

<b>Municipal Corporation Sagar Distt. Sagar (M.P.)</b>		
<b>Work : Constrution of Bituminious road &amp; CC Roads at Sagar M.P.</b>		
<b>COST SHEET</b>		
<b>S.NO.</b>	<b>WORK DETAIL</b>	<b>AMOUNT With GST</b>
1	Construction of Bituminious road From Lal School To Kali Tiraha	9534112.965
2	Construction of Bituminious road From Ambedkar chowk to Jhansi Road	8166974.169
3	<b>Construction of Bituminious road In Poddar colony at shivaji nagar ward ( , Nema store to bhargavji house, Ranu yadav to Manish jha Home )</b>	5447808.66
4	<b>Construction of Bituminious road Near Gulab colony Behind Tilli Hospital (Tilli hospial to bank colony)</b>	3730400.67
5	Construction of Bituminious road In Manorama colony at Madhukar shah ward (	1248221.877
6	<b>Construction of CC road at Ahemad nagar in Vrindawan ward . (Main road Beside Vrindawan temple to chamrola chowk )</b>	9135081.392
7	Construction of CC road from balkrishan nema To sahu tigadda in naryawali kana ward sagar mp..	5105288.88
8	Construction of Connecting Bituminious road From sant kavir ward to Rajiv nagar (munna hotel to rajiv nagar ward)	1509683.268
9	Construction of CC road From Lacchu chouraha to Jhula Tigadda and Varni colony to old sabji mandi	10473033.88
10	Construction of CC road from vijay taakeej chouraha to Ajay Shrivastav house to Neelkanthesahwar Mandir and MS Qureshi to Gajanand raikwar house in chandrashekhar ward	4463351.977
11	Construction of CC road from Chatrashaal akhada to Rampura Chouraha	3599977.512
12	Construction of CC road In Tiwari gali and Different roads in Bhagat singh ward	3682794.797
13	Construction of CC road From Radhe thekedar house to shamshanghat in Subhash nagar ward sagar	5808541.268
14	Construction of Bituminious road From Ravishankar school to kaanch mandir	4407257.52
15	Construction of Bituminious road at Gandhi chowk to rampura ward and rampura trihara to vijay takeej ,and btesa bali gali sagar mp..	5721913.191
16	Construction of Bituminious road & CC Road In Sastri ward sagar mp. ( <b>From Vijay jain chakki to Rajendra rai home. &amp; from Shiv medical to anil prajapati home in front of swaraj agency )</b>	4739696.609
17	Construction of Bituminious road & CC Road In Panthnagar ward ward sagar mp From govind bachau home to samsan ghat and Main rod to ramesh ghoshi and ramesh ghoshi to mohan masab house, Behind balram kori ji house )	4719718.104
18	Sant ravidash ward (In front of ITI to Joy Campion School, Shri 1008 arhatkoot jinalay, In front of ITI Gate no. 1 )	2639674.239
	<b>Total Amount</b>	<b>94133531</b>

## ESTIMATE

ESTIMATE										
Name of Work			Construction of Bituminous road at Lal School To Kali Tiraha gopaj ward sagar mp..							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
1	5.2	Providing and applying Tack Coat with cationic bitumen emulsion (RS-1) using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per Section 503 of the specifications								
	5.2.3	0.35 Kg per Sqm (Non-bituminous surfaces) Cement Concrete pavement	Sqm	1	783	10		7830	18	140940
2	5.11	Providing and laying Dense Bituminous Macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per Section 505 of the specifications. (As specified, Lime or cement will be used as filler)								
	5.11.1	For Grading I (75-100mm thickness) bitumen content 4.0% (VG-30)	cum	1	783	10	0.075	587.25	7129	4186505.25
3	5.12	Providing and laying Bituminous Concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per Section 507 of the specifications.								
	5.12.1	For Grading I (50-65 mm thickness) with VG-30 bitumen @ 5.2%	cum	1	783	10	0.05	391.5	8766	3431889
4	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications								
			Sqm	2	783	0.1		156.6	438	68590.8
				1	391.5	0.1		39.15	438	17147.7
5	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	200			400	315	126000
6	8.2	Road Delineators	Each	120				120	714	85680
7	17.2.1	Providing and laying non-pressure NP3 class (Medium duty) cement concrete Hume pipes for service ducts below concrete pavement or other similar work, collar jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand).								
			Rmt	2	6			12	1917	23004
		<b>Total</b>								8079756.75
								18% gst		1454356.215
								<b>Total amount</b>		<b>9534112.965</b>

## ESTIMATE

ESTIMATE										
Name of Work			Construction of Bituminous road at t Ambedkar chowk to Jhansi road Vitthal nagar ward sagar mp.							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
1	5.2	Providing and applying Tack Coat with cationic bitumen emulsion (RS-1) using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per Section 503 of the specifications								
	5.2.3	0.35 Kg per Sqm (Non-bituminous surfaces) Cement Concrete pavement	Sqm	1	1229	6		7374	18	132732
2	5.11	Providing and laying Dense Bituminous Macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per Section 505 of the specifications. (As specified, Lime or cement will be used as filler)								
	5.11.1	For Grading I (75-100mm thickness) bitumen content 4.0% (VG-30)	cum	1	245	6	0.075	110.25	7129	785972.25
3	5.12	Providing and laying Bituminous Concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per Section 507 of the specifications.								
	5.12.1	For Grading I (50-65 mm thickness) with VG-30 bitumen @ 5.2%	cum	1	1229	6	0.05	368.7	8766	3232024.2
	2.3.1.1.2	Dismantling of existing structures comprising of masonry, Cement Concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material, stacking the serviceable material with all lifts and lead up to 1000 meters, as per Section-200 of the specifications.								
		Plain Cement Concrete Grade M-15 and M-20	Cum	1	10	6	0.1	6	615	3690
	3.12	Construction of Embankment/Sub-grade/Earthen Shoulders with material obtained from other sources, as per provisions of Section 305 of the specifications, with approved materials/soil confirming to requirements given in Table 301-1 of specifications including all lead and lifts, including cost of watering, compaction by vibratory roller/heavy pneumatic type roller etc. confirming to requirements given in Table 301-2 of the specifications complete	Cum	2	216	0.9	0.2	77.76	432	33592.32
	4.1.1.1	Construction of granular sub-base, spreading in uniform layers with motor grader on prepared surface, mixing by Mix in Place Method at OMC and compacting with vibratory roller of 80-100 KN Static weight to achieve the desired density, including all lifts and lead complete in all respect as per Section-400 of the specifications	Cum	1	216	6.3	0.15	204.12	1059	216163.08
	6.1	Construction of Dry Lean Cement Concrete Sub-Base Over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 26.5mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1 of the specifications, cement content not to be less than 150 Kg/Cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 MPa at 7 days, mixed in a batching plant, transported to site, laid with paver with electronic sensor/mechanical paver, compacting with 8-10 tonnes vibratory roller, finishing and curing and as per Section 601 of specifications	Cum	1	216	6.2	0.1	133.92	3210	429883.2

		Construction of Dowel jointed, Plain Cement Concrete Pavement in M-30 Grade Concrete over a prepared sub base with 43 or higher grade cement, coarse and fine aggregate conforming to IS:383 maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver with electronic sensor spreading the concrete by shovels, rakes compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, placing of dowel bar, tie rod admixtures as approved, curing compound, finishing to lines and grades as per approved drawings as per IRC:15 and as per Section-602 of the specifications complete excluding cost of steel in dowel bar and tie rod etc.								
6.2.1			Cum	1	216	6	0.2	259.2	5916	1533427.2
		Deduct from Item No 6.2.1 & 6.2.2 above if paver with electronic sensor/ mechanical paver, is not used and laying is done by any other method. Note: The acceptance criteria regarding level, thickness, surface regularity, texture finish, strength of concrete and all other quality control measures shall be the same as in case of machine laid work. This item is to be executed with Prior written permission of Executive Engineer	Cum							
6.2.3			Cum	-1	216	6	0.2	-259.2	301	-78019.2
6.2.4.1		Mild Steel dowel bars confirming to IS 432, grade I	MT	1	0.5				57200	28600
6.2.4.2		HYSD tie bars of Fe 500 grade confirming to IS 1786	MT	1	0.7				63800	44660
4	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications	Sqm	2	1445	0.1		289	438	126582
				1	722.5	0.1		72.25	438	31645.5
5	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	481			962	315	303030
6	8.2	Road Delineators	Each	120				120	714	85680
7	17.2.1	Providing and laying non-pressure NP3 class (Medium duty) cement concrete Hume pipes for service ducts below concrete pavement or other similar work, collar jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand).	Rmt	1	6			6	1917	11502
		<b>Total</b>								<b>6921164.55</b>
								18% gst		1245809.619
								<b>Total amount</b>		<b>8166974.169</b>

## ESTIMATE

ESTIMATE										
Name of Work			Construction of Bituminous road at Poddar colony shivaji nagar ward sagar mp..							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
1	5.2	Providing and applying Tack Coat with cationic bitumen emulsion (RS-1) using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per Section 503 of the specifications								
	5.2.3	0.35 Kg per Sqm (Non-bituminous surfaces) Cement Concrete pavement	Sqm	1	1025	6		6150	18	110700
2	5.11	Providing and laying Dense Bituminous Macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per Section 505 of the specifications. (As specified, Lime or cement will be used as filler)								
	5.11.1	For Grading I (75-100mm thickness) bitumen content 4.0% (VG-30)	cum	1	450	6	0.075	202.5	7129	1443622.5
3	5.12	Providing and laying Bituminous Concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per Section 507 of the specifications.								
	5.12.1	For Grading I (50-65 mm thickness) with VG-30 bitumen @ 5.2%	cum	1	1025	6	0.05	307.5	8766	2695545
4	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications								
			Sqm	2	1025	0.1		205	438	89790
				1	512.5	0.1		51.25	438	22447.5
5	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	250			500	315	157500
6	8.2	Road Delineators	Each	120				120	714	85680
7	17.2.1	Providing and laying non-pressure NP3 class (Medium duty) cement concrete Hume pipes for service ducts below concrete pavement or other similar work, collar jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand).								
			Rmt	1	6			6	1917	11502
		<b>Total</b>								<b>4616787</b>
								18% gst		831021.66
								<b>Total amount</b>		<b>5447808.66</b>

## ESTIMATE

ESTIMATE										
Name of Work			Construction of CC road at Vrindawan ward Ahemad nagar sagar mp..							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
1	2.3.1.1.2	Dismantling of existing structures comprising of masonry, Cement Concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material, stacking the serviceable material with all lifts and lead up to 1000 meters, as per Section-200 of the specifications.								
		Plain Cement Concrete Grade M-15 and M-20	Cum	1	12	6	0.1	7.2	615	4428
	3.12	Construction of Embankment/Sub-grade/Earthen Shoulders with material obtained from other sources, as per provisions of Section 305 of the specifications, with approved materials/soil confirming to requirements given in Table 301-1 of specifications including all lead and lifts, including cost of watering, compaction by vibratory roller/heavy pneumatic type roller etc. confirming to requirements given in Table 301-2 of the specifications complete	Cum	2	1150	0.9	0.2	414	432	178848
2	4.1.1.1	Construction of granular sub-base, spreading in uniform layers with motor grader on prepared surface, mixing by Mix in Place Method at OMC and compacting with vibratory roller of 80-100 KN Static weight to achieve the desired density, including all lifts and lead complete in all respect as per Section-400 of the specifications	Cum	1	80	6.3	0.15	75.6	1059	80060.4
3	6.1	Construction of Dry Lean Cement Concrete Sub-Base Over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 26.5mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1 of the specifications, cement content not to be less than 150 Kg/Cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 MPa at 7 days, mixed in a batching plant, transported to site, laid with paver with electronic sensor/mechanical paver, compacting with 8-10 tonnes vibratory roller, finishing and curing and as per Section 601 of specifications	Cum	1	80	6.2	0.1	49.6	3210	159216
3	6.2.1	Construction of Dowel jointed, Plain Cement Concrete Pavement in M-30 Grade Concrete over a prepared sub base with 43 or higher grade cement, coarse and fine aggregate conforming to IS:383 maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver with electronic sensor spreading the concrete by shovels, rakes compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, placing of dowel bar, tie rod admixtures as approved, curing compound, finishing to lines and grades as per approved drawings as per IRC:15 and as per Section-602 of the specifications complete excluding cost of steel in dowel bar and tie rod etc.	Cum	1	1000	6	0.2	1200	5916	7099200
4	6.2.3	Deduct from Item No 6.2.1 & 6.2.2 above if paver with electronic sensor/ mechanical paver, is not used and laying is done by any other method. Note: The acceptance criteria regarding level, thickness, surface regularity, texture finish, strength of concrete and all other quality control measures shall be the same as in case of machine laid work. This item is to be executed with Prior written permission of Executive Engineer	Cum	-1	1000	6	0.2	-1200	301	-361200
5	6.2.4.1	Mild Steel dowel bars confirming to IS 432, grade I	MT	1	1.2				57200	68640
6	6.2.4.2	HYSD tie bars of Fe 500 grade confirming to IS 1786	MT	1	1				63800	63800

7	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications								
			Sqm	2	1000	0.1		200	438	87600
				1	500	0.1		50	438	21900
8	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	350			700	315	220500
9	8.2	Road Delineators	Each	150				150	714	107100
2	17.2.1	Providing and laying non-pressure NP3 class (Medium duty) cement concrete Hume pipes for service ducts below concrete pavement or other similar work, collar jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand).								
			Rmt	1	6			6	1917	11502
		<b>Total</b>								<b>7741594.4</b>
								18% gst		1393486.992
								<b>Total amount</b>		<b>9135081.392</b>

ESTIMATE										
Name of Work			Construction of Bituminous road From Ravishankar school to kaanch							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
1	5.2	Providing and applying Tack Coat with cationic bitumen emulsion (RS-1) using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per Section 503 of the specifications								
	5.2.3	0.35 Kg per Sqm (Non-bituminous surfaces) Cement Concrete pavement	Sqm	1	700	6		4200	18	75600
2	5.11	Providing and laying Dense Bituminous Macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per Section 505 of the specifications. (As specified, Lime or cement will be used as filler)								
	5.11.1	For Grading I (75-100mm thickness) bitumen content 4.0% (VG-30)	cum	1	700	6	0.05	210	7129	1497090
3	5.12	Providing and laying Bituminous Concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per Section 507 of the specifications.								
	5.12.1	For Grading I (50-65 mm thickness) with VG-30 bitumen @ 5.2%	cum	1	700	6	0.05	210	8766	1840860
4	8.18	Providing and applying 2.5 mm including reflectorising glass beads @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications								
			Sqm	2	700	0.1		140	438	61320
				1	350	0.1		35	438	15330
5	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	250			500	315	157500
6	8.2	Road Delineators	Each	90				90	714	64260
7	17.2.1	Providing and laying non-pressure NP3 class (Medium duty) cement concrete Hume pipes for service ducts below concrete pavement or other similar work, collar jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand).								
			Rmt	2	6			12	1917	23004
<b>Total</b>										<b>3734964</b>

672293.52  
4407257.52

## ESTIMATE

ESTIMATE										
Name of Work			Construction of Bituminious road at Gulab colony Behind Tilli Hospital sagar mp..							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
1	5.2	Providing and applying Tack Coat with cationic bitumen emulsion (RS-1) using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per Section 503 of the specifications								
	5.2.3	0.35 Kg per Sqm (Non-bituminous surfaces) Cement Concrete pavement	Sqm	1	715	6		4290	18	77220
2	5.11	Providing and laying Dense Bituminous Macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per Section 505 of the specifications. (As specified, Lime or cement will be used as filler)								
	5.11.1	For Grading I (75-100mm thickness) bitumen content 4.0% (VG-30)	cum	1	300	6	0.075	135	7129	962415
3	5.12	Providing and laying Bituminous Concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per Section 507 of the specifications.								
	5.12.1	For Grading I (50-65 mm thickness) with VG-30 bitumen @ 5.2%	cum	1	715	6	0.05	214.5	8766	1880307
4	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications								
			Sqm	2	715	0.1		143	438	62634
				1	357.5	0.1		35.75	438	15658.5
5	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	150			300	315	94500
6	8.2	Road Delineators	Each	80				80	714	57120
7	17.2.1	Providing and laying non-pressure NP3 class (Medium duty) cement concrete Hume pipes for service ducts below concrete pavement or other similar work, collar jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand).								
			Rmt	1	6			6	1917	11502
		<b>Total</b>								<b>3161356.5</b>
								18% gst		569044.17

ESTIM/		
S. no.	Item No.	Name of Work
1	6.2.1	Construction of Dowel jointed, Plain Cement Concrete Pavement in M-30 Grade Concrete over a prepared sub base with 43 or higher grade cement, coarse and fine aggregate conforming to IS:383 maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver with electronic sensor spreading the concrete by shovels, rakes compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, placing of dowel bar, tie rod admixtures as approved, curing compound, finishing to lines and grades as per approved drawings as per IRC:15 and as per Section-602 of the specifications complete excluding cost of steel in dowel bar and tie rod etc.
2	6.2.3	Deduct from Item No 6.2.1 & 6.2.2 above if paver with electronic sensor/ mechanical paver, is not used and laying is done by any other method. Note: The acceptance criteria regarding level, thickness, surface regularity, texture finish, strength of concrete and all other quality control measures shall be the same as in case of machine laid work. This item is to be executed with Prior written permission of Executive Engineer
3	6.2.4.1	Mild Steel dowel bars confirming to IS 432, grade I
4	6.2.4.2	HYSD tie bars of Fe 500 grade confirming to IS 1786

	5 8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications
		<b>Total</b>

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**Construction of CC road from balkrishan nema To sahu tigadda in naryawali kana ward sagar mp..**

Unit	No.	Length	Width	Height	Quantity	Rate	Amount
Cum	1	80	6.2	0.1	49.6	3210	159216
Cum	1	600	6	0.2	720	5916	4259520
Cum	-1	600	6	0.2	-720	301	-216720
MT	1	0.7				57200	40040
MT	1	0.5				63800	31900

Sqm	2	600	0.1		120	438	52560
							<b>4326516</b>
					18% gst		778772.88
					<b>Total amount</b>		<b>5105288.88</b>

## ESTIMATE

		Construction of CC road from vijay taakeej chouraha at chandrashekhar - itwari ward								
S. no.	Item No.	Name of Work	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
1	2.3.1.1.2	Dismantling of existing structures comprising of masonry, Cement Concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material, stacking the serviceable material with all lifts and lead up to 1000 meters, as per Section-200 of the specifications.								
		Plain Cement Concrete Grade M-15 and M-20	Cum	1	5	6	0.1	3	615	1845
	3.12	Construction of Embankment/Sub-grade/Earthen Shoulders with material obtained from other sources, as per provisions of Section 305 of the specifications, with approved materials/soil conforming to requirements given in Table 301-1 of specifications including all lead and lifts, including cost of watering, compaction by vibratory roller/heavy pneumatic type roller etc. conforming to requirements given in Table 301-2 of the specifications complete	Cum	2	390	0.9	0.2	140.4	432	60652.8
2	4.1.1.1	Construction of granular sub-base, spreading in uniform layers with motor grader on prepared surface, mixing by Mix in Place Method at OMC and compacting with vibratory roller of 80-100 KN Static weight to achieve the desired density, including all lifts and lead complete in all respect as per Section-400 of the specifications	Cum	1	50	6.3	0.15	47.25	1059	50037.75
3	6.1	Construction of Dry Lean Cement Concrete Sub-Base Over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 26.5mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1 of the specifications, cement content not to be less than 150 Kg/Cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 MPa at 7 days, mixed in a batching plant, transported to site, laid with paver with electronic sensor/mechanical paver, compacting with 8-10 tonnes vibratory roller, finishing and curing and as per Section 601 of specifications	Cum	1	50	6.2	0.1	31	3210	99510
3	6.2.1	Construction of Dowel jointed, Plain Cement Concrete Pavement in M-30 Grade Concrete over a prepared sub base with 43 or higher grade cement, coarse and fine aggregate conforming to IS:383 maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver with electronic sensor spreading the concrete by shovels, rakes compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, placing of dowel bar, tie rod admixtures as approved, curing compound, finishing to lines and grades as per approved drawings as per IRC:15 and as per Section-602 of the specifications complete excluding cost of steel in dowel bar and tie rod etc.	Cum	1	395	6	0.2	474	5916	2804184
4	6.2.3	Deduct from Item No 6.2.1 & 6.2.2 above if paver with electronic sensor/ mechanical paver, is not used and laying is done by any other method. Note: The acceptance criteria regarding level, thickness, surface regularity, texture finish, strength of concrete and all other quality control measures shall be the same as in case of machine laid work. This item is to be executed with Prior written permission of Executive Engineer	Cum	-1	395	6	0.2	-474	301	-142674
5	6.2.4.1	Mild Steel dowel bars conforming to IS 432, grade I	MT	1	1.5				57200	85800
6	6.2.4.2	HYSD tie bars of Fe 500 grade conforming to IS 1786	MT	1	0.7				63800	44660

7	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications								
			Sqm	2	395	0.1		79	438	34602
				1	197.5	0.1		19.75	438	8650.5
8	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	144			288	315	90720
9	8.2	Road Delineators	Each	100				100	714	71400
2	17.2.1	Providing and laying non-pressure NP3 class (Medium duty) cement concrete Hume pipes for service ducts below concrete pavement or other similar work, collar jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand).								
			Rmt	1	6			6	1917	11502
		<b>Bitumen road</b>								
1	5.2	Providing and applying Tack Coat with cationic bitumen emulsion (RS-1) using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per Section 503 of the specifications								
	5.2.3	0.35 Kg per Sqm (Non-bituminous surfaces) Cement Concrete pavement	Sqm							
		MS Qureshi to Gajanand raikwar house in chandrashekhar ward		1	145	3		435	18	7830
2	5.11	Providing and laying Dense Bituminous Macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per Section 505 of the specifications. (As specified, Lime or cement will be used as filler)								
	5.11.1	For Grading I (75-100mm thickness) bitumen content 4.0% (VG-30)								
		MS Qureshi to Gajanand raikwar house in chandrashekhar ward	cum	1	145	3	0.075	32.625	7129	232583.625
3	5.12	Providing and laying Bituminous Concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per Section 507 of the specifications.								
	5.12.1	For Grading I (50-65 mm thickness) with VG-30 bitumen @ 5.2%								
			cum	1	145	3	0.05	21.75	8766	190660.5
4	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications								
		MS Qureshi to Gajanand raikwar house in chandrashekhar ward	Sqm	2	145	0.1		29	438	12702
				1	72.5	0.1		7.25	438	3175.5
5	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	80			160	315	50400
6	8.2	Road Delineators	Each	90				90	714	64260
		<b>Total</b>								<b>3782501.675</b>
								18% gst		680850.3015
								<b>Total amount</b>		<b>4463351.977</b>

## ESTIMATE

ESTIMATE										
Name of Work			Construction of Bituminous road at Manorama colony Madhukar shah ward sagar mp..							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
1	5.2	Providing and applying Tack Coat with cationic bitumen emulsion (RS-1) using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per Section 503 of the specifications								
	5.2.3	0.35 Kg per Sqm (Non-bituminous surfaces) Cement Concrete pavement	Sqm	1	265	6		1590	18	28620
2	5.11	Providing and laying Dense Bituminous Macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per Section 505 of the specifications. (As specified, Lime or cement will be used as filler)								
	5.11.1	For Grading I (75-100mm thickness) bitumen content 4.0% (VG-30)	cum	1	53	6	0.075	23.85	7129	170026.65
3	5.12	Providing and laying Bituminous Concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per Section 507 of the specifications.								
	5.12.1	For Grading I (50-65 mm thickness) with VG-30 bitumen @ 5.2%	cum	1	265	6	0.05	79.5	8766	696897
4	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications								
			Sqm	2	265	0.1		53	438	23214
				1	132.5	0.1		13.25	438	5803.5
5	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	90			180	315	56700
6	8.2	Road Delineators	Each	75				75	714	53550
7	17.2.1	Providing and laying non-pressure NP3 class (Medium duty) cement concrete Hume pipes for service ducts below concrete pavement or other similar work, collar jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand).								
			Rmt	2	6			12	1917	23004
		<b>Total</b>								<b>1057815.15</b>
								18% gst		190406.727
								<b>Total amount</b>		<b>1248221.877</b>

## ESTIMATE

ESTIMATE										
Name of Work			Construction of Bituminious road From Sant kavir ward to Rajiv nagar ward sagar mp..							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
1	5.2	Providing and applying Tack Coat with cationic bitumen emulsion (RS-1) using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per Section 503 of the specifications								
	5.2.3	0.35 Kg per Sqm (Non-bituminous surfaces) Cement Concrete pavement	Sqm	1	302	6		1812	18	32616
2	5.11	Providing and laying Dense Bituminous Macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per Section 505 of the specifications. (As specified, Lime or cement will be used as filler)								
	5.11.1	For Grading I (75-100mm thickness) bitumen content 4.0% (VG-30)	cum	1	80	6	0.075	36	7129	256644
3	5.12	Providing and laying Bituminous Concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per Section 507 of the specifications.								
	5.12.1	For Grading I (50-65 mm thickness) with VG-30 bitumen @ 5.2%	cum	1	302	6	0.05	90.6	8766	794199.6
4	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications								
			Sqm	2	302	0.1		60.4	438	26455.2
				1	151	0.1		15.1	438	6613.8
5	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	120			240	315	75600
6	8.2	Road Delineators	Each	90				90	714	64260
7	17.2.1	Providing and laying non-pressure NP3 class (Medium duty) cement concrete Hume pipes for service ducts below concrete pavement or other similar work, collar jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand).								
			Rmt	2	6			12	1917	23004
		<b>Total</b>								<b>1279392.6</b>
								18% gst		230290.668
								<b>Total amount</b>		<b>1509683.268</b>

## ESTIMATE

ESTIMATE										
S. no.	Item No.	Name of Work	Construction of CC road and Drain from lacchu chouraha to jhula tigadda							
			Unit	No.	Length	Width	Height	Quantity	Rate	Amount
	1.2.3.1.1.2	Dismantling of existing structures comprising of masonry, Cement Concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material, stacking the serviceable material with all lifts and lead up to 1000 meters, as per Section-200 of the specifications.								
		Plain Cement Concrete Grade M-15 and M-20	Cum	1	160	8	0.2	256	615	157440
				1	200	9	0.2	360	615	221400
	3.1	Excavation for roadway in soil including loading and unloading in/from truck for carrying suitable cut earth to embankment site and disposing off unsuitable earth with all lifts and lead up to 1000 Meters as per Section-300 of the specifications	cum	1	20	8	0.2	32	245	7840
				1	10	9	0.2	18	245	4410
	3.12	Construction of Embankment/Sub-grade/Earthen Shoulders with material obtained from other sources, as per provisions of Section 305 of the specifications, with approved materials/soil confirming to requirements given in Table 301-1 of specifications including all lead and lifts, including cost of watering, compaction by vibratory roller/heavy pneumatic type roller etc. conforming to requirements given in Table 301-2 of the specifications complete	Cum	2	360	0.9	0.2	129.6	432	55987.2
	2.4.1.1.1	Construction of granular sub-base, spreading in uniform layers with motor grader on prepared surface, mixing by Mix in Place Method at OMC and compacting with vibratory roller of 80-100 KN Static weight to achieve the desired density, including all lifts and lead complete in all respect as per Section-400 of the specifications								
			Cum	1	25	8	0.15	30	1059	31770
				1	20	9	0.15	27	1059	28593
	3.6.1	Construction of Dry Lean Cement Concrete Sub-Base Over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 26.5mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1 of the specifications, cement content not to be less than 150 Kg/Cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 MPa at 7 days, mixed in a batching plant, transported to site, laid with paver with electronic sensor/mechanical paver, compacting with 8-10 tonnes vibratory roller, finishing and curing and as per Section 601 of specifications								
			Cum	1	160	8	0.1	128	3210	410880
			Cum	1	200	9	0.1	180	3210	577800
	3.6.2.1	Construction of Dowel jointed, Plain Cement Concrete Pavement in M-30 Grade Concrete over a prepared sub base with 43 or higher grade cement, coarse and fine aggregate conforming to IS:383 maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver with electronic sensor spreading the concrete by shovels, rakes compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, placing of dowel bar, tie rod admixtures as approved, curing compound, finishing to lines and grades as per approved drawings as per IRC:15 and as per Section-602 of the specifications complete excluding cost of steel in dowel bar and tie rod etc.								
			Cum	1	160	8	0.2	256	5916	1514496
			Cum	1	200	9	0.2	360	5916	2129760

4	6.2.3	Deduct from Item No 6.2.1 & 6.2.2 above if paver with electronic sensor/ mechanical paver, is not used and laying is done by any other method. Note: The acceptance criteria regarding level, thickness, surface regularity, texture finish, strength of concrete and all other quality control measures shall be the same as in case of machine laid work. This item is to be executed with Prior written permission of Executive Engineer	Cum								
			Cum	-1	160	8	0.2	-256	301	-77056	
				-1	200	9	0.2	-360	301	-108360	
5	6.2.4.1	Mild Steel dowel bars confirming to IS 432, grade I	MT	1	1.2				57200	68640	
6	6.2.4.2	HYSID tie bars of Fe 500 grade confirming to IS 1786	MT	1	0.9				63800	57420	
7	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications									
			Sqm	2	360	0.1		72	438	31536	
				1	180	0.1		18	438	7884	
8	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	435			870	315	274050	
9	8.2	Road Delineators	Each	120				120	714	85680	
		<b>Total Amount Of Road A</b>								<b>5480170.2</b>	
		<b>Drain Work</b>									
	2.6	Earth work in excavation for foundation ,trenches for pipes/cablesor drains etc.by mechanical means/ manualmeans(exceeding30cm in depth.)including rammingofbottom,dressingof sides,disposalofexcavated earthincludingofallliftandleadupto50m.Disposedearth to be levelled and neatly dressed									
	2.6.1	All kinds of soil	Cum	2	200	1.2	0.9	432	151	65232	
								0			
	2.18	2.18Supplyingandfillinginplinthunderfloorsincluding, watering, ramming consolidating and dressing complete									
	2.18.2	Crusher Stone Dust	Cum	2	200	1.2	0.1	48	687	32976	
	4.1.4	Cement concrete grade M-10 (Nominal Mix ) with 20mm maximum size of stone aggregate	Cum	2	200	1.2	0.1	48	4219	202512	
	5.11.4	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding upto floor level including cost of binding wire, wastage and overlaps upto 12mm horizontal/ inclined position of reinforcement bars in slab and beams, plinth, chajjas, lintels, upto 4.5m vertical length of reinforcement in wall columns (over laps shall be provided as per requirement of IS:13920; IS456 & SP: 34) etc. complete									
		Thermo-Mechanically Treated bars. (Fe 500 D or more									
		Main Bar		12	4000	2.8	11200	0.888	9945.6	58	576844.8
		Dist bar		10	36	220	7920	0.617	4886.64	58	283425.12
		Cover					0			0	
		main bar		12	4000	1.2	4800	0.8888	4266.24	58	247441.92
		Dist bar		10	20	220	4400	0.617	2714.8	58	157458.4
	19.1.2	Walls (any thickness ) including attached pilasters ,butteresses ,plinth and string courses etc	Sqm	4	200		0.2	160	289	46240	
				8	200		0.9	1440	289	416160	
	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering Al lwork upto plinth level									

	4.1.2	Cement concrete grade M-20 (Nominal Mix) with 20mm maximum size of stone aggregate	Cum	2	200	1	0.1	40	5178	207120
				4	200	0.2	0.9	144	5178	745632
				2	200	1	0.2	80	5178	414240
								Total amount of drain B		3395282.24
								<b>Total amount of drain &amp; Road A+B</b>		<b>8875452.44</b>
								18% gst		1597581.439
								<b>Total amount</b>		<b>10473033.88</b>

## ESTIMATE

		Name of Work	Construction of CC road from Chatrashaal akhada to vallabh nagar ward							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
1	2.3.1.1.2	Dismantling of existing structures comprising of masonry, Cement Concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material, stacking the serviceable material with all lifts and lead up to 1000 meters, as per Section-200 of the specifications.								
		Plain Cement Concrete Grade M-15 and M-20	Cum	1	10	6	0.1	6	615	3690
	3.12	Construction of Embankment/Sub-grade/Earthen Shoulders with material obtained from other sources, as per provisions of Section 305 of the specifications, with approved materials/soil conforming to requirements given in Table 301-1 of specifications including all lead and lifts, including cost of watering, compaction by vibratory roller/heavy pneumatic type roller etc. conforming to requirements given in Table 301-2 of the specifications complete	Cum	2	495	0.9	0.2	178.2	432	76982.4
2	4.1.1.1	Construction of granular sub-base, spreading in uniform layers with motor grader on prepared surface, mixing by Mix in Place Method at OMC and compacting with vibratory roller of 80-100 KN Static weight to achieve the desired density, including all lifts and lead complete in all respect as per Section-400 of the specifications	Cum	1	50	4.8	0.15	36	1059	38124
3	6.1	Construction of Dry Lean Cement Concrete Sub-Base Over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 26.5mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1 of the specifications, cement content not to be less than 150 Kg/Cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 MPa at 7 days, mixed in a batching plant, transported to site, laid with paver with electronic sensor/mechanical paver, compacting with 8-10 tonnes vibratory roller, finishing and curing and as per Section 601 of specifications	Cum	1	50	4.7	0.1	23.5	3210	75435
3	6.2.1	Construction of Dowel jointed, Plain Cement Concrete Pavement in M-30 Grade Concrete over a prepared sub base with 43 or higher grade cement, coarse and fine aggregate conforming to IS:383 maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver with electronic sensor spreading the concrete by shovels, rakes compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, placing of dowel bar, tie rod admixtures as approved, curing compound, finishing to lines and grades as per approved drawings as per IRC:15 and as per Section-602 of the specifications complete excluding cost of steel in dowel bar and tie rod etc.	Cum	1	495	4.5	0.2	445.5	5916	2635578
4	6.2.3	Deduct from Item No 6.2.1 & 6.2.2 above if paver with electronic sensor/ mechanical paver, is not used and laying is done by any other method. Note: The acceptance criteria regarding level, thickness, surface regularity, texture finish, strength of concrete and all other quality control measures shall be the same as in case of machine laid work. This item is to be executed with Prior written permission of Executive Engineer	Cum	-1	495	4.5	0.2	-445.5	301	-134095.5
5	6.2.4.1	Mild Steel dowel bars conforming to IS 432, grade I	MT	1	1.2				57200	68640
6	6.2.4.2	HYSD tie bars of Fe 500 grade conforming to IS 1786	MT	1	0.6				63800	38280

7	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications								
			Sqm	2	495	0.1		99	438	43362
				1	247.5	0.1		24.75	438	10840.5
8	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	165			330	315	103950
9	8.2	Road Delineators	Each	110				110	714	78540
2	17.2.1	Providing and laying non-pressure NP3 class (Medium duty) cement concrete Hume pipes for service ducts below concrete pavement or other similar work, collar jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand).								
			Rmt	1	6			6	1917	11502
		<b>Total</b>								<b>3050828.4</b>
								18% gst		549149.112
								<b>Total amount</b>		<b>3599977.512</b>

## ESTIMATE

		Name of Work	Construction of CC road At Shubhash nagar ward sagar M.P.							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
		Dismantling of existing structures comprising of masonry, Cement Concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material, stacking the serviceable material with all lifts and lead up to 1000 meters, as per Section-200 of the specifications.								
1	2.3.1.1.2	Plain Cement Concrete Grade M-15 and M-20	Cum	1	15	6	0.1	9	615	5535
		Construction of Embankment/Sub-grade/Earthen Shoulders with material obtained from other sources, as per provisions of Section 305 of the specifications, with approved materials/soil confirming to requirements given in Table 301-1 of specifications including all lead and lifts, including cost of watering, compaction by vibratory roller/heavy pneumatic type roller etc. confirming to requirements given in Table 301-2 of the specifications complete	Cum	2	600	0.9	0.2	216	432	93312
		Construction of granular sub-base, spreading in uniform layers with motor grader on prepared surface, mixing by Mix in Place Method at OMC and compacting with vibratory roller of 80-100 KN Static weight to achieve the desired density, including all lifts and lead complete in all respect as per Section-400 of the specifications	Cum	1	120	6.3	0.15	113.4	1059	120090.6
3	6.1	Construction of Dry Lean Cement Concrete Sub-Base Over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 26.5mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1 of the specifications, cement content not to be less than 150 Kg/Cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 MPa at 7 days, mixed in a batching plant, transported to site, laid with paver with electronic sensor/mechanical paver, compacting with 8-10 tonnes vibratory roller, finishing and curing and as per Section 601 of specifications	Cum	1	120	6.2	0.1	74.4	3210	238824
3	6.2.1	Construction of Dowel jointed, Plain Cement Concrete Pavement in M-30 Grade Concrete over a prepared sub base with 43 or higher grade cement, coarse and fine aggregate conforming to IS:383 maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver with electronic sensor spreading the concrete by shovels, rakes compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, placing of dowel bar, tie rod admixtures as approved, curing compound, finishing to lines and grades as per approved drawings as per IRC:15 and as per Section-602 of the specifications complete excluding cost of steel in dowel bar and tie rod etc.	Cum	1	600	6	0.2	720	5916	4259520
4	6.2.3	Deduct from Item No 6.2.1 & 6.2.2 above if paver with electronic sensor/ mechanical paver, is not used and laying is done by any other method. Note: The acceptance criteria regarding level, thickness, surface regularity, texture finish, strength of concrete and all other quality control measures shall be the same as in case of machine laid work. This item is to be executed with Prior written permission of Executive Engineer	Cum	-1	600	6	0.2	-720	301	-216720
5	6.2.4.1	Mild Steel dowel bars confirming to IS 432, grade I	MT	1	1.2				57200	68640
6	6.2.4.2	HYSID tie bars of Fe 500 grade confirming to IS 1786	MT	1	0.76				63800	48488

7	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications								
			Sqm	2	620	0.1		124	438	54312
				1	310	0.1		31	438	13578
8	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	224			448	315	141120
9	8.2	Road Delineators	Each	110				110	714	78540
2	17.2.1	Providing and laying non-pressure NP3 class (Medium duty) cement concrete Hume pipes for service ducts below concrete pavement or other similar work, collar jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand).								
			Rmt	2	4.5			9	1917	17253
		<b>Total</b>								<b>4922492.6</b>
								18% gst		886048.668
								<b>Total amount</b>		<b>5808541.268</b>

## ESTIMATE

ESTIMATE										
Name of Work			Construction of CC road At Bhagat sing ward sagar M.P.							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
1	2.3.1.1.2	Dismantling of existing structures comprising of masonry, Cement Concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material, stacking the serviceable material with all lifts and lead up to 1000 meters, as per Section-200 of the specifications.								
		Plain Cement Concrete Grade M-15 and M-20	Cum	1	15	6	0.1	9	615	5535
	3.12	Construction of Embankment/Sub-grade/Earthen Shoulders with material obtained from other sources, as per provisions of Section 305 of the specifications, with approved materials/soil confirming to requirements given in Table 301-1 of specifications including all lead and lifts, including cost of watering, compaction by vibratory roller/heavy pneumatic type roller etc. confirming to requirements given in Table 301-2 of the specifications complete	Cum	2	507	0.9	0.2	182.52	432	78848.64
2	4.1.1.1	Construction of granular sub-base, spreading in uniform layers with motor grader on prepared surface, mixing by Mix in Place Method at OMC and compacting with vibratory roller of 80-100 KN Static weight to achieve the desired density, including all lifts and lead complete in all respect as per Section-400 of the specifications	Cum	1	55	4.8	0.15	39.6	1059	41936.4
3	6.1	Construction of Dry Lean Cement Concrete Sub-Base Over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 26.5mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1 of the specifications, cement content not to be less than 150 Kg/Cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 MPa at 7 days, mixed in a batching plant, transported to site, laid with paver with electronic sensor/mechanical paver, compacting with 8-10 tonnes vibratory roller, finishing and curing and as per Section 601 of specifications	Cum	1	55	4.7	0.1	25.85	3210	82978.5
3	6.2.1	Construction of Dowel jointed, Plain Cement Concrete Pavement in M-30 Grade Concrete over a prepared sub base with 43 or higher grade cement, coarse and fine aggregate conforming to IS:383 maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver with electronic sensor spreading the concrete by shovels, rakes compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, placing of dowel bar, tie rod admixtures as approved, curing compound, finishing to lines and grades as per approved drawings as per IRC:15 and as per Section-602 of the specifications complete excluding cost of steel in dowel bar and tie rod etc.	Cum	1	507	4.5	0.2	456.3	5916	2699470.8
4	6.2.3	Deduct from Item No 6.2.1 & 6.2.2 above if paver with electronic sensor/ mechanical paver, is not used and laying is done by any other method. Note: The acceptance criteria regarding level, thickness, surface regularity, texture finish, strength of concrete and all other quality control measures shall be the same as in case of machine laid work. This item is to be executed with Prior written permission of Executive Engineer	Cum	-1	507	4.5	0.2	-456.3	301	-137346.3
5	6.2.4.1	Mild Steel dowel bars confirming to IS 432, grade I	MT	1	0.8				57200	45760
6	6.2.4.2	HYSD tie bars of Fe 500 grade confirming to IS 1786	MT	1	0.6				63800	38280





2.6.1	All kinds of soil	Cum	2	675	0.6	0.45	364.5	151	55039.5
							0		
2.18	2.18 Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete								
2.18.2	Crusher Stone Dust	Cum	2	675	0.6	0.1	81	687	55647
4.1.4	Cement concrete grade M-10 (Nominal Mix ) with 20mm maximum size of stone aggregate	Cum	2	675	0.6	0.1	81	4219	341739
	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding upto floor level including cost of binding wire, wastage and overlaps upto 12mm horizontal/inclined position of reinforcement bars in slab and beams, plinth, chajjas, lintels, upto 4.5m vertical length of reinforcement in wall columns (over lap shall be provided as per requirement of IS:13920; IS456 & SP:34) etc. complete								
5.11.4	Thermo-Mechanically Treated bars. (Fe 500 D or more								
	Main Bar		12	9000	1.35	12150	0.888	10789.2	58 625773.6
	Dist bar		10	20	700	14000	0.617	8638	58 501004
19.1.2	Walls (any thickness ) including attached pilasters , butresses , plinth and string courses etc	Sqm	4	675		0.45	1215	289	351135
4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering Al work upto plinth level								
4.1.2	Cement concrete grade M-20 (Nominal Mix) with 20mm maximum size of stone aggregate	Cum	2	675	0.6	0.1	81	5178	419418
			4	675	0.1	0.45	121.5	5178	629127
	<b>Total</b>								4849078.975
							18% gst		872834.2155
							<b>Total amount</b>		<b>5721913.191</b>

## ESTIMATE

ESTIMATE										
Name of Work			Construction of Bituminious road & CC Road In Sastri ward sagar mp.							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
1	5.2	Providing and applying Tack Coat with cationic bitumen emulsion (RS-1) using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per Section 503 of the specifications								
	5.2.3	0.35 Kg per Sqm (Non-bituminous surfaces) Cement Concrete pavement								
		<b>Vijay jain chakki to rajendra rai home</b>	Sqm	1	282	2.8		789.6	18	14212.8
2	5.11	Providing and laying dense bituminous macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per								
	5.11.1	For Grading I (75-100mm thickness) bitumen content 4.0% (VG-30)								
		<b>Vijay jain chakki to rajendra rai home</b>	cum	1	15	2.8	0.075	3.15	7129	22456.35
3	5.12	Providing and laying Bituminous Concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per Section 507 of the specifications.								
	5.12.1	For Grading I (50-65 mm thickness) with VG-30 bitumen @ 5.2%	cum							
		<b>Vijay jain chakki to rajendra rai home</b>		1	282	2.8	0.05	39.48	8766	346081.68
	2.3.1.1.2	Dismantling of existing structures comprising of masonry, Cement Concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material, stacking the serviceable material with all lifts and lead up to 1000 meters, as per Section-200 of the specifications.								
		Plain Cement Concrete Grade M-15 and M-20	Cum	1	10	2.8	0.1	2.8	615	1722
	3.12	Construction of Embankment/Sub-grade/Earthen Shoulders with material obtained from other sources, as per provisions of Section 305 of the specifications, with approved materials/soil conforming to requirements given in Table 301-1 of specifications including all lead and lifts, including cost of watering, compaction by vibratory roller/heavy pneumatic type roller etc. conforming to requirements given in Table 301-2 of the specifications complete								
		<b>Shiv medical to anil prajapati home and</b>	Cum	2	42	4.5	0.3	113.4	432	48988.8
	4.1.1.1	Construction of granular sub-base, spreading in uniform layers with motor grader on prepared surface, mixing by Mix in Place Method at OMC and compacting with vibratory roller of 80-100 KN Static weight to achieve the desired density, including all lifts and lead complete in all respect as per Section-400 of the specifications								
		<b>Shiv medical to anil prajapati home and</b>	Cum	1	190	4.5	0.15	128.25	1059	135816.75
		<b>Yadavji home to main road</b>		1	202	2.5	0.15	75.75	1059	80219.25
	6.1	Construction of Dry Lean Cement Concrete Sub-Base Over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 26.5mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1 of the specifications, cement content not to be less than 150 Kg/Cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 MPa at 7 days, mixed in a batching plant, transported to site, laid with paver with electronic sensor/mechanical paver, compacting with 8-10 tonnes vibratory roller, finishing and curing and as per Section 601 of specifications								
		<b>Shiv medical to anil prajapati home and</b>	Cum	1	190	4.5	0.1	85.5	3210	274455
		<b>Yadavji home to main road</b>		1	202	2.5	0.1	50.5	3210	162105



19.1.2	Walls (anythickness )including attached pilasters ,butteresses ,plinth and string courses etc	Sqm	8	190		0.45	684	289		197676
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering Al work upto plinth level									
4.1.2	Cement concrete grade M-20 (NominalMix) with 20mm maximum size of stone aggregate	Cum	2	190	0.6	0.15	34.2	5178		177087.6
			4	190	0.1	0.6	45.6	5178		236116.8
	<b>Total</b>									<b>4016692.041</b>
								18% gst		723004.5674
								<b>Total amount</b>		<b>4739696.609</b>

## ESTIMATE

ESTIMATE										
Name of Work			Construction of Bituminous road & CC Road In Panthnagar ward ward sagar mp.							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
1	5.2	Providing and applying Tack Coat with cationic bitumen emulsion (RS-1) using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per Section 503 of the specifications								
	5.2.3	0.35 Kg per Sqm (Non-bituminous surfaces) Cement Concrete pavement								
		<b>Govind kirana to samsan ghat</b>	Sqm	1	381	2.9		1104.9	18	19888.2
		<b>Front of govind kirana</b>		1	58	2.4		139.2	18	2505.6
2	5.11	Providing and laying Dense Bituminous Macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per Section 505 of the specifications. (As specified, Lime or cement will be used as filler)								
	5.11.1	For Grading I (75-100mm thickness) bitumen content 4.0% (VG-30)								
		<b>Govind kirana to samsan ghat</b>	cum	1	25	2.9	0.075	5.4375	7129	38763.9375
3	5.12	Providing and laying Bituminous Concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per Section 507 of the specifications.								
	5.12.1	For Grading I (50-65 mm thickness) with VG-30 bitumen @ 5.2%	cum							
		<b>Govind kirana to samsan ghat</b>		1	381	2.8	0.05	53.34	8766	467578.44
		<b>Front of govind kirana</b>		1	58	2.4	0.05	6.96	8766	61011.36
2.3.1.1.2		Dismantling of existing structures comprising of masonry, Cement Concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material, stacking the serviceable material with all lifts and lead up to 1000 meters, as per Section-200 of the specifications.								
		<b>Plain Cement Concrete Grade M-15 and M-20</b>	Cum	1	2	2.8	0.1	0.56	615	344.4
3.12		Construction of Embankment/Sub-grade/Earthen Shoulders with material obtained from other sources, as per provisions of Section 305 of the specifications, with approved materials/soil confirming to requirements given in Table 301-1 of specifications including all lead and lifts, including cost of watering, compaction by vibratory roller/heavy pneumatic type roller etc. confirming to requirements given in Table 301-2 of the specifications complete								
			Cum	1	5	4.5	0.3	6.75	432	2916
4.1.1.1		Construction of granular sub-base, spreading in uniform layers with motor grader on prepared surface, mixing by Mix in Place Method at OMC and compacting with vibratory roller of 80-100 KN Static weight to achieve the desired density, including all lifts and lead complete in all respect as per Section-400 of the specifications								
			Cum	1	25	3.6	0.15	13.5	1059	14296.5
6.1		Construction of Dry Lean Cement Concrete Sub-Base Over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 26.5mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1 of the specifications, cement content not to be less than 150 Kg/Cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 MPa at 7 days, mixed in a batching plant, transported to site, laid with paver with electronic sensor/mechanical paver, compacting with 8-10 tonnes vibratory roller, finishing and curing and as per Section 601 of specifications								
			Cum	1	25	3.6	0.1	9	3210	28890

		Construction of Dowel jointed, Plain Cement Concrete Pavement in M-30 Grade Concrete over a prepared sub base with 43 or higher grade cement, coarse and fine aggregate conforming to IS:383 maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver with electronic sensor spreading the concrete by shovels, rakes compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, placing of dowel bar, tie rod admixtures as approved, curing compound, finishing to lines and grades as per approved drawings as per IRC:15 and as per Section-602 of the specifications complete excluding cost of steel in dowel bar and tie rod etc.								
6.2.1			Cum	1	85	3.6	0.2	61.2	5916	362059.2
		<b>Main road to ramesh ghoshi</b>	Cum	1	72	3.4	0.2	48.96	5916	289647.36
		<b>Ramesh ghoshi to sandeep kori</b>	Cum	1	134	3.6	0.2	96.48	5916	570775.68
		<b>Mahesh sahu harichand prajapati</b>	Cum	1	66	3	0.2	39.6	5916	234273.6
			Cum	1	69	4	0.2	55.2	5916	326563.2
6.2.3		Deduct from Item No 6.2.1 & 6.2.2 above if paver with electronic sensor/ mechanical paver, is not used and laying is done by any other method. Note: The acceptance criteria regarding level, thickness, surface regularity, texture finish, strength of concrete and all other quality control measures shall be the same as in case of machine laid work. This item is to be executed with Prior written permission of Executive Engineer	Cum							
			Cum	-1	426	3.52	0.2	-299.904	301	-90271.104
6.2.4.1		Mild Steel dowel bars confirming to IS 432, grade I	MT	1	0.6				57200	34320
6.2.4.2		HYSD tie bars of Fe 500 grade confirming to IS 1786	MT	1	0.3				63800	19140
4	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications								
			Sqm	2	300	0.1		60	438	26280
				1	150	0.1		15	438	6570
5	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	130			260	315	81900
6	8.2	Road Delineators	Each	50				50	714	35700
7	17.2.1	Providing and laying non-pressure NP3 class (Medium duty) cement concrete Hume pipes for service ducts below concrete pavement or other similar work, collar jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand).	Rmt	5	3.6			18	1917	34506
		<b>Drain Work</b>								
2.6		Earth work in excavation for foundation , trenches for pipes/cables or drains etc.by mechanical means/ manual means(exceeding 30cm in depth.)including ramming of bottom, dressing of sides, disposal of excavated earth including of all lift and lead upto 50m. Disposed earth to be levelled and neatly dressed								
2.6.1		All kinds of soil	Cum	2	250	0.6	0.45	135	151	20385
								0		
2.18.2	2.18	2.18 Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete Crusher Stone Dust	Cum	2	250	0.6	0.1	30	687	20610
4.1.4		Cement concrete grade M-10 (Nominal Mix ) with 20mm maximum size of stone aggregate	Cum	2	250	0.6	0.1	30	4219	126570

		Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding upto floor level including cost of binding wire, wastage and overlaps upto 12mm horizontal/inclined position of reinforcement bars in slab and beams, plinth, chajjas, lintels, upto 4.5m vertical length of reinforcement in wall columns (over lap shall be provided as per requirement of IS:13920; IS:456 & SP:34) etc. complete								
5.11.4		Thermo-Mechanically Treated bars. (Fe 500 D or more)								
		Main Bar	12	3333	1.6	5332.8	0.888	4735.5264	58	274660.5312
		Dist bar	10	20	260	5200	0.617	3208.4	58	186087.2
19.1.2		Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc	Sqm	8	250		0.45	900	289	260100
	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering Al work upto plinth level								
	4.1.2	Cement concrete grade M-20 (Nominal Mix) with 20mm maximum size of stone aggregate	Cum	2	250	0.6	0.15	45	5178	233010
				4	250	0.1	0.6	60	5178	310680
		<b>Total</b>								<b>3999761.105</b>
								18% gst		719956.9988
								<b>Total amount</b>		<b>4719718.104</b>

## ESTIMATE

		Name of Work	Construction of CC road In Sant ravidash ward sagar M.P.							
S. no.	Item No.	Item Name	Unit	No.	Length	Width	Height	Quantity	Rate	Amount
		Construction of Embankment/Sub-grade/Earthen Shoulders with material obtained from other sources, as per provisions of Section 305 of the specifications, with approved materials/soil confirming to requirements given in Table 301-1 of specifications including all lead and lifts, including cost of watering, compaction by vibratory roller/heavy pneumatic type roller etc. confirming to requirements given in Table 301-2 of the specifications complete								
	3.12									
		<b>Shri 1008 arhatkoot jinalay road</b>	Cum	2	62	0.9	0.2	22.32	432	9642.24
		<b>In front of ITI Gate no.1</b>	Cum	2	92	0.9	0.2	33.12	432	14307.84
		Construction of granular sub-base, spreading in uniform layers with motor grader on prepared surface, mixing by Mix in Place Method at OMC and compacting with vibratory roller of 80-100 KN Static weight to achieve the desired density, including all lifts and lead complete in all respect as per Section-400 of the specifications								
	2.4.1.1.1									
		<b>Shri 1008 arhatkoot jinalay road</b>	Cum	1	62	4.4	0.15	40.92	1059	43334.28
		<b>In front of ITI Gate no.1</b>	Cum	1	92	2.5	0.2	46	432	19872
		Construction of Dry lean cement concrete sub-base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 26.5mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1 of the specifications, cement content not to be less than 150 Kg/Cum, optimum moisture content to be determined during trial								
	3.6.1									
		<b>Shri 1008 arhatkoot jinalay road</b>	Cum	1	62	4.4	0.1	27.28	3210	87568.8
		<b>In front of ITI Gate no.1</b>	Cum	1	92	2.5	0.2	46	432	19872
		Concrete Pavement in M-30 Grade Concrete over a prepared sub base with 43 or higher grade cement, coarse and fine aggregate conforming to IS:383 maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver with electronic sensor spreading the concrete by shovels, rakes compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, placing of dowel bar, tie rod admixtures as approved, curing compound, finishing to lines and grades as per approved								
	3.6.2.1									
		<b>Shri 1008 arhatkoot jinalay road</b>	Cum	1	62	4.2	0.2	52.08	5916	308105.28
		<b>In front of ITI Gate no.1</b>	Cum	1	92	2.5	0.2	46	432	19872
		Deduct from Item No 6.2.1 & 6.2.2 above if paver with electronic sensor/ mechanical paver, is not used and laying is done by any other method. Note: The acceptance criteria regarding level, thickness, surface regularity, texture finish, strength of concrete and all other quality control measures shall be the same as in case of machine laid work. This item is to be executed with Prior written permission of Executive Engineer								
	4.6.2.3		Cum							
		<b>Shri 1008 arhatkoot jinalay road</b>	Cum	-1	62	4.2	0.2	-52.08	301	-15676.08
		<b>In front of ITI Gate no.1</b>	Cum	-1	92	2.5	0.2	-46	301	-13846
	5.6.2.4.1	Mild Steel dowel bars confirming to IS 432, grade I	MT	1	0.29				57200	16588
	6.6.2.4.2	HYSD tie bars of Fe 500 grade confirming to IS 1786	MT	1	0.6				63800	38280
		<b>Bitumen Road</b>								
		Providing and applying Tack Coat with cationic bitumen emulsion (RS-1) using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per Section 503 of the specifications								
	1.5.2									
		0.35 Kg per Sqm (Non-bituminous surfaces) Cement Concrete pavement								
	5.2.3									
		<b>In front of iti to joy campion school</b>	Sqm	1	156	6		936	18	16848

2	5.11	Providing and laying Dense Bituminous Macadam with hot mix plant batch using crushed aggregates of specified grading, premixed with bituminous binder, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction complete in all respects and as per Section 505 of the specifications. (As specified, Lime or cement will be used as filler)									
	5.11.1	For Grading I (75-100mm thickness) bitumen content 4.0% (VG-30)									
		<b>In front of iti to joy campion school</b>	cum	1	45	2.9	0.075	9.7875	7129	69775.0875	
3	5.12	Providing and laying Bituminous Concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects and as per Section 507 of the specifications.									
	5.12.1	For Grading I (50-65 mm thickness) with VG-30 bitumen @ 5.2%	cum								
		<b>In front of iti to joy campion school</b>		1	156	6	0.05	46.8	8766	410248.8	
7	8.18	Providing and applying 2.5 mm including reflectorising glass beds @ 250 gm per Sqm area thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi-automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and as per Section 803 of specifications									
			Sqm	2	310	0.1		62	438	27156	
				1	155	0.1		15.5	438	6789	
8	8.19	Road Markers/ Road Studs with Lense Reflector	Each	2	310			620	315	195300	
9	8.2	Road Delineators	Each	60				60	714	42840	
2	17.2.1	Providing and laying non-pressure NP3 class (Medium duty) cement concrete Hume pipes for service ducts below concrete pavement or other similar work, collar jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand).									
			Rmt	4	4.5			18	1917	34506	
		<b>Drain Work</b>									
	2.6	Earth work in excavation for foundation ,trenches for pipes/cables or drains etc.by mechanical means/ manualmeans(exceeding30cm in depth.)including rammingofbottom,dressingofsides,disposalofexcavated earthincludingofallliftandleadupto50m.Disposedearth to be levelled and neatly dressed									
	2.6.1	All kinds of soil	Cum	2	154	0.6	0.45	83.16	151	12557.16	
								0			
	2.18	2.18Supplyingandfillinginplinthunderfloorsincluding, watering, ramming consolidating and dressing complete									
	2.18.2	Crusher Stone Dust	Cum	2	154	0.6	0.1	18.48	687	12695.76	
	4.1.4	Cement concrete grade M-10 (Nominal Mix ) with 20mm maximum size of stone aggregate	Cum	2	154	0.6	0.1	18.48	4219	77967.12	
	5.11.4	Reinforcement for R.C.C. work including straightening,cutting, bending,placinginpositionandbindinguptofloorlevelincludingcost ofbindingwire,wastageandoverlapsupto12mmhorizontal/inclined positionofreinforcementbarsinslabandbeams,plinth,chajjas, lintels,upto4.5mverticallengthofreinforcementinwallcolumns(over lapsshallbeprovidedasperrequirementofIS:13920;IS456&SP: 34) etc. complete									
		Thermo-Mechanically Treated bars. (Fe 500 D or more									
		Main Bar		12	2053	1.6	3284.8	0.888	2916.9024	58	169180.3392
		Dist bar		10	20	165	3300	0.617	2036.1	58	118093.8

19.1.2	Walls (anythickness )including attached pilasters ,butteresses ,plinth and string courses etc	Sqm	8	154		0.45	554.4	289	160221.6
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering Al lwork upto plinth level								
4.1.2	Cement concrete grade M-20 (NominalMix) with 20mm maximum size of stone aggregate	Cum	2	154	0.6	0.15	27.72	5178	143534.16
			4	154	0.1	0.6	36.96	5178	191378.88
	<b>Total</b>								<b>2237012.067</b>
							18% gst		402662.172
							<b>Total amount</b>		<b>2639674.239</b>