				cum	1	12.00	(4+6)/2	2.700	162.00		
				cum	1	23.00	(4.6+7.5)/2	2.700	375.71		
			For 1000 m lead @ 100 %						**730.08**	163.44	1,19,324.00
2			**Brick BAT Filling**								
			Emergent Repair by Filling Brick Bats in Flood damaged Stretch of the Road for making it Motorable ....as per S/D of E/I								
			Top	cum	1	15.00	3.500	0.300	15.75		
			Bottom	cum	1	15.00	5.000	0.600	45.00		
				cum	1	12.00	4.000	0.300	14.40		
			Top	cum	1	23.00	4.600	0.300	31.74		
			Bottom	cum	1	23.00	6.500	0.900	134.55		
			Net Qty						**241.44**	1,711.75	4,13,286.00
3			Sand Filling With Empty Cement Bags								
				Each	1	1,416.0			1,416.00		
			Net Qty						**1,416.00**	8.46	11,979.00

Sl. No.	SDB SL .NO	MORD Ref.No	Description	Unit	NOS	LENGTH	WIDTH	HEIGHT	QUANTITY	RATE	AMOUNT (in Rs.)
4			Single Bamboo palasiding / walling of whole 2nd class bamboo (jati or Bethua) 75 mm dia and closely packed and driven fitting fixing with half bamboo kamis horizantally in three rows with cane or tying with wire complete and struts 1.5 m apart longitudinaly and providing brush wood as per drawing and technical specification clause 1302.5 (Length of Bamboo 1.8. m - 2.5 m)								
			Bamboo Pilling	Each	1	166.0			166.00		
			Net Qty						**166.00**	49.19	8,166.00
										TOTAL =	**5,52,755.00**

26-10-2021
JE
RWD

26/10/21
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RWD

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EE
RWD

Name of Road :- Ara - Sasaram PWD Road - Niuga Khelariya Upto Karakat PWD Road (At 2.20 Km)

SEIGNIORAGE FEE

Material	Unit	Quantity	Basic rate	Amount	Seigniorage fee
Earth	m3	730.08	34.82	25421.39	2542.14
Brick Bats	m3	290.00	1031.00	298990.00	29899.00
				324411.39	**32441.14**

26-10-2021
JE

26/10/21
AE

26/10/21
EE

Name of Road: Ara - Sasaram PWD Road - Niuga Khelariya Upto Karakat PWD Road (At 2.20 Km)

Sl. No.	Description	Unit	Quantity	Material Analysis (Minor Mines)																		
				Earth	GSB 9.5-2.36	Local sand	Agg-63-45 G2	Screening B	Mooram	53-22.4 G3	Agg 13.2 ,mm	agg 9.5-4.75	agg 4.75 below	agg 40	agg 20	agg 10	Stone Agg	stone spalls	Coarse sand	cement	Brick Bats	Brick
1	Earth Work	m3	730.08	730.08																		
2	Brick Bat filling	m3	241.44																		290.00	0.00
				730.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	290.00	0.00

26-10-2021 J.E

26/10/21 AE

26/10/21 SDE

Analysis for Carriage by Road & Rail

Sl No	Item with Source	Unit	Source Up to	Carriage Cost & Lead in Km										Loading & Unloading Cost	Carriage Cost by Rail Head	Total
				Pucka / Surface					Katcha							
1	Brick	1000 Nos	Local	8.00/2.00	x 7.52	x 7.00 Km	= Rs 210.56		8.00/2.00	x 18.19	x 1.00 Km	= Rs 72.76		387.52		Rs. 670.84

Cost of Haulage Excluding Loading & Unloading as per SOR

Type of Road	Per Ton. Km by Tipper	Per Ton. Km by Truck
For Surface Road	8.40	7.52
Unsurface Gravel Road	10.10	9.04
Kachha Road	20.30	18.19

* Subjected to Verification of Lead

26-10-2021
JE
RWD

26/10/21
AE
RWD

26/10/21
EE
RWD

BASIC RATES

Sl. No.	Description of Labour	Unit	Rate (Rs.)
L-01	Bhisti	day	304.00
L-02	Bitumen Sprayer	day	318.00
L-03	Head Blacksmith	day	408.00
L-04	Blaster	day	502.00
L-05	Carpenter 1st Class	day	408.00
L-06	Chips spreader	day	364.00
L-07	Chiseller	day	386.00
L-08	Dresser (Skilled)	day	386.00
L-09	Driller	day	364.00
L-10	Electrician	day	386.00
L-11	Fitter	day	415.00
L-12	Mason (1st class)	day	408.00
L-13	Mason (2nd Class)	day	364.00
L-14	Mate	day	321.00
L-15	Mazdoor (Unskilled)	day	304.00
L-16	Mazdoor (Semi skilled)	day	316.00
L-17	Mazdoor (Skilled)	day	385.00
L-18	Painter (Ist class)	day	385.00
L-19	Plumber	day	385.00
L-20	Surveyor	day	368.00
L-21	White Washer	day	385.00

BASIC RATES
(B) Material

Sl. No.	SOR Code	Description	Unit	Basic Rate Exclusive of All Taxes, Royality	ADD Royality	Total Basic Rate
001	M-056	AC pipe 100 mm	m	40.63		40.63
002	M-032	Aggregate - For 37.5 mm Maximum size - 22.4 mm to 5.6 mm	cum	431.99	150	581.99
003	M-034	Aggregate - For 37.5 mm Maximum size - 45 mm to 22.5 mm	cum	382.52	150	532.52
004	M-030	Aggregate - For 37.5 mm Maximum size - Below 5.6 mm	cum	101.35	150	251.35
005	M-032	Aggregate - For 53 mm Maximum size - 22.5 mm to 5.6 mm	cum	431.99	150	581.99
006	M-038	Aggregate - For 53 mm Maximum size - 63 mm to 45 mm	cum	330.64	150	480.64
007	M-030	Aggregate - For 53 mm Maximum size - Below 5.6 mm	cum	101.35	150	251.35
008	M-040	Aggregate - Grading I (40 mm nominal Size) 10 mm - 5 mm	cum	432.8	150	582.8
009	M-046	Aggregate - Grading I (40 mm nominal Size) 25 mm – 10 mm	cum	517.2	150	667.2
010	M-049	Aggregate - Grading I (40 mm nominal Size) 37.25 mm - 25 mm	cum	382.52	150	532.52
011	M-030	Aggregate - Grading I (40 mm nominal Size) 5 mm and below	cum	101.35	150	251.35
012	M-040	Aggregate - Grading II (19 mm nominal Size) 10 mm - 5 mm	cum	432.8	150	582.8
013	M-046	Aggregate - Grading II (19 mm nominal Size) 25 mm – 10 mm	cum	517.2	150	667.2
014	M-030	Aggregate - Grading II (19 mm nominal Size) 5 mm and below	cum	101.35	150	251.35
015	M-051	Aggregate 10 mm	cum	518.8	150	668.8
016	M-053	Aggregate 20 mm	cum	454.91	150	604.91
017	M-055	Aggregate 40 mm	cum	344.15	150	494.15
018	M-007	Aggregate- Crushable type such as moorum or Gravel for Grading I	cum	76.97	83	159.97
019	M-007	Aggregate- Crushable type such as moorum or Gravel for Grading II	cum	76.97	83	159.97
020	M-007	Aggregate- Crushable type such as moorum or Gravel for Grading III	cum	76.97	83	159.97
021	M-039	Aggregate-Grading I 90 mm to 45 mm	cum	298.91	150	448.91
022	M-038	Aggregate-Grading II 63 mm to 45 mm	cum	330.64	150	480.64
023	M-036	Aggregate-Grading III 53 mm to 22.4 mm	cum	361.44	150	511.44
024	M-031	Aggregates 22.4 mm to 2.36 mm for wet mix macadam	cum	431.99	150	581.99
025	M-034	Aggregates 45 mm to 22.4 mm for wet mix macadam	cum	382.52	150	532.52
026	M-059	Aluminium sheeting (1.5 mm thick)	sqm	7738.53		7738.53
027	M-062	Aluminium Studs 100 mm x 100 mm fitted with lense reflectors	Nos.	168.52		168.52
028		Bamboo (1st Class) 85 mm - 100 mm dia, 2.0 m long	No.	15		15
029		Bamboo (1st Class) 85 mm - 100 mm dia, 2.5 m long	No.	20		20
029		Bamboo (1st Class) 85 mm - 100 mm dia, 3.0 m long	No.	20		20
030		Bamboo (1st Class) 85 mm - 100 mm dia, 4.5 m - 5.5 m long	No.	20		20
029		Bamboo (2nd Class) 75mm dia, 1.8 m - 2.5 m long	No.	20		20
030		Bamboo (2nd Class) 75mm dia, 2.1 m - 3.0 m long	kg	59.01		59.01
031	M-063	Barbed wire	cum	76.97	83	159.97
032	M-007	Binding Material (Moorum)	kg	60.03		60.03
033	M-072	Binding wire	tonne			0
034	M-078	Bitumen (Crumb Rubber Modified) at GAYA	tonne			0
035		Bitumen (Natural Rubber Modified)	tonne			0
036		Bitumen (Polymer Modified)				

Sl. No.	SOR Code	Description	Unit	Basic Rate Exclusive of All Taxes, Royality	ADD Royality	Total Basic Rate
M-037	M-074	Bitumen (S-65)(Excluding the Cost of Empty Drum @ Rs.804.56/-Per MT) at GAYA	t	48293.44		48293.44
M-038	M-075	Bitumen (S-90)(Excluding the Cost of Empty Drum @Rs.804.56/-Per MT)	t	47493.44		47493.44
M-039	M-077	Bitumen Emulsion (RS-1)(Excluding the Cost of Empty Drum @Rs.629.55/-Per MT)	t	48268.45		48268.45
M-040	M-077	Bitumen Emulsion (SS-1) (Excluding the Cost of Empty Drum @Rs.629.55/-Per MT)	t	50959.45		50959.45
M-041	M-120	Bituminous sealant (JOINT SEALANT COMPOUND)	KG	24.05		24.05
M-042	M-148	Randum Rubble Stone	kg	190.55	150	340.55
M-043		Blasting material	kg	134.16		134.16
M-044	M-182	Bond stone (400 mm x 150 mm x 150 mm)	No.	10.57		10.57
M-045	M-079	Brick 1st Class	No.	5.001	0.045	5.050
M-046		Cement (OPC - 43 Grade) (Gaya) Excluding the Cost of Empty Bag @Rs. 3.49/-Per Bag	t	5108.2		5108.2
M-047	M-090	Cement Primer / CURING COMPOUND	litre	122.56		122.56
M-048		Chlorprene Elastomer or Closed Cell Foam Sealing Element	m	24868.88		24868.88
M-049	M-163	Compensation for earth taken from private land (Including royality @ Rs. 33.00 per cum & compensation @ Rs. 1.82 per cum)	cum	1.82	33	34.82
M-050	M-084	Compressible Fibre Board	sqm	1014.12		1014.12
M-051	M-086	Copper plate (12 mm long 210 mm wide)	kg	728.1		728.1
M-052		Corbelling Stones (300 mm x 150 mm x 150 mm)	No.			0
M-053	M-087	Corrosion Resistant Structural Steel Grating	kg	44786.06		44786.06
M-054	M-089	Credit for excavated rock found suitable for use	cum	171.48		171.48
M-055		Crow bars 40 mm dia (hire charges)	hour	5		5
M-056	M-021	Crushed Sand or Grit Passing 2.36 mm and retained on 180 micron	cum	87.43	75	162.43
M-057		Crushed Slag	cum	705.46		705.46
M-058	M-026	Crushed Stone Aggregate 26.5 mm to 75 micron	cum	403.36	150	553.36
M-059	M-052	Crushed Stone chipping 13.2 mm nominal size	cum	547.55	150	697.55
M-060	M-050	Crushed Stone Chipping 6.7 mm size 100% passing 11.2 mm and retained on 2.36 mm	cum	311.52	150	461.52
M-061	M-050	Crushed Stone Chipping 6.7 mm size 100% passing 9.5 mm and retained on 2.36 mm	cum	311.52	150	461.52
M-062	M-051	Crushed Stone chipping 9.5 mm nominal size	cum	518.8	150	668.8
M-063	M-035	Crushed Stone Coarse Aggregate Passing 53 mm and retained on 2.8 mm	cum	374.27	150	524.27
M-064	M-009	Curing compound	litre	122.56		122.56
M-065		Debonding strips	m	45		45
M-066		Edge Stone (450 mm x 350 mm x 100 mm)	No.			0
M-067		Edge Stone (450 mm x 350 mm x 200 mm)	No.			0
M-068		Elastomeric bearing assembly	Nos.	24868.88		24868.88
M-069	M-094	Electric Detonator	each	5.75		5.75
M-070	M-095	Epoxy Paint	litre	690.07		690.07
M-071	M-097	Epoxy Primer	litre	12.59		12.59
M-072	M-167	Farmyard manure	cum	775.57		775.57
M-073		Fevicol adhesive	kg	125		125
M-074	M-012	Filter media	cum	362.06	150	512.06

Sr.	SOR Code	Description	Unit	Basic Rate Exclusive of All Taxes, Royality	ADD Royality	Total Basic Rate
75	M-021	Fine aggregate/Crushed sand 2.36 mm to 75 micron	cum	87.43	75	162.43
76		Galvanised angle	kg	42.1		42.1
77		Galvanised angle Section 100 mm x 100 mm of 12 mm thickness	kg	42.1		42.1
78	M-104	Gelatine 80 per cent	kg	806.85		806.85
79	M-056	GI Pipe 100 mm dia	m	300		300
80	M-056	GI Pipe 50 mm dia	m	211.02		211.02
81	M-102	GI wires	kg	96.86		96.86
82		Graded stone aggregate	cum	309.21		309.21
83	M-003	Granular material (Natural occuring, soil gravel mixture / quarry waste, kankar, laterite, dhandla	cum	205.68	150	355.68
84	M-055	Hand Broken Metal 40 mm size	cum	344.15	150	494.15
85		Indigo	kg	416		416
86		Interlocking Blocks with 60 mm thickness	sqm,			0
87		Interlocking Blocks with 80 mm thickness	sqm			0
88	M-141	Joint filler board	sqm	957.49		957.49
89	M-121	Jute netting, open weave 25 mm square opening	sqm	34.2		34.2
90	M-121	Jute rope 12 mm dia	m	43.28		43.28
91	M-031	Key Aggregates passing 22.4 mm and retained on 2.8 mm	cum	431.99	150	581.99
92	M-188	Lime	t	3615.82		3615.82
93	M-188	Lime putty	t	3615.82		3615.82
94		Local Wood Piles (1st Class) 150-200 mm dia ,6m long	No.	258		258
95		Local Wood Piles (1st Class) 100 mm x 75 mm	cum	27700		27700
96	M-002	Loose stone	cum	205.68	150	355.68
97	M-101	MS clamps	Nos.	14.8		14.8
98	M-179	MS Flat / Structural Steel	t	38649		38649
99		MS Sheet Tube (47 mm x 47 mm x 12 SWG Sheet)	kg	44.93		44.93
00		MS Sheet 1.5 mm thick	sqm	416		416
01		MS Sheet 2 mm thick	sqm	832		832
02	M-130	Nuts, Bolts and Rivets	t	61.74		61.74
03	M-131	Paint (Synthetic Enamel)	litre	226.28		226.28
04	M-180	Plasticizer	litre	156.84		156.84
05	M-138	Polythene sheet (125 micron)	sqm	14.68		14.68
06	M-138	Polythene Sheething	Nos.	14.68		14.68
07	M-002	Quarried Stone 150-200 mm size	cum	205.68	150	355.68
08	M-150	RCC Pipe NP3 (1200 mm dia)	m	3901.83		3901.83
09	M-149	RCC Pipe NP3 (1000 mm dia)	m	2758.22		2758.22
10		RCC Pipe NP3 (750 mm dia)	m			0
11		RCC Pipe NP3 (600 mm dia)	m	1582.72		1582.72
12		RCC Pipe NP3 (500 mm dia)	m			0
		RCC Pipe NP3 (300 mm dia)	m	502.61		502.61
13	M-150	RCC Pipe NP4 (1200 mm dia)	m	3901.83		3901.83

Sl. No.	SOR Code	Description	Unit	Basic Rate Exclusive of All Taxes, Royality	ADD Royality	Total Basic Rate
M-114	M-149	RCC Pipe NP4 (1000 mm dia)	m	2758.22		2758.22
M-115		RCC Pipe NP4 (750 mm dia)	m			0
M-116		RCC Pipe NP4 (600 mm dia)	m	1582.72		1582.72
M-117		RCC Pipe NP4 (300 mm dia)	m	538.14		538.14
M-118		Red-oxide Primer	litre	219.05		219.05
M-119	M-132	Road marking paint	litre	226.28		226.28
M-120	M-005	Sand (Coarse)	cum	100.8	75	175.8
M-121	M-006	Sand (Fine)	cum	66.85	75	141.85
M-122	M-162	Seeds	kg	34.47		34.47
M-123	M-175	Steel Pipe 50 mm dia	m	223.45		223.45
M-124		Steel Reinforcement (HYSD Bars) 12 mm	t	48334.75		48334.75
M-125		Steel Reinforcement (MS Round Bars) 6 mm	t	54300.00		54300
M-126		Steel Reinforcement (TMT Bars) 8 mm	t	37500.00		37500
M-127	M-001	Stone Boulder of size 150 mm and below	cum	205.68	150	355.68
M-128	M-052	Stone Chips 12 mm size	cum	547.55	150	697.55
M-129	M-043	Stone Chips 13.2 mm to 5.6 mm	cum	518.8	150	668.8
M-130	M-041	Stone Crushed Aggregate 11.2 mm to 0.09 mm	cum	247.73	150	397.73
M-131		Stone for Coarse Rubble Masonry 1st Sort	cum			0
M-132		Stone for Coarse Rubble Masonry 2nd Sort	cum			0
M-133	M-148	Stone for Random Rubble Masonry	cum	191.14	150	341.14
M-134		Stone for Stone Set Pavement (300 mm x 200 mm x 150 mm)	No.			0
M-135	M-042	Stone Screening - Type A 13.2 mm for Grading-1	cum	518.8	150	668.8
M-136	M-042	Stone Screening - Type A 13.2 mm for Grading-2	cum	518.8	150	668.8
M-137	M-041	Stone Screening - Type B 11.2 mm for Grading-2	cum	247.73	150	397.73
M-138	M-041	Stone Screening - Type B 11.2 mm for Grading-3	cum	247.73	150	397.73
M-139	M-001	Stone spall	cum	205.68	150	355.68
M-140		Traffic cones	No.			0
M-141	M-189	Water	kl	40		40
M-142	M-020	Well graded Granular Base Material - Grading A 2.36 mm below	cum	89.1	150	239.1
M-143	M-026	Well graded Granular Base Material - Grading A 26.5 mm to 4.75 mm	cum	403.36	150	553.36
M-144	M-029	Well graded Granular Base Material - Grading A 53 mm to 26.5 mm	cum	361.44	150	511.44
M-145	M-020	Well graded Granular Base Material - Grading B 2.36 mm below	cum	89.1	150	239.1
M-146	M-026	Well graded Granular Base Material - Grading B 26.5 mm to 4.75 mm	cum	403.36	150	553.36
M-147	M-020	Well graded Granular Base Material - Grading C 2.36 mm below	cum	89.1	150	239.1
M-148	M-016	Well graded Granular Base Material - Grading C 9.5 mm to 4.75 mm	cum	432.8	150	582.8
M-149	M-020	Well Graded Material for Sub-Base - Grading I 2.36 mm below	cum	89.1	150	239.1
M-150	M-013	Well Graded Material for Sub-Base - Grading I 53 mm to 9.5 mm	cum	470.62	150	620.62
M-151	M-017	Well Graded Material for Sub-Base - Grading I 9.5 mm to 2.36 mm	cum	364.58	150	514.58
M-152	M-020	Well Graded Material for Sub-Base - Grading II 2.36 mm below	cum	89.1	150	239.1
M-153	M-027	Well Graded Material for Sub-Base - Grading II 26.5 mm to 9.5 mm	cum	507.85	150	657.85

FORM F8

SOR Code	Description	Unit	Basic Rate Exclusive of All Taxes, Royality	ADD Royality	Total Basic Rate
M-017	Well Graded Material for Sub-Base - Grading II 9.5 mm to 2.36 mm	cum	364.58	150	514.58
M-020	Well Graded Material for Sub-Base - Grading III 2.36 mm below	cum	89.1	150	239.1
M-018	Well Graded Material for Sub-Base - Grading III 4.75 mm to 2.36 mm	cum	154.29	150	304.29
M-016	Well Graded Material for Sub-Base - Grading III 9.5 mm to 4.75 mm	cum	485.73	150	635.73
	Wooden sleepers (250 mm x 250 mm x 125 mm) (hire charges)	No.	5		5
M-202	Waste Plastic	T	15000		15000
M-118	Hot applied thermoplastic compound (Sp. Gravity - 2.10)	litre	188.53		188.53
M-152	Reflectorising glass beads	kg	64.78		64.78
	Cold Mix Bituminous Binder (Market Rate)	t	43856.75		
	Water based Cement Paint	litre	109.33		
M-146	Stone crushed aggregates 13.2 mm to 0.09 mm	cum	373.37	150	523.37
	Slow-curing bitumen emulsion	kg	37.88		37.88
M-146	Sapling 2 m high 25 mm dia	each	22.99		22.99
M-146	Pesticide	Kg	78.17		78.17
M-091	Delineators from ISI certified firm as per the standard drawing given in IRC - 79	each	790.92		790.92
	Brick Bats	cum	987		1031
	Sand Bag	no	5.54		5.54

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	P&M-001	Air Compressor 210 cfm	Supplying compressed air	cfm	210.00	per hour	483.70
PM-002	P&M-024	HMP 30-40 TPH / 40-60 TPH	BM, DBM, SDBC, PM	Cum/h	17.00	per hour	23,729.00
PM-003	P&M-002	Batch mix Plant 30 cum capacity	Concrete mixing	Cum/h	20.00	per hour	2,981.00
PM-004	P&M-005	Bitumen boiler oil fired					
		200 litre	Bitumen Spraying	litre / h	400.00	per hour	299.70
		1000 litre		litre / h	2000.00	per hour	299.70
PM-005	P&M-004	Bitumen pressure distributor	Applying bitumen tack coat	sqm/h	1750.00	per hour	1,622.20
PM-006	P&M-009	Concrete mixer 0.4/0.28 cum	Mixing of ingradients	cum/h	2.50	per hour	86.30
PM-007	P&M-012	Crane upto 35T	Lifting of materials			per hour	1,289.30
PM-008	P&M-015	Dozer D 50	Dozing/cutting/ Clearing	cum/h	200.00	per hour	3,337.90
				cum/h	100.00		3,337.90
PM-009	P&M-018	Electric generator set, 125 KVA	Electricity generation	KVA	100.00	per hour	2,724.00
PM-010	P&M-016	Emulsion Sprayer with Tractor	Spraying of Emulsion			per hour	1,209.90
PM-011	P&M-017	Front end-loader 1 cum bucket capacity @ 45 cum/hour	Loading Aggregates	cum/h	45.00	per hour	1,403.00
			Loading Soil	cum/h	100.00		1,403.00
PM-012	P&M-031	Hydraulic broom with tractor	Surface cleaning	sqm/h	1250.00	per hour	572.00
PM-013	P&M-026	Hydraulic Excavator 0.9 cum	Excavation	cum/h	100.00	per hour	1,969.20
PM-014	P&M-025	Hydraulic self propelled chip spreader	Surface Dressing	sqm/h	1500.00	per hour	3,986.60
PM-015	P&M-084	Jack Hammer with tractor	Pavement breaking & rock drilling	cum/h	05. to 1	per hour	886.00
PM-016	P&M-083	Joint Cutting Machine with 2-3 blades	Cutting of Joints	h		per hour	352.00
PM-017		Mixall 6-10 t capacity	Mixing of bituminous materials	t/h	8.00	per hour	1,547.50
PM-018	P&M-032	Motor Grader	Scarifier & levelling	cum/h	200.00	per hour	2,786.00
	P&M-054	Tractor Mounted Grader			50.00		573.20
PM-019		Needle vibrator	Vibrating cement concrete mix	cum/h	3.50	per hour	76.35
PM-020	P&M-035	Paver finisher	Laying/spreading	t/h	75.00	per hour	1,417.00
PM-021	P&M-086	Plate compactor	Compaction	cum/h		per hour	469.70
PM-022	P&M-086	Plate vibrator	Compaction	cum/h		per hour	469.70
PM-023		Screed vibrator	Compaction	cum/h		per hour	102.64
PM-024	P&M-044	Smooth wheeled 80-100 kN tandem roller	Compaction of Sub-base/ Asphalt	cum/h	30.00	per hour	803.00
PM-025	P&M-028	Stone crusher (Integrated) of 200 TPH	Crushing of Spalls	t/h	200.00	per hour	27,425.00

Sr. No.	SOR Code	Description of		Output of Machine		Usage Rates in Rs.	
		Machine	Activity	Unit	Output	Unit	Rate
PM-026	P&M-044	Three wheel 80-100 kN Static Roller	Compaction/ Rolling			per hour	803.00
			Earth:- Embankment or sub-grade	cum/h	80/70		803.00
			Sub-base G-I	cum/h	10.00		803.00
			Sub-base G-II/G-III	cum/h	8.00		803.00
			WMM	cum/h	16.00		803.00
			BUSG	cum/h	10.00		803.00
			BM 50/75 mm	cum/h	12.00		803.00
			Premix 20 mm	sqm/h	250.00		803.00
			Seal Coat	sqm/h	500.00		803.00
			Surface Dressing 1st Coat	sqm/h	400.00		803.00
			Surface Dressing 2ndCoat	sqm/h	500.00		803.00
PM-027	P&M-048	Tipper 5.5 cum/10 t	Carriage	cum/trip	5.50	per hour	1,043.00
PM-028	P&M-053	Tractor with Disc Harrows	Pulverisation of soil	cum/h	80.00	per hour	542.00
PM-029	P&M-055	Tractor with ripper @ 60 cum per hour	Ripping Pavements, uprooting trees	cum/h	60.00	per hour	591.40
PM-030	P&M-053	Tractor with trolley/with Grading equipment	Transportation of materials	t/trip	3 to 5	per hour	549.10
PM-031	P&M-054	Tractor with Rotavator	Scarifier	cum/h	25.00	per hour	573.20
PM-032	P&M-057	Truck 10 t capacity	Carriage	cum/trip	5.50	per hour	934.30
PM-033	P&M-059	Vibratory roller 80-100 kN	Compaction of soil	cum/h	100.00	per hour	2,029.00
			Compaction of WMM/BM	cum/h	60.00		2,029.00
PM-034	P&M-060	Water tanker 6 kl capacity (Truck Mounted)	Carriage of water	litre / h	12000.00	per hour	184.00
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	P&M-043	Road marking machine	Road marking	Sqm/h	100.00	per hour	141.80
P&M-037	P&M-022	Hot Mix Plant - 100 TPH	DBM/BM/SDBC/P remix	Cum/h	30.00	per hour	40,270.00
P&M-038	P&M-034	Sensor Paver Finisher	Paving of DBM/BM/SDBC/P remix	Cum/h	40.00	per hour	3,566.00
P&M-039	P&M-081	250 KVA Generator Set	Generation of Electric Energy	KVA	200.00	per hour	3,795.00
P&M-040	P&M-047	Tipper 5 Cum	Transportation of Soil, GSB, WMM, Hotmix etc.	Capacity in Cum	5.50	Tonne.Km	9.07
P&M-040	P&M-045	Tandem Road Roller	Rolling of Aspalt Surface	Cum/h	30.00	per hour	1,731.80

Analysis of Rates (FORMAT F8)

SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
		Haulage BY TIPPER				
1.10	(i)	**Haulage excluding Loading & Unloading**				
		Haulage of materials by tipper excluding cost of loading, unloading and stacking.				
		Unit = t.km				
		Taking output 10 t load and lead 10 km = 100 t.km				
		Case-I : Surfaced Road				
		Speed with load: 25 km per hour				
		Speed while returning empty: 35 km per hour				
	a)	**Machinery**				
		Tipper 10 t capacity				
		Haulage with load	hour	0.40	1043.00	417.20
		Empty return trip	hour	0.29	1043.00	302.47
		Cost for 100 t-km = a+b+c				719.67
		Rate per cum = (a+b+c) /100				7.20
		Rate Per Km.	**Cum**			7.20
1.10	(ii)	**Haulage excluding Loading & Unloading**				
		Haulage of materials by tipper excluding cost of loading, unloading and stacking.				
		Unit = t.km				
		Taking output 10 t load and lead 10 km = 100 t.km				
		Case-II: Unsurfaced Gravel Road.				
		Speed with load: 20 km/hour				
		Speed for empty return trip: 30 km/hour				
	a)	**Machinery**				
		Tipper 10 t capacity				
		Haulage with load	hour	0.50	1043.00	521.50
		Empty return trip	hour	0.33	1043.00	344.19
		Cost for 100 t-km = a+b+c				865.69
		Rate per cum = (a+b+c) /100				8.66
		Rate Per Km.	**Cum**			8.70
1.10	(iii)	**Haulage excluding Loading & Unloading**				
		Haulage of materials by tipper excluding cost of loading, unloading and stacking.				
		Unit = t.km				
		Taking output 10 t load and lead 10 km = 100 t.km				
		Case-III : Katcha Track and Track in River Bed/Nallah Bed and Choe Bed.				
		Speed with load: 10 km per hour				
		Speed while returning empty: 15 km per hour				
	a)	**Machinery**				
		Tipper 10 t capacity				
		Haulage with load	hour	1.00	1043.00	1043.00
		Empty return trip	hour	0.67	1043.00	698.81
		Cost for 100 t-km = a+b+c				1741.81
		Rate per cum = (a+b+c) /100				17.42
		Rate Per Km.	**Cum**			17.40

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount
			Haulage BY TRUCK				
4	1.10	(i)	**Haulage excluding Loading & Unloading**				
			Haulage of materials by tipper excluding cost of loading, unloading and stacking.				
			Unit = t.km				
			Taking output 10 t load and lead 10 km = 100 t.km				
			Case-I : Surfaced Road				
			Speed with load: 25 km per hour				
			Speed while returning empty: 35 km per hour				
		a)	**Machinery**				
			Truck 10 t capacity				
			Haulage with load	hour	0.40	934.30	
			Empty return trip	hour	0.29	934.30	
			Cost for 100 t-km = a+b+c				
			Rate per cum = (a+b+c) /100				
			Rate Per Km.	**Cum**			
5	1.10	(ii)	**Haulage excluding Loading & Unloading**				
			Haulage of materials by tipper excluding cost of loading, unloading and stacking.				
			Unit = t.km				
			Taking output 10 t load and lead 10 km = 100 t.km				
			Case-II: Unsurfaced Gravel Road.				
			Speed with load: 20 km/hour				
			Speed for empty return trip: 30 km/hour				
		a)	**Machinery**				
			Truck 10 t capacity				
			Haulage with load	hour	0.50	934.30	
			Empty return trip	hour	0.33	934.30	
			Cost for 100 t-km = a+b+c				
			Rate per cum = (a+b+c) /100				
			Rate Per Km.	**Cum**			
6	1.10	(iii)	**Haulage excluding Loading & Unloading**				
			Haulage of materials by tipper excluding cost of loading, unloading and stacking.				
			Unit = t.km				
			Taking output 10 t load and lead 10 km = 100 t.km				
			Case-III : Katcha Track and Track in River Bed/Nallah Bed and Choe Bed.				
			Speed with load: 10 km per hour				
			Speed while returning empty: 15 km per hour				
		a)	**Machinery**				
			Truck 10 t capacity				
			Haulage with load	hour	1.00	934.30	
			Empty return trip	hour	0.67	934.30	
			Cost for 100 t-km = a+b+c				
			Rate per cum = (a+b+c) /100				
			Rate Per Km.	**Cum**			

Analysis of Rates (FORMAT F8)

SDB Sl. No.	MORD Ref No. RCD	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
1.10		Loading and Unloading of Stone Boulder/Stone aggregates/Sand/Kanker/Moorum.				
		Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and				
		Unit = cum				
		Taking output = 5.5 cum				
		Time required for				
		i) Positioning of tipper at loading point		1 Min		
		ii) Loading by front end loader 1 cum bucket capacity @ 25 cum per hour		13 Min		
		iii) Maneuvering, reversing, dumping and turning for return		2 Min		
		iv) Waiting time, unforeseen contingencies etc		4 Min		
		Total		**20 Min**		
		a) Machinery				
		Tipper 5.5 tonnes capacity	hour	0.33	1043.00	344.19
		Front end-loader 1 cum bucket capacity @ 25 cum/hour	hour	0.33	1403.00	462.99
		Cost for 5.5 cum = a+b+c				807.18
		Rate per cum = (a+b+c)/ 5.5				146.76
		Unloading will be by tipping.			*say*	***146.80***
1.1	**(i)**	Loading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by manual means including a lead upto 30 m				
		Unit = cum				
		Taking output = 5.5 cum				
	a)	**Labour**				
		Mate	day	0.02	321.00	6.42
		Mazdoor (Unskilled)	day	0.50	304.00	152.00
	b)	**Machinery**				
		Truck	hour	0.50	934.30	467.15
		Cost for 5.5 cum = a+b+c+d				625.57
		Rate per cum = (a+b+c+d) /5.5				**113.74**
		Total Cost	**Cum**			**113.74**
	(ii)	Loading of Earth, Sand, Moorum, Manure, Flyash by manual means including a lead upto 30 m.				
		Unit = cum				
		Taking output = 5.5 cum				
	a)	**Labour**				
		Mate	day	0.01	321.00	3.21
		Mazdoor (Unskilled)	day	0.25	304.00	76.00
	b)	**Machinery**				
		Truck	hour	0.25	934.30	233.58
		Cost for 5.5 cum = a+b+c+d				312.79
		Rate per cum = (a+b+c+d) /5.5				**56.87**
		Total Cost	**Cum**			**56.87**

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs.
12		(iii)	Unloading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by mechanical means including a lead upto 30 m				
			Unit = cum				
			Taking output = 5.5 cum				
		a)	**Labour**	day	0.01	321.00	
			Mate	day	0.25	304.00	3.2
			Mazdoor (Unskilled)				76.0
		b)	**Machinery**	hour	0.25	934.30	
			Truck				233.5
			Cost for 5.5 cum = a+b+c+d				312.7
			Rate per cum = (a+b+c+d) /5.5				56.8
			Total Cost	**Cum**			56.8
			Total Loding & Unloading of Stone Aggregate	***Cum***	***= 113.74 + 56.87 =***		170.6
13		(iv)	Unloading of Earth, Sand, Moorum, Manure, Flyash by manual means including a lead upto 30 m.				
			Unit = cum				
			Taking output = 5.5 cum				
		a)	**Labour**				
			Mate	day	0.01	321.00	1.6
			Mazdoor (Unskilled)	day	0.13	304.00	38.0
		b)	**Machinery**				
			Truck	hour	0.17	934.30	155.9
			Cost for 5.5 cum = a+b+c+d				194.1
			Rate per cum = (a+b+c+d) /5.5				35.4
			Total Cost	**Cum**			35.4
			Total Loding & Unloading of Sand / Moorum	***Cum***	***= 56.87 + 35.4 =***		92.2
		(II) B	Loading of Earth, Sand, Moorum, Manure, Flyash by mechanical means including a lead upto 30 m.				
			Unit = cum (Taking output = 5.5 cum)				
			Placing tipper at loading point, loading with front end loader excluding time for haulage and return trip.				
			Unit = cum				
			Taking output = 5.5 cum				
			Time required for				
			Positioning of tipper at loading point	Min	1.00		
			Loading by front end loader 1 cum bucket capacity @ 45 cum per hour	Min	3.30		
			Waiting time, unforeseen contingencies, etc.	Min	2.00		
			Total		6.30		
			Machinery				
			Tipper 10 t capacity	hour	0.105	1,043.00	109.5
			Front end-loader 1 cum bucket capacity @ 45 cum per hour	hour	0.055	1,403.00	77.1
			Cost for 5.5 cum = a+b				186.6
			Rate per cum = (a+b) /5.5				33.9

Analysis of Rates (FORMAT F8)

SDB Sl. No.	MORD Ref No. (IV) B	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
		Unloading of Earth, Sand, Moorum, Manure, Flyash by mechanical means including a lead upto 30 m. Unit = cum (Taking output = 5.5 cum)				
		Placing tipper at loading point, loading with front end loader excluding time for haulage and return trip.				
		Unit = cum				
		Taking output = 5.5 cum				
		Time required for				
		Positioning of tipper at loading point	Min	1.00		
		Loading by front end loader 1 cum bucket capacity @ 45 cum per hour	Min	2.00		
		Waiting time, unforeseen contingencies, etc.	Min	2.00		
		Total		5.00		
		Machinery				
		Tipper 10 t capacity	hour	0.080	1,043.00	83.44
		Cost for 5.5 cum = a+b				83.44
		Rate per cum = (a+b) /5.5				***15.17***
1.2		**Loading and Unloading Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by Mechanical Means**				
	(i)	Loading of Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by mechanical means including a lead upto 30 m				
		Placing tipper at loading point, loading with front end loader excluding time for haulage and return trip.				
		Unit = cum				
		Taking output = 5.5 cum				
		Time required for				
		Positioning of tipper at loading point	Min	1.00		
		Loading by front end loader 1 cum bucket capacity @ 45 cum per	Min	7.33		
		Waiting time, unforeseen contingencies, etc.	Min	2.00		
		Total		10.33		
	a)	**Machinery**				
		Tipper 10 t capacity	hour	0.172	1,043.00	179.40
		Front end-loader 1 cum bucket capacity @ 45 cum per hour	hour	0.122	1,403.00	171.17
		Cost for 5.5 cum = a+b				350.56
		Rate per cum = (a+b) /5.5				***63.74***
	iii	Unloading of Earth, Sand, Lime, Moorum, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Manure, Crushed Slag, Flyash, Stone for Masonry Work by mechanical means.				
		Unit = cum				
		Taking output = 5.5 cum				
		Placing tipper at unloading point excluding time for haulage and				
		Time required for				
		Positioning of tipper at unloading point	min	1.00		
		Manoeuvering, reversing, dumping and turning for return	min	2.00		
		Waiting time, unforeseen contingencies, etc.	min	2.00		
		Total	min	5.00		
	a)	**Machinery**				
		Tipper 10 t capacity	***Hour***	***0.08***	***1,043***	83.44
		Cost for 5.5 cum = a+b+c				83.44
		Rate per cum = (a+b+c)/5.5				***15.17***

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs.
14	1.3		**Loading, Unloading and Stacking of Bricks by Manual Means**				
		(i)	Loading of Bricks by manual means including a lead upto 30 m				
			Unit = 1000 Nos.				
			Taking output = 2000 Nos.				
		a)	**Labour**				
			Mate	day	0.01	321.00	3.2
			Mazdoor (Unskilled)	day	0.25	304.00	76.0
		b)	**Machinery**				
			Truck	hour	0.33	934.30	308.3
			Cost for 2000 Nos. = a+b+c+d				387.5
			Rate for 1000 bricks = (a+b+c+d)/2				193.7
			Total Cost	**no.**			193.7
15		(ii)	Unloading and Stacking of Bricks by manual means including a lead upto 30 m				
			Unit = 1000 Nos.				
			Taking output = 2000 Nos.				
		a)	**Labour**				
			Mate	day	0.01	321.00	3.2
			Mazdoor (Unskilled)	day	0.25	304.00	76.0
		b)	**Machinery**				
			Truck	hour	0.33	934.30	308.3
			Cost for 2000 Nos. = a+b+c+d				387.5
			Rate for 1000 bricks = (a+b+c+d)/2				193.7
			Total Cost	**no.**			193.7
			Total Loding & Unloading of Brick Per 1000			***= 193.76 + 193.76 =***	***387.5***
22	1.9		**Loading and Unloading of Hume Pipes**				
		(i)	Loading of RCC Hume pipes by mechanical means including a lead upto 30 m				
		A.	**1000 / 1200 mm dia Hume pipe**				
			Unit = per pipe				
			Taking output = 9 pipes				
		a)	**Labour**				
			Mate	day	0.02	321.00	6.4
			Mazdoor (Unskilled)	day	0.50	304.00	152.0
		b)	**Machinery**				
			Truck	hour	0.33	934.30	308.3
			Crane	hour	0.33	1289.30	425.4
			Cost for 9 pipes = a+b+c+d				892.7
			Rate per pipe = (a+b+c+d)/9				99.1
			Total Cost	**per p**			99.1
23		C.	**600/450 mm dia Hume pipe**				
			Unit = per pipe				
			Taking output = 21 pipe				
		a)	**Labour**				
			Mate	day	0.02	321.00	6.4
			Mazdoor (Unskilled)	day	0.50	304.00	152.0
		b)	**Machinery**				
			Truck	hour	0.33	934.30	308.3
			Crane	hour	0.33	1289.30	425.4
			Cost for 21 pipes = a+b+c+d				892.7
			Rate per pipe = (a+b+c+d)/21				42.4
			Total Cost	**per p**			42.4

Analysis of Rates (FORMAT F8)

SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount in Rs
	(ii)	Unloading of RCC Hume pipe by mechanical means including a lead upto 30 m				
	A.	**1000/1200 mm dia RCC Hume pipes**				
		Unit = per pipe				
		Taking output = 9 pipes				
	a)	**Labour**				
		Mate	day	0.02	321.00	6.42
		Mazdoor (Unskilled)	day	0.50	304.00	152.00
	b)	**Machinery**				
		Truck	hour	0.20	934.30	186.86
		Crane	hour	0.20	1289.30	257.86
		Cost for 9 pipes = a+b+c+d				603.14
		Rate per pipe = (a+b+c+d)/9				**67.02**
		Total Cost	**per p**			**67.02**
		Total Loding & Unloading of RCC Hume Pipe	***per Pipe***	***= 99.13 + 67.02 =***		***166.15***
		Total Loding & Unloading of RCC Hume Pipe	***m***	***= 166.15 / 2.50 =***		***66.46***
	C.	**600/450 mm dia Hume pipe**				
		Unit = per pipe				
		Taking output = 21 pipes				
	a)	**Labour**				
		Mate	day	0.02	321.00	6.42
		Mazdoor (Unskilled)	day	0.50	304.00	152.00
	b)	**Machinery**				
		Truck	hour	0.20	934.30	186.86
		Crane	hour	0.20	1289.30	257.86
		Cost for 21 pipes = a+b+c+d				603.14
		Rate per pipe = (a+b+c+d)/21				**28.72**
		Total Cost	**per p**			**28.72**
		Total Loding & Unloading of RCC Hume Pipe	***per Pipe***	***= 42.49 + 28.72 =***		***71.21***
		Total Loding & Unloading of RCC Hume Pipe	***m***	***= 71.21 / 2.50 =***		***28.48***
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	day	0.04	321.00	12.84
		Mazdoor (Unskilled)	day	1.00	304.00	304.00
	b)	Machinery				
		Hydraulic Excavator 0.9 cum bucket capacity @ 60 cum per hour	hour	1.67	1969.20	3288.56
		Tipper 5.5 cum with 10 t capacity	hour	4.50	1043.00	4693.50
		Add 10 % of the cost of carriage by tipper				469.35
	c)	Material				
		Water	kl	12.00	40.00	480.00
		Compensation for earth taken from private land	cum	100.00	34.82	3482.00
		Cost for 100 cum = a+b+c+d+e				16344.15
		Rate per cum = (a+b+c+d+e)/100=				163.44
		Total Cost	**CUM**			***163.44***

Analysis of Rates (FORMAT F8)

Sl. No.	SDB Sl. No.	MORD Ref No.	DESCRIPTION	Unit	Quantity	Rate	Amount R
64			Emergent Repair by Filling Brick Bats in Flood damaged Stretch of the Road for making it Motorable ....as per S/D of E/I				
			Unit - cum				
			Taking output - 2.832 cum				
		a)	Labour				
			Mazdoor(Unskilled)		2.17	304.00	659.6
		b)	Material				
			Brick Bats = 1.20 x 2.832 cum		3.40	1031	3503.7
							4163.4
			Cost for 2.832 cum				1470.1
		c)	Carriage				
			Brick Bats = 850/2.832 no for 1.2 cum	Th	0.36	670.84	241.6
			Rate / cum				1711.7
65	14.40		Single Bamboo palasiding / walling of whole 2nd class bamboo (jati or Bethua) 75 mm dia and closely packed and driven fitting fixing with half bamboo kamis horizantally in three rows with cane or tying with wire complete and struts 1.5 m apart longitudinaly and providing brush wood as per drawing and technical specification clause 1302.5				
			(B) Driven at least 900 mm below ground and 900 mm above ground on average				
			Unit - Each				
			Taking output - 14 Nos				
		a)	**Materials**				
			2 nd class Bamboo 65 mm to 75 mm dia.(1.8 m-2.5m) long	nos	14.00	43.31	606.3
		b)	**Labour**				
			Mate	day	0.02	321.00	6.4
			Majdoor (un skilled)	day	0.25	304.00	76.0
			No Horizontal Bamboo Used				688.7
			1 no Bamboo				49.1

26-10-2021
J.E