

Resurfacing to Valotra Daiyar Road Ch.0/0 to 5/030 Ta.Ranavav Dist.Porbandar (Kisanpath 2023-24)**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.	2.00	One Hect.	28455.09	56910.18
2	Earthwork for embankment including breaking clods, dressing with all lead and lift (excluding watering and consolidation) (C) From Borrow area within 3 km lead	299.00	One Cum	177.33	53021.67
3	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 slopes as directed upto all lead	6323.00	One Cum	114.44	723604.12
4	Scarifying graveled macadam or Bitumen macadam surface 6cm to 10cm depth including stacking useful materials on road side and disposing off remaining stuff.	2663.00	One Sqm	43.58	116053.54
5	Providing and laying compacted W.B.M. 75mm thick (Grade -II) of Machine crushed BT metal of size of 40-63 mm with 16% stone screening 13.20 mm size binding materials at 0.08Cum/10Sqm including spreading, watering and consolidation by vibratory roller etc. complete.	2751.00	One Cum	1281.11	3524333.61
6	Rolling and Watering of earthwork in layers with vibratory roller 80 to 100KN static weight including filling in depression which occur during the process as directed.	299.00	One Cum	23.41	6999.59
7	Providing, laying And rolling 37.50 mm thick compacted Bitumeneous Macadam (B.M.) in one layer with B.T. aggregates as specified and using RS-1 Emulsion for tack coat at the rate of 4.00 Kg 10sqm. on B. T. Surface (As per IRC-16) and using bitumen for mixing with aggregate at the rate of 3.40 % i.e. 34.00 kg 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 including cost of Hire charges, firewood, fl, Lubricants, labour charges, etc. by using Drum mix plant, machineries and equipment, tools etc. complete in accordance with the requirement of specification.	220.00	One MT	2821.58	620747.60

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate In Figures	Amount
8	Providing and laying and roling of 20mm thick compacted mix seal surface with B.T.and aggregate as specified using itumen for mixing with aggregate at the rate of 5.10% i.e. 51.00kg/ M.T. of total mix, including heating and mixing in drum mix plant and spreading the same by paver finisher and con solidation with vibratory roller including necessary frewood, ofl, lubricants, labour charges, using drum mixp lant, machineries and equipment, tools etcincluding fushing of sand 0.30 cum/10sqm. etc complete in accordance with the requirement of specification	123.00	One MT	3336.81	410427.63
9	Filling in foundation and plinth with murrum or selected soil in layers of 20cm. thickness including watering, ramming and consolidating etc. complete.	42.00	One Cum	307.41	12911.22
10	Excavation for foundation upto 1.5 m depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto all lead. Dense or hard soil.	272.00	One Cum	265.97	72343.84
11	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 3.0 M and lead upto 100m for 10 cum	376.00	One Cum	535.45	201329.20
12	Providing and casting in situ ordinary cement concrete M-150 mix and providing necessary pin headers including shuttering, scafilding, laying vibrating, curing and finishing complete Without V-Grooves (A) Height 0.0 M to 5.0 M	863.80	One Cum	3954.98	3416311.72
13	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.	1526.00	One Cum	3378.92	5156231.92
14	Providing & Cating in situ controlled cement concrete M-250 mix with trimix C.C. Road laid ,conplast P-211 water reduction admixture @ 100ml/bag of cement as directed including temping, vibrating, finishing, curing and filling joint with bitumen etc as Directed and approved by engineer in charge.	2797.00	One Cum	5960.53	16671602.41
15	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.	16.00	One Cum	4765.74	76251.84
16	Providing and casting in situ Controlled cement concrete M-250 for R.C.C. Solid slab including centering, scaffolding, curing and finishing complete.	30.00	One Cum	5493.53	164805.90
17	Providing and casting in situ Controlled cement concrete M-250 mix for average 75mm thick wearing coat laid as directed incuding. tamping, vibrating, finishing, curring and filling in joints with bitumen complete.	215.00	One Cum	5445.65	1170814.75

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate In Figures	Amount
18	Providing and laying weep hole in Abutment and returns by using A.C / P.V.C pipe of 100mm. Including laying in proper grade and jointing the complete as per detailed specifications.	643.00	One No	90.82	58397.26
19	Providing and laying filter media 600mm. thick directed at the back of abutments, returns and wing walls as per detailed specifications.	43.00	One Sqm	1298.37	55829.91
20	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	7.580	One MT	73858.69	559848.87
21	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 (C) RCC App. Slab (D) Wearing coat.	57.290	One MT	73243.01	4196092.04
22	Filling around the pipes with murrum including dressing, tampering etc. complete	188.00	One Cum	88.72	16679.36
23	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.	321.00	One Cum	137.47	44127.87
24	Supplying and Fixing reinforced concrete heavy duty non-pressure pipes with collars for culverts including setting and joining the pipe in C.M. 1:2 watering and laying (to level or slope) of I.S. class NP3 of following internal diameters. (V) 900mm Dia.	37.50	One Rmt.	3531.49	132430.88
25	Demolition including stacking of serviceable materilas and disposal of unserviceable materials with all lead and lift. (i) R.C.C. work	1370.00	One Cum	1133.88	1553415.60
26	Providing Temporary diversion suitable for traffic during the construction period of the bridge / CD work by levelling existing ground and supplying and spreading Hard Murrum in layear etc complete as per specification	200.00	One Rmt.	669.84	133968.00
27	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.	19.00	One Cum	3748.96	71230.24
28	Providing parapet of ordinary cement concrete M-250 as per detailed drawing with necessary reinforcement including, shuttering, laying vibrating and finishing to line and level complete. (ii) Cast in situ	6.00	One Rmt.	1558.89	9353.34
29	Providing and casting in situ controlled cement concrete M-250 for R.C.C. return as per drawings including centering huttering, scaffolding where necessary, laying vibrating, curing and finishing complete. (A) Height from 0.00 to 5.0 Mt (1) Piers (2) Abutment (3) RCC return	12.00	One Cum	5372.45	64469.40

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate In Figures	Amount
30	Providing & Cating in situ controlled cement concrete M-250 mix with trimix C.C. Road laid as directed including temping, vibrating, finishing, curing and filling joint with bitumen etc as Directed and approved by engineer in charge.	41.00	One Cum	5948.15	243874.15
31	Providing and placing in position FE 500D bar reinforcement for following items including cutting bending hooking and tying complete as per detailed drawing.For well :- curb, staining, cap and RCC Raft.	1.20	One MT	73858.69	88630.43
32	Providing and placing in position FE 500D TMT bar reinforcement including cutting, bending, hooking, and tying complete as per detailed drawing. (A) Solid Slab.	2.10	One MT	73243.01	153810.32
33	Providing and fixing Hectometer of pecast C.C. 1:2:4 including necessary reinforcement as per I.R.C. type design including painting lettering and etc. complete. (II) Fixing in C.C. 1:5:10	21.00	One No	356.49	7486.29
34	Providing and fixing guard stone as per IRC type design including white washing etc complete (i) Fixing in C.C. 1:5:10	143.00	One No	350.80	50164.40
35	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.	6.00	One No	704.33	4225.98
36	Providing and fixing indicator stone of approved stone as per I.R.C. type design in C.C. 1:4:8 including white washing etc. complete.(ii) Fixing in C.C. 1:5:10	252.00	One No	343.26	86501.52
37	Supplying and fixing road sign board of M.S. plate and angle IR including painting, lettering etc complete including fixing in CC 1:4:8 with necessary excavation etc. complete as per IRC Type design (II) Reflective Type.	14.00	One No.	3072.98	43021.72
38	Citizen information Boards. Providing and fixing of Typical information board as per instruction Two ACP sheets of 3mm thick of 900mm x 750mm size fixed at top & bottom duly rivetted with MS angles of 25 x 25 x 5mm thick MS angle shall be welded by two vertical M.S. angle of 5mm thick to 75mm x 75mm pf 12SWG square tubes posts duly embeded in cement concrete M-15 grade blocks of 600mm x 600mm x 750mm below ground level. The letters and figures of any shade reflectorised with High Intensity Prismatic Grade Retro Reflective Sheeting of TYPE-4 as per ASTM D-4956 and latest MORD specification; All sections of framed posts and sheet tube will be painted with primer and two coats of epoxy paints as per drawing Clause 1701 annexture 1700.1(10.16) (A) Class-B High intensity Grade Retro Reflective Sheeting.	1.00	One No	8575.79	8575.79

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate In Figures	Amount
39	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 coefficinet 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.	1020.00	One Sqm	367.72	375074.40
40	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 rismatic 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.	1154.00	One No	326.23	376469.42

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate In Figures	Amount
41	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 fittings to be galvanised 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 811.	190.00	One Rmt.	3468.34	658984.60
42	Village Name / Bump Ahead Sign:Providing and fixing sign board made out of 2 mm Aluminium sheet: Size 90 x 60 Cms rectangle as per design of IRC 67-1977. 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 MOST specification: 3.1 M Long (2 Nos) Stand Post and frame fabricated from suitable size iron angle of 50 x 50 x 5 mm painted with best quality epoxy coatings in black and white bends the details of symbol on 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 legs including excavation, curing etc. complete under the supervision of Engineer In Charge (A) Engineer Grade	2.00	One No	5045.36	10090.72
43	Hazard Marker Sign :-Providing and fixing sign boards made out of 2mm aluminium sheet; size 90 x 30cms. rectangle as as per the design/drawing attached (IRC) pretreated with phosphating 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; 3.1m long stand post and frame fabricated from suitable size iron angle of 35 x 35 x 3mm & 50 x 50 x 5mm painted with best quality epoxy coatings The fixing at site shall be in 1:2:4 CC block of size 45x45x 60cms. for each leg. including excavation curing etc. complete under the supervision of engineer in charge. (A) Engineer Grade	4.00	One No	2423.73	9694.92

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate In Figures	Amount
44	Chevron sign-Providing and fixing sign boards made out of 1.5mm aluminium sheet / 3mm ACP (Aluminum composite Panel); size 60x50cm 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; 3.3 mtr 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 35x35x3mm; 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 contractor. (A) Class-B Type-4 Retro Reflective sheeting	28.00	One No	3711.75	103929.00
Four Crore Fifteen Lakh Seventy One Thousand Seventy Seven Rupees And Seventeen Paisa					41571077.17

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 321847.5 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
Porbandar

Executive Engineer
Panchayat R&B Division
Porbandar