Department: Civil Project & Services

Total Amount: 39,95,243.94 A1

PLANNING

## ABSTRACT ESTIMATE/ BILL OF QUANTITY

ESTIMATE NO: E41AFM2425 REVISION NO: RO

Date: 23-11-2024

NAME OF WORKS: FACTORY ROADS MAINTENANCE WORKS-FY2024-25

Details of Free Issue Materials SI.No Type of Materials Quantity Unit Amount Price Cement 0.00 0.00 Kg Rebar Steel 0.00 0.00 Kg 54.00 Structural Steel 0.00 58.50 0.00 Kg Total Amount of Free Issue Materials:

Overall Value with GST 18% and Including Free Issue Material :

S-STEEL

R-STEEL

0.00 A2 18% GST for Free Issue Material: 0.00 T1 0.00 <sub>A3=A2+T1</sub> Total Amount of Free Issue Materials with GST 18%:

Estimate Value (Excl. Free Issue Material & GST): ₹ 39,95,244.00

Estimate Amount in Words: Rupees Thirty Nine Lacs Ninety Five Thousand Two Hundred Forty Four

Quantity Factor: 1.00

₹ 39,95,243.94 A1 Estimate Value (Excl. Free Issue Material&GST ): 18% GST for Estimate Value: 7,19,143.91 T2 47,14,387.85 A4=A1+T2 Overall Estimate Value with GST 18%:

47,14,387.85 A5=A3+A4

AMT-REB

			WORK CODE (From SAP Rate Master)	WORK SHORT TEXT (From SAP Rate Master)	WORK DESCRIPTION (From SAP Rate Master)		ANTITY UNIT	RATE	AMOUNT C=A*B	Cement Kg/Unit (D)	Free Issue Material Type	Quantities of Free Material			Amount of Free Material		
SAP S/N		PREVIOUS. EST.S/N				QUANTITY		DSR-18 (Excl.GST 14.05%) (B)				1.CEMENT (Kg)	2.REBAR STEEL (Kg)	3.STRUCT. STEEL (Kg)	1.CEMENT	2.REBAR STEEL	3.STRUT. STEEL
10	1		CVL-2.1.1	CVL-2.1.1_EARTH WORK	(2.1) Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lift up to 1.5 m, as directed by Engineer-in-Charge: (2.1.1) All kinds of soil	425.00	M2	81.15	34,488.75	<b>X</b> 0.00	NIL	0.00	0.00	0.00	0.00	0.00	0.00
20	2		CVL-1.1.1B-CMT	CVL-1.1.1B-CMT-CARG-MATL	(CVL-1.1.1B-CMT)_(1.1) Carriage of materials by mechanical transport including loading, unloading and stacking.(1.1.1) Lime, moorum, building rubbish.(1.1.1A) Upto 2 Km	42.50		104.81	4,454.43			0.00	0.00	0.00	0.00	0.00	0.00
30	3		CVL-16.9	CVL-16.9_ROAD-WORK	(16.9) Scarifying metalled (water-bound) road surface including disposal of rubbish, lead upto 50m and consolidation of the aggregate received from scarifying with power road roller of 8 to 10 tonne capacity.	425.00		21.53	9,150.25			0.00	0.00	0.00	0.00	0.00	0.00
40	4		CVL-16.77	CVL-16.77_ROAD-WORK	(16.77) Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of scarified material within all lifts and lead upto 1km (by mechanical means).	5,750.00	M2	4.16	23,920.00	<b>X</b> 0.00	NIL	0.00	0.00	0.00	0.00	0.00	0.00
50	5		CVL-16.79	CVL-16.79_ROAD-WORK	(16.79) Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical	31.88	М3	2,316.00	73,834.08	× 0.00	NIL	0.00	0.00	0.00	0.00	0.00	0.00
60	6		CVL-16.30.2	CVL-16.30.2_ROAD-WORK	(16.30) Providing and applying tack coat using hot straight run bitumen of grade VG - 10 including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boller, cleaning and preparing the existing road surface as per specifications: (16.30.2) On bituminous surface @ 0.50 Kg / sqm.					**							
70	7		CVL-16.55.1	CVL-16.55.1_ROAD-WORK	(16.55) Providing and laying bituminous macadam using crushed stone aggregate of specified grading premixed with bituminous binder, transported to site by tippers, laid over a previously prepared surface with pawer finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifications and directions of Engineer-in-Charge. (16.55.1) 50 to 100 mm average compacted thickness with bitumen of grade VG-30 9 3.0% (percentage by weight of total mix) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	5,750.00 287.50		6,789.61	1,69,625.00 19,52,012.88	•		0.00	0.00	0.00	0.00	0.00	0.00
80	8		CVL-16.57.1	CVL-16.57.1_ROAD-WORK	(16.57) Providing and laying Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equiped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge (16.57.1) 40/50 mm compacted thickness with bitumen of grade VG-30 (9.5.5% (percentage by weight of total mix) and limit elifie (9.8% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity	172.50		9,596.36	16,55,372.10			0.00	0.00	0.00	0.00	0.00	0.00
90	9		CVL-16.1	CVL-16.1_ROAD-WORK	[16.1] Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-olling the sub grade and disposal of surplus earthwith lead upto 50 metres.			137.44	13,744.00	**		0.00	0.00	0.00	0.00	0.00	0.00
100	10		CVL-16.48.1	CVL-16.48.1_ROAD-WORK	(16.48) Painting road surface marking with adequate nos of coats to give uniform finish with ready mixed road marking paint conforming to 15: 164, on bituminous surface in white/yellow shade, including cleaning the surface of all dirt, scales, oil, grease and foreign material etc. complete. (16.48.1) New work (Two or more coats).	176.92		189.35	33,499.80	**		0.00	0.00	0.00	0.00	0.00	0.00
110	11		CVL-16.50	CVL-16.50_ROAD-WORK	[16.50] Providing and fixing Glow studs of size 100x20 mm made of heavy duty body shall be moulded ASA (Acrylic styrene Acryloretrie) or HIP (High impact polystyrene) or ASB having electronically wedded micro-prismatic lens with abrasion resistant costing as approved by Engineer in charge. The glow stud shall support a load of 13835 kg tested in accordance with ASTM D4280. The slope of retro-reflective surface shall be 35 (4/5) degress to base. The reflective panels on both sides with at least 12 cm of reflective area up each side. The luminance intensity should be a sper the specification and shall be tested as described in ASTM 1: 809 as recommended in 85:873 part 4: 1973. The studs shall be fixed to the Road surface using the adhesive conforming to IS, as per procedure recommended by the manufacturer complete and as per direction of Engineer-in-charge.	146.00		172.21	25,142.66			0.00	0.00	0.00	0.00	0.00	0.00

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Department: Civil Project & Services PLANNING

ABSTRACT ESTIMATE/ BILL OF QUANTITY

Estimate Amount in Words: Rupees One Crores Sixteen Lacs Ninety Five Thousand Forty Two Only

ESTIMATE NO: E42ATM2425 REVISION NO: RO

Date: 23-11-2024

NAME OF WORKS: TOWNSHIP ROADS MAINTENANCE WORKS-FY2024-25

Estimate Value (Excl. Free Issue Material & GST ): ₹ 1,16,95,042.00

Details of Free Issue Materials SI.No Type of Materials Quantity Unit Amount Price 1 Cement 0.00 0.00 Kg 2 Rebar Steel 54.00 0.00 0.00 Kg 3 Structural Steel 0.00 Kg 58.50
Total Amount of Free Issue Materials: 58.50 0.00 0.00 A2

18% GST for Free Issue Material: 0.00 T1 0.00 <sub>A3=A2+T1</sub> Total Amount of Free Issue Materials with GST 18%:

Estimate Value (Excl. Free Issue Material&GST ):

18% GST for Estimate Value: 21,05,107.46 T2 1,38,00,148.91 A4=A1+T2 Overall Estimate Value with GST 18%:

₹ 1,16,95,041.45 A1

													Value with GST	18% and Including	1,38,00,148.91 A5=A3+A4		
												CEMENT	R-STEEL	S-STEEL	AMT-CEM	AMT-REB	AMT-STR
					Quantity Factor:	1.00		Total Amount:	1,16,95,041.45	A1	Total:	0.00	0.00	0.00	0.00	0.00	0.00
S	,	PREVIOUS.	WORK CODE	WORK SHORT TEXT	WORK DESCRIPTION	RATE			AMOUNT	Cement	Free Issue	Quantities of Free Material			Amount of Free Material		al
S	S/N	EST.S/N	(From SAP Rate Master)	(From SAP Rate Master)	(From SAP Rate Master)	QUANTITY	UNIT	DSR-18	C=A*B	Kg/Unit (D)	Material	1.CEMENT	2.REBAR	3.STRUCT.	1.CEMENT	2.REBAR	3.STRUT. STEEL
1	1		CVI 16 77	CVL-16.77_ROAD-WORK	(16.77) Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of			(Excl.GST 14.05%)		(0)	Туре	(Kg)	STEEL (Kg)	STEEL (Kg)		STEEL	
1	1		CVE-10.77		scarified material within all lifts and lead upto 1km (by mechanical means).												
						17,125.00		4.40	74 040 000								
-	2		CVII 16 20 2	CVL-16.30.2_ROAD-WORK	(16.30) Providing and applying tack coat using hot straight run bitumen of grade VG - 10	17,125.00	IVIZ	4.16	/1,240.00	0.00	NIL	0.00	0.00	0.00	0.00	0.00	0.00
-			CVL-10.30.2	CVE-10.30.2_NOAD-WORK	including heating the bitumen, spraying the bitumen with mechanically operated spray unit												
					fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications	17,125.00	M2	29.50	5,05,187.50	0.00	NIL	0.00	0.00	0.00	0.00	0.00	0.00
3	3		CVL-16.55.1	CVL-16.55.1_ROAD-WORK	(16.55) Providing and laying bituminous macadam using crushed stone aggregate of specified												
					grading premixed with bituminous binder, transported to site by tippers, laid over a previously	856.25	842	6.789.61	58,13,603.56			0.00	0.00	0.00	0.00	0.00	0.00
_	4		C) () 4 C F7 4	CVL-16.57.1_ROAD-WORK	prepared surface with paver finisher equipped with electronic sensor to the required grade, (16.57) Providing and laying Bituminous concrete using crushed stone aggregates of specified	830.23	IVIS	0,769.01	58,13,003.50	0.00	INIL	0.00	0.00	0.00	0.00	0.00	0.00
4	4		CVL-16.57.1	CVE-10.37.1_NOAD-WORK	grading, premixed with bituminous binder and filler, transporting the hot mix to work site by												
					tippers, laying with paver finisher equiped with electronic sensor to the required grade, level												
					and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the												
					desired compaction and density as per specification, complete and as per directions of	513.75	M3	9,596.36	49,30,129.95	0.00	NIL	0.00	0.00	0.00	0.00	0.00	0.00
5	5		CVL-16.1	CVL-16.1_ROAD-WORK	(16.1) Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne												
					capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re- olling the	1,500.00	M2	137.44	2 06 160 00	0.00	NII	0.00	0.00	0.00	0.00	0.00	0.00
6	6		CVI-16.48.1	CVL-16.48.1_ROAD-WORK	(16.48) Painting road surface marking with adequate nos of coats to give uniform finish with	2,500.00		207111	2,00,100.00	^		0.00	0.00	0.00	-		
			CVL-10.40.1		ready mixed road marking paint conforming to IS: 164, on bituminous surface in white/yellow												
					shade, including cleaning the surface of all dirt, scales, oil, grease and foreign material etc.												
					complete. (16.48.1) New work (Two or more coats).	560.00		189.35		<b>×</b> 0.00				0.00	0.00	0.00	0.00
Η,	7		C) # 4C F0	CVL-16.50_ROAD-WORK	(16.50) Providing and fixing Glow studs of size 100x20 mm made of heavy duty body shall be	560.00	IVIZ	109.55	1,06,036.00	0.00	INIL	0.00	0.00	0.00	0.00	0.00	0.00
_ /	/		CVL-16.50	CVE-10.30_ROAD-WORK	moulded ASA (Acrylic styrene Acryloretrite ) or HIP (High impact polystyrene) or ABS having												
					electronically welded micro- prismatic lens with abrasion resistant coating as approved by												
					Engineer in charge. The glow stud shall support a load of 13635 kg tested in accordance with												
					ASTM D4280. The slope of retro- reflective surface shall be 35 (+/-5) degress to base .The												
					reflective panels on both sides with at least 12 cm of reflective area up each side. The												
					luminance intensity should be as per the specification and shall be tested as described in ASTM I: 809 as recommended in BS: 873 part 4: 1973. The studs shall be fixed to the Road												
					surface using the adhesive conforming to IS, as per procedure recommended by the												
					manufacturer complete and as per direction of Engineer-in-charge.												
						364.00		472.24	62.62							0.00	0.00
						364.00	NO	172.21	62,684.44	0.00	NIL	0.00	0.00	0.00	0.00	0.00	0.00

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