

CONSTRUCTION OF KAPDISAR DAM NANI SINCHAI YOJANA APPROCH ROAD TA.ABDASA (IRRIGATION DEPOSIT WORK)

BILL OF QUANTITIES

Memorandum showing item of works to be carried out.

It. No.	Description of Item	Qty.	Unit	Rate in figures	Total Amount
1	2	3	4	5	6
1	Clearing and grubbing of road length including up rooting wild vegetation, grass, bush shrubs, saplings and trees of girth up to 300 mm removal of stumps, of such trees cut earlier and disposal of and unserviceable material stacking of serviceable material ,Clause-2 C1.1 (area of light density) by mechanical means in area of light jungle	0.40	Hect.	28455.09	11382.04
2	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 all lead and lift.	820.00	Cum	109.24	89576.80
3	Earth work for embankment with selected soil C.B.R. not less then 6.0 includiing breaking clouds, dressing, with all lead amd lift (excl. watering and consolidation) from borrow area with all lead & lift	1959.00	Cum	163.69	320668.71
4	Rolling & watering and consolidation of earthwork using vibratory road roller 8-10 ton capacity (A)Earth work (layer not exceeding 200mm thickness)	1959.00	Cum	22.96	44978.64
5	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 stone dust 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 8T 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)	700.00	Cum	705.20	493640.00
6	Providing and laying W.B.M. of M.c. meta of size 45 mm to 90 mm size including 0.27Cu.M.Stone screening & 0.08 Cu.M. stone dust as filler including spreading, watering & consolidation by vibratory roller 80KN to 100KN static weight. 100 mm thick compacted	300.50	Cum	1184.38	355906.19
7	Providing and laying W.B.M. of M.C. metal of size 45 mm to 63 mm size including 0.12Cu.M. Stone screening & 0.08 Cu.M. stone dust as filler including spreading, watering & consolidation by vibratory roller 80KN to 100KN static weight. 75 mm 1thick compacted each layer.	417.00	Cum	1081.80	451110.60

It. No.	Description of Item	Qty.	Unit	Rate in figures	Total Amount
1	2	3	4	5	6
8	Providing and laying bituminous grout 37.5mm compacted thick using B.T. stone aggregates as per required gradation with the asphalt VG-30 grade for tack coat 2.5 Kg/10 Smt on B.T. surface and 4.0 Kg/10 Smt on W.B.M. surface and asphalt VG-30 grade for mixing @ 1.99% i.e. 19.90 kg./ MT by weight of mix including heating and mixing in drum mix plant transporting the mix, spreading the same by pavers finisher and consolidation as per MORTH specification including cost of all materials fuels, labors, tools and plant etc. using contractors own drum mix plant etc. completed as directed.	204.38	M.T.	2310.23	472164.81
9	Providing and laying 37.50 mm thick compacted B.M. using stone chips 0.66 Cum/1 M. ton mix as per gradation with Asphalt VG-30 for tack coat @ 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 continuous batching drum mix plant, transporting and mixed material 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.	224.90	M.T.	2913.04	655142.70
10	Providing and laying bituminous seal coat with stone chips 6 to 10 mm size 0.18 Cmt/10 smt. i.e. using 0.66 cmt aggregate per M.T mix using asphalt VG-30 @ of 4.50% of mix including heating the asphalt and aggregate by continuous batching drum mix plant and paver finisher and consolidating by vibratory roller including providing equipment, tools, plant, firewood, oil, kerosene, labour charges etc. using the contractors own machinery and plant.	74.40	M.T.	3243.50	241316.40
11	Providing and laying cement concrete 1:4:8 (1 cement : 4 coarse sand : 8 machine crushed stone aggregates 40 mm nominal size) and curing complete in foundation and plinth.	169.50	Cum	2968.27	503120.92
12	Proving and laying cement concrete grade M-20 (1-Cement : 1.5 sand : 3 coarse aggregate 20mm nominal size) for C.C. road and curing etc. complete including cost of formwork, finishing the cement concrete road by Trimix process inclusive of labour charges for trimix vacume dewatering process on cement concrete road by using vacume dewatering pump, surface floater, including channelling and making grooves & rough finish to surface, providing expansion joint, construction joint including filling the joint with asphalt filler as per direction by engineer in charge and as per specification.	330.00	Cum	5189.34	1712482.20
13	Providing I.S.I. mark T.M.T. bar Fe-500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto two floor level.	5148.00	kg	77.29	397888.92

It. No.	Description of Item	Qty.	Unit	Rate in figures	Total Amount
1	2	3	4	5	6
14	Providing and fixing ordinary kilometer stone of precast 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 O.D. road V.R.)	1.00	No.	704.33	704.33
15	Providing and fixing Hectometer stone as per I.R.C. type design including painting, lettering etc. complete (i) Fixing in earth.	4.00	No.	356.50	1426.00
16	Providing 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	35.00	No.	343.27	12014.45
17	<p>Facility Informatory Sign :-Providing and fixing sign boards with logo of scheme 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 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 reflective sheeting 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 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.</p> <p>(B) Class-B Type-4 Retro Reflective sheeting</p>	1.00	No.	3990.64	3990.64

It. No.	Description of Item	Qty.	Unit	Rate in figures	Total Amount
1	2	3	4	5	6
18	Cautionary Warning Sign :-Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel);size 90 x 90 x 90 cms, equilateral triangle as per design of IRC-67-2012Pre treated with phosphating process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint seflectorised with Micro Prismatic Grade retro reflectivesheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T.Specifications; 3.6mtr long stand post of 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 foreach board shall be as per theinstruction of engineer in charge, The fixing at site shall be in 1:2:4 CC blockof size 45x45 x 60 Cms. for each leg. including excavation, curing etc.complete under the supervision of engineer in charge, A warranty for 10 years for the Retro reflective sheeting from orliginal manufacturer rom 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	2.00	No.	5077.27	10154.54
19	Give Way sgn :-Providing and ftxinge sign boards made out of 2nm aluminium sheet / 4mm ACP(Alurminium composte Pane)ave 90x90x90 cms.equilateraltriangle as per desgn OfIRC6.96i2. pre treated with phosphating process & acid etenm ated with one coat of epoxy primer and two coats of be uality epoxy paint ; reflectorised with High Intensity Prismare arade retro reflectivesheting of Type-4 as per ASTM D-4956 ae (atest M.O.S.T.Specfications; 3.6mtr long stand post of Iron Angele 75x75x6mm/65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35x35x3mm; paintec with bestquality epoxy coatings in black and white bends. The detals 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 letcomplete under the supervision of engineer in change..A warranty for 7 years for the Retro reletive sheting from oiginal macopy of 3 year outdoor exposure test report from lthird paty test lab for the product offeredshall be submittedby contractor. (B) Class-B Type-4 Retro Reflec	1.00	No.	3906.19	3906.19

It. No.	Description of Item	Qty.	Unit	Rate in figures	Total Amount
1	2	3	4	5	6
20	Direction sign (Junction board) :- Providing and fixing sign boards made out of 2mm aluminium sheet size 244 x 122cms. rectangle as per the 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 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, 75 x 75 x 6mm as required 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)	1.00	No.	14831.71	14831.71
21	STOP SIGN :- Providing and fixing sing boards made out of 2mm aluminium sheet size 90 x 90cms. rectangle as per the design of IRC-67-1977 pretreated 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; 3.1m long stand post and frame fabricated from suitable size iron angle of 35 x 35 x 3mm, 75 x 75 x 6mm as required; 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 60cms. for each leg including excavation curing etc. complete under the supervision of Engineer in charge. (A) Engineer grade (VR).	2.00	No.	6704.36	13408.72
22	Village name/ Bump Ahead sign :- Providing and fixing sign board made out of 2 mm alluminium sheet size 90 x 60 cms rectangle as per the design of IRC-67-1977 pre treated 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.R.T.H. specifications. Letters and numerals should be as per IRC-30-1968, 310m 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 coating 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 C.C. 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) Engineer grade (VR).	1.00	No.	6397.43	6397.43

It. No.	Description of Item	Qty.	Unit	Rate in figures	Total Amount
1	2	3	4	5	6
			TOTAL Rs.		5816212.94

i.e. Rs. Fifty Eight lacs Sixteen thousands Two hundred Twelve Rupees and Ninty four paisa only.

I/We am/are willing to carry out the work @ _____ % above/below percent (Should be written in figures and 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 Rs. _____	Total Rs. _____
In words _____	In words _____

Note :-

1. The Contractor shall exhibit a board with detailed specification and details of work as directed by the Engineer-In-
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

Above all items of "Schedule-B" with Item Description, Unit, Rate & Amount have verified by me and found

Deputy Executive Engineer
Panchayat (R & B) Sub Division,
Nalia, Abdasa

Sr. Divisional Account
Officer
Panchayat (R & B)

Executive Engineer
Panchayat (R & B) Division,
Bhuj-Kutch