

**Construction of Various Structure of Bhavnagar District PKG.NO.RPC-2/BVN/STRC/MMGSY ~ NORMAL/2025-26/8.2
Ta.Mahuva Dist.Bhavnagar**

BILL OF QUANTITIES

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate In Figures	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.	0.13	One Hect.	28455.09	3699.16
2	Earthwork for embankment including breaking clods, dressing with all lead and lift (excluding watering and consolidation) Selected soil from borrow area with necessary lead	134.00	One Cum	173.31	23223.54
3	WBM Grading 1 Providing, laying, spreading and compacting stone aggregates of 45 to 90mm sizes with average lead 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/bindingmaterials to fill-up the interstices of coarse aggregate, wateringand compacting to the required density grading I as per TechnicalSpecification Clause 405. By Manual Means	157.60	One Cum	1744.28	274898.53
4	WBM Grading 2 (By Manual Means) Providing, laying, spreading and compacting stone aggregates of 63 to 45mm 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 (As per Technical Specification Clause 404)	111.60	One Cum	1337.06	149215.90
5	Rolling of earthwork in layers with power roller including filling in depressions which occur during the process. Watering of earth work as directed	867.80	One Cum	23.17	20106.93
6	Rolling and Watering of earthwork in layers with vibratory roller including filling in depression which occur during the process as directed.	134.00	One Cum	23.18	3106.12
7	Earth work for embankment including breaking clods, dressing with all lead and lift. (Excluding watering and consolidation) (C) From borrow area with 1.0 Km lead and should have CBR not less than 6.00%)	448.80	One Cum	161.67	72557.50
8	Excavation for foundation upto 1.5 m depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto 50 mtr lead. Dense or hard soil.	665.00	One Cum	259.93	172853.45
9	Excavation for foundation upto 1.5m depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto 50 mtr lead. Hard Murrum	399.00	One Cum	442.90	176717.10
10	Excavation for foundation in sand, gravel, clay soft soils and murrum etc. including shoring, strutting dewatering as necessary and disposing of the excavated stuff as directed.(A) Depth upto 3.00mt and lead upto 100m	1438.00	One Cum	523.28	752476.64
11	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.	244.80	One Cum	625.87	153212.98
12	Excavation in large boulders and soft rock by wedging including shoring, strutting and dewatering as necessary and disposing of the excavated stuff as directed,	1238.10	One Cum	733.62	908294.92

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate In Figures	Amount
13	Excavation in hard rock by dry-wet blasting and chiseling including dewatering preparing foundation base by proper benching and stepping and disposing of the excavated stuff as directed (B) Prohibited Blasting prohibited.	474.60	One Cum	1715.19	814029.17
14	Providing and fixing Mild steel dowel bar of minimum 32mm dia. For anchoring by drilling holes in foundation strata including necessary bending, hooking of dowel bars and grouting the holes complete as per detailed drawing and as directed.	375.60	One Rmt.	450.07	169046.29
15	Providing and laying rubble for apron (Each stone weighting not less than 40kg) including and packing and filling in the interstices with quarry spalls.	218.10	One Cum	1092.51	238276.43
16	Providing and casting in situ ordinary cement concrete M-15 mix) and providing necessary pin headers including shuttering, scaffolding, laying vibrating, curing and finishing complete Without V-Grooves. (A) Height from 0.0 m to 5.0m	1759.50	One Cum	3938.30	6929438.85
17	Providing and filling in foundation with ordinary cement concrete M-10 mix and providing necessary vertical pin headers incl. Formwork, vibrating, ramming and curing complete.	410.10	One Cum	3362.25	1378858.73
18	Providing and cast in situ Ordinary Cement Concrete M-20 Mix and providing pin headers including shuttering scaffolding, laying, vibrating, curing and finishing complete without V-grooves (A) Height from 0.0 M to 5.0 M	247.10	One Cum	4308.34	1064590.81
19	Providing and casting in situ controlled cement concrete M-30 for varies thickness wearing coat laid as directed including tamping, vibrating, finishing, curing and filling in joints with bitumen complete.	173.90	One Cum	5611.88	975905.93
20	Providing and casting in situ controlled cement concrete M-20 for R.C.C. work in Pier, Abutment, Return & Riding Return as per drawings including centering shuttering, scaffolding where necessary, laying vibrating, curing and finishing complete. (A) Height from 0.0 to 5.0 M. (1) Piers (2) Abutment (3) RCC return	1221.60	One Cum	5247.04	6409784.06
21	Providing and casting in situ Controlled Cement Concrete M-25 for R.C.C. Raft and cut-off walls including necessary shuttering laying, vibrating ramming of curing complete.	160.80	One Cum	4745.95	763148.76
22	Providing and casting in situ Contolled Cement concrete M 200 mix for R.C.C. works in pier cap, abutment cap, and dirt wall including controlled cement concrete M 25 bed block or pedestals for required size below bearings as per detailed drawings, centering, shuttering, scaffolding wherever necessary laying, vibrating, curing and finishing complete.	17.50	One Cum	5327.23	93226.53
23	Providing and casting in situ Controlled cement concrete M 25 mix for R.C.C. works in pier cap, abutment cap, and dirt wall including controlled cement concrete M 30 bed block or pedestals for required size below bearings as per detailed drawings, centering, shuttering, scaffolding wherever necessary laying, vibrating, curing and finishing complete.	58.00	One Cum	5432.96	315111.68
24	Providing and casting in situ Controlled cement concrete M 25 for R.C.C. Solid slab including centering, scaffolding, curing and finishing complete.	427.70	One Cum	5294.73	2264556.02
25	Providing and casting in situ Contolled cement concrete- M-20 for avarage 75 / 150 mm thick wearing coat laid as directed incuding. tamping, vibrating, finishing, curing and filling in joints with bitumen complete.	121.10	One Cum	5320.24	644281.06
26	Providing and casting in situ Contolled cement concrete- M-200 for Approach slab including formwork, curing and finishing complete.	14.60	One Cum	5178.40	75604.64

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27	Providing and casting in situ Controlled cement concrete M 25 mix for Approach slab including formwork, curing and finishing complete.	52.90	One Cum	5284.13	279530.48
28	Providing and casting in situ Controlled cement concrete- M-200 Kerb/Kerb blocks including formwork,curing and finishing complete.	3.60	One Cum	4886.91	17592.88
29	Providing and laying Weep Hole in Abutments and returns by using A.C. pipe of 100mm. Incl. fixing in proper grade and jointing the complete as per detailed specification	266.00	One No	62.93	16739.38
30	Providing and laying weep hole in Abutments, and returns by using PVC pipe of 100MM including fixing in proper grade and jointing the complete as per detailed specification	272.00	One No	355.52	96701.44
31	Providing and laying filter media 600mm. thick directed at the back of abutments, returns and wing walls as per detailed specifications.	254.60	One Sqm	1268.86	323051.76
32	Providing and fixing in position Mild steel dowel bars in pier cap or abutment caps for anchorage in fixed end as per detailed drawings including cutting bending and welding complete.	60.00	One No	341.29	20477.40
33	Providing and fixing in position Mild steel dowel bars in pier cap or abutment caps for anchorage in free end as per detailed drawings including cutting bending and welding complete.	60.00	One No	399.70	23982.00
34	Providing and laying in Position FE 500D TMT bar reinforcement including cutting, bending, hooking and tying complete as per detailed drawings for the following (A) Piers (B) Abutments (C) R.C.C. Returns / Walls / Caps/ Copings etc.	11.590	One MT	73858.69	856022.22
35	Providing and Fixing in position FE 500D TMT bar reinforcement including (testing of coating at plant and all taxes) cutting, bending, hooking, and tying complete as per detailed drawaing (A)RCC kerb (B) RCC Footpath (C) RCC App. Slab (D) Wearing coat.	8.960	One MT	73243.01	656257.37
36	Construction of Precast R.C.C. railing of M 30 grade concrete having 2-tire (Row) of hand rail dimension as shown on detail drawing and vertical posts not to exceed 1.625m including necessary TMT steel, formwork, painting with weateherproof paint, supoplying of all materail, labour etc. complete as per instruction of Engineer-in-chargee.	220.00	One Rmt.	2123.35	467137.00
37	Providing and filling Pre moulded Asphlat Joint Filler 20/12mm. Size as directed by Engineer in charge.	134.20	One Sqm	712.40	95604.08
38	Providing G.I. 100mm. Diameter water spouts including necessary iron gratings as per drawings.	8.00	One No	536.02	4288.16
39	Providing PVC 100mm. Diameter water spouts including necessary iron gratings as per drawings.	72.00	One No	159.37	11474.64
40	Providing flood gauge marks on sub structure as per design including painting complete	3.60	One Rmt.	160.06	576.22
41	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.	2757.90	One Cum	137.47	379128.51
42	Supplying and fixing reinforced concrete heavy duty nonpressure pipes with collars for culverts carrying heavy traffic as per IS 458-1991 specifications including setting the pipes in C.M. 1:2 watering and laying (to level or slopes) of class NP3 of following internal daimeters.I)900mm.	15.00	One Rmt.	3498.72	52480.80

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate In Figures	Amount
43	Supplying and fixing reinforced concrete heavy duty nonpressure pipes with collars for culverts carrying heavy traffic as per IS 458-1991 specifications including setting the pipes in C.M. 1:2 watering and laying (to level or slopes) of class NP3 of following internal diameters. 1) 1200mm. Dia	105.00	One Rmt.	5560.00	583800.00
44	Dismantling the existing structure including removing and stacking the dismantled materials as and where directed. Rubble masonry.	128.00	One Cum	418.96	53626.88
45	Dismantling the existing structure including removing and stacking the dismantled materials as and where directed. RCC Work.	452.10	One Cum	940.89	425376.37
46	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 dia of pipe)	45.00	One Rmt.	76.67	3450.15
47	Diversion: Providing temporary diversion suitable for traffic during the construction period of the C.D. Structure / Bridge / Box Structure work by levelling existing ground and constructiong suitable compacted embankment, road surface with providing, laying & consolidation of 200 mm WBM in layers on carriage width with safety measures like sign board, guard stone & maintain for motorable road throughout construction period etc. and also dismantle diversion after completion of work etc. complete as per instrucion of Engineer-in-Charge.	80.00	One Rmt.	1707.91	136632.80
48	Providing and filling trenches in foundation in rocky strata with ordinary cement concrete M-10	290.00	One Cum	3304.10	958189.00
49	Providing and filling in foundation with ordinary cement concrete M-15 mix and providing necessary pin headers including formwork vibrating, rammering and curing complete	112.10	One Cum	3732.29	418389.71
50	Providing parapet of ordinary cement concrete M-200 as per detailed drawing with necessary reinforcement including, shuttering, laying vibrating and finishing to line and level complete. (ii) Cast in situ	29.00	One Rmt.	1089.66	31600.14
51	Providing and casting in situ controlled cement concrete M-20 for R.C.C. work in Pier, Abutment, Return & Riding Return as per drawings including centering shuttering, scaffolding where necessary, laying vibrating, curing and finishing complete. (A) Height from 5.0 M. to 10.0 M (1) Piers (2) Abutment (3) RCC return	98.20	One Cum	5574.64	547429.65
52	Providing and casting - in - situ controlled cement concrete DMC M-20 for mass concrete for foundation below Piers, Abutments & Square Return including centering shuttering, scaffolding where necessary, laying vibrating, curing and finishing complete as per specification	593.50	One Cum	5247.04	3114118.24
53	Providing and casting in situ controlled cement concrete M-25 for R.C.C. Wall / Return as per drawings including centering shuttering, scaffolding where necessary, laying vibrating, curing and finishing complete. (A) Height from 0.0 to 5.0 M. (1) Piers/ R.C.C. Walls (2) Abutment (3) RCC return	130.00	One Cum	5352.76	695858.80
54	Providing and casting in situ Controlled cement concrete- M-25 Kerb/Kerb blocks including formwork, curing and finishing complete.	14.40	One Cum	4992.64	71894.02
55	Providing and casting in situ controlled cement concrete M-30 mix for kerbs/Kerb blocks including formwork, curing and finishing complete.	6.30	One Cum	4992.64	31453.63

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate In Figures	Amount
56	Providing and laying in position FE 500 D TMT bar reinforcement including providing fusion bonded Epoxy coating not less than 175 micron thickness and up to 300 micron to reinforcement bars as per IS-13620-1993/ ASTM-775 M including testing of coating at plant and all taxes including cutting, bending, hooking and tying complete as per detailed drawings for the following. (A) Piers (B) Abutments (C) R.C.C. Returns / Walls/ Caps/ Copings etc.	14.20	One MT	81154.93	1152400.01
57	Providing and placing in position FE 500/550 D TMT bar reinforcement including providing fusion bonded Epoxy coating not less than 175 micron thickness and up to 300 micron to reinforcement bars as per IS-13620-1993/ ASTM-775 M including testing of coating at plant and all taxes including testing of coating at plant and all taxes including cutting, bending, hooking, and tying complete as per detailed drawing.(A) Solid Slab. / App slab / Wearing Coat	27.57	One MT	80539.26	2220467.40
58	Providing and placing in position FE 500D TMT bar reinforcement including testing of coating at plant and all taxes including cutting, bending, hooking, and tying complete as per detailed drawing.(A) Solid Slab. / App slab / Wearing Coat	34.90	One MT	73243.02	2556181.40
59	"W": Metal Beam Crash Barrier Providing and erecting a "W" metal beam crash barrier comprising of 3mm thick corrugated sheet metal beam rail, 70cm above road/ground level, fixed on ISMC series channel vertical post, 150x75x5mm spaced 2m centre to centre, 1.8m high, 1.1m below ground/road level, all steel parts and fitments to be galvanised by hot dip process, all fittings to confirm 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.	63.00	One Rmt.	3723.46	234577.98
60	Numbering the CD work with approved paint including all materials for painting etc. complete.	2.00	One No	58.80	117.60
61	Providing and fixing Flood guage post mark of 'C' angle size 100mm x 50mm x 6mm thick of length 2.00 Mt. height fixed in head wall 0.50 mt. and 1.50mt. Out side with painting and lettering with radium color as directed.	2.00	One No	1144.33	2288.66
62	Supplying & laying of bi-axial extruded high modulus polypropylene geogrid conforming to MORT&H specification for base/sub-base reinforcement having minimum tensile strength 30kN/m in the longitudinal and transverse direction, with 10.5kN/m and 21kN/m tensile strength at 2% and 5% strain respectively in the longitudinal and transverse direction, junction efficiency not less than 95% and with 38mm X 38mm mesh opening	581.30	One Sqm	253.51	147365.36

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate In Figures	Amount
63	Cautionary warning sign:-Providing & Fixing sign boards made out of 2mm. alluminium sheet size 90x90x90cms. equilateral triangle as per design of IRC-67-1977 Pretrated with phospheting process & acid atching : coated with one coat of apoxy primer and two coats of best quality epoxy paint, reflectorised with retro reflective sheeting as per latest MOSTspecifications. 3.1mt. lomg stand post & frame fabricated from suitable size iron angle of 35x35x3 mm., 75x75x6mm. required paited with best quality epoxy coatings in black and white bends, the detail of symbols for each board shall be as per the instruction of the engineer in charge. The fixing at site shall be in C.C. 1:2:4 block of size 45x45x60 cms for each leg, incl. excavation,curing etc. comp.under the supervision of Engineer - in charge. (A) Engineer Grade	2.00	One No	3808.65	7617.30
64	Informatory Signs:-Providing and fixing sing boards made out of 2mm aluminium sheet; size 90 x 60cms. rectangle as per the design of IRC-67-1977 pre treated with phospheting process & acid teching; coated with one coat of epoxyprimer and two coats of best qualityepoxy paint; reflectorised with retro reflective sheeting as per latest M.O.S.T. Specifications; 3.1m long stand postand frame fabricated from suitable sizeiron angle of 35 x 35 x 3mm75x75x6mm as required; painted with best qualityepoxy coatings in black and whitebends. the details of symbol for eachboard shall details of symbol for eachboard shall be as per the instruction ofengineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x45 x 60cms. for each leg. including excavation curing tec. complete under the supervision of engineer in charge. (A) Engineer Grade	3.00	One No	3856.90	11570.70
65	Hazard Marker sign : Providing and Fixing sign boards made out of 2mm aluminum sheet : size 90*30 cms. rectangle as per design / Drawing attached (IRC). Pretreated with phospheting process and acid etching : coated with one coat of epoxy primer and two coats of best quality epoxy paint: reflectorised with retro reflective sheeting as per latest M.O.S.T specification: 3.1 M. long (2 nos) stand post and frame fabricated from suitable size iron angle of 35*35*3mm and 50*50*5mm : painted with best quality epoxy coatings in black and white bends the details of symbole 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*45*60 cms for each leg: including excvation curing etc. comp.under the supervision of engineer-in-charge. (A) Engineer grade	4.00	One No	2423.74	9694.96
66	Providing temporary diversion suitable for traffic during the construction period of the Bridge/Box Structure work by levelling existing ground and constructiong suitable compacted embankment, all weather road surface with providing, laying & consolidation of 200 mm WBM in layers in proper carriage width with safety measures & maintain for motorable road throughout construction period etc. and also dismantle diversion after completion of work etc. complete as per instrucion of Engineer-in-Charges	150.00	One Rmt.	2500.76	375114.00
67	Providing temporary all weather and fair weather diversion suitable for traffic during the construction period of the bridge /slab drain / Causeway / HPD etc. including all safety measures for traffic etc.	190.00	One Rmt.	1997.64	379551.60

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	Four Crore Twenty Three Lakh Sixteen Thousand Thirty Two Rupees And Forty Paise.				42316032.40

I \ We am \ are willing to carry out the work at % above \ below 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 447357.76 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
Mahuva

Executive Engineer
Panchayat R&B Division
Bhavnagar