

**D. P. R. FOR DEVELOPMENT OF NANDED CITY ROADS UNDER JNNURM
RATE ANALYSIS**

Sr No	Description	Unit	Quantity	Rate Rs	Cost Rs
Sec 3	Drainage and Protective Works				
3.3 I)	Providing rubble solling of 23 cm thick of trap stones of approved quality in bed foundation including sand packing and filling of gravel in the voids including all leads and lifts etc. complete as directed by Engineer.				
	As per DSR 2005-06 (page no.164, Sr.No. 726	Cum			158.00
	add lead charges for stones				20.74
	add royalty charges for stones				17.67
	Add corporation charges @ 5%				8.94
	Rate per cum				205
				say	205
3.4	Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications. PCC Grade M15 <i>Unit = cum</i> <i>Taking output = 15 cum</i>				
a)	Material				
	Cement	tonne	4.13	3870.00	15983.10
	Coarse sand	cum	6.75	187.33	1264.48
	20 mm Aggregate	cum	8.10	268.17	2172.18
	10 mm Aggregate	cum	5.40	278.17	1502.12
b)	Labour				
	Mate	day	0.86	130.00	111.80
	Mason	day	1.50	130.00	195.00
	Mazdoor	day	20.00	120.00	2400.00
c)	Machinery				
	Concrete mixer (cap. 0.40/0.28 cum)	hour	6.00	150.00	900.00
	Generator 63 KVA	hour	6.00	240.00	1440.00
	<i>Per Cum Basic Cost of Labour, Material & Machinery (a+b+c)</i>		1732.00		
d)	Add Contractors Profit @ 10 %				2102.99
	Cost for 15 cum = a+b+c+d				28071.66
	Rate per cum = (a+b+c+d+e)/15				1871.44
				say	1871.00
3.5	RCC M25 Grade With Batching Plant, Transit Mixer <i>Unit: cum</i> <i>Taking Output = 120 cum</i>				
a)	Material				
	Cement	tonne	48.38	3870.00	187230.60
	Coarse sand	cum	55.90	187.33	10471.75
	20 mm Aggregate	cum	66.10	268.17	17726.04
	10 mm Aggregate	cum	44.50	278.17	12378.57
b)	Labour				
	Mate	day	0.84	130.00	109.20
	Mason	day	3.00	130.00	390.00
	Mazdoor	day	18.00	120.00	2160.00
c)	Machinery				
	Batching Plant @ 20 cum/hour	hour	6.00	1440.00	8640.00
	Generator 100 KVA	hour	6.00	450.00	2700.00
	Loader 1 cum capacity 1 cum	hour	6.00	520.00	3120.00
	Transit Mixer 4 cum capacity for lead upto 1 km.	hour	15.00	600.00	9000.00
	Transit Mixer 4 cum capacity lead beyond 1 Km, L - lead in Kilometer	tonne.km	300L	6.00	9000.00
	<i>Per Cum Basic Cost of Labour, Material & Machinery (a+b+c)</i>		2192.00		

**D. P. R. FOR DEVELOPMENT OF NANDED CITY ROADS UNDER JNNURM
RATE ANALYSIS**

Sr No	Description	Unit	Quantity	Rate Rs	Cost Rs
	d) Formwork @ 3.75 per cent on cost of concrete i.e. cost of material, labour and machinery				9859.73
	Add Contractors Profit @ 10 %				23220.95
	cost of 120 cum = a+b+c+d+e				296006.83
	Rate per cum (a+b+c+d+e)/120				2466.72
				<i>say</i>	2467.00
3.6	Providing and laying MS/HYSD bars for structure including cutting, bending hooking by machine, tying in position including binding wire, spacers, chairs, cover blocks as per detailed drawing including all leads and lifts etc. complete as directed by Engineer. As per DSR 2005-06 (page no.205, Sr.No. 874)	MT			32421
	Add Corporation Charges @ 5%				1621.05
	Total				34042
3.7	Kerb M-25 With Batching Plant, Transit Mixer <i>Unit: cum</i> <i>Taking Output = 120 cum</i>				
	a) Material				
	Cement	tonne	48.38	3870.00	187230.60
	Coarse sand	cum	54.00	187.33	10115.82
	20 mm Aggregate	cum	64.80	268.17	17377.42
	10 mm Aggregate	cum	43.20	278.17	12016.94
	Cost of Water	Kl	270.00	100.00	27000.00
	b) Labour				
	Mate	day	0.84	130.00	109.20
	Mason	day	3.00	130.00	390.00
	Mazdoor	day	18.00	120.00	2160.00
	c) Machinery				
	Kerb Casting Machine @ 60meter/hour	Hour	6.00	200.00	1200.00
	Batching Plant @ 20 cum/hour	hour	6.00	1440.00	8640.00
	Transit Mixer 4 cum capacity for lead upto 1 km.	hour	15.00	600.00	9000.00
	<i>Per Cum Basic Cost of Labour, Material & Machinery (a+b+c)</i>		2294.00		275240.00
	Contractors Profit @ 10 % (b+c)				20872.98
	cost of 120 cum = a+b+c+d				296112.98
	Rate per cum (a+b+c+d)/120				2467.61
				<i>say</i>	2468.00
3.12	RCC Runner Beam M 35 Grade Using Batching Plant, Transit Mixer <i>Unit ; cum</i> <i>Taking Output = 120 cum</i>				
	a) Material				
	Cement	tonne	50.64	3870	195976.80
	Coarse sand	cum	54	187.33	10115.82
	20 mm Aggregate	cum	64.8	268.17	17377.42
	10 mm Aggregate	cum	43.2	278.17	12016.94
	b) Labour				
	Mate	day	0.84	130	109.20
	Mason	day	3	130	390.00
	Mazdoor	day	18	120	2160.00
	c) Machinery				
	Batching Plant @ 20 cum/hour	hour	6.00	1440	8640.00

**D. P. R. FOR DEVELOPMENT OF NANDED CITY ROADS UNDER JNNURM
RATE ANALYSIS**

Sr No	Description	Unit	Quantity	Rate Rs	Cost Rs
	Generator 100 KVA	hour	6.00	450	2700.00
	Loader 1 cum capacity	hour	6	520	3120.00
	Transit Mixer 4 cum capacity for lead upto 1 km.	hour	15.00	600	9000.00
	Transit Mixer 4 cum capacity lead beyond 1 Km, L - lead in Kilometer	tonne.km	300L	6	9000.00
	cutting ,bending ,hooking for reinforcement	MT	0.029	34042	987.22
	<i>Per Cum Basic Cost of Labour, Material & Machinery (a+b+c)</i>		2264		
	d) Formwork @ 3 per cent on cost of concrete i.e. cost of material, labour and machinery				8147.80
	Add Contractors Profit @ 10 %				24023.10
	cost of 120 cum = a+b+c+d+e				303764.30
	Rate per cum = (a+b+c+d+e)/120				2531.37
				say	2531.00
3.15	Providing & laying 100 mm dia PVC perforated pipe median under drain including geotextile and building through kerb etc. complete as per drawing and specification (at 15 m interval in median with approximate width of 1.5 m)				
	Unit - m				
	1) Cost of 100mm dia PVC pipe	M	1.000	125.00	125.00
	2) Labour for laying - 5%				6.25
	Add 10% Contractor's profit				13.13
	Rate per m				<u>144.38</u>
				say	<u>144.00</u>
3.16	Providing and fixing 150*100 mm non skidding precast chequered tiles 25 mm thick of approved quality in traffic island and where ever necessary in city suburban limit over 18 mm thick C.M 1:3 including curing etc.complete as per drawing and as directed by Engineer.				
	<i>Unit = 10 Sqm</i>				
	a) Material				
	Chequered Tile	Sqm	11.00	130.00	1430.00
	Cement Mortar 1:3	Sqm	0.18	2217.90	399.22
					1829.22
	Cement Mortar 1:3				
	Unit =Cum				
	Taking Output =1cum				
	Material				
	Cement	tonne	0.51	3870.00	1973.70
	Sand	Cum	1.05	187.33	196.70
	Mate	day	0.04	130.00	5.20
	Mazdoor	day	0.30	120.00	36.00
	Total = (A+B)				2211.60
	b) Labour				
	Mason	day	2.16	130.00	280.80
	Mazdoor	day	2.16	120.00	259.20
					540.00
	Sundries				15.00
	c) Contractor's profit @ input on (a+b)				55.50
	Rate per 10 sqm = a+b+c				2439.72
	Rate per sqm = (a+b+c)/10				<u>243.97</u>
				say	<u>244</u>