

KACHCHH PANCHAYAT R. & B. DIVISION BHUJ

NAME OF WORK :- REPAIRS TO ROAD OF ABADASA TALUKA. C.R. 2026 - 27. TAL, ABADASA.

BILLOF QUANTITIES**(A) Percentage Rate Tender (Upto INR 50 Cr)**

It.No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Unit	Rate in Figures	Amount
1	2	3	4	5	6
1	Providing and laying bituminous grout base course 37.50 mm compacted thi. using B.T. stone aggregates as per required gradation with the asphalt V.G.-30 grade for tack coat 2.50Kg/10 Smt on B.T.surface and 4.0 Kg/10 Smt on W.B.M.Surfcae and asphalt V.G.-30 grade for mixing @ 1.99 % i.e. 19.90 kg./ MT by weight of mix incl. heating and mixing in drum mix plant transporting the mix , spreading the same by pavers finisher and consolidation as per MORTH specification incl. cost of all materials fuels, labors, tools and plant etc. using contractors own drum mix plant etc. comp. etc. comp. (R.A.1)	10.00	M.T.	3104.42	31044.20
2	Providing and laying 25 mm thick semi dense bituminous carpet in single course on existing B. T. surface with drum mix plan using crushed stone agg of specified grading and stone dust as filler, including using asphalt VG-30 for tack coat @ 5.0 kg/10 Sq.mt and for mixing by weight of total mix @ 5.00 % (i.e. 50.00 Kg/Mt) incl. heating and mixing in drum mix plant transporting the mix , spreading the same by pavers finisher and consolidation as per MORTH specification incl. cost of all materials fuels, labors, tools and plant etc. using contractors own drum mix plant etc. comp. including flushing stone dust @ 0.03 cmt/10 Sq.mt. (R.A.2)	50.00	M.T.	5715.16	285758.20
3	Providing and laying 25 mm thick semi dense bituminous carpet in single course on existing B. T. surface with drum mix plan using crushed stone agg of specified grading and stone dust as filler, including using asphalt VG-30 for mixing by weight of total mix @ 5.00 % (i.e. 50.00 Kg/Mt) incl. heating and mixing in drum mix plant transporting the mix , spreading the same by manually as per MORTH specification incl. cost of all materials fuels, labors, tools and plant etc. using contractors own drum mix plant etc. comp. including flushing stone dust @ 0.03 cmt/10 Sq.mt. (R.A.3)	50.00	M.T.	4704.45	235222.40
4	Providing and laying 37.50 mm thick compacted B.M. using stone chips 0.66 Cum / 1 M.Ton mix as per gradation and tack coat with Bitumen V.G.-30 grade @ 2.50 kg. / 10 Smt. on B.T. surface and asphalt grade VG-30 for mixing @ 34 kg/M.Ton (I.e. 3.40% of mix) including heating the and aggregate by contineous batching drum mix plant, transporting and mixed matrrial and spreading the same by paver finisher and consolidation by vibratory roller of 80 KN to 100 Kn static weight including the cost of labour oil, lubricants etc. using contractors own machineries and plant. (R.A. 6)	50.00	M.T.	3937.86	196893.00
5	Providing and Laying 20 mm thick mix seal surface using stone chips as per gradation on prepared surface with spesified grade crushed stone agg. as per MORTH & H specification and asphalt grade V.G.-30 for mixing at rate of 5.10 % by weight of mix and including heating the asphalt and aggregate by drum mix plant and spreading the same by paver finisher and consolidating by vibratory roller to achive the desired density incl. providing tools, plant,oil, kerosene, lubricating etc. comp. using contractors own machinery, drum mix plant and paver finisher etc. complete. (R.A. 5)	20.00	M.T.	4999.04	99980.80

It.No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Unit	Rate in Figures	Amount
6	Providing and laying bituminous sealcoat with stone chips 6 to 10mm size 0.18 cmt /10 smt. i.e. using 0.66 cmt agg.per M.T. mix using asphalt V.G.-30 @ of 4.50 % of mix inc. heating the asphalt and agg. By continous batching hot mix plant and paver finisher and consolidating by vibratory roller incl. providing equipments, tools, plants, firewood ,oil, kerosene, labour charges etc, comp, using the contractor's own machinery, [R. A.6]	20.00	M.T.	4530.53	90610.60
7	Providing and laying, spreading and compacting 100m thick 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 tp site, laying in uniform layers with mechanical means in sub-base /base course on well prepared surface and compacting with vibratory roller to achieve the desired density. (RA-7)	30.00	Cmt.	1552.82	46584.60
8	Supplying of graded stone aggregate of following size (Hand broken stone aggregates 25 mm to 90 mm size) including Spreading the stone aggregates for soling and W.B.M. including filling the interstices forming the surface to required chamber & gradient. (R.A.8)	20.00	Cmt.	903.41	18068.20
9	Supplying of graded stone aggregate of following size (Machine crushed stone aggregates 45 mm to 63 mm size) including Spreading the stone aggregates for soling and W.B.M. including filling the interstices forming the surface to required chamber & gradient. (R.A.6)	20.00	Cmt.	1084.76	21695.20
10	Supplying of graded stone aggregate of following size (Machine crushed stone aggregates 45 mm to 90 mm size) including Spreading the stone aggregates for soling and W.B.M. including filling the interstices forming the surface to required chamber & gradient. (R.A.10)	20.00	Cmt.	1058.87	21177.40
11	Construction of granular sub base by providing well graded crushed stone material(M.C.Metal 53 to 9.5 mm size 50%,M.C. metal 9.5 to 2.36 mm 20% and sand below 2.36mm size 30%) spreading in uniform layes with motor grader on prepared surface,mixing by mix in place method with rotovator at O.M.C. and compacting with three wheeler roller 8 T to 10 T to achieve the desired density complete as per technical specification Close graded Granular sub-base Material as per clause 401 for grading -I well graded sub base material.(150mm thick compacted thickness) (R.A.18)	10.00	Cmt.	991.53	9915.30
12	Supplying stone screening 13.2 mm size of approved quality and gradation on road site comp including all kind of taxes and royalties and filling meauser boxes etc comp.(RA11)	5.00	Cmt.	730.26	3651.28
13	Supplying of stone dust of app. Quality and gradation on road site comp. including all kind of taxes and royalties and filling the measure boxes etc. comp.(RA12)	5.00	Cmt.	499.98	2499.90
14	Spreading the Murrum/Binding material on crust filling the gap in metal and levelling to camber and gradient (S.O.R.It.No.26020A)	5.00	Cmt.	147.47	737.35
15	Clearing and grubbing road land including uprooting rank vegetation grass bushes, shrubs, sapling and trees girth up to 300 mm removal of stumps of trees cut earlier and disposal of unserviceable materials(D) By mechanical means in area of thorny jungle (S.O.R.It.No.26117C)	25.00	Hect	28455.09	711377.25
16	Engaging the JCB for the different type of work on road side with machineries, oil, fuel, driver etc. complete	5.00	Hour	1454.40	7272.00
17	Tractor on hire charges with trailer diesel, driver, necessary equipment.	1.00	Day	5141.30	5141.30

It.No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Unit	Rate in Figures	Amount
18	Providing Hitachi Ex110 with an experience driver/operator including diesel. Fuels etc. for maintenance to various road etc.complete.[M.R.]	1.00	Hour	2222.00	2222.00
19	Providing Hitachi Ex200 with an experience driver/operator including diesel. Fuels etc. for maintenance to various road etc.complete.[M.R.]	1.00	Hour	2525.00	2525.00
20	Providing Gradar with an experience driver/operator including diesel. Fuels etc. for maintenance to various road etc.complete.[M.R.]	1.00	Hour	4040.00	4040.00
21	Engaging skilled/unskilled labours as and where required for safety measure cleaning of site, removing of desire, over burned, jungle cutting seeding materials as directed by engineer incharge (B) unskilled Labour [S.O.R.L022]	15.00	Day	497.93	7468.95
22	Earthwork for embankment including breaking clods,dressing with all lead and lift (excluding watering and consolidation) (B) From Borrow area within 0.5 Km.lead(S.O.R It.No.26001BA)	200.00	Cmt	154.87	30974.00
23	Earth work for embankment with selected soil C.B.R.not less than 6.0 including breaking clods, dressing, with all, lead and lift (incl. watering and consolidation) From borrow area with all lead & lift (S.O.R It.No.26001DA)	200.00	Cmt	163.69	32738.00
24	Earthwork in cutting including preparing the slope and camber andstacking or utilising the cutting stuff in bank as directed upto 200 Meters from the end of cutting with all lead and lift.(ii) Hard Murrum (S.O.R.It.No.26009A)	50.00	Cmt.	248.16	12408.00
25	Box cutting the road surface to proper slope and camber for making a base for road work including removing the excavated stuff and depositing on the road side slope as directed upto 50Mt.lead (S.O.R.It.No.26008)	10.00	Cmt.	104.04	1040.40
26	Supplying,stacking and spreading quarry spall with all lead and lift and including watering and rolling and consolidation of sub grade in layers at OMC to required dry density including filling depression which occurs during the process using vibratory roller of 80 KN to 100KN (selected quarry spall having CBR value not less than 30.0)(RA-10)	50.00	Cmt.	667.92	33396.00
27	Supplying and stacking murrum of approved quality on road site including filling measure boxes including Spreading the murrum/binding material on crust filling the gaps in metal and leveling to camber and gradient.etc. complete. (R.A.11)	35.00	Cmt.	342.25	11978.75
28	Supplying and fixing reinforced concrete heavy duty non pressure pipes with collars for culverts including setting and jointing the pipes in cm 1:2, watering and laying (to level or slope) of I. S. Class Np3 of 900 mm internal diameter. with all lead and lift (IT. 26089EA)	5.00	Rmt.	3469.26	17346.30
29	Supplying and fixing reinforced concrete heavy duty non pressure pipes with collars for culverts including setting and jointing the pipes in cm 1:2, watering and laying (to level or slope) of I. S. Class Np3 of 600 mm internal diameter. with all lead and lift(IT. 26089CA)	5.00	Rmt.	1968.38	9841.90
30	Providing and fixing ordinary kilometer stone of pre-cast c.c. 1:2:4 including necessary reinfor- cement as per I.R.C. type design in c.c. 1:4:8 including letter and paints etc. complete. (IT. 26052)	2.00	No.	704.33	1408.66
31	Providing and fixing guard stone as per I.R.C. type design including white washing etc.complete (ii) Fixing in c.c. 1:5:10 (IT. 26045B)	5.00	No.	350.80	1754.00
32	Supplying and fixing road sign board of M.S. plates and angle iron including painting,lettering etc. complete including fixing in C.C. 1:4:8 with necessary excavation etc. complete as per I.R.C. type design. (i) Non reflective type (IT. 26054A)	2.00	No.	1878.98	3757.96

It.No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Unit	Rate in Figures	Amount
33	Cautionary Warning Sign :-Providing and fixing sing boards made out of 2mm aluminium sheet; size 90 x 90 x 90 cms. equilateral triangle as per design of IRC-67-1977. Pre treated with phospheting process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ;reflectorised with retro reflectivesheeting as per latest M.O.S.T.Specifications; 3.1m long stand postand frame fabricated from suitable sizeiron angle of 35 x 35 x 3mm, 75 x 75 x 6mm as required; painted with bestquality epoxy coatings in black andwhite bends. The details of symbol foreach board shall be as per theinstruction 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) Engineer Grade(VR)(IT. 26092A)	2.00	No	3808.66	7617.32
34	Supp. And Fixi. flood gauge as per drawing and instruction. Made of M.S. pipe of size 100 x 50 mm size and 2.05 mtr. long rectangle pipe Incl.fabrication,Welding, applying a coat of primer coat and two coat of oil paint and painting letters & calibration as per drawing etc. comp. at road site (RA-15)	2.00	No	1031.41	2062.82
35	Supplying, Stacking & Laying rubble of required size for soling on road site including packing & filling in the interstice as directed (RA-12)	2.00	Cmt.	828.91	1657.82
36	Providing and laying cement concrete 1:4:8 (1cement : 4 coarse sand : 8 hand broken stone aggregate 40mm. nominal size) and curing complete excluding the costo of form work in. (A) Foundation and Plinth.(S.O.R.It.No. 05004A)	2.00	Cmt.	2769.69	5539.38
37	Providing and laying cement concrete work 1:2:4 (1- Cement : 2- Coarse sand : 4- graded stone aggregates 20 mm nominal size) and curing complete excluding cost of formwork and reinforcement for reinforced concrete work in (A) Foundations, footings, Base or columns and Mass concrete(S.O.R.It.No. 05011AA)	2.00	Cmt.	4029.02	8058.04
38	Proving and laying cement concrete Grade M20 C.C.1:1.5:3(1 Cement:1.5 Coarse Sand:3 stone agg 20mm nominal size) for CC road and curring etc. comp. incl. cost of form work. Finishing the cement concrete road by Tri-mix process inclusive of labour charges for trimix vacume dewatering process on cement conc. road by using vacume dewatering pump, surface floater, including channelling and making grooves & rough finish to surface, providing expansion join, construction joint incl. filling the joint with asphalt filler as per direction by engineer in charge and as per specification.(R.A.13)	3.00	Cmt.	5189.34	15568.02
39	Providing and filling in foundation with ordinary cement concret M150 mix and providing necessary vetical pin headers including formwork vibrating ramming and curing complete. (R.A.14)	8.00	Cmt.	3697.13	29577.04
40	Providing TMT Bar FE 500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level (S.O.R. It.No.05014C)	210.00	Kg.	77.29	16230.90
41	Precast concrete block masonry (including quoin blocks Jamb blocks, closer etc.) with solid concreteblocks of approved size made of cement concrete 1:3:6 mix (1cement : 3 coarse sand : 6 graded stone aggregate of 20mm. and down gauge) for super structure above plinth level in C.M.1:4 (S.O.R.Ch-7 / It.7.75+7.93)	2.00	Cmt.	3903.84	7807.68

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42	Providing and fixing steel guard railing crash barrier having post angle size channel of 150mmx75mm x 7.5mm at 1.50 Mt.C/C and bracket channel size 150mm x 75mm x5 mm size by 12mm dia high tensile bolt with Two Rows of "W" shape type guard rail 3mm thick and 330m straight height as per drawing incl.guard rail with oil painting and fixing in cement concrete 1:2:4 block 0.45 x 0.45x0.60 mt incl.xecavation as directed and as per clause No.800 of MORT & H specification and drawing.(R.A.20)	2.00	Rmt.	5193.37	10386.74
43	White washing with lime on wall surfaces (Two coats) to give an even shade including thoroughly brooming the surface to remove all dirt,dust, mortar drops and other foreign matter.(S.O.R.It.No.18001)	25.00	Smt.	12.70	317.50
44	Supplying of Vibratory roller 8 - 10 tonnes @ 100 cum per hour with driver including cost of diesel oil etc. including maintenance and equipment etc. complete (SOR-H020)	5.00	hour	850.79	4253.95
45	Providing excavator on hire base for excavation, loading etc. type of work on road site operation, diesel, oil (L&T type capacity) as directed. (S.O.R. H016)	5.00	hour	718.98	3594.90
46	Providing loader machine on hire charges with operator, diesel, oil for loading / unloading work on site as directed.	5.00	hour	1515.00	7575.00
47	Providing Truck, Dumper (With diesel & driver). on hire charges with operator,diesel, oil for loading / unloading work on site as directed.	1.00	Day	10201.00	10201.00
48	Road marking with hot applied thermoplastic paints with reflectorising glass beads on bitumin surface providing and laying a hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250gms per sqm area, thickness of 2.5mm is excluding of surface applied glass beds as per IRC:35-2015. The finished surface to be level, uniform and free from streaks and holes. zebra patta /bump patta lane/center line/ edge line/cut patta. The white color marking should provide liminance coefficin on cemend road shall be min 130 mcd/m2/lux and Asphalt road shall be min 100 mcd/m2/lux during the service life during the day time. The marking should meet the performance criteria for night time reflectivity, wet reflectivity and skid resistance as mentioned in the section-15 of IRC 35-2015. Warranty for the Retro reflectivity should be two years.(S.O.R.It.No.26161)	10.00	Smt.	367.72	3677.20
49	Cat Eye / Road Stud / RPM: Supplying of Molded Twin Shanks Raised Pavement Markers made of polycarbonate and ABS moulded body and reflective panels with micro prismatic 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 Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 DO III Dt 11.06. 1997. The height, width and length shall not exceed 20 mm, 130 mm and 130 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 +/- 5 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 +/- 2 mm and height not less than 30+/- 2 mm) from the body is to be a minimum value of 500 Kgf. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturers recommendation and The color of the marker should be as per the IRC 35-2015 and as directed by Engineer-in-charge.(S.O.R.It.No.26162A)	10.00	No.	326.23	3262.30
				Total Rs.	2097916.51
				Total Rs.	2097917.00

I/We am/are willing to carry out the work at..... % above/ below Percent (Should be written in figures and

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words) of the estimated rate mentioned above.Amount of my /our tender works out as under .

Estimated amount put to tender.....

Estimated amount put to tender.....

Deduct% **below**

Add% **Above**

Net

Net

In words.....

In words.....

Signature of the Contractor.

Executive Engineer
R & B Panchayat Division
Bhuj - Kachchh