

Original Repair OR (DPP) estiamte for highway from Km 239 to 288, Total 50.00 Km on NH-552 Extn. SHYAMPUR-SABALGARH Road.

ABSTRACT OF COST		Estimated cost Rs.			#REF!
SN	ITEM	QTY	UNIT	RATE	AMOUNT
1	SOR ITEM NO 2.2 (i) P.N.17				
	Clearing and Grubbing Road Land Clearing and grubbing road land including uprooting rankvegetation, grass, bushes, shrubs, saplings and trees having girth up to 300 mm, removal of stumps of trees cut earlier and disposal ofunserviceable materials and stacking of serviceable material up to a lead of 1000 metres including removal and disposal of top organicsoil not exceeding 150 mm in thickness.				
	A In area of light jungle (in 40% length)	11.25	Hactare	22918	257827.5
2	SOR ITEM NO 4.12 P 25				
	Crusher Run Macadam Sub Base/Base Course Providing crushed stone aggregate, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller as per clause 410 to form a layer of sub-base/Base in accordance to Table No. 400-14, 400-15 and as per clause of section 407 of specifications.				
	(ii) For 37.5 mm maximum size (in 04% Area)	9375.0	Cum	1157.00	10846875
3	SOR ITEM NO 4.11 P 24				
	Wet Mix Macadam Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density in accordance to Table No. 400-12, 400-13 and as per clause of section 406 of specifications.	1875.0	Cum	1493.00	2799375.00
4	SOR ITEM NO 5.1 P 28				
	Prime coat Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including cleaning of road surface and spraying primer at the rate of 0.75 kg/sqm using mechanical means as per clause 502 of specifications.	9375.0	Sqm	37.00	346875
5	SOR ITEM NO5.2 (i) P.N.27				
	Providing and applying tack coat with catonic bitumen emulsion (RS-1) using				
	(i) @ 0.25 kg per sqm (normal bituminous surfaces)	18750.0	Sqm	14	262500
	(ii) @ 0.30 kg per sqm (dry & hungry bituminous surfaces /granular surfaces treated with primer)	13125	Sqm	16.00	210000
6	SOR ITEM NO.5.5(b) (V) P.N29				
	Dense Graded Bituminous Macadam Providing and laying dense bituminous macadam using crushed aggregates of specified grading, premixed with bituminous binder @ 4.0 to 4.5% by weight of total mix of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per clause 505 of specification complete in all respects. (b) Using Drum Mix Plnt of appropriate capacity and Paver finisher Hydraustatic with Sensor				
	(V) for GradingII(19 mm nominal size) Bitument Content Minimum 4.5% with Bitumen 30/40 (VG-40)	656.3	Cum	7957	5221781.25
7	SOR ITEM NO.5.6(b) (vi) P.N30				
	Bituminous Concrete Providing and laying bituminous concrete using crushed aggregates of specified grading, premixed with bituminous binder @ 5.4 to 5.6 % of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per clause 507 of specification. (b) Using Hot Mix Plant of appropriate capacity and Paver Finisher Hydraustatic with Sensor control				
	(vi) for Grading-II (30-45 mm thickness) with 30/40 bitumen(VG-40)	562.5	Cum	9992.00	5620500
8	SOR ITEM NO. 8.25 PN. 57				

	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beeds on Bituminous surface. Providing and applying (Cleaning of Bituminous surface) thermoplastic compound having composition of binder (Regin) minimum 18 %, titanium dioxide minimum 10 % and intermixed glass bead, minimum 30% of brand like Asian, Burger or equivalent make of 2.5 mm thick including drop down reflectorizing, glass beeds @ 250 gms per sqm area thickness of 2.5 mm is exclusive of surface applied glass beeds as per IRC:35. The finished surface to be level, uniform and free from streaks and holes, all complete as per clause 803 of specifications. Note:- The guarantee of Thermoplastic should be minimum 3 Years	10000.00	Sqm.	636.00	6360000
9	SOR ITEM NO. 8.4 (i) PN. 46				
	Retro- reflectorised Traffic signs Providing and fixing of retro-reflectorised cautionary, mandatory and informatory sign board as per IRC 67-2012 made of high intensity Micro-Prismatic Grade Sheeting (Type XI) vide IRC: 67:2012 clause 6.7.3.2 and clause 801.3.3 of MoRT&H fixed over Aluminum composite material sheet with thermoplastic core of Low density polyethylene (LDPE) between two thick skins/sheets of aluminum with overall thickness of 4mm and aluminum skin of thickness 0.3 on both side, the ACM shall conform to Table 6.1 of IRC:67:2012 and Table 800-1 of MoRT&H specification and High Intensity Micro Prismatic Grade Sheeting shall conform to Table 6.6 of IRC:67:2012 and Table 800-3 of MoRT&H specification of in the clause IRC 6.8 of the IRC 67-2012 and clause 801.3.7 of MORTH message legend numerical letter etc. and borders shall be screen printed on high intensity micro prismatic sheeting shall conform to clause 801.3.7 with digital printing ink or of cutout from transparent durable overlay or cutout from the same type of reflecting sheeting for cautionary/ mandatory/ signs, supported on MS sign post of size 75mm x 75mm x 6mm of 3.60 meter over all length and fix to ground by means of properly designed foundation of dimension 450x450x600mm with M20 grade concrete. The ACM sheet shall be fixed to the post with four minimum four number breakaway bolts. & supported with a back support frame of 25mmx25mmx3mm angle. 10 years warranty for Retro Reflection Sheeting to be provided from the original sheeting manufacture as per clause 6.9 of IRC: 67:2012 & a certified copy for three years for outdoor exposure report from an independent test lab as per clause 6.7 of IRC: 67:2012 for the product offered shall be submitted by the contractor. Note:- Manufacture name and date of manufacture is to be printed (Embossed) at the backside of the board.				
	i) 90 cm equilateral triangle	100.0	Each	4357.00	435700
	ii) 60 cm equilateral triangle	100.0	Each	3066.00	306600
	iii) 60 cm circular	100.0	Each	3911.00	391100
	iv) 80 mm x 60 mm rectangular	85.0	Each	5222.00	443870
	v) 60 cm x 45 cm rectangular	115.0	Each	3825.00	439875
10	SOR item no.8.11 p 51				

	Direction and Place Identification signs more than 0.9 sqm size board. Providing and fixing of retro-reflectorised cautionary, mandatory and informatory sign board as per IRC 67-2012 made of high intensity Micro-Prismatic Grade Sheeting (Type IV) vide IRC: 67:2012 clause 6.7.3.2 and clause 801.3.3 of MoRT&H fixed over Aluminum composite material sheet with thermoplastic core of Low density polyethylene (LDPE) between two thick skins/sheets of aluminum with overall thickness of 4mm and aluminum skin of thickness 0.3 on both side, the ACM shall conform to Table 6.1 of IRC:67:2012 and Table 800-1 of MoRT&H specification and High Intensity Micro Prismatic Grade Sheeting shall conform to Table 6.6 of IRC:67:2012 and Table 800-3 of MoRT&H specification of in the clause IRC 6.8 of the IRC 67-2012 and clause 801.3.7 of MORTH message legend numerical letter etc. and borders shall be screen printed on high intensity micro prismatic sheeting shall conform to clause 801.3.7 with digital printing ink or of cutout from transparent durable overlay or cutout from the same type of reflecting sheeting for cautionary/ mandatory/ signs, supported on MS sign post of size 75mm x 75mm x 6mm of 3.60 meter over all length and fix to ground by means of properly designed foundation of dimension 450x450x600mm with M20 grade concrete. The ACM sheet shall be fixed to the post with four minimum four number breakaway bolts. & supported with a back support frame of 25mmx25mmx3mm angle. 7 years warranty for Retro Reflection Sheeting to be provided from the original sheeting manufacture as per clause 6.9 of IRC: 67:2012 & a certified copy for three years for outdoor exposure report from an independent test lab as per clause 6.7 of IRC: 67:2012 for the product offered shall be submitted by the contractor. Note:- Manufacture name and date of manufacture is to be printed (Embossed) at the backside of the board	22.0			0
11	SOR ITEM NO.8.21 P 56				
	Road Markers/Road Stud with Lense Reflector Providing and fixing single mound twin shanked molded Road Markers/Road Stud made of poly carbonate or ABS body and shall support a load of 13635 Kg tested in accordance to ASTM D 4280 and complying to specifications of Section-5 of IRC:35-2015 and clause 804.2.2 of MORT&H and Section-5 of IRC:35-2015. the reflecting panels shall consist of number of lenses containing single or dual prismatic cubes capable of providing total internal reflection of the light entering the lens face. The slope or retro-reflecting surface should be 35 + 5 degree to base. The reflective marker shall be fixed to the road surface using the epoxy/ adhesives and the procedure recommended by the manufacturer. No nails shall be used to affix the markers so Cubes capable of that they do not pose safety hazard on the road.. The contractor shall submit a two year replacement warranty. for satisfactory field performance including stipulated retro-reflectance of the reflecting pan	1000	Each	673	673000
	At 02 junctions and curves				
12	SOR ITEM NO.8.20Pn56				
	Supplying and installation of delineators (road way indicators,hazard markers, object markers), 80-100 cm high above ground level, painted black and white in 15 cm wide stripes, fitted with 80 x100 mm rectangular or 75 mm dia circular reflectorised panels at the top, buried or pressed into the ground and confirming to IRC-79 and the drawings.	500	Each	278	139000
13	SOR ITEM NO.8.23Pn 57				
	Kilo Metre Stone Reinforced cement concrete M15 grade kilometre stone of standard design as per IRC:8-1980, fixing in position including painting and printing etc				
	(ii) Ordinary Kilometer stone (Precast)	5	Each	1984	9920
	(iii) Hectometer stone (Precast)	45	Each	578	26010
14	SOR ITEM NO.10.19 PN.73				
	Providing painting, figuring and numbering as per IRC specifications complete with Synthetic Enamel Paint for 5th Km. Stone.				
	(ii) One coat on old work.	10	Each	293	2930
15	SOR ITEM NO.10.20 PN.73				
	Providing painting, figuring and numbering as per IRC specifications complete with Synthetic Enamel Paint for ordinary Km. Stone.				

	(ii) One coat on old work.	35	Each	99	3465
16	SOR ITEM NO.10.21 PN.73				
	Providing painting, figuring and numbering as per IRC specifications complete with Synthetic Enamel Paint for 0.2 Km. Stones or Boundary Stones..				
	(ii) One coat on old work	155	Each	25	3875
17	SOR ITEM NO.4.13(B) PN.25				
	Construction of Shoulders with approved material/selected soil/c excavation all lifts & leads i/c grading to required slope & camber of 4% and compacting using vibratory roller of 80 to 100 kN static weight to meet requirement as per relevant clause of 400				
	(B) Hard Shoulders (CBR value >12)	13668	Cum	223	3047964
18	SOR ITEM NO.6.14 PN.39				
	Providing and laying factory made coloured chamfered edge Cement Concrete paver blocks of required strength, thickness and size/shape, made by table vibratory method using PU mould, laid in required colour and pattern over 50mm thick compacted bed of stone dust, compacting and proper embedding/laying of inter locking paver blocks into the bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand including locking edges with M 15 cement concrete in footpath, light traffic parking etc. complete as per direction of Engineer-in-Charge.				
	(i) 100mm thick C.C. paver block of M-35 grade with approved colour, design and pattern.	12800	Sqm	837	10713600.00
19	SOR ITEM NO.8.16 PN.54				
	Metal Beam Crash Barrier A Type - A, "W" : Metal Beam Crash Barrier (Providing and erecting a "W" metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 70 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, however 5 spaces of 600mm each between vertical post and 5 spaces of 900mm each between vertical post will be kept adjacent to RCC parapet/ concrete crash barrier in accordance to figure 9.14 of the IRC-SP: 73-2018, 1.8 m high, 1.1 m below ground/road level, all steel parts and fittings to be galvanised by hot dip process, all fittings to conform to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical post with a spacer of channel section 150 x 75 x 5 mm, 330 mm long complete as per clause 811) and treatment for metal beam crash barrier on approach shall be modified eccentric loader terminal arrangement as shown in figure 9.12 of IRC- SP : 73-2018 End portion of metal beam crash barrier shall be flared outside by 1.25 mtr. Distance in last section of 8 mtr. Length. Departure side it shall be trailing terminal (TT) arrangement as shown in figure 9.13 of the IRC SP-73-2018. End portion of metal beam crash barrier shall be flared outside by 0.35 mtr. Distance in last section of 8	2400	metre	4500	10800000
20	SOR ITEM NO.8.28 PN.58				
	Painting Two Coats on New Concrete Surfaces Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces	1380	Sqm	65	89700
21	SOR ITEM NO.16.19 PN.99				
	Replacement of expansion Joint complete as per drawing. Cost of expansion joint to be paid separately.	110	RM	292	32120
22	SOR ITEM NO.16.5 PN.97				
	Sealing of cracks/porous concrete by injection process through nipples/Grouting complete as per Technical specification. A Cement Grout	3600	Kg	65	234000
23	SOR ITEM NO.16.7 PN.97				
	Sealing of crack / porous concrete with Epoxy Grout by injection through nipples complete as per clause 2803.1.	3600	Kg	1583	5698800
24	SOR ITEM NO.15.8 PN.94				
	Dry rubble Flooring	605.268	Cum	2608	1578538.944
25	SOR ITEM NO.14.6 PN.89				
	Providing and laying Cement concrete wearing coat M-30 grade including reinforcement complete as per drawing and Technical Specifications and as per relevant clauses of sections 1500, 1700 and Clause 2702 of specifications..	47.925	Cum	11685	560003.625
26	SOR ITEM NO.8.43 PN.60				
	Providing and fixing guard stones 220x220x1000mm made of hammer dressed stones or 250 mm (dia) x 1000 mm M-15 concrete and fixed 400mm into the ground in moorum and broken aggregates block of size 500x500x500 mm and given two coats of paints with white and black bands i/c excavation etc. complete.	222	No	368	81696
				Grand Total	67637899