

Name of work :- Construction New Structure of Amreli District Package No.RPC-  
2/AMR/MMGSY/Khas Angbhut/2025-26/P.43 Ta.Babara, Dist.; Amreli.

### BILL OF QUANTITIES

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
1	Earthwork for embankment including breaking clods, dressing with all lead and lift (Excluding watering and consolidation) (A) From borrow area with all lead and lift.Executed with machineries.(Selected soil to be used for earthwork shall be from BORROW AREA only having CBR not less than 6.00%)	992.00	One Cum	157.91	156646.72
2	WBM Grading-1 Providing, laying, spreading and compacting stone agg. Of 90mm 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-1 as per Technical Specification Clause.405 By manual means.	686.00	One Cum	1418.16	972857.76
3	Rolling and Watering of earthwork in layers with vibratory roller including filling in depression which occur during the process as directed.	992.00	One Cum	22.95	22766.40
4	Providing and laying bitumenous grout 37.50mm thick using Emulsion RS1 for tack coat at the rate of 4.00kg/10sqm on W.B.M. 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.	216.00	One MT	2392.22	516719.52

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
5	Providing, laying and rolling 50mm thick compacted bitumenous Macadam (B.M.) in one layer with B.T. aggregates as specified and using Emulsion RS1 for tack coat at the rate of 2.50kg/10sqm (As per IRC-16) and using bitumen for mixing with agg. at the rate of 3.40% i.e 34.00kg/MT of total mix including mixing in Drum mix plant and spreading the same by paver finisher and consolidation with vibratory roller including necessary including cost of hire charges, firewood, oil, lubricants, labour charges, etc. by using constructor's own Drum mix plant, machineries and equipment, tools etc. complete in accordance with the requirement of specification.	192.00	One MT	3000.57	576109.44
6	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 0.30cum/10sqm etc. complete in accordance with the requirement of specification.	220.00	One MT	3626.27	797779.40
7	Excavation for foundation upto 1.5m depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto all lead. Dense or hard soil.	70.00	One Cum	253.88	17771.60
8	Excavation for foundation upto 1.5m depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto all lead. Hard Murrum	55.00	One Cum	432.61	23793.55

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
9	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.	1569.00	One Cum	511.11	801931.59
10	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.	289.00	One Cum	611.32	176671.48
11	Excavation in large boulders and soft rock by wedging including shoring, strutting and dewatering as necessary and disposing of the excavated stuff as directed,	1510.00	One Cum	716.55	1081990.50
12	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) Blasting prohibited.	479.00	One Cum	1675.30	802468.70
13	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.	342.00	One Rmt.	450.07	153923.94
14	Providing and laying rubble for apron (Each stone weighting not less than 40kg) including and packing and filling in the interstices with quarry spall.	380.00	One Cum	1083.81	411847.80
15	Providing and casting in situ ordinary cement concrete M-150 mix and providing necessary pin headers including shuttering, scafildng, laying vibrating, curing and finishing complete Without V-Grooves For all Hieght.	1710.70	One Cum	3921.63	6708732.44
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.	469.50	One Cum	3345.58	1570749.81

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
17	Providing and casting in situ Ordinary cement concrete- M-150 for average 75/150mm thick wearing coat laid as directed including. tamping, vibrating, finishing, curing and filling in joints with bitumen complete.	95.40	One Cum	3876.65	369832.41
18	Providing and filling trenches of Labour charges Excavator in rocky strata with ordinary cement concrete M-15	71.00	One Cum	3657.68	259695.28
19	Providing and casting in situ Controlled cement concrete M-200 for R.C.C. work in Piers, abutment, returns and riding returns as per drawing including centering, shuttering, scaffolding where necessary laying, vibrating curing and finishing complete (A) For all Height	1755.20	One Cum	5227.36	9175062.27
20	Providing and casting in situ Controlled Cement concrete M 20 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.	154.90	One Cum	5307.46	822125.55
21	Providing and casting in situ Controlled cement concrete M 25 for R.C.C. Solid slab including centering, scaffolding, curing and finishing complete.	483.60	One Cum	5457.74	2639363.06
22	Providing and casting in situ Controlled cement concrete- M-200 for average 75/150mm thick wearing coat laid as directed including. tamping, vibrating, finishing, curing and filling in joints with bitumen complete.	136.00	One Cum	5300.56	720876.16
23	Providing and casting in situ Controlled cement concrete- M-200 mix for Approach slab including formwork, curing and finishing complete.	88.20	One Cum	5158.72	454999.10
24	Providing and casting in situ Controlled cement concrete- M-20 mix for kerbs/Kerb blocks including formwork, curing and finishing complete.	77.88	One Cum	4869.02	379199.28
25	Providing and laying filter media 600mm. thick directed at the back of abutments, returns and wing walls as per detailed specifications.	277.20	One Sqm	1239.35	343547.82

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
26	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.	114.00	One No	341.29	38907.06
27	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.	114.00	One No	399.70	45565.80
28	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.	34.810	One MT	73858.69	2571021.00
29	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.	50.210	One MT	73243.01	3677531.53
30	Providing PVC 100mm. Diameter water spouts including necessary iron gratings as per drawings.	391.00	One No	159.37	62313.67
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.	1905.00	One Cum	136.91	260813.55
32	Finishing wall with weather proof exterior emulsion paint on wall surface (two coats) to give an required shape even shade after throughly brushing the surface to remove all dirt, and remains of loose powdered materials etc. complete.	404.00	One sqm	120.26	48585.04
33	Supplying and fixing reinforced concrete heavy duty non presure pipes with collars for culverts carrying heavy traffic as per IS 458-1991 specification including setting and joinng the pipes in C.M. 1:2 watering and laying (to level or slope) of I.S. Class NP-3 of following internal diameter with all lead and lift. (i) 900mm Dia.	30.00	One Rmt.	3469.25	104077.50

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
34	Dismantling the existing structure including removing and stacking the dismantled materials as and where directed. Stone/Rubble masonry.	65.00	One Cum	409.22	26599.30
35	Dismantling the existing structure including removing and stacking the dismantled materials as and where directed. RCC Work.	868.90	One Cum	930.35	808381.12
36	Removing all types of Hume pipes and stacking within a lead of 1000m including earthwork and Dismantling of Masonary works as per technical Specification Clause. 202 All Diameter (600mm to 900mm dia and upto 600mm dia.)	90.90	One Rmt.	362.77	32975.79
37	Demolition and desposal of unserviceable materials with all lead and lift. (II) Unreinforced cement concrete.	18.00	One Cum	623.01	11214.18
38	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 Earthwork, Quarry spall, guard stone, red lamps / signals at night for traffic etc. complete.	370.00	One Rmt.	884.46	327250.20
39	Providing and Fixing Flood guage post confirming to IRC 67-2001 using engineering grade retro reflective sheeting including lettering and border as directed. For New structure.	2.00	One No	3045.15	6090.30
40	Informatory Signs :-Providing and fixing sing boards made out of 2mm aluminium sheet; size 80 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 refiective 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(VR)...	3.00	One No	3856.90	11570.70

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
41	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 phosphating 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.(B) Engineering Grade	6.00	One No	2423.74	14542.44
42	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 phosphating 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	4.00	One No	3518.69	14074.76

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
43	Facility Informatory Sign :-Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel); size 80 x 60 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; 3.6mtr 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	2.00	One No	3990.64	7981.28
44	Men at work (Heavy) sign :-Providing and fixing sing boards made out of 2mm aluminium sheet; size 120 x 90cms. rectangle as as per the attached drawing. 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 reflective sheeting as per latest M.O.S.T. Specifications; Letters and numerals should be as per IRC-30-1968, 3.1m long (2 nos) stand post and frame fabricated from suitable size iron angle of 50 x 50 x 5mm 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 60cms. for each leg. including excavation curing etc. complete under the supervision of engineer in charge.(A) Engineer Grade(VR)...	6.00	One No	6141.20	36847.20



Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
45	Men at work (Heavy) sign :-Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel); size 120cm x 90cm as per design of IRC-67-2012. Pre treated with phosphating 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; 3.6 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 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 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)	4.00	One No	9148.16	36592.64
46	Cautionary Warning Sign : Providing and fixing sign boards made out of 2mm Aluminium sheet size 90x90x90 cms. Equilateral triangle as per the design of IRC-67-1977 pre treated with phosphating process and acid etching coated with one coat of apoxy primer and two coats of best quality epoxy paint reflectorised with retro reflective sheeting as per latest MOST specification 3.1 Mt. long stand post and frame fabricated from suitable size iron angle of 35x35x3mm, 75x75x6mm. as required painted with best quality epoxy coating in black and white bends the details of symbole 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 45x45x60cms. for each leg including excavation curring etc. complete under the supervision of engineer in charge (A) Engineering Grade.	2.00	One No	3808.65	7617.30

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
47	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.	441.20	One Sqm	367.72	162238.06
48	Supplying and fixing cat eye (Stimsonite) made out from acrilol beatiful sterine injuction high compressed molding with reflector made of MMC (Prismatic type size 12cmx6cmx2.5cm) provided with bituminous adhesive 100g. With each unit for fixing (Engineer grade)	324.00	One No	375.72	121733.28

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
49	Providing and fixing "W" shape metal crash safety barrier comprising of 3mm thick galvanised sheet to be fixed on ISMC 150 (150x75x5.4mm) series channel vertical post to be spaced 2.0 mtr. c/c to be kept 0.90mtr height as per MOST specification incl. necessary foundation, fittings with bolts, painting and required all process as per specification and as per drawings.	333.60	One Rmt.	2801.74	934660.46
50	Providing and applying one coat Epoxy Phenolic primer of DFT 50 micron and two coats of Polyurethane (aliphatic) epoxy paint 75 micron DFT each or any other equivalent epoxy coating system to all concrete surfaces exposed to atmosphere in Substructure & Super Structure as directed by Engineer and as per specification	2964.40	One Smt.	234.32	694618.21
Rupees Four Crore Twenty One Thousand Two Hundred Sixty Three And Paise Ninety Seven Only					40021263.97

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. Of Dismantled materials shall be recovered from 1st R.A. bill of Contractor at once.**

Signature of Contractor.

Deputy Executive Engineer  
Panchayat R&B Sub Division  
Kukavav

Executive Engineer  
Panchayat R&B Division  
Amreli