

MUKHYA MANTRI GRAM SADAK YOJNA MMGSY (AWSHESH)

BILL OF QUANTITIES (BOQ) - CONSTRUCTION

Name of Road : Rwd Road Kenduatar To Rachnar Morawa Tol
Road :

Block : Dumaria

District : -

GAYA

Length : 3.81 km

Sl. No.	Description of Items	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
1	Setting Out Pillars :- Providing & Fixing of Working benchmark Pillars 01 nos. per km & 04 Nos. of reference pillars required for 1 Km. as per drawings given and direction of E/I				
i	Working Benchmark Pillars	4.00	Nos	4420.80	17683.20
ii	Reference Pillars	16.00	Nos	2027.96	32447.36
2	Clearing and Grubbing Road Land Clearing and Grubbing Road Land (By manual means) including uprooting wild vegetation , grass ,bushes ,shrubs , saplings and trees of girth upto 300mm , removals of stumps of such trees cut earlier & disposal of unserviceable materials & stacking of serviceable materials to be used or auctioned upto a lead of 1000 m including removal and disposal of top organic soil not exceeding 150mm in thickness as per technical specification - clause 201.1 and direction of E/I (By Manual Means) In area of non-thorny jungle	2.67	Hect.	75354.75	200971.12
3	Construction of embankment with approved material obtained from borrow pits with a lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 100 m as per Technical Specification Clause 301.5	934.43	Cum	178.60	166892.73
4	Construction of embankment with approved material obtained from borrow pits with a lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 1000 m as per Technical Specification Clause 301.5	377.04	Cum	240.76	90775.22
5	A) In Flexible Road:-Construction of subgrade and earthen shoulders with approved material obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table 300.2 with lead upto 1000 m & 100 m as per Technical Specification Clause 303.1. (Including Royalty & Labour Cess).	10595.20	Cum	244.02	2585460.17

Yd

Mr

6	B) In Rigid Road:-Construction of subgrade and earthen shoulders with approved material obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table 300.2 with lead upto 1000 m & 100 m as per Technical Specification Clause 303.1. (Including Royalty & Labour Cess).	693.75	Cum	244.02	169290.15
7	Granular Sub-base with Well Graded Material (Table 400.1) :- Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401. (For Grading II Material)	1927.99	Cum	2421.56	4668735.13
8	WBM Grading 2 :-Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheel roller 80-100 kN in stages to proper grade and camber, applying and brooming, stone screening/binding materials to fill-up the interstices of coarse aggregate, watering and compacting to the required density grading 2 as per Technical Specification Clause 405.	992.48	Cum	3926.710772	3897181.91
9	WMM :- Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mixer (Pug Mill), carriage of mixed material by tipper to site, laying in uniform layers in sub-base/base course on a well prepared sub-base and compacting with smooth wheel roller of 80 to 100kN weight to achieve the desired density including lighting, barricading and maintenance of diversion, etc as per Tables 400.11 & 400.12 and Technical Specification Clause 406.	1098.62	Cum	2915.1065	3202594.00
10	Prime Coat (Low Porosity) :- Providing and applying primer coat with bitumen emulsion (SS-1) on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.70-1.0kg/sqm using mechanical means as per Technical Specification Clause 502	13233.00	Sqm	55.18	730170.00
11	Tack Coat:- Providing and applying tack coat with Bitumen emulsion (RS-1) using emulsion distributor at the rate of 0.25-0.30kg per sqm on the prepared granular surfaces treated with primer & cleaned with Hydraulic broom as per Technical Specification Clause 503.	13233.00	Sqm	18.98	251162.00

Va

DR

12	MSS (Waste Plastic) : - Providing, laying and rolling of close-graded premix surfacing material of 20 mm thickness composed of 11.2 mm to 0.9 mm (Type-A) or 13.2 mm to 0.9 mm (Type-B) aggregates using penetration grade bitumen to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a three wheel 8-10 kN static roller and finishing to required level and grades as per Technical Specification Clause 509	13233	sqm	203.2933579	2690181.00
				APPROVED AS CORRECTED <i>S. S. Superintending Engineer</i>	
13	Construction of un-reinforced, plain cement concrete pavement (M35 Grade) over a prepared sub base with 43 grade cement @ 400 kg per cum, 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 paver, spread, compacted and finished in a continuous operation including provision of 0.5 x 0.5 panel, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, admixtures as approved, curing compound, finishing to lines and grades as per drawing	176.91	Cum	5923.82	1047982.00
14	Edging with 1st class bricks, laid dry lengthwise, including excavation, refilling, consolidation, with a hand packing and spreading nearly surplus earth within a lead of 50 metres	740.00	mt	43.83	32437.00
15	Reinforced cement concrete M15 grade kilometre stone/local stone of standard design as per IRC:8 fixing in position including painting and printing, etc as per drawing and Technical Specification Clause 1703				
ii	Ordinary Kilometer Stone (Precast)	4	Each	2558.72	10234.88
iii	200 m stone (precast)	16	Each	730.76	11692.16
16	Retro-reflectorised Traffic Signs Providing and erecting direction and place identification retroreflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide Clause 1701.2.3, fixed over aluminium sheeting, 2 mm thick with area exceeding 0.9 sqm supported on mild steel angle iron posts 75 mm x 75 mm x 6 mm, 2 Nos. firmly fixed to the ground by means of properly designed foundation with M-15 grade cement concrete 450 mm x 450 mm x 600 mm, 600 mm below ground level as per approved drawing and Technical Specification Clause 1701.	1.92	Sqm	13449.07	25822.22
17	Boundary Pillar/Gaurd Post :- Reinforced cement concrete M15 grade boundary pillars/local stone of standard design as per IRC:25, fixed in position including finishing and lettering but excluding painting as per drawing and Technical Specification Clause 1704	324	Nos	632.13	204809.06

V.R

M

18	<u>Traffic Signs :-</u> Providing and fixing of semi reflective cautionary , mandatory and informative sign board as per IRC :67 made of 1.5 mm thick MS steel duly stove white colour in front and gray colour on back with red reflective border of 65 mm width and required letters and figures with reflective tape engineering grade as per clause 1701.3.9 of MORD for rural road of required shade and colour supported and welded on 47mmx47mmx12swg sheet tube firmly fixed to the ground by mean of properly designed foundation with M15 grade cement concrete 450x450x600 mm ,600mm below ground level as per approved drawing clause 1701.2.2.				
	<u>APPROVED AS CORRECTED</u>				
		Superintending Engineer			
		Rural Works Department			
		Works Circle, Gaya			
19	600 mm equilateral & triangle	16	Each	4091.28	65460.56
	600 mm circular	4	Each	5407.71	21630.82
	600 mm x 450 mm rectangular	4	Each	5272.95	21091.81
	900 mm side octagon, OR	2	Each	9439.89	18879.78
20	<u>Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface :-</u> Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.	688	Sqm	801.71	551576.48
21	<u>Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Concrete Surface :-</u> Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.	74	Sqm	903.03	66824.22
	Planting of trees by the road side (Avenue trees) in 0.60 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year	344	Each	1247.20	429036.80




22	<p><u>(i) Providing and Fixing 'Logo' of MMGSUY Project :-</u></p> <p>Providing and fixing of typical MMGSUY informative sign board with Logo as per MORD specifications and drawing. Three MS Plates of 1.6 mm thick, top and middle plate duly welded with MS flat iron 25mm x 5mm size on back on edges. The lower plate will be welded with MS angle iron frame of 25mm x 25mm x 5mm. The angle iron frame of the lower most plate and flat iron frame of middle plate will be welded to 2 nos. 75mm x 75 mm of 12 SWG sheet tubes posts duly embedded in cement concrete M-15 grade blocks of 450mm x 450mm x 600mm, 600mm below ground level. The top most diamond plate will be welded to middle plate by 47mm x 47mm of 12 SWG steel plate tube. All M.S. will be stove enameled on both sides. Lettering and printing arrows, border etc. will be painted with ready mixed synthetic enamel paint of superior quality in required shade and colour. All sections of framed posts and steel tube will be painted with primer and two coats of epoxy paint as per drawing Clause 1701 and Annexure 1700.1</p>			
		2	Each	10679 21357.11
23	<p>Providing and laying of a reinforced cement concrete pipe duct, 300 mm dia, across the road (new construction), extending from drain to drain in cuts and toe of slope to toe of slope in fills, constructing head walls at both ends, providing a minimum fill of granular material over top and sides of RCC pipe as per IRC:981997, bedded on a 0.3 m thick layer of granular material free of rock pieces, outer to outer distance of pipe at least half dia of pipe subject to minimum 450 mm in case of double and triple row ducts, joints to be made leak proof, invert level of duct to be above higher than ground level to prevent entry of water and dirt, all as per IRC: 98 - 1997 and approved drawings.</p>	100.00	RM	972.18 97218.43
24	Earth work in excavation for foundation of structures upto 3.0 m depth as per drawing and technical specification clause 1104	120.81	Cum	397.76 48053.39
25	Providing concrete for plain/reinforced concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203 PCC M-15 Grade	8.67	Cum	5686.71 49303.78
26	Providing concrete for plain/reinforced concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203 PCC M-20 Grade	33.40	Cum	6238.25 208357.55
27	Supplying, fitting and placing HYSD bar reinforcement in foundation complete as per drawings and technical specifications Clauses 1000 and 1202	0.16	MT	66393.49 10456.97

VR

DR

28	Plain/reinforced cement concrete in substructure complete as per drawings and technical specification Clauses 802, 804, 805, 806, 807, 1202 and 1204 PCC M-20 Grade	16.25	Cum	6506.31	105727.54
29	Providing weepholes in brick masonry/stone masonry, plain/reinforced concrete abutment, wing wall, return wall with 100 mm dia AC pipe extending through the full width of the structures with slope of 1(V):20(H) towards drawing face complete as per drawing and technical specification Clauses 614, 709, 1204.3.7	36.00	Nos. Superintendent Enginee, Rural Works Departm.	175.31 15/06/25	6311.16
30	Plain/reinforced cement concrete in substructure complete as per drawings and technical specification Clauses 802, 804, 805, 806, 807, 1202 and 1204 RCC M-25 Grade	15.03	Works Circle, Gaya Cum	7043.59 15/06/25	105865.16
31	Supplying, fitting and placing HYSD bar reinforcement (Fe 415) in substructure complete as per drawings and technical specification Clauses 1002, 1005, 1010 & 1202	2.31	mt	66601.68	153849.88
32	Backfilling behind abutment, wing wall and return wall complete as per drawings & technical specification Clause 1204.3.8 (With Sandy Materials)	30.80	Cum	952.80	29346.24
33	Providing and laying filter media with granular crushed aggregates as per specification to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and providing over the entire surface behind abutment, wing wall, return wall to the full height, compacted to firm condition complete as per drawing and technical specification Clause 1204.3.8	27.98	Cum	2998.39	83894.95
34	Providing and laying reinforced cement concrete in superstructure as per drawing and technical specifications Clauses 800, 1205.4 and 1205.5 RCC M-30 Grade	6.25	Cum	7921.42	49508.88
35	Supplying, fitting, and placing HYSD bar reinforcement in superstructure complete as per drawing and technical specifications Clauses 1002, 1010 and 1202	0.75	mt	68118.34	51088.76
36	Parapet Construction Plain/reinforced cement concrete in substructure complete as per drawings and technical specification Clauses 802, 804, 805, 806, 807, 1202 and 1204 (M25)	4.01	Cum	7474.61	29973.19
37	Painting on Parapet Wall (Black & White Strips) Painting two coats including primer coat after filling the surface with synthetic enamel paint in all shades on new, plastered / concrete surfaces as per drawing and Technical Specification Clause 1701	27.65	Sqm	130.96	3621.04
38	Drainage spouts complete as per drawing and technical specifications Clause 1209	4.00	Nos	822.11	3288.44
39	Earth work in excavation for foundation of structures upto 3.0 m depth as per drawing and technical specification clause 1104	347.44	Cum	397.76	138198.70

40	Providing concrete for plain/reinforced concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203 PCC M-15 Grade	39.95	Cum	5686.71	227178.38
41	Plain/reinforced cement concrete in substructure complete as per drawings and technical specification Clauses 802, 804, 805, 806, 807, 1202 ans 1204 (M15 (PCC 1:2.5:5)	185.58	Cum	6133.61	1138256.94
42	Providing and laying RCC pipe NP-3 for culverts on first class bedding of PCC M10 material 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 parapets as per clause 1106 - <u>1000 mm Dia Pipe</u>	52.50	nos nos	7199.37	377966.74
				Superintending Engineer, Rural Works Department	
43	Painting on Parapet Wall (Black & White Strips) Painting two coats including primer coat after filling the surface with synthetic enamel paint in all shades on new, plastered / concrete surfaces as per drawing and Technical Specification Clause 1701	144.48	Works Circle, Gaya 130.96 Sqm		18921.10
44	Earthwork in excavation for structures as per drawing and technical specifications Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m, dressing of sides and bottom and backfilling in trenches with excavated suitable material.	205.95	cum	397.76	81918.67
45	Sand Filling in Foundation Trenches as per drawing and technical specification Clause 1108.	4.53	cum	584.67	2648.56
46	Providing PCC M 15 (1:2.5:5) concrete for plain concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203	34.57	cum	5686.71	196589.56
47	Providing PCC M 15 (1:2.5:5) concrete for plain concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203	115.71	cum	5686.71	658009.21
48	Plain/reinforced cement concrete in substructure complete as per drawings and technical specification Clauses 802, 804, 805, 806, 807, 1202 ans 1204. (M15 (PCC 1:2.5:5)	91.11	cum	6133.61	558833.21
49	Plain/Reinforced cement concrete(M-20) in substructure complete as per drawings and technical specification Clauses 802, 804, 805, 806, 807, 1202 ans 1204	9.80	cum	6506.31	63761.84
50	RCC M25 in Deck Slab --- Providing and laying reinforced cement concrete in superstructure (Deck slab M25) as per drawing and technical specifications Clauses 800, 1205.4, 1205.5	20.81	cum	7474.61	155546.63
51	Supplying, fitting and placing HYSD bar reinforcement in super-structure complete as per drawing and technical specifications	1.98	mt	68118.34	134942.43

VSL

WY

52	Providing and filling joint sealing compound as per drawings and technical specifications with coarse sand and 6 per cent bitumen by weight	16.80	RM	54.51	915.77
53	Providing Weepholes in brick masonry , Plain / Reinforced concrete abutement , 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	48.00	Nos.	175.31	8414.88
54	Drainage spouts complete as per drawing and technical specifications Clause 1209.	4.00	Nos.	822.11	3288.44
Total Construction Cost (A) :-					26033635.30
55	Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor at the rate of 0.25 to 0.30 kg per sqm on the prepared Bitumen surface treated with Primer and cleaned with hydriloc broom as per technical specification clause 503.	13158.00	Sqm	15.85 <i>Approved as correct</i> Superintending Engineer	208564.22
56	Providing and laying semi dense bituminous concrete with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder @ 4.5 to 5 per cent 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 MoRTH specification clause No. 508 complete in all respects.	328.95	Cum	12113.54 <i>Rural Works Department Works Circle, Gaya RP 25/86/25</i>	3984748.98
57	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.	688.00	Sqm	801.71	551576.48
58	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.	74.00	Sqm	903.03	66824.22
59	1% LABOUR CESS	1	RS	308453.483	308453.48
60	Seigniorage Fee	1	RS	561122.9065	561122.91
61	18 % GST	1	RS	5708686.445	5708686.44
Total Construction Cost					37423612.04
62	1st Year Maintenance cost	1	Year	528539.18	528539.18
63	2nd Year Maintenance Cost	1	Year	989516.81	989516.81
64	3rd Year Maintenance Cost	1	Year	1045606.46	1045606.46
65	4th Year Maintenance Cost	1	Year	844384.08	844384.08
66	6th Year Maintenance Cost	1	Year	457037.88	457037.88
67	7th Year Maintenance Cost	1	Year	545408.69	545408.69

VJL

M/

68	Total					4410493.1
69	1% LABOUR CESS					44104.9
70	Seigniorage Fee					22566.23
71	18 % GST					805887.8
72					Total Maintenance Singh (P) :-	5283052.0
					Superintendent	
					Rural Works Department	
					Total Project Cost (A.P) :-	42706664.1
					Works Circlet (A.P)	

25/06/21

Vd
25/06/21

Manj P. S.
25/06/21

Executive Engineer
RWD Works Division
Imamganj (Gaya)

Letter No: - 1164 Date: - 03/06/2025

AA Details
CONST. COST=
MAINT. COST=
OTHERS=
TOTAL=

363.	502	Lacq.
44.	395	Lacp
10.	497	Lacq
		<hr/>
418.		394 Lacq
		<hr/>

T.S. Details
CONST. COST=
MAINT. COST=
TOTAL=

374.	236	Lacq.
52.	830	Lacp
		<hr/>
427.		066 Lacq

BOQ Details
CONST. COST=
MAINT. COST=
TOTAL=

374	23	612	.04
52	83	052	.0
<hr/>			
42706664.1			

Total 42706664=₹ (Say)

B.O.Q approved for ₹. 42706664=₹ (₹. Four Crore
Twenty Seven Lacq Six Thousand Six hundred Sixty
four only.) From. Item No:-(1 to 53) & (62 to 67.)


25.06.2025
Superintending Engineer,
Rural Works Department,
Works Circle, Gaya

R.W.
25/06/25

MUKHYA MANTRI GRAM SADAK YOJNA MMGSY(AWSHESH)

BILL OF QUANTITIES (BOQ) - CONSTRUCTION

Name of Road : Sh 69 Mandar Hlb To Mattaha

Block : Dumaria

District :-

GAYA

Length : 2.35 km

Sl. No.	Description of Items	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
1	<u>Setting Out Pillars</u> :- Providing & Fixing of Working benchmark Pillars 01 nos. per km & 04 Nos. of reference pillars required for 1 km. as per drawings given and direction of E/I				
i	Working Benchmark Pillars	2.00	Nos	4420.80	8841.60
ii	Reference Pillars	8.00	Nos	2027.96	16223.68
2	<u>Clearing and Grubbing Road Land</u> Clearing and Grubbing Road Land (By manual means) including uprooting wild vegetation , grass ,bushes ,shrubs , saplings and trees of girth upto 300mm , removals of stumps of such trees cut earlier & disposal of unserviceable materials & stacking of serviceable materials to be used or auctioned upto a lead of 1000 m including removal and disposal of top organic soil not exceeding 150mm in thickness as per technical specification - clause 201.1 and direction of E/I (By Manual Means) In area of non-thorny jungle	1.65	Hect.	75354.75	123958.56
3	Construction of embankment with approved material obtained from borrow pits with a lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 100 m as per Technical Specification Clause 301.5	1634.81	Cum	178.60	291983.24
4	Construction of embankment with approved material obtained from borrow pits with a lift upto 1.5 m, transporting to site, spreading, grading to required slope and compacting to meet requirement of Tables 300.1 and 300.2 with a lead upto 1000 m as per Technical Specification Clause 301.5	1602.60	Cum	240.76	385838.03
5	A) In Flexible Road:-Construction of subgrade and earthen shoulders with approved material obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table 300.2 with lead upto 1000 m & 100 m as per Technical Specification Clause 303.1. (Including Royalty & Labour Cess).	4312.00	Cum	244.02	1052222.16

APPROVED AS CORRECTED

**Superintending Engineer
Rural Works Department
Works Circle, Gaya**

*Kan
25/06/25*

Vd

DR

6	B) In Rigid Road:-Construction of subgrade and earthen shoulders with approved material obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table 300.2 with lead upto 1000 m & 100 m as per Technical Specification Clause 303.1. (Including Royalty & Labour Cess).	1781.25	Cum	244.02	434663.90
7	Granular Sub-base with Well Graded Material (Table 400.1) :- Construction of granular sub-base by providing well graded material, spreading in uniform layers with tractor mounted grader arrangement on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401. (For Grading II Material)	1096.43	Cum	2421.56	2655066.29
8	WBM Grading 2 :-Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheel roller 80-100 kN in stages to proper grade and camber, applying and brooming, stone screening/binding materials to fill-up the interstices of coarse aggregate, watering and compacting to the required density grading 2 as per Technical Specification Clause 405.	407.25	Cum	3026.710772	1509152.96
9	WMM :- Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mixer (Pug Mill), carriage of mixed material by tipper to site, laying in uniform layers in sub-base/base course on a well prepared sub-base and compacting with smooth wheel roller of 80 to 100kN weight to achieve the desired density including lighting, barricading and maintenance of diversion, etc as per Tables 400.11 & 400.12 and Technical Specification Clause 406.	679.78	Cum	2915.1065	1981631.00
10	Prime Coat (Low Porosity) :- Providing and applying primer coat with bitumen emulsion (SS-1) on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.70-1.0kg/sqm using mechanical means as per Technical Specification Clause 502	5430.00	Sqm	55.18	299616.00
11	Tack Coat:- Providing and applying tack coat with Bitumen emulsion (RS-1) using emulsion distributor at the rate of 0.25-0.30kg per sqm on the prepared granular surfaces treated with primer & cleaned with Hydraulic broom as per Technical Specification Clause 503.	5430.00	Sqm	18.93	103061.00

VR

DR

12	MSS (Waste Plastic) - Providing, laying and rolling of close-graded premix surfacing material of 20 mm thickness composed of 11.2 mm to 0.9 mm (Type-A) or 13.2 mm to 0.9 mm (Type-B) aggregates using penetration grade bitumen to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a three wheel 8-10 kN static roller and finishing to required level and grades as per Technical Specification Clause 509	5430	sqm	203.2933579	1103882.93
		APPROVED AS CORRECTED			
13	Construction of un-reinforced, plain cement concrete pavement (M35 Grade) over a prepared sub base with 43 grade cement @ 400 kg per cum, 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 paver, spread, compacted and finished in a continuous operation including provision of 0.5 x 0.5 panel, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, admixtures as approved, curing compound, finishing to lines and grades as per drawing	454.22	 Superintending Engineer Rural Works Department Works Circle, Gava	5923.82 Cum 16/25	2690715.00
14	Edging with 1st class bricks, laid dry lengthwise, including excavation, refilling, consolidation, with a hand packing and spreading nearly surplus earth within a lead of 50 metres	1900.00	sqm	43.83	83283.56
15	Reinforced cement concrete M15 grade kilometre stone/local stone of standard design as per IRC:8 fixing in position including painting and printing, etc as per drawing and Technical Specification Clause 1703				
i	Ordinary Kilometer Stone (Precast)	3	Each	2558.72	7676.16
ii	200 m stone (precast)	10	Each	730.76	7307.60
16	Retro-reflectorised Traffic Signs Providing and erecting direction and place identification retroreflectorised sign as per IRC:67 made of encapsulated lens type reflective sheeting vide Clause 1701.2.3, fixed over aluminium sheeting, 2 mm thick with area exceeding 0.9 sqm supported on mild steel angle iron posts 75 mm x 75 mm x 6 mm, 2 Nos. firmly fixed to the ground by means of properly designed foundation with M-15 grade cement concrete 450 mm x 450 mm x 600 mm, 600 mm below ground level as per approved drawing and Technical Specification Clause 1701.	1.92	Sqm	13449.07	25822.22
17	Boundary Pillar/Gaurd Post :- Reinforced cement concrete M15 grade boundary pillars/local stone of standard design as per IRC:25, fixed in position including finishing and lettering but excluding painting as per drawing and Technical Specification Clause 1704	192	Nos	632.13	121368.33




18	Traffic Signs :- Providing and fixing of semi-reflective cautionary, mandatory and informative sign board as per IRC:67 made of 15 mm thick MS steel duly stove white colour in front and gray colour on back with red reflective border of 65 mm width and required letters and figures with reflective tape engineering grade as per clause 1701.3.9 of MORD for rural road of required shade and colour supported and welded on 47mmx47mmx12swg sheet tube firmly fixed to the ground by mean of properly designed foundation with M15 grade cement concrete 450x450x600 mm ,600mm below ground level as per approved drawing clause 1701.2.2.				
	600 mm equilateral & triangle	26	Each	4091.28	105373.40
	600 mm circular	8	Each	5407.71	43261.64
	600 mm x 450 mm rectangular	6	Each	5272.95	31637.72
	900 mm side octagon, OR	2	Each	9439.89	18879.78
19	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface :- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.	280	Sqm	801.71	224478.80
20	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Concrete Surface :- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.	190	Sqm	903.03	171575.70
21	Planting of trees by the road side {Avenue trees} in 0.60 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year	140	Each	1247.20	174608.00

VS

DR

22	<p>(i) Providing and fixing 'Logo' of MMGSUY Project :- Providing and fixing of typical MMGSUY informative sign board with Logo as per MORD specifications and drawing. Three MS Plates of 1.6 mm thick, top and middle plate duly welded with MS flat iron 25mm x 5m size on back on edges. The lower plate will be welded with MS angle iron frame of 25mm x 25mm x 5mm. The angle iron frame of the lower most plate and flat iron frame of middle plate will be welded to 2 nos. 75mm x 75 mm of 12 SWG sheet tubes posts duly embedded in cement concrete M-15 grade blocks of 450mm x 450mm x 600mm, 600mm below ground level. The top most diamond plate will be welded to middle plate by 47mm x 47mm of 12 SWG steel plate tube. All M.S. will be stove enameled on both sides. Lettering and printing arrows, border etc. will be painted with ready mixed synthetic enamel paint of superior quality in required shade and colour. All sections of framed posts and steel tube will be painted with primer and two coats of epoxy paint as per drawing Clause 1701 and Annexure 1700.1</p>	2	Each	10679	21357.11
23	Providing and laying of a reinforced cement concrete pipe duct, 300 mm dia, across the road (new construction), extending from drain to drain in cuts and toe of slope to toe of slope in fills, constructing head walls at both ends, providing a minimum fill of granular material over top and sides of RCC pipe as per IRC:981997, bedded on a 0.3 m thick layer of granular material free of rock pieces, outer to outer distance of pipe at least half dia of pipe subject to minimum 450 mm in case of double and triple row ducts, joints to be made leak proof, invert level of duct to be above higher than ground level to prevent entry of water and dirt, all as per IRC: 98 - 1997 and approved drawings.	40.00	RM	972.18	38887.37
24	Earth work in excavation for foundation of structures upto 3.0 m depth as per drawing and technical specification clause 1104	145.59	Cum	397.76	57909.88
25	Providing concrete for plain/reinforced concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203 PCC M-15 Grade	10.65	Cum	5686.71	60563.46
26	Providing concrete for plain/reinforced concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203 PCC M-20 Grade	40.04	Cum	6238.25	249779.53
27	Supplying, fitting and placing HYSD bar reinforcement in foundation complete as per drawings and technical specifications Clauses 1000 and 1202	0.24	mt	66393.49	15894.60
28	Plain/reinforced cement concrete in substructure complete as per drawings and technical specification Clauses 802, 804, 805, 806, 807, 1202 and 1204 PCC M-20 Grade	25.21	Cum	6506.31	164024.08

APPROVED AS CORRECTED

Superintending Engineer,
Rural Works Department
Works Circle, Gaya

4/25/2025

VSL

MY

29	Providing weepholes in brick masonry/stone masonry, plain/reinforced concrete abutment, wing wall, return wall with 100 mm dia AC pipe extending through the full width of the structures with slope of 1(V) 20(H) towards drawing face complete as per drawing and technical specification Clauses 614, 709, 1204.3.7	66.00	Nos	175.31	11570.46
30	Plain/reinforced cement concrete in substructure complete as per drawings and technical specification Clauses 802, 804, 805, 806, 807, 1202 and 1204 RCC M-25 Grade	28.26	Cum	7043.59	199051.85
31	Supplying, fitting and placing HYSD bar reinforcement (Fe 415) in substructure complete as per drawings and technical specification Clauses 1002, 1005, 1010 & 1202	4.11	mt	66601.68	273732.90
32	Backfilling behind abutment, wing wall and return wall complete as per drawings & technical specification Clause 1204.3.8 (With Sandy Materials)	79.71	APPROVED AS CORRECTED Cum	952.80	75947.69
33	Providing and laying filter media with granular crushed aggregates as per specification to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and providing over the entire surface behind abutment, wing wall, return wall to the full height, compacted to firm condition complete as per drawing and technical specification Clause 1204.3.8	33.72	Superintending Engineer Rural Works Department Works Circle, Gaya Cum	2998.39 25/06/25	101105.71
34	Providing and laying reinforced cement concrete in superstructure as per drawing and technical specifications Clauses 800, 1205.4 and 1205.5 RCC M-30 Grade	11.24	Cum	7921.42	89036.76
35	Supplying, fitting, and placing HYSD bar reinforcement in superstructure complete as per drawing and technical specifications Clauses 1002, 1010 and 1202	1.35	mt	68118.34	91959.76
36	Parapet Construction Plain/reinforced cement concrete in substructure complete as per drawings and technical specification Clauses 802, 804, 805, 806, 807, 1202 and 1204 (M25)	4.71	Cum	7474.61	35205.41
37	Painting on Parapet Wall (Black & White Strips) Painting two coats including primer coat after filling the surface with synthetic enamel paint in all shades on new, plastered / concrete surfaces as per drawing and Technical Specification Clause 1701	32.32	Sqm	130.96	4232.63
38	Drainage spouts complete as per drawing and technical specifications Clause 1209	4.00	Nos	822.11	3288.44
39	Earth work in excavation for foundation of structures upto 3.0 m depth as per drawing and technical specification clause 1104	82.79	Cum	397.76	32929.09
40	Providing and laying boulder apron for bed protection with stone boulders of minimum size and weight as per Table 1300.1, no fragment weighing less than 25 kg laid dry complete as per drawing and technical specifications Clause 1301	9.12	Cum	3104.20	28310.32

✓

✓

41	Providing concrete for plain/reinforced concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203 PCC M-15 Grade Curtain wall	1.85	Cum	5686.71	10518.42
42	Providing concrete for plain/reinforced concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203 PCC M-20 Grade	11.27	Cum	6238.25	70333.77
43	Earth work in excavation for foundation of structures upto 3.0 m depth as per drawing and technical specification clause 1104	297.81	cum	397.76	118456.03
44	Providing concrete for plain/reinforced concrete in open foundations complete as per drawings and technical specifications Clause 802, 803, 1202 & 1203 PCC M-15 Grade	34.24	Cum	5686.71	194724.32
45	Plain/reinforced cement concrete in substructure complete as per drawings and technical specification Clauses 802, 804, 805, 806, 807, 1202 and 1204 (M15 (PCC 1:2.5:5))	159.07	Cum Superintending Engineer	6133.61	975648.81
46	Providing and laying RCC pipe NP-3 for culverts on first class bedding of PCC M10 material 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 parapets as per clause 1106 - <u>1000 mm Dia. Pipe</u>	45.00	Rural Works Department Works Circle, Gaya Nos 25/156/25	7199.37	323971.49
47	Painting on Parapet Wall (Black & White Strips) Painting two coats including primer coat after filling the surface with synthetic enamel paint in all shades on new, plastered / concrete surfaces as per drawing and Technical Specification Clause 1701	123.84	Sqm	130.96	16218.09
48	Brick masonry work in cement mortar 1:3 in parapet excluding pointing and plastering as per drawing and technical specifications Clauses 600, 900 and 1208.4	10.08	cum	7046.68	71030.53
49	Plastering with cement mortar (1:4) on brick work in sub-structure as per Technical Specifications	70.08	sqm	190.35	13339.73
50	Painting two coats including primer coat after filling the surface with synthetic enamel paint in all shades on new, plastered / concrete surfaces as per drawing and Technical Specification Clause 1701	199.68	sqm	130.96	26150.09
	Total Construction Cost (A) :-				17138307.62
51	Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor at the rate of 0.25 to 0.30 kg per sqm on the prepared Bitumen surface treated with Primer and cleaned with hydriloc broom as per technical specification clause 503.	5355.00	Sqm	15.85	84880.79

Ver

DR

52	Providing and laying semi dense bituminous concrete with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder @ 4.5 to 5 per cent 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 MoRTH specification clause No. 508 complete in all respects.	133.88	Cum 12113.54	1621760.74
53	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.	280.00 12 Sqm 25/06/25	801.71 125	224478.80
54	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes.	190.00	Sqm 903.03	171575.70
55	1% LABOUR CESS	1	RS 192410	192410.04
56	Seigniorage Fee	1	RS 365575.6	365575.57
57	18 % GST	1	RS 3563818	3563818.07
58	Total Construction Cost			
59	1st Year Maintenance cost	1	Year 274275.9	274275.90
60	2nd Year Maintenance Cost	1	Year 468044.8	468044.76
61	3rd Year Maintenance Cost	1	Year 497033.6	497033.61
62	4th Year Maintenance Cost	1	Year 421302.5	421302.46
63	6th Year Maintenance Cost	1	Year 394524.8	394524.77
64	7th Year Maintenance Cost	1	Year 287303.1	287303.08
65	Total			2342484.6
66	1% LABOUR CESS			23424.8
67	Seigniorage Fee			8976.25
68	18 % GST			427479.4
69	Total Maintenance Cost (B) :-			2802365.1
	Total Project Cost (A +B) :-			26165172.4

1/2
25/06/25
AC-

manu
25/06/25

Executive Engineer
Rural Works Division
Incharge (Gaya)

Letter No:- 1164, Date - 03/06/2025

AA Details
CONST. COST=
MAINT. COST=
OTHERS=
TOTAL=

229.376	Lacp
24.503	Lacp
6.508	Lacp
<u>260.687</u>	<u>Lacp</u>

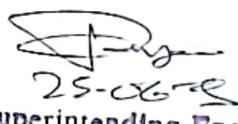
T.S. Details
CONST. COST=
MAINT. COST=
TOTAL= ✓

233.628	Lacp
28.024	Lacp
<u>261.652</u>	<u>Lacp</u>

BOQ Details
CONST. COST=
MAINT. COST=
TOTAL= ✓

23362807.32	
2802365.1	
<u>26165172.4</u>	Say (26165172 = ₹)

B.O.Q. approved for ₹. 26165172 = ₹ (₹. TWO crore
Sixty-one lacp Sixty-five thousand one hundred Seventy
two only.) From item No:- (1 to 54) & (59 to 64)


25-06-25
Superintending Engineer,
Rural Works Department
Works Circle, Gaya

R.H.P/25
25/06/25