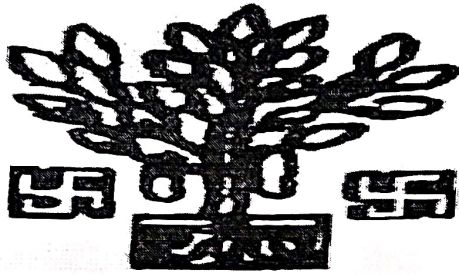


RURAL WORKS DEPARTMENT GOVT OF BIHAR



NAME OF WORKS :- Prasadpur Fulpur PMGSY to Jogindra river

BLOCK :- Jokihat

FDR

Phase-I

13,17,597

YEAR(2024-25)

R.W.D., WORKS CIRCLE, KISHANGANJ

R.W.D., WORKS DIVISION, ARARIA

प्रतिवेदन

पथ का नाम :-

Prasadpur Fulpur PMGSY to Jogindra river

कार्य का नाम :-

Prasadpur Fulpur PMGSY to Jogindra river

में बाढ़ से क्षतिग्रस्त भाग में यातायात चालू करने का कार्य।

संलग्न प्राक्कलन 2024 को प्रखण्ड में आयी भीषण बाढ़ से क्षतिग्रस्त पथ

..... में बाढ़ क्षतिग्रस्त मरम्मति मद से यातायात चालू करने हेतु तैयार किया गया है जिसकी प्राक्कलित लागत 13,17,597 (Thirteen lakhs Seventeen thousand five hundred Ninety-seven) है। उक्त पथ का निर्माण M.M.C.Y./N.D.B. योनान्तर्गत हुआ है एवं योजना अनुरक्षण अवधि में है।

पथ के कटे (क्षतिग्रस्त) भाग में आवश्यकता अनुसार Hume Pipe, Bamboo, लोकल बालू एवं Brick Bats देने के बाद यातायात चालू कराया गया है। पथ के विभिन्न हिस्से में कराये गये कार्य का विवरणी स्पष्ट रूप से प्राक्कलन में दर्शाया गया है। प्राक्कलन मदों का दर वर्तमान अनुसूचित दर के अनुरूप है।

कनीय अभियंता,
ग्रामीण कार्य विभाग,
कार्य प्रशाखा, 6/11/24

सहायक अभियंता,
ग्रामीण कार्य विभाग,
कार्य अवर प्रमण्डल, 6/11/24

कार्यपालक अभियंता,
ग्रामीण कार्य विभाग,
कार्य प्रमण्डल, 6/11/24

SUMMARY OF COST ESTIMATE FOR THE PROJECT

NAME OF ROAD :-	Prasaddpur Fulpur PMGSY to Jogindra river	
DISTRICT :-	ARARIA	
BLOCK :-	Jokihat	
Length of Road:-	0.00KM	
Length of Cutting in mtr :-	18.000	
Sl. No.	DESCRIPTION	AMOUNT (LAKHS)
1	Filling of local sand	641715.31
2	Labour for cutting 62mm to 75mm dia bamboo	44832.53
3	Labour for fitting 62mm to 75mm dia bamboo	6471.00
4	Labour for filling empty cement bags with local sand Nylon crate	0.00
5	Supplying of EC bag, of local sand	407924.00
6	Supply and Carriage of brick bats	146260.69
7	Supply, laying and carriage of 1000 mm HPC	55393.88
8	Drone videography three times	15000.00
	SUB TOTAL COST =	1317597.40
	TOTAL (RS.) =	13,17,597

J.E *[Signature]*
6/11/24

A.E *[Signature]*
6/11/24

E.E *[Signature]*
6/11/24

S.E

Technically ^{approved} ~~Sanctioned~~ for ₹ 13,17,597 = 00
(Rupees Thirteen Lakhs Seventeen thousand
five hundred Ninety-seven) only

[Signature]
Superntending Engineer
RWD Work Circle
Kishanganj

Bill of Quantity

NAME OF ROAD :-					
Prasadpur Fulpur PMGSY to Jogindra river					
DISTRICT :-					
ARARIA					
BLOCK :-					
Jokihat					
Sl. No.	DESCRIPTION OF ITEMS	QUANTITY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	Filling of local sand obtained from river bed, watering & ramming, all complete job as per specification & direction of Engineer-in-charge	504.18	CUM	1272.78	641715.31
2	Construction of embankment with approved materials obtained from excavation for road way in soil using manual means for carrying of cut earth to embankment site 1.5 mt and lead upto 50 m, graded and compacted to meet requirement of table 300.1, 300.2 with lift up to	0.00	CUM	549.74	0.00
3	Labour for cutting 62 mm to 75mm dia bamboo piles to size and making shoes & driving by jet machine etc. all complete job as per specification & direction of Engineer-in-charge.	648.00	MTR	69.19	44832.53
4	Labour for fitting & fixing 62 mm to 75 mm dia bamboo runners in position at every vertical pile with 150 mm long nails or 38 swg G.I wire including cost of G.I wire or nails etc all complete job as per specification & direction of Engineer-in-charge.	180.00	MTR	35.95	6471.00
5	Labour for fitting empty cement bags with local sand, stitching the bags and placing in Nylon crate of size (1 m X 1 m X 1 m) with lead of 150 M including supply of sutli etc. at site in dry portion all complete as per approved design, specification and direction of E/I	0.00	Each	1151.80	0.00
6	Supplying of EC bag, filling of local sand stitching and placing in position as the direction of Engineer-in-charge.	7300.00	Each	55.88	407924.00

7	Supply and Carriage of brick bats upto 8 km breach and placing in breaches and lying of bats, all complete job.	53.01	CUM	2759.12	146260.69
8	Supplaying and carriage of hume pipe 1000 mm dia , all complete job.	7.50	RM	7385.85	55393.88
		A) SUB TOTAL =			1302597.40
		TOTAL COST =			1302597

Abbas Naseem
6/11/24
J.E

Abbas Naseem
6/11/24
A.E

Abbas Naseem
6/11/24
E.E

ESTIMATE FOR REPAIRING / RESTORATION/ MAKING MOTORABLE ROADS DAMAGED DURING FLOOD

[illegible]

3	Labour for fitting & fixing 62 mm to 75 mm dia bamboo runners in position at every vertical pile with 150 mm long nails or 38 swg G.I wire including cost of G.I wire or nails etc all complete job as per specification & direction of Engineer-in-charge.									
	At ch:-0.700 km	2	18.00	2.5/0.5		180.00				
	Mtr.	total qty :-				180.00	35.95			8471.00
4	Supplying of EC bag, filling of local sand stitching and placing in position as the direction of Engineer-in-charge.									
	At ch:-0.700 km	cum	2	18.00	(1.25+1.5+1.5)/3	(4.5+5.85+4.25)/3	248.20			
	Total No of E C Bags(0.034cum=100Bags)			248.20	/	0.034	7300.00			
	Each	Say No of Bage :-				7300.00	55.88			407924.000
5	Providing laying & filling Geo bags of size 1m X 0.700m (Type A) 300 GSM nonwoven weight 420 gm volume of filled bag 0.070 cum Weight of filled Geo bag 126 kg with local sand including stitching in four lines by approved Nylon thread with Staching machine and generator, stacking and placing after loading, Unloading and carriage with the help of Trolley within 150 mtr. lead and all complete as per specification and direction of E/I.									
	At ch:-23500 m	cum	0	18.00	4.50	2.73	0.00			
	(0.07m3=1 no. of Geo Bags)		0.00	/		0.07	0.00			
	Each					0.00	332.74			0.000

6	Supply and Carriage of brick bats upto 8 km breach and placing in breaches and lying of bats, all complete job.							
	At ch:-0.700 km	cum	1	18.00	(5.75+5.85+5.5)/3	(0.45+0.65+0.45)/3	53.01	
		cum	total qty :-				53.01	146260.69
7	Supplaying and carriage of hume pipe 1000 mm dia , all complete job.							
	At ch:-50 m	RM	1	3	2.5		7.50	
		RM	total qty :-				7.50	55393.88
							A) SUB TOTAL =	1302597.40
							TOTAL COST =	1302597.40

[Signature]
Junior Engineer

[Signature]
Asstt. Engineer

[Signature]
Executive Engineer

S.E
KISHANGANJ

FINAL RATE UNDER WORKS CIRCLE KISHANGANJ

S.No	Discription of Item	Unit	Final Rate (Excluding GST, Seigniorage & L.Cess)	Final Rate (Including GST, Seigniorage & L.Cess)	S.F. Per Cum / Per Bag BAG
1	EARTH WORK	CUM	459.003	549.740	3.530
2	BRICK BAT	CUM	2209.576	2759.115	129.720
3	G.S.B	CUM	4328.501	5172.300	21.380
4	SAND BAG (Cement Bag)	Each	46.550	55.880	0.490
5	BAMBOO PILE	Per Mtr.	58.140	69.186	
6	BAMBOO CHACHRI	Per Mtr.	302.258	359.690	
7	BAMBOO RUNNER	Per Mtr.	30.210	35.950	
8	HUME PIPE (1000 mm Div)	Per Mtr.	6206.598	7385.850	
9	HUME PIPE (600 mm Div)	Per Mtr.	2492.260	2965.790	
10	STEEL DRUM SHEET	Per Sqr.Mtr.	215.352	256.270	
11	GEO BAG WITH SAND	EACH	967.490	1152.320	1.010
12	EACH N.C. BAG WITH SAND (Cement Bag)	Each E.C	967.490	1151.800	0.490
13	LOCAL SAND	CUM	721.110	1272.780	0.490

Edu Nakam
6/11/24
Junior Engineer

Rajendra
Assistant Engineer

gudh
6/11/24
Executive Engineer

Superintending Engineer
Rural Works Department
Works Circle Kishanganj

BASIC RATES

(A) Labour

Sl. No.	Description of Labour	Unit	Rate (Rs.)
L-01	Bhisti	day	373
L-02	Bitumen Sprayer(semi skilled)	day	393
L-03	Blacksmith.special	day	503
L-04	Blaster, 2nd class	day	619
L-05	Carpenter 1st Class	day	503
L-06	Chips spreader, semi-skilled	day	449
L-07	Chiseller (Skilled)	day	577
L-08	Dresser (Skilled)	day	472
L-09	Driller, 2nd class	day	449
L-10	Electrician,skilled	day	476
L-11	Fitter, skilled	day	511
L-12	Mason (1st class)	day	503
L-13	Mason (2nd Class)	day	449
L-14	Mate, Semi skilled	day	397
L-15	Mazdoor (Unskilled)	day	373
L-16	Mazdoor (Semi skilled)	day	388
L-17	Mazdoor (Skilled)	day	472
L-18	Painter (1st class)	day	476
L-19	Plumber, Special	day	476
L-20	Surveyor	day	454
L-21	White Washer	day	476
L-22	Head blacksmith	day	531
L-23	Welder 1 St Class	day	584
	Carpenter Head	day	531
	Night Gurad	day	415

(Basic Rates Taken From SOR, Seventeenth Edition, Road Construction Department, Govt. of Bihar effective from 01/04/2023)

**BASIC RATES
(B) Material**

Sl. No.	Description	Unit	Basic Rate as per SOR	Add Royalty	Final Rate With Royalty
M-001	Bamboo (1st Class) 100 mm - 100 mm dia, 6.0 m -8.0 m long (per mtr.- 23.52 Rs.)	No.	188.00		188.00
M-002	Bamboo (1st Class) 100 mm - 100 mm dia, 6.0 m -8.0 m long (per mtr.- 23.52 Rs.)	No.	188.00		188.00
M-003	Bamboo (1st Class) 50 mm - 100 mm dia, 6.0 m -8.0 m long (per mtr.- 14.71 Rs.)	No.	118.00		118.00
M-004	Bamboo (1st Class) 50 mm - 100 mm dia, 6.0 m -8.0 m long (per mtr.- 14.71 Rs.)	No.	118.00		118.00
M-005	Bamboo (2nd Class) 75mm dia, 1.8 m - 6.0 m -8.0 m long (per mtr.- 22.03 Rs.)	No.	176.00		176.00
M-006	Bamboo (2nd Class) 75mm dia, 6.0 m -8.0 m long (per mtr.- 22.03 Rs.)	No.	176.00		176.00
M-007	Brick Bats	cum	1063.00	18.00	1081.00
M-008	Selected earth (Including @ Rs. 33.00 per cum & compensation @ Rs. 2.25 Per Cum	cum	2.25	33.00	35.25
M-009	Empty Cement Bag IS 11652:2000	Nos.	11.11		11.11
M-010	Steel Drum 300 mm dia 1.2 m high / empty bitumen drum	Nos.	170.13		170.13
M-011	Sand bags (Cost of sand and Empty cement bag)	Nos.	7.31	2.59	9.90
M-012	Sutli (Brown)	kg	20.59		20.59
M-013	Granular material (Natural occuring, soil gravel mixture / quarry waste, kankar, laterite, dhandla	cum	84.03	83.00	167.03
M-014	Nails	kg	108.00		108.00
M-014	RCC Pipe NP3 (1000 mm dia)	m	5787.23		5787.23
M-015	RCC Pipe NP3 (600 mm dia)	m	2310.00		2310.00
M-015	Sand (Fine) at source	cum	69.75	75.00	144.75
M-016	Empty Steel Drum 300 mm dia 1.2 m height	Nos.	170.13		170.13
M-016	Water	kl	60.30		60.30
M-017	Geo Bags	Each	124.00		124.00
M-018	G.S.B.	cum	69.75	75.00	144.75

*(Basic Rates Taken From SOR, Seventeenth Edition, Road Construction Department, Govt. of Bihar
effective from 01/04/2023.*

SUMMARY OF CARRIGE COST

Sl. No.	Item	Unit	Amount (Rs.)
1	Earth Work	Cum	274.42
2	Brick Bats	Cum	521.97
3	Bamboo	Per Mtr.	3.00
4	G.S.B.	Cum	2960.13
5	Local Sand	Cum	345.14
6	HUME PIPE (1000 mm DIA)	Per Pipe	745.93
7	HUME PIPE PIR METER	Per Mtr.	298.37
8	HUME PIPE (600 mm DIA)	Per Pipe	310.88
9	HUME PIPE (600 mm DIA)	Per Mtr.	124.35
10	Local Sand	Cum	345.10

Comparison of cartilage cost of Material via Road from different sources										
Sl No	Item	Unit	Source	Pukka / Surface			Katcha			Total
1	A	Cum	Local	3.60	20.04	0 Km	3.60	31.30	1 Km	274.42
				2.04			2.04			274.42
B	B	Cum	Local	3.60	20.04	7 Km	3.60	31.30	1 Km	521.97
				2.04			2.04			521.97
B	B	per mtr.	Local	3.60	20.04	2 Km	3.60	31.30	1 Km	1000
				126.00			126.00			1000
D	D	Cum	Local	3.60	20.04	2 Km	3.60	31.30	1 Km	115.10
				2.04			2.04			115.10
2	A	Cum	Siliguri	0.00	9.93	177 Km	0.00	23.01	0 Km	2960.10
				4.99			4.99			2960.10
3	A	Mtr.	purnea	0.00	7.27	53 Km	0.00	17.60	0 Km	745.91
				10.00			10.00			745.91
A1	B	Mtr.	purnea					Rate per mtr		290.37
										290.37
B	B	Mtr.	purnea	0.00	7.27	53 Km	0.00	17.60	0 Km	110.000
				25.00			25.00			110.000
B1	B	Mtr.	purnea					Rate per mtr		124.35
										124.35

07/11/24
Executive Engineer
R.W.D. Works

07/11/24
Asst. Engineer
R.W.D. Works Sub-Division,

07/11/24
Junior Engineer
R.W.D. Works Section

Cost of cartilage excluding Loading & Unloading as per BO - subjected to 6% addition of tax

SDS Sl. No.	MORD Ref No.	DESCRIPTION	Unit	QTY	Rate	Amount In Rs
1		Carriage Of Material (By Tractor)				
4.4		Loading and unloading of stone Boulder /stone aggregates sand/ kankar/ moorum				
		Placing tractor at loading point loading with front end loader dumping ,turning for return trip exluding time for haulage and return trip				
		Unit = cum				
		Taking output = 2.25 cum				
		Time required for				
	i)	positioning of tractor at loading point				
	ii)	Loading by front end loader 1 cum bucket capacity @ 25 cum	min	1 min		
		Total	min	5 min		
				6 min		
	a)	Labour				
		Mate				
		Mazdoor (Unskilled)	day	0.030	397.00	11.91
	b)	Machinery	day	0.720	373.00	268.56
		Tractor 3.60 Tonnes Capcaity				
		Front end loader 1 cum buckert capacity @ 25 Cum/hour	hour	0.100	676.00	67.60
		Cost for 2.25 cum = a+b+c	hour	0.083	1,419.00	117.78
		Rate per cum = (a+b+c)/2.25				
		Total per cum	cum			465.85
1.10		Haulage excluding Loading & Unloading	cum			207.044
		Haulage of materials by truck excluding cost of Loading, Unloading and stacking				207.044
		Unit = 7km				
		Taking output 3.6t load and lead 10km = 36t/km				
		Case- I : Surfaced Road				
		Speed with load : 15km per hour				
		Speed while returning empty : 25km per hour				
	a)	Machinery				
		Tractor 3.6 tonnes Capacity				
		Haulage with load				
		Empty return trip	hour	0.667	676.00	450.89
		Cost for 36t/km = a+b+c	hour	0.400	676.00	270.40
		Cost for 1 t.km = a+b/36				721.29
		Total per t per km				20.040
		Case - II Kutchra Track and Track in River Bed / Nallah Bed and Choe Bed				20.040
		Speed with load : 10km per hour				
		Speed while returning empty : 15km per hour				
	a)	Machinery				
		Tractor 3.6 tonnes Capacity				
		Haulage with load				
		Empty return trip	hour	1.00	676.00	676.00
		Cost for 36t/km = a+b+c	hour	0.667	676.00	450.89
		Cost for 1 t.km = a+b/36				1126.89
		Total per t per km				31.300
2		Carriage Of Material (By Tipper)				
1.1		Loading and Unloading Lime, Aggregate, Stone Boulder, Brick Aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for Masonry Work by Manual Means				31.300
	(I)	Loading of lime, Aggregates, Stone boulder, Brick aggregate, Kankar, Building Rubbish, Crushed Slag, Stone for masonry work by manual means including a lead upto 30m				
		Unit = cum				
		Taking output = 5.5 cum				
		Time required for				
	(i)	Position of tipper at laoding point				
	(ii)	loading by front end loader 1 cum bucket capacity @25		1Min		
	(iii)	maneuvering, reversing, dumping and turning for return		13Min		
	(iv)	Waiting time unforeseen contingencies etc.		2Min		
		Total		4Min		
	b)	Machinery		20Min		
		Tipper 5.5 Tonnes Capcaity				
		Front end loader 1 cum buckert capacity @ 25 Cum/hour	hour	0.330	1,426.00	470.58
		Cost for 5.5 cum = a+b+c	hour	0.330	1,419.00	468.27
						938.85

		Rate per cum = (a+b+c)/5.5	cum			170.70
		Total per cum	cum			170.700
1.10		Haulage excluding Loading & Unloading				
		Haulage of materials by truck excluding cost of Loading, Unloading and stacking				
		Unit 1km				
		Taking output 10t load and lead 10km 100t km				
		Case- I : Surfaced Road				
		Speed with load : 25km per hour				
		Speed while returning empty : 35km per hour				
	a)	Machinery				
		Tipper				
		Haulage with load	hour	0.40	1426.00	570.40
		Empty return trip	hour	0.29	1426.00	413.54
		Cost for 100t km a b c				983.94
		Cost for 1 t km = a+b/100				9.830
		Total per t per km				9.830
		Case - III Kutchu Track and Track in River Bed / Nallah Bed and Choe Bed				
		Speed with load : 10km per hour				
		Speed while returning empty : 15km per hour				
	a)	Machinery				
		Tipper				
		Haulage with load	hour	1.00	1426.00	1426.00
		Empty return trip	hour	0.67	1426.00	955.42
		Cost for 100t km a b				2381.42
		Cost for 1 t km = a+b+c/100				23.81
		Total per t per km				23.810
3		Carriage Of Material (By Truck)				
1.10		Haulage excluding Loading & Unloading				
		Haulage of materials by truck excluding cost of Loading, Unloading and stacking				
		Unit 1km				
		Taking output 10t load and lead 10km 100t km				
		Case- I : Surfaced Road				
		Speed with load : 25km per hour				
		Speed while returning empty : 35km per hour				
	a)	Machinery				
		Truck				
		Haulage with load	hour	0.40	1054.00	421.60
		Empty return trip	hour	0.29	1054.00	305.66
		Cost for 100t km a b c				727.26
		Cost for 1 t km = a+b/100				7.270
		Total per t per km				7.270
		Case - III Kutchu Track and Track in River Bed / Nallah Bed and Choe Bed				
		Speed with load : 10km per hour				
		Speed while returning empty : 15km per hour				
	a)	Machinery				
		Truck				
		Haulage with load	hour	1.00	1054.00	1054.00
		Empty return trip	hour	0.67	1054.00	706.18
		Cost for 100t km a b				1760.18
		Cost for 1 t km = a+b+c/100				17.60
		Total per t per km				17.600
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	397.00	7.94
		Mazdoor (Unskilled)	day	0.50	373.00	186.50
	b)	Machinery				
		Truck	hour	0.33	1054.00	347.82
		Crane	hour	0.33	5573.00	1839.09
		Cost for 9 pipes = a+b+c+d				2381.35

			Rate per pipe = (a+b+c)/9	per p			264.594
			Total per pipe				264.594
		C.	600/450 mm dia Hume pipe				
			Unit = per pipe				
			Taking output = 21 pipe				
		a)	Labour				
			Mate	day	0.02	397.00	7.94
			Mazdoor (Unskilled)	day	0.50	373.00	186.50
		b)	Machinery				
			Tractor 3.60 Tonnes Capacity	hour	0.33	1054.00	347.02
			Crane	hour	0.33	5573.00	1839.09
			Cost for 21 pipes = a+b+c+d				2381.35
			Rate per pipe = (a+b+c)/21	per p			113.398
			Total per pipe				113.398
		(iii)	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	397.00	7.94
			Mazdoor (Unskilled)	day	0.50	373.00	186.50
		b)	Machinery				
			Truick	hour	0.20	1054.00	210.80
			Crane	hour	0.20	5573.00	1114.60
			Cost for 9 pipes = a+b+c+d				1519.84
			Rate per pipe = (a+b+c)/9	per p			168.871
			Total per pipe				168.871
		C.	600/450 mm dia Hume pipe				
			Unit = per pipe				
			Taking output = 21 pipes				
		a)	Labour				
			Mate	day	0.020	397.00	7.94
			Mazdoor (Unskilled)	day	0.50	373.00	186.50
		b)	Machinery				
			Truick	hour	0.20	1054.00	210.80
			Crane	hour	0.20	5573.00	1114.60
			Cost for 21 pipes = a+b+c+d				1519.84
			Rate per pipe = (a+b+c)/21	per p			72.373
			Total per pipe				72.373
		1.9	Loading and Unloading of Bamboo				
		(i)	Loading & unloading Bamboo				
			Unit = per metre				
			Taking output = per mtr.				
		a)	Material				
			Bamboo = 2016/300	per pipe			6.72
			Bamboo Per Mt.	par mt			0.96
			Total per m				0.960
		4	3.3	301.5	Construction of Embankment with material obtained from roadway cutting		
					Construction of Embankment with approved material deposit at site from roadway cutting and excavation from drain and foundation of other structure graded and compacted to meet requirement of Table 300.1 and 300.2 as per Technical Specification Clause 301.5.		
					Unit = cum		
					Taking output = 100 cum		
		a)	Labour				
			Mate	day	0.02	397.00	7.94
			Mazdoor (Unskilled)	day	0.50	373.00	186.50
		b)	Machinery				
			Dozer D-50 for spreading @200 cum per hour	hour	0.50	0.00	0.00
			Motor Grader for grading @200 Cum per hour	hour	2.00	697.00	1,394.00
			Water tanker 6 kl capacity	hour	2.00	752.00	1,504.00
			Three Wheel 80-100 kN Static Roller	hour	1.25	1593.00	1,991.25
		c)	Material				
			Water	kl	12.00	60.30	723.60
			Cost for 100 cum = a+b+c+d+e				5807.29

		b)	Machinery				
			Tractor mounted grader arrangement				4864.56
			Three wheel 80-100 kN static roller @ 10 cum per hour	hour	12.00	676.00	8112.00
			Tractor with Rotavator 25 cum per hour	hour	30.00	1593.00	47790.00
			Water tanker 6 kl capacity	hour	12.00	693.00	8316.00
				hour	5.00	752.00	3760.00
		c)	Material				67978.00
			Well graded granular sub-base material as per Table 400.1				
			GSE	cum	1.28	167.03	213.80
			Cost of 300 cum without Carriage = (a+b+c+d+e)				73056.36
			A) Basic Cost per cum = (a+b+c+d+e)/300	cum			243.521
			CARRIAGE				
			G.S.B.	Cum	414.00	2960.13	1225493.82
			Carriage cost of 300 cum				1225493.82
			B) Carriage cost per cum				4084.98
			Rate per cum = (A+B)	CUM			4328.501
			Total per cum	CUM			4328.501
			Labour Cess @ 1%				43.285
			G.S.T. @ 18%				779.130
			Add Seigniorage Fee @ 10 % of Materials	cum	1.28	167.03	21.38
			Total Cost of 1 cum 1% Cess & 18 % GST =				5,172.296
9	9.3	1100	Providing and laying reinforced cement concrete pipe NP3 for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets Clause 1106.				
		B.	1000 MM DIA (Single Row)				
		a)	Material				
			RCC NP3 pipe including collar	m	7.50	5787.23	43404.23
		b)	Labour				
			Mate	day	0.09	397.00	35.73
			Mason (1st class)	day	0.25	503.00	125.75
			Mazdoor (Unskilled)	day	2.00	373.00	746.00
			Cost for 7.5m = (a+b+c)				44311.71
			A) Basic Cost per m = (a+b)/7.5	m			5908.23
			Rate per m of Pipe				5908.23
		(d)	CARRIAGE COST				
			NP3 Pipe	m	7.5	298.37	2237.78
			Carriage cost of 7.5 m				2237.78
			Carriage cost per m	m			298.37
			Rate per m with Carriage	m			6,206.598
			Total per m	m			6,206.598
			Labour Cess @ 1%				62.066
			G.S.T. @ 18%				1,117.188
			Total Cost of 1 mtr, 1% Cess & 18 % GST =				7,385.852
2		C.	600 MM DIA (Single Row)				
		a)	Material				
			RCC NP3 pipe including collar	m	7.50	2310.00	17325.00
		b)	Labour				
			Mate	day	0.04	397.00	15.88
			Mason (1st class)	day	0.12	503.00	60.36
			Mazdoor (Unskilled)	day	0.96	373.00	358.08
			Cost of 7.5m = (a+b+c+d)				17759.32
			A) Basic Cost per m = (a+b)/7.5	m			2367.91
			Rate per m of Pipe				2367.91
			CARRIAGE COST				
			NP3 Pipe	m	7.5	124.35	932.63
			Carriage cost of 7.5 m				932.63
			B) Carriage cost per m	m			124.35
			Rate per m with Carriage	m			2,492.260
			Total per m	m			2,492.260
			Labour Cess @ 1%				24.923
			G.S.T. @ 18%				448.607
			Total Cost of 1 mtr, 1% Cess & 18 % GST =				2,965.789
3	5.7.40.1		Labour for filling empty cement bags with local sand, stitching the bags and placing including supply of sutti etc. all complete as per approved design, specification and direction E/I.				

		Unit = Per % Nos.				
		(A) For Filling & Stitching & Stacking				
		Labour				
		Skilled Labour for filling sand into bags and sewing	No.	2.00	472.00	944.00
		sutali	kg	0.50	20.59	10.30
		(B) Labour Rate For Carrying & Placing filed E.C. Bags.				
		Labour				
		Skilled Labour for Carrying filed bags and placing to work site	No.	3.00	472.00	1416.00
		TOTAL =				2370.30
		Per % Nos. (B) =			Say.	2370.30
		Rate per bag (A+B) = /100				23.70
		(C) Cost of empty cement bag & cost of sand	each			11.11
		(D) Carriage cost				
		Tractor with trolley	cum	0.034	345.14	11.73
		(G) Total = (A+B+C+D) =				46.55
		Labour Cess @ 1%				0.465
		G.S.T. @ 18%				8.379
		Add Seigniorage Fee @ 10 % of Materials	cum	0.034	144.75	0.49
		Total Cost of 1 E.C. Bag 1% Cess & 18 % GST =				55.882
4	5.7.9	Supply Labour for fitting and fixing 62 mm to 75 mm dia bamboo runners in position at every verticle pile with 150 mm long nails or 38 swg G. I. wire including cost of G.I. or nails complete job as per specification and direction				
		Unit = Per mt.				
		Taking Out Put = 30.50 m				
	(i)	Materials				
		Bamboo	m	30.50	20.21	616.41
		Nails	kg	0.50	108.00	54.00
	(ii)	Labour				
		Carpenter Gr -II	No.	0.125	531.00	66.38
		Unskilled Labour	No.	0.25	373.00	93.25
		Rate for 30.5 m				830.04
		TOTAL =				830.04
		Rate per mt				27.21
	(iii)	Carriage cost				
		bamboo	mt	1	3.00	3
		Total Cost with Carriage				30.21
		Labour Cess @ 1%				0.302
		G.S.T. @ 18%				5.439
		Total Cost of 1 mtr, 1% Cess & 18 % GST =				35.955
5	5.7.7	Labour for cutting 62 mm to 75 mm dia bamboo piles in size and making shoes and driving etc. complete bob as per specification and direction E/I.				
		Unit = Per mt.				
		Taking Out Put = 30.50 m				
		Assurning				
		20 no pile sunk 1.525 m deeps				
		Total depth sunk 30.50 m				
	(I)	Materials				
		Bamboo	m	30.50	20.21	616.41
	(I)	Labour				
		Carpenter Gr -II	No.	0.25	531.00	132.75
		Unskilled Labour for piling	No.	2.50	373.00	932.5
		Rate for 30.5 m				1681.66
		Total				1681.66
		Rate for 1 m				55.14
		Carriage Cost of Bamboo	per mtr.			3.00
		Total Cost with Carriage				58.14
		Labour Cess @ 1%				0.581
		G.S.T. @ 18%				10.465
		Total Cost of 1 mtr, 1% Cess & 18 % GST =				69.182

6		Labour for fitting and and fixing Steel Drum 300 mm dia 1.2 m high as per specification and direction				
		(Assuming Per Mtr. = $3.14 \times 0.30 = 0.942$ mtr.)				
		Area of Assuming in one Drum = $0.942 \times 1.20 = 1.130$ Sqm				
		One Sqm sheet Cost = $127.80 / 1.130 = 113.12$ Cost				
		Unit = per sqm				
		Taking Out = 100 sqm				
	a	Labour				
		Hammer man	No.	4.00	531.00	2124.00
		Mazdoor (Unskilled)	No.	4.00	373.00	1492.00
		Carpenter 1st Class	No.	4.00	503.00	2012.00
	b	Materials				5628.00
		Nails	kg	5.00	170.13	850.65
		Steel Drum sheet	Nos.	88.5	170.13	15056.51
						21535.160
		Rate Per m = $(a+b+c)/100$				215.352
		Labour Cess @ 1%				2.154
		G.S.T. @ 18%				38.763
		Total Cost of 1 mtr. 1% Cess & 18 % GST =				256.268
5.7.8	WRD	Labour for fitting and and fixing split bamboo woven chachari in position with 20 swg G.I. wire of 75 mm to 100 mm long nails alternatively including cost of G.I. wire or nails complete job as per specification and direction of E/I.				
		(Assuming strip of $3.05 \times 3.05 = 9.30$ sqm				
		Unit = per sqm				
		Taking Out = 9.30 sqm				
	a	Labour				
		Carpenter Gr -II	No.	1.00	531.00	531.00
		Mazdoor (Unskilled) for pilling	No.	1.00	373.00	373.00
	b	Materials				
		Bamboo	Mtr.	10.00	188.00	1880.00
		Nails	kg	0.25	108.00	27.00
						2811.000
		Rate Per m = $(a+b+c)/9.30$				302.258
		Labour Cess @ 1%				3.023
		G.S.T. @ 18%				54.406
		Total Cost of 1 mtr. 1% Cess & 18 % GST =				359.687
5.7.50		Providing laying & filling Geo bags of size 1m X 0.700m (Type A) 300 GSM nonwoven weight 420 gm volume of filled bag 0.070 cum Weight of filled Geo bag 126 kg with local sand including stitching in four lines by approved Nylon thread with Staching machine and generator, stacking and placing after loading, Unloading and carriage with the help of Trolly within 150 mtr. lead and all complete as per specification and direction of E/I.				
		Unit = Each Bag				
		Taking Out = 40 Nso.				
		Labour	nos	2	373.00	746.00
		Unskilled Loading For filling stacking	nos	0.33	472.00	155.76
		Skilled labour for stacking	nos	4.00	373.00	1492.00
		Unskilled labour for carring and placing	nos	0.25	397.00	99.25
		Mate	day	0.33	50.00	16.50
		Stiching Machine	day	1.00	676.00	676.00
		Tractor with trolley	hrs	20.67	74.00	1529.58
		Generator 3KVA				4715.09
		Total				117.80
		Rate per bag (total/40) (A)				
		charge for placing & dumping	nos	16	373.00	6320.00
	(ii)	unskilled labour for loading unloading & dumping	nos	1	397.00	419.00
		Mate	each	4	676.00	2704.00
		Tractor with trolley				9,443.000
		Total				36.887
		Rate per bag (Total/256) (B)				
		Matroials	each	1	124.00	124.00
		cost of Geo Bag				278.764
		Total cost (a+b+c)				

		Rate per bag				
		Labour Cess @ 1%				278.764
		G.S.T. @ 18%				2.788
		Add Seigniorage Fee @ 10 % of Materials				50.178
		Total Cost of 1 Geo Bag 1% Cess & 18 % GST =	cum	0.070	144.75	1.01
5.7.40.3		Labour for filling empty cement bags with local sand, stitching the bags and pitching in Nylon crate of size (1m x 1m x 1m) with a lead of 150 m including supply of suti etc. and placing the filed crates in water portion within a lead 30 m all complete as per approved design, specification and direction of E/L.				332.739
		Unit = Each N.C.				
	(i)	(i) Labour Cost for filling bags in one Nylon crate in dry portion	No.	1	472.00	411.00
	(ii)	(i) Labour Cost for filling bags in one Nylon crate in dry portion	No.	1	472.00	611.00
		(II) Placing of filed N/C with 30 m lead in water portion				
		Labour				
		Mate				
		Labour(Skilled)	No.	0.37	397.00	146.89
		Labour(Unskilled)	No.	1.00	472.00	472.00
			No.	1.00	373.00	373.00
		Hence, Total Labour for 100 Cft.				2013.89
		Taking one E.C. Bags to contain 1.20 Cft. Of sand				2013.89
	(ii)	Hence, labour rate for placing one filed N.C.				
		Hence rate per mu;pm crate om water portion (I+II)		356.49		356.49
		Labour Cess @ 1%			Say.	967.49
		G.S.T. @ 18%				9.675
		Add Seigniorage Fee @ 10 % of Materials				174.148
		Total Cost of 1 E.C.1% Cess & 18 % GST =	cum	0.034	144.75	0.49
(I)	800	local sand Filling in foundation trenches as per drawing and technical specification				1,151.803
		local sand Filling in foundation trenches as per drawing and technical specification Clause 305.3.9				
	I.	Sand filling				
		Unit = cum				
	a)	Labour				
		Mate				
		Mazdoor (Unskilled)	day	0.01	397.00	3.97
	b)	Material	day	0.30	373.00	111.90
		Sand (assuming 20 per cent voids)				
		Overheads @ 6 % on (a)	cum	1.20	144.75	173.70
						17.37
		CARRIAGE COST				306.94
		sand				
		Rate per cum = a+b+c	Cum	1.2	345.14	414.17
		Total Cost including 1 % LABOUR CESS				721.11
		G.S.T. @ 18%				7.21
		Add Seigniorage Fee @ 10 % of Materials				129.80
		Total Cost of 1 E.C.1% Cess & 18 % GST =				0.49
						1272.78