

Name of work :-Resurfacing of N.H. to Gomta Road (NP BT) Km.0/000 to 1/900 Ta.Gondal,
Dist.; Rajkot (Package No.RAJ/MMGSY/BUJ/2026-27/P.05)

BILL OF QUANTITIES

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
1	Clearing and grubbing of road land incl.uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth upto 300mm removal of stumps of trees cut earlier and disposal of unserviceable materials © By mechanical means in area of Light jungle.	0.56	One Hect.	28455.09	15934.85
2	Earthwork for embankment including breaking clods, dressing with all lead and lift (Excluding watering and consolidation) (A) Selected soil should be From borrow area with all lead and lift and should have CBR not less than 6.00%.	1033.00	One Cum	165.42	170878.86
3	Earthwork in cutting in all sorts of soil and soft Murrum including conveying and spreading the suff embankment as and where directed within 200 meters from the end of the cutting with all required lead and lift.	963.90	One Cum	140.87	135784.59
4	WBM Grading-2 Providing, laying, spreading and compacting stone agg. Of 63mm to 45mm size to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheel roller 80-100 KN in stage to proper grade and camber, applying and brooming, stone screening/binding material to fill-up the intersties of coarse agg., watering and compacting to the required density grading-2 as per Technical Specification Clasue.405 By manual means.	11.90	One Cum	1239.77	14753.26
5	Rolling and Watering of earthwork with vibratory roller including filling in depression which occur during the process and as directed.	606.40	One Cum	23.41	14195.82

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
6	Providing and laying bitumenous grout 37.50mm thick using bulk Emulsion RS1 for tack coat at the rate of 2.50kg/10sqm on Bitumin surfacer and using BT chips for required gradation with the asphalt of grade VG-30 at the rate of 1.99% i.e 19.90kg/MT by weight of mix including heating and mixing in drum mix plant , transporting the mix and spreading the same by paver finisher and consolidation as per MOST specification including cost of all materials fuel, labours, tools and plants etc. using contractor's own drum mix plant etc. complete.	435.00	One MT	2776.08	1207594.80
7	Providing and laying and rolling of 20mm thick Compacted mix seal surface with B.T. and aggregate as specified using bitumen Grade VG-30 for mixing with aggregate at the rate of 5.10% i.e 51.00Kg/MT of total mix including heating and mixing in drum mix plant and spreading the same by paver finisher and consolidation with vibratory roller including necessary firewood, oil, lubricants, labour charges using contractor's own drum mix plant, machineries and equipment, tools etc including flushing of sand 0.27cum/10sqm etc. complete in accordance with the requirement of specification.	267.00	One MT	4827.80	1289022.60

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
8	Providing, laying and rolling of 25mm thick using asphalt viscosity grade of VG-30 open graded premix bituminous carpet with B.T aggregates as specified and using bulk Emulsion RS1 for tack coat at the rate of 2.50kg/10sqm on B.T.Surface (As per IRC-16) and using bitumen for mixing with aggregate at the rate of 3.36% i.e 33.60kg/MT. of total mix including heating and mixing in drum mix plant, spreading the same with paver finisher and consolidation with vibratory roller including necessary firewood, oil, lubricants, labour charges etc. using equipment tools etc. completed in accordance with the requirement of specification.	304.00	One MT	3856.98	1172521.92
9	Excavation for foundation upto 1.5m depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto all lead. (B) Dense or hard soil.	234.00	One Cum	265.97	62236.98
10	Excavation for foundation upto 1.5m depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto all lead. (C) Hard Murrum	176.00	One Cum	453.20	79763.20
11	Excavation of foundation in Sand gravel caly soft soil and murrum etc. including shoring, struting dewatering as necessary and disposing of the excavated stuff as directed. Depth upto 3.00mt.	223.80	One Cum	535.45	119833.71
12	Excavation of foundation in hard murrum and boulders and very stiff or sticky clays and other similar strata including shorting out and struting and dewatering as necessary and disposing of the excavated stuff as directed.	115.40	One Cum	640.44	73906.78
13	Providing and laying rubble for apron (Each stone weighting not less than 40kg) including and packing and filling in the interstices with quarry spall.	31.60	One Cum	1101.22	34798.55

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
14	Providing and filling in foundation with ordinary cement concrete M-150 mix and providing necessary vertical pin headers incl. Formwork, vibrating, ramming and curing complete.	45.60	One Cum	3729.97	170086.63
15	Providing and casting in situ ordinary cement concrete M-150 mix and providing necessary pin headers including shuttering, scaffolding, laying vibrating, curing and finishing complete Without V-Grooves For all Hieght.	479.00	One Cum	3935.98	1885334.42
16	Providing and filling in foundation with ordinary cement concrete M-100 mix and providing necessary vertical pin headers incl. Formwork, vibrating, ramming and curing complete.	30.00	One Cum	3359.92	100797.60
17	Providing parapet of ordinary cement concrete M-200 as per detailed drawing with necessary reqinforcement including shuttering laying vibrating and finishing to line and level complete (ii) cast in situ.	28.20	One Rmt.	1078.36	30409.75
18	Providing and casting in situ Controlled cement concrete M-200 for R.C.C. work in Piers, abutment, returns and riding returs as per drawing including centering, shuttering, scaffolding where neccesary laying, vibrating curing and finishing complete (A) For all Height	146.60	One Cum	5173.92	758496.67
19	Providing and casting in situ Controlled Cement Concrete M-250 for R.C.C. Raft and cut-off walls including neccesary shuttering laying, vibrating ramming of curing complete.	54.20	One Cum	4672.48	253248.42
20	Providing and casting in situ Controlled cement concrete M 25 for R.C.C. Solid slab including centering, scaffolding, curing and finishing complete.	28.50	One Cum	5242.73	149417.81
21	Providing and casting in situ Contolled cement concrete- M-200 for average 75/150mm thick wearing coat laid as directed incuding. tamping, vibrating, finishing, curring and filling in joints with bitumen complete.	18.30	One Cum	5247.13	96022.48

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
22	Providing and casting in situ Controlled cement concrete- M-20 mix for kerbs/Kerb blocks including formwork,curing and finishing complete.	1.80	One Cum	4820.44	8676.79
23	Providing and casting in situ Contolled cement concrete- M-25 mix for Approach slab including formwork, curing and finishing complete.	15.80	One Cum	5211.02	82334.12
24	Providing and laying weep hole in Abutment and returns by using A.C pipe of 100mm. Incl. fixing in proper grade and jointing the complete as per detailed specification.	225.00	One No	90.82	20434.50
25	Providing and laying filter media 600mm. thick directed at the back of abutments, returns and wing walls as per detailed specifications.	54.70	One Sqm	1298.37	71020.84
26	Providing and laying in Position FE - 500/500D TMT bar reinforcement including cutting, bending, hooking and tying complete as per detailed drawings for the following (A) Piers (B) Abutments (C) Returns (D) Walls etc.	3.680	One MT	73858.69	271799.98
27	Providing and Fixing in position FE-500/500D TMT bar reinforcement including cutting, bending, hooking, and tying complete as per detailed drawaing (A)RCC kerb (B) RCC Footpath (B) RCC Solid Slab/ App. Slab / Wearing coat.	8.210	One MT	73243.01	601325.11
28	Providing 12mm. Thick Pre-moulded asphalt filler joints as per drawings	3.70	One Sqm	703.52	2603.02
29	Providing G.I. 100mm. Diameter water spouts including necessary iron gratings as per drawings.	8.00	One No	536.02	4288.16
30	Providing flood gauge marks on sub structure as per design including painting complete	6.00	One Rmt.	174.98	1049.88
31	Filling available excavated earth (excluding rock) in trenches plinth sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering.	34.70	One Cum	137.47	4770.21

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32	Dismantling the existing structure including removing and stacking the dismantled materials as and where directed. RCC Work.	76.80	One Cum	974.66	74853.89
33	Dismantling C.I. Pipes G.S.W. Pipes and A.C Rain water pipes with fitting and clamps including stacking the materials with all lead and lift (for any of pipe)	22.50	One Rmt.	76.67	1725.08
34	Providing temporary all weather and fair weather diversion suitable for traffic during the construction period of the bridge / Slab drain including providing necessary drains and all safety measures including red lamps / signals at night for traffic etc. complete..	50.00	One Rmt.	1678.41	83920.50
35	Providing and fixing Precast cement concrete Hectometer as per IRC type design incl. painting, lettering etc. fixing in C.C. 1:5:10.	8.00	One No	356.49	2851.92
36	Providing and fixing Precast cement concrete Guard stone as per I.R.C. type design including white washing etc. complete. Fixing in C.C.1:5:10.	120.00	One No	350.80	42096.00
37	Providing and fixing ordinary Kilometer stone of pre-cast C.C. 1:2:4 including necessary reinforcement as per I.R.C. type design in C.C. 1:4:8 including painting lettering etc. complete. (For, MDR,SH)	2.00	One No	1293.39	2586.78
38	Providing and fixing Indicator stone of approve stone as per I.R.C. type design in C.C. 1:4:8 including white washing etc. complete Fixing in Earth	85.00	One No	102.84	8741.40

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
39	Village name Sign :-Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel); size 90x60 cms. rectangular as per design of IRC-67-2012. Pre treated with phospheting process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ; reflectorised with High Intensity Prismatic Grade retro reflectivesheeting of Type-4 as per ASTM D-4956 and latest M.O.S.T.Specifications; 3.3mtr long stand post of Iron Angle 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with bestquality epoxy coatings in black and white bends. the details of symbol or inscription / numerals for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC blockof size 45 x 45 x 60 Cms. for each leg including excavation, curing etc.complete under the supervision of engineer in charge. A warranty for 7 years for the Retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by	5.00	One No	6397.43	31987.15
40	Hazard Marker Sign :-Providing and fixing sign boards made out of 2.0 mm aluminium sheet / 4 mm ACP (Aluminum composite Panel); size 90x30 cms. rectangular as per design of IRC-67-2012. Pre treated with phospheting process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ; reflectorised with High Intensity Prismatic Grade retro reflectivesheeting of Type-4 as per ASTM D-4956 and latest M.O.S.T.Specifications; 1.8mtr long stand post of Iron Angle 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with bestquality epoxy coatings in black and white bends. The details of symbol for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC blockof size 45 x 45 x 60 Cms. for each leg including excavation, curing etc.complete under the supervision of engineer in charge. A warranty for 7 years for the Retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (B) Class-B Type-4 Retro Reflective sheeting	6.00	One No	3518.68	21112.08

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
41	Direction (Junction) Sign :-Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel); size 244x122 cms. rectangular as per design of IRC-67-2012. Pre treated with phospheting process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ; reflectorised with High Intensity Prismatic Grade retro reflective sheeting of Type-4 as per ASTM D-4956 and latest M.O.S.T.Specifications; 4.0mtr (2 Nos.) long stand post of Iron Angle 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 50x50x5mm; painted with best quality epoxy coatings in black and white bends. The details of symbol for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60 Cms. for each leg including excavation, curing etc.complete under the supervision of engineer in charge. A warranty for 7 years for the Retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (B) Class-B Type-4 Retro	1.00	One No	21287.50	21287.50
42	Sign board per Square Meter :-Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel); size 1 meter x 1meter as per design of IRC-67-2012. Pre treated with phospheting process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ; reflectorised with High Intensity Prismatic Grade retro reflective sheeting of Type-4 as per ASTM D-4956 and latest M.O.S.T.Specifications; 4 mtr long stand post (2 Nos.) of Iron Angle 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 50x50x5mm; painted with best quality epoxy coatings in black and white bends. the details of symbol or inscription / numerals for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60 Cms. for each leg including excavation, curing etc.complete under the supervision of engineer in charge. A warranty for 7 years for the Retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by	4.00	One No	7894.01	31576.04

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
43	Citizen's information Board. Providing and fixing of typical MMGSY information board as per instruction. Two MS sheets of 3 mm thick, of 900 mm x 750mm size fixed at top & bottom duly rivetted with MS angles of 25 x 25 x 5 mm thick M.S angle shall be welded by two vertical M.S angle of 5 mm thick to 75 mm x 75 mm of 12 SWG square tubes posts duly embedded in cement concrete M-15 grade blocks of 600mm x 600mm x 750mm, below ground level. The letters & figure of any shade reflectorised with High Intensity Prismatic Grade Retro Reflective Sheeting of Type-4 as per ASTM D-4956 and latest MORD specifications; All sections of framed posts and steel tube will be painted with primer and two coats of epoxy paints as per drawing Clause 1701 and Annexure 1700.1 (10.16). (A) Class-B High intensity Grade Retro Reflective sheeting.	1.00	One No	7393.20	7393.20
44	Road Marking with Hot Applied paints with reflectorising glass beads on bitumin surface providing and laying a hot applied thermoplasting compound 2.5mm thick including reflectorising glass beads @250 gm per sq.mtr area, thickness of 2.5mm is excluding of surface applied glass beads as per IRC:35-2015 the finished surface to be level, uniform and free from streaks and holes, zebra patta/bump/centerline/edge line/ cut patta. the while color marking should provide liminance coefficient on cement road shall be min. 130 mcd/m2/lux and asphalt road shall be min 100 mcd/m2/lux during the survice life during the date the marking should meet the performanace criteria for night time reflectivity, wet reflectivity and skid resistance as mentioned in the section-15 of IRC 35-2015 warranty for retroreflectivity shall be two years.	418.00	One Sqm	367.72	153706.96

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
45	Cate eye / road stud/ RPM : Supplying Raised Pavement markers of polycarbonate and ABS moulded body and reflective panels with micro prismatic lens (No glass bead lens) capable of providing total internal reflection of the light entering the lens face and shall support a load of 13635 kgs. tested in accordance to ASTM D 4280 type H and complying to specification of category A of MORTH circular No RW/NH/33023/10-97-DO III Dt. 11-06-1997. the height, width and length shall be exceed 20mm, 130mm and 130mm and with minimum reflective area of 13sqcm on each side and the slope to the base shall be 35+/-5 degree. the body of the marker should having finger grip for easy and accurate placement and application with epoxy /bituminous adhesive as recommended by the manufacturer of the marker. the colour of the marker should be as per the IRC:35-2015 and as directed by Engineer-in-charge.	233.00	One No	326.23	76011.59
46	Providing and erecting a "W" metal crash barrier comprising of 3mm thick currugated sheet metal beam rail, 70cm above Road/Ground level, fixed on ISMC series channel vertical post, 150x75x5mm spaced 2m center to center, 1.8m high, 1.1m below ground/road level, all steel parts and fitments to be galavanized 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 150x75x5mm, 330mm long complete as per clause 810.	74.00	One Rmt.	3723.46	275536.04
Rupees Ninety Seven Lakh(s) Thirty Eight Thousand Seven Hundred Twenty Eight And Paise Forty Four Only					9738728.44

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I \ We am \ are willing to carry out the work at % above \ bellow percent (Should be written in figures and words) of the estimated rate mentioned above. Amount of My \ Our tender works put as under.

* Estimated Amount

Put to tender **Rs**.....

Deduct.....%

Net **Rs**.....

In words.....

* Estimated Amount

Put to tender **Rs**.....

Add.....%

Total **Rs**.....

In words.....

1.The Contractor shall exhibit a board with detailed specification and details of work as directed by the Engineer-In-Charge for which no extra payment shall be made.

2.The labour cess will be deducted as per prevailing rules i.e. 1% of the work done.

3.GST and Income tax TDS will be deducted at a source while making payments of bills

4.In all R.C.C. Items in Rate Analysis Standard Cement Consumption has been taken as per Govt. G.R.: PRC-10/2017 Cement Consumption/16/C Date:11/05/2017 as stated in

S.O.R. therefore in R.C.C. items where there is a change as per actual mix design the cost of difference of cement consumption have been deducted from the rate of original item at the rate of input rate mentioned in all the tender.

NOTE: Amount Rs. 19023/-Of Dismantalled materials shall be recovered from 1st R.A. bill of Contractor at once.

Signature of Contractor.

Deputy Executive Engineer
Panchayat R&B Sub Division
Gondal

Executive Engineer
Panchayat R&B Division
Rajkot