

<p style="text-align: center;"><b>NIT</b>  <b>Construction Of Krashi Upaj Mandi Badora Betul Back side to NH-47 Road Length-1.50 km</b>  <b>SOR Road and Bridge Work IN FORCE FROM APRIL 11th, 2025</b></p>						
			<b>P.A.C.</b>		<b>586.04</b>	<b>LACS</b>
<b>S.No.</b>	<b>S.O.R ITEM NO.</b>	<b>Descriptions of Item</b>	<b>Quantity</b>	<b>Rate</b>	<b>Unit</b>	<b>Amount in Rs</b>
1	2.2	<b>Clearing and Grubbing Road Land</b> Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees having girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material up to a lead of 1000 meters including removal and disposal of top organic soil not exceeding 150 mm in thickness				
		<b>A. In area of light jungle</b>	2.40	29409.00	hectare	70582.00
2	3.3	<b>Excavation in Soil using Hydraulic Excavator and Tippers with disposal up to 1000 meters.</b> Excavation for roadwork in soil with hydraulic excavator including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting suitable earth to the embankment location and disposing off unsuitable earth with all lifts and lead up to 1000m as per relevant clauses of section-300 of specification.	2400.00	79.00	cum	189600.00
3	3.14	<b>Construction of Embankment with Material Deposited from Roadway Cutting</b> Construction of embankment with approved materials having CBR>7 deposited at site from roadway cutting and excavation from drain or foundation of structures graded and compacted to meet requirement of table 300-1, 300-2 and as per relevant clauses of section-300.	240.00	60.00	cum	14400.00
4	3.13	<b>Embankment Construction with Material Obtained from Borrow Pits</b> Construction of embankment with approved material having CBR>7 obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement of table 300-1, 300-2 and as per relevant clauses of section-300.	14216.25	298.00	cum	4236443.00
5	3.18	<b>Surface Drains in Soil</b> Construction of unlined surface drains of average cross sectional area 0.40 sqm in soil to specified lines, grades, levels and dimensions to the requirement of clause 301 and 309. Suitable Excavated material to be used in embankment within a lead of 50 metres as per relevant clauses of section-300	2250.00	72.00	metre	162000.00
6	4.2	<b>Crusher Run Macadam Sub Base/Base Course</b> 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	2660.49	1198.00	cum	3187267.00



7	4.3	<b>Wet Mix Macadam</b> 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. A By Sensor Paver	2703.75	1451.00	cum	3923141.00
8	4.16	<b>Construction of Shoulders</b> with approved material/selected soil i/c excavation all lifts & leads i/c grading to required slope & camber of 4% and compacting on OMC using vibratory roller of 80 to 100 kN static weight. Field compaction shall be done in corresponding layers of carriage way thickness and meet the requirements of MDD to achieve compaction (98% - 100%) as per relevant clause of 408 A Hard Shoulders (CBR value >12)	3283.20	398.00	cum	1306714.00
9	5.1	<b>Prime Coat Over WMM/WBM</b> (i) Providing and applying primer coat with cationic bitumen emulsion on prepared surface of granular Base including cleaning of road surface and spraying primer at the rate of 0.70 to 1.00 kg/sqm using mechanical means as per clause 502 of specifications.	10815.00	44.00	sqm	475860.00
10	5.3	<b>Providing and applying tack coat</b> with cationic bitumen emulsion using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom and as per relevant clauses of section-503 of specifications.				
	(ii)	@0.30 kg per sqm (dry & hungry bituminous surfaces /Granular surfaces treated with primer)	10815.00	17.00	sqm	183855.00
11	5.6	<b>Dense Graded Bituminous Macadam</b> 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 Electronic Sensor 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.				
	a)	Using Batch Mix Plant of appropriate capacity				
	(iv)	for Grading II (26.5 mm nominal size) Bitumen Content minimum 4.5% with bitumen 60/70 (VG 30)	540.75	8259.00	CuM	4466054.00
12	5.7	<b>Bituminous Concrete</b> Providing and laying bituminous concrete using crushed aggregates of specified grading, premixed with bituminous binder@ 5.4 to 5.6 % by weight of total mix of mix and filler,transporting the hot mix to work site, laying with an ElectronicSensor paver finisher with sensor control to the required grade,level and alignment, rolling with smooth wheeled, vibratorytandem and pneumatic tyre rollers to achieve the desiredcompaction as per clause 507 of specification				
	a)	Using Batch Mix Plant of appropriate capacity				
	(v)	for Grading-II (30-40 mm thickness) Bitumen Content minimum 5.4% with 60/70 bitumen (VG-30)	324.45	9760.00	Cum	3166632.00
13	6.15	Providing and laying reinforced cement concrete pipe NP-4 for service ducts below concrete pavement. a) 300 mm Dia	75.00	850.00	Rm.	63750.00



14	8.3	<b>Retro- reflectorised Traffic signs</b> Providing and fixing of retro-reflectorised cautionary, mandatory and informatory sign board as per IRC 67-2022 made of high intensity Micro-Prismatic Grade Sheeting (Type IV) vide IRC: 67:2022 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:67:2022 and Table 800-1 of MoRT &H specification and High Intensity Micro Prismatic Grade Sheeting shall conform to Table 6.6 of IRC:67:2022 and Table 800-3 of MoRT &H specification of in the clause 6.8				
		ii) 90 cm equilateral triangle	15.00	4531.00	Each	67965.00
		xiii) 60 cm x 60 cm square	15.00	4593.00	Each	68895.00
		x) 80 mm x 60 mm rectangular	15.00	5391.00	Each	80865.00
15	8.5	<b>Direction and Place Identification signs upto 0.9 sqm size board.</b> Providing and fixing of retro-reflectorised cautionary, mandatory and informatory sign board as per IRC 67-2022 made of high intensity Micro-Prismatic Grade Sheeting (Type IV) vide IRC: 67:2022 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:67:2022 and Table 800-1 of MoRT&H specification and High Intensity Micro Prismatic Grade Sheeting shall conform to Table 6.6 of IRC:67:2022 and Table 800-3 of MoRT&H specification of in the clause 6.8	3.60	9027.00	sqm	32497.00
16	8.7	<b>Direction and Place Identification signs more than 0.9 sqm size board.</b> Providing and fixing of retro-reflectorised cautionary, mandatory and informatory sign board as per IRC 67-2022 made of high intensity Micro-Prismatic Grade Sheeting (Type IV) vide IRC: 67:2022 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:67:2022 and Table 800-1 of MoRT&H specification and High Intensity Micro Prismatic Grade Sheeting shall conform to Table 6.6 of IRC:67:2022 and Table 800-3 of MoRT&H specification of in the clause 6.8	4.80	14497.00	Sqm	69586.00
17	8.36	<b>Kilo Metre Stone</b> Reinforced cement concrete M15grade kilometre stone of standard design as per IRC:8-1980, fixing in position including painting and printing etc				
	(i)	5th kilometre stone (precast)	0.00	3686.00	each	0.00
	(ii)	Ordinary Kilometer stone (Precast)	3.00	2131.00	each	6393.00
	(iii)	Hectometer stone (Precast)	12.00	621.00	each	7452.00






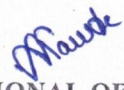



24	12.1	<b>Excavation for Structures</b> Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom as per relevant clauses of section 300 & 2100 in				
	I	<b>Ordinary soil ( including back filling with approved material)</b>				
	(i)	<b>Depth upto 3 m</b>	1897.73	79.00	Cum	149921.00
	II	<b>Ordinary rock (not requiring blasting)</b>				
	(i)	<b>Depth upto 3 m</b>	173.58	239.00	Cum	41486.00
25	9.1	<b>PCC M-15 in Foundation</b> Plain cement concrete M-15 mix with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days. as per MORT&H Specification 409.	18.83	4225.00	Cum	79557.00
26	9.8	Providing P.C.C. M-15 Nominal mix for hume pipe culverts in foundation and sub structure etc. as per drawing and as per relevant clauses of section 1500, 1700, 2100 and 2900.	186.48	4425.00	Cum	825174.00
27	9.2	<b>Providing and Laying Reinforced Cement Concrete Pipe NP4/prestrssed concrete pipe on first class bedding in single row.</b> Providing and Laying Reinforced cement concrete pipe NP4/prestrssed concrete pipe for culverts on first class bedding of granular material (cost of bedding included) in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and manapets				
		<b>B. 1000 mm dia</b>	105.00	6732.00	metre	706860.00
		<b>FOUNDATION</b>				
28	12.3	Providing Plain cement concrete M-15 nominal mix in foundation as per relevant clauses of sections 1500, 1700 and 2100.	223.740	4225.00	cum	945302.00
29	12.6	Providing and laying Plain/Reinforced cement concrete in open foundation including form work shuttering etc. complete as per drawing and technical specifications and as per relevant clauses of sections 1500, 1700 & 2100 with.				
		With Batching Plant, (Pan Type or Twin Shaft type)Transit Mixer and placing with Boom placer				
	B.	<b>PCC M20</b>	379.29	4783.0	Cum	1814144.00
	C.	<b>RCC M20</b>	837.00	4810.0	Cum	4025970.00
30	12.33	Supplying, fitting and placing un-coated HYSD bar reinforcement in foundation complete as per drawing and technical specifications and as per relevant clauses of section 1600. FE 500D/FE 550/FE 550D	49.044	68252.00	MT	3347331.00
		<b>SUBSTRUCTURE</b>				
31	13.1	Plain/Reinforced cement concrete in sub-structure complete as per drawing and technical specifications				
		<b>B. PCC M20</b>	851.04	5195.0	Cum	4421141.00
		<b>E. RCC Grade M-20 With Batching Plant, (Pan Type or Twin Shaft type)Transit Mixer and placing with Boom placer</b>				
		<b>Hight Up to 5m</b>	1222.50	5184.00	Cum	6337440.00
		<b>F. RCC Grade M-25 With Batching Plant, (Pan Type or Twin Shaft type)Transit Mixer and placing with Boom placer</b>				
		<b>Hight Up to 5m</b>	29.808	5746.00	cum	171277.00



32	13.4	Supplying, fitting and placing HYSD bar reinforcement in substructure complete as per drawing and technical specifications and as per relevant clause of section 1600. <b>FE 500D/ FE 550/ FE 550D</b>	84.42	68395.00	MT	5773815.00
33	13.7	Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical specifications.	200.00	174.00	Rm.	34800.00
34	13.8	Back filling behind abutment, wing wall and return wall complete as per drawing and Technical specification and as per relevant clauses 305 of specifications and as per appendix 6 of IRC-78.				
	A	Granular material	136.800	771.00	cum	105473.00
35	13.9	Providing and laying of Filter media with granular materials/stone crushed aggregates satisfying the requirements laid down in clause 2504.2.2 of MoRT&H specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided behind entire surface after abutment, return wall and wing wall to the full height compacted to a firm condition complete as per drawing and technical specification	37.440	871.00	cum	32610.00
36	13.16	Providing and fixing in position bituminous paper bearing for slabs as per approved drawing and confirming to IS:1398.	90.72	48.00	Sqm	4355.00
37		<b>SUPER STRUCTURE</b>				
	14.1	Providing and Placing Reinforced/Prestressed cement concrete in superstructure e/x reinforcement as per drawing and Technical Specification and as per relevant clauses of sections 1500, 1700 and 2300 in				
	B.	RCC Grade M 25 With Batching Plant (Pan Type or Twin Type Shaft type), Transit Mixer and placing with Boom placer				
		(i) Solid Slab				
		1. Height upto 5m	372.600	6179.00	Cum	2302295.00
38	14.4	Supplying, fitting and placing HYSD bars reinforcement in superstructure complete as per confirming to IS 1786:2000 drawing and technical specifications as per relevant clauses of section 1600 <b>(ii) FE 500D/ FE 550/ FE 550D</b>	48.438	68538.00	MT.	3319844.00
39	14.11	Providing and laying Cement concrete wearing coat 75 mm thick with M-30 grade concrete with cement, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 19 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with static paver, spread, compacted and finished with power trowel in a continuous operation including provision of admixtures as approved, curing compound, finishing to lines and grades as per drawing but including cost of steel etc. including reinforcement, texturing with texturing brush complete as per drawing and Technical Specifications and as per relevant clauses of sections 1500, 1700 and Clause 2702 of specifications.	30.938	10517.00	cum	325370.00
40	14.17	Drainage Spouts complete as per MOST standard drawing and Technical specification and as per clause 2705 of specifications	30.000	1227.00	No's	36810.00
41		<b>14.19 Filler joint</b>				
	14.24	(ii) Providing & fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & Technical Specification.	64.80	405.00	Rm.	26244.00



42	14.18	PCC M15 Grade leveling course below approach slab complete as per drawing and Technical specification and as per relevant clauses of section 1700.	7.88	5651.00	Cum	44502.00
43	14.19	Reinforced cement concrete non-structural approach slab (Grade of concrete M 30) as per MOST standard drawing including reinforcement and formwork complete as per drawing and Technical specification and as per relevant clauses of section 1500, 1600, 1700 and clause 2704 of specifications.	15.75	6672.00	Cum	105084.00
44	8.19	Reinforced Cement Concrete Crash Barrier Providing of an Reinforced cement concrete crash barrier at the edges of the road, approaches to bridge structures, constructed with M-40 grade concrete with HYSD reinforcement conforming to IRC:21 and dowel bars 25 mm dia, 450 mm long at expansion joints filled with pre-moulded asphalt filler board, keyed to the structure on which it is built and installed as per design given in the enclosure to MoRT&H circular No. RW/NH - 33022/1/94-DO III dated 24 June 1994 as per dimensions in the approved drawing and at locations directed by the Engineer, all as specified. (i) M 40 grade concrete	110.00	3294.00	Rm.	362340.00
45	16.4	Providing and laying Pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and Technical specifications A. Stone/Boulder	33.60	2351.00	cum	78994.00
46	16.5	Providing and laying suitable designed Filter material underneath pitching in slopes complete as per drawing and Technical specification	16.80	1591.00	cum	26729.00
PART II SUB TOTAL RS						35444864.00
GRAND Total (PART I + PART II) Rs						58604575.00
SAY(IN LAKHS)						586.04
<div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">   <b>SUB-ENGINEER</b>  <b>P.W.D.(B&amp;R) SUB DIVISION</b>  <b>BETUL</b> </div> <div style="text-align: center;">   <b>SUB DIVISIONAL OFFICER</b>  <b>P.W.D.(B&amp;R) SUB DIVISION</b>  <b>BETUL</b> </div> </div> <div style="text-align: center; margin-top: 20px;">   <b>EXECUTIVE ENGINEER</b>  <b>P.W.D.(B&amp;R) SUB DIVISION</b>  <b>BETUL</b> </div>						

Rate checked by  
me  
20/06/2008