

The Executive Engineers may verify the following draft Observed Datas with the help of Liason officers of PRICE or other competent Engineers and report the remarks to this office via email to [pricelsgd@gmail.com](mailto:pricelsgd@gmail.com) and on the meeting scheduled on 18.08.2016.

## DRAFT OBSERVED DATAS AS PER CPWD SCHEDULE OF RATES 2014

### Cold Mix Technology

1 Providing, laying and rolling of open-graded premix carpet of 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates (Table 500.13) either using Bitumen emulsion at the rate of 22.00 kg/10 sqm to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a concrete mixer 0.25 to 0.4 cum capacity, laying and rolling with a three wheel 0-100 kN static roller  
Details for 100 sqm

MR	Bitumen emulsion medium setting (M.S.) conformin	tonne	0.215	39283	8445.845
2211	Carriage of Tar Bitumen	tonne	0.215	106.49	22.89535
2910	Stone chippings/ screenings 12.5/13.2 mm nominal s	cum	1.8	1250	2250
2911	Stone chippings/ screenings 10.0/ 11.20 mm nomina	cum	0.9	1250	1125
2202	Carriage of Stone aggregate below 40 mm nominal s	cum	2.7	106.49	287.523
128	Mate	day	0.08	363	29.04
114	Beldar	day	1.4	329	460.6
115	Coolie	day	1.4	329	460.6
130	Mistry	day	0.19	435	82.65
114	Beldar	day	5	329	1645
113	Chowkidar	day	0.27	329	88.83
101	Bhisti	day	0.11	363	39.93
3	Hire charges of diesel road roller - 8 to 10 tonne	day	0.11	1500	165
1235	Diesel Oil for road roller @ 18 litres per day	litre	2	55.49	110.98
9999	Carriage of diesel	LS	2.73	1.78	4.8594
2	Hire charges of concrete mixer 0.25 to 0.40 cum with	day	0.04	800	32
364	Wire Brush	each	0.11	20	2.2
365	Soft brush	each	0.32	18	5.76
9999	Brooms and gunny bags	LS	6.76	1.78	12.0328
9999	Sundries	LS	9.49	1.78	16.8922
<b>Total</b>					<b>15287.64</b>
Add water charges 1%					152.88
<b>Total</b>					<b>15440.51</b>
Add CPOH 15%					2316.08
<b>Total</b>					<b>17756.59</b>
<b>for 1 sqm</b>					<b>177.57</b>

2 Providing and laying seal coat with 0.90 cum of stone aggregate of 6.7 mm size (Passing 11.2 mm sieve and retained on 2.36mm sieve) per 100 sqm of road surface with bitumen emulsion (SS2) 12kg/10m<sup>2</sup> of road surface including rolling and finishing with road roller all complete.

Details for 100 sqm

MR	Bitumen emulsion	tonne	0.1	39040	3904
2211	Carriage of Tar Bitumen	tonne	0.1	106.49	10.649
2910	Stone aggregates 6 mm nominal size	cum	0.9	1140	1026
2202	Carriage of Stone aggregate below 40 mm nominal s	cum	0.9	106.49	95.841
128	Mate	day	0.06	363	21.78
114	Beldar	day	0.49	329	161.21
115	Coolie	day	0.97	329	319.13
130	Mistry	day	0.05	435	21.75
114	Beldar	day	1.11	329	365.19

113	Chowkidar	day	0.15	329	49.35
101	Bhisti	day	0.06	363	21.78
3	Hire charges of diesel road roller - 8 to 10 tonne	day	0.06	1500	90
1235	Diesel Oil for road roller @ 18 litres per day	litre	1.08	55.49	59.9292
9999	Carriage of diesel	LS	0.26	1.78	0.4628
2	Hire charges of concrete mixer 0.25 to 0.40 cum with	day	0.01	800	8
364	Wire Brush	each	0.05	20	1
365	Soft brush	each	0.12	18	2.16
9999	Sundries	LS	18.2	1.78	32.396
	<b>Total</b>				<b>6190.63</b>
				Add water charges 1%	61.91
				<b>Total</b>	<b>6252.53</b>
				Add CPOH 15%	937.88
				<b>Total</b>	<b>7190.41</b>
	<b>for 1 sqm</b>				<b>71.90</b>

sd/-

**CHIEF ENGINEER**

LSGD Subdivision PothencodeCold mix estimate

## Detailed Estimate

(Cost Index Applied for this estimate is 46.67%)

SI No	Description	No	L	B	D	CF	Quantity	Remark	
<b>1 Road</b>									
1	2.1 Clearing Grass and Removal of Rubbish Clearing grass and removal of rubbish up to a distance of 30m outside the periphery of the area as per Technical Specification Clause 201. By Manual Means								
		1	1.50000	0.0600			0.090		
		Total Quantity						0.090 Hecter	
		Total Deducted Quantity						0.000 Hecter	
		Net Total Quantity						0.090 Hecter	
		Say 0.090 Hecter @ Rs 24385.89 / Hecter						<b>Rs 2194.73</b>	
2	3.15.2 Compacting Original Ground (ii) Compacting original ground supporting subgrade Loosening of the ground upto a level of 300 mm below the subgrade level, watered, graded and compacted in layers to meet requirement of Tables 300.1 and 300.2 for subgrade construction as per Technical Specification Clause 303.5.2.								
		1	260.000	3.350	0.300		261.300		
		Total Quantity						261.300 cum	
		Total Deducted Quantity						0.000 cum	
		Net Total Quantity						261.300 cum	
		Say 261.300 cum @ Rs 68.42 / cum						<b>Rs 17878.15</b>	
3	3.14 Construction of Subgrade and Earthen Shoulders Construction of subgrade and earthen shoulders with approved material obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table 300.2 with lead upto 1000 m as per Technical Specification Clause 303.1.								
	subgrade	1	260.000	3.350	0.300		261.300		
		Total Quantity						261.300 cum	
		Total Deducted Quantity						0.000 cum	
		Net Total Quantity						261.300 cum	
		Say 261.300 cum @ Rs 471.08 / cum						<b>Rs 123093.20</b>	

4	4.11.2 Granular sub-base/base/surface course with local materials (Table 400.13) by mix in place method normal. Construction of granular sub-base by providing local material spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at once and compacting with smooth wheel roller to achieve the desired density complete as per Clause 401.4 as per Technical Specification Clause 408. (ii)Using Gravel mix soil.		1	260.000	3.350	0.100		87.101	
		Total Quantity						87.101 cum	
		Total Deducted Quantity						0.000 cum	
		Net Total Quantity						87.101 cum	
		Say 87.101 cum @ Rs 1990.98 / cum						<b>Rs 173416.35</b>	
5	4.9 Wet Mix Macadam Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mixer (Pug Mill), carriage of mixed material by tipper to site, laying in uniform layers in sub-base/base course on a well prepared sub-base and compacting with smooth wheel roller of 80 to 100kN weight to achieve the desired density including lighting, barricading and maintenance of diversion, etc as per Tables 400.11 & 400.12 and Technical Specification Clause 406. By Mechanical Means with 1 km lead		1	260.000	3.100	0.150		120.900	
		Total Quantity						120.900 cum	
		Total Deducted Quantity						0.000 cum	
		Net Total Quantity						120.900 cum	
		Say 120.900 cum @ Rs 3205.25 / cum						<b>Rs 387514.73</b>	
6	od8335/2016_2017 Prime Coat Low porosity Providing and applying primer coat with bitumen emulsion (SS-1) on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.70-1.0 kg/sqm using mechanical means as per Technical Specification Clause 502		1	260.000	3.000			780.000	
		Total Quantity						780.000 sqm	
		Total Deducted Quantity						0.000 sqm	
		Net Total Quantity						780.000 sqm	
		Say 780.000 sqm @ Rs 42.19 / sqm						<b>Rs 32908.20</b>	
7	od8336/2016_2017 Tack Coat								

	Providing and applying tack coat with Bitumen emulsion (RS-1) using emulsion distributor at the rate of 0.25 to 0.30 kg per sqm on the prepared granular surfaces treated with primer & cleaned with Hydraulic broom as per Technical Specification Clause 503.						
	1	260.000	3.000			780.000	
	Total Quantity						780.000 sqm
	Total Deducted Quantity						0.000 sqm
	Net Total Quantity						780.000 sqm
	Say 780.000 sqm @ Rs 11.92 / sqm						<b>Rs 9297.60</b>
8	od8337/2016_2017 20 mm thick Open Graded Premix Carpet using Bitumen Emulsion as per Technical Specification Clause 508.2						
	1	260.000	3.000			780.000	
	Total Quantity						780.000 sqm
	Total Deducted Quantity						0.000 sqm
	Net Total Quantity						780.000 sqm
	Say 780.000 sqm @ Rs 185.93 / sqm						<b>Rs 145025.40</b>
9	od8338/2016_2017 Seal Coat Providing and laying seal coat sealing the voids in a bituminous surface laid to the specified levels, grade and cross fall using Type A, Type B and Type C as per Technical Specification Clause 510 A. By Manual Means Case - III : Type C (I)Bitumen (SS-2 emulsion)						
	1	260.000	3.000			780.000	
	Total Quantity						780.000 sqm
	Total Deducted Quantity						0.000 sqm
	Net Total Quantity						780.000 sqm
	Say 780.000 sqm @ Rs 85.22 / sqm						<b>Rs 66471.60</b>
<b>TOTAL Rs 957800.00</b>							
<b>Rounded Total Rs 9,57,800</b>							
Rupees Nine Lakh Fifty Seven Thousand Eight Hundred Only							

(Cost Index Applied for this estimate is 46.67%)