

Sealed percentage rate quotations of the subject work are invited from eligible contractors preferably registered with CPWD/MES/PWD, who have carried out ~~one~~ civil work of at least equal to or exceeding 80% of the estimated cost during last seven years. The sealed quotations shall be submitted with Registrar, Delhi Kendra, Bharatiya Vidya Bhavan.

**Estimated Cost**

**Rs 7,95,024**

Name of work:- Improvement of Cold Filtered water supply system for students and staff in Mehta Vidyalaya, Bharatiya Vidya Bhavan, New Delhi

**General terms and conditions:**

- 1 NIQ can be obtained from Bhavan's website [www.bvbdelhi.org](http://www.bvbdelhi.org) free of cost.
- 2 Last date of receipt of duly filled quotation in Registrar office shall be 1.00 pm on ~~01.03.2023~~ 10.3.2023.
- 3 Time allowed for completion shall be 75 days starting from next date of award of work.
- 4 Water and electricity shall be provided for execution of this work by the Bhavan from existing bore well and pump and recovery @ 1.5% shall be made from gross amount of contract on account of water & electricity charges. One main point for electricity & water out shall be provided by Bhavan, further Distribution shall be made & maintained by the Agency.
- 5 All other statutory recoveries like income tax @2%, GST @2%, Labour Cess @1% etc shall be effected from gross amount of each bill.
- 6 Payment shall be made on the basis of actual quantity executed, approved & measured for payment by the Works Unit
- 7 All works shall be carried out as per CPWD specifications 2019 vol-1 & II with correction slips upto date of receipt of NIQ
- 8 No T & P shall be supplied by the Bhavan Authorities.
- 9 Bhavan's Authorities have the power to reject any or all the quotations even after opening.
- 10 Rates shall be inclusive of all material, T& P, manpower, Machinery and supervision expenses & OHeads etc.
- 11 Rates are based on DSR 2021 and estimated cost of this work is **Rs. 7,95,024/-**
- 12 An amount equal to 5% of gross amount of each bill shall be recovered on account of Security Deposit. The same shall be refunded after successful completion of six months defect liability period. Any defects arising during that shall be rectified by the agency failing which it shall be got rectified by Bhavan Authorities at risk and cost of the agency.

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- 13 All safety provisions for workmen, supervisory staff, Bhavan's property and local body installations shall be the responsibility of the work executing agency
- 14 Time allowed for completion shall be 75 days starting from next date of award of work.
- 15 Quantities in the BoQ are estimated and subject to variations. No extra rates etc. shall be allowed on exceeded or decreased quantities.
- 16 Any extra item ordered or cropping up during execution of the work shall be prepared and paid based on DSR 2021 with added or subtracted enhancement/ abetment in rates quoted by the agency in this NIQ.

Head (W.U.)

Project Engineer

Registrar (Delhi Kendra)  
Bharatiya Vidya Bhavan

Preferred makes of materials to be used in the work are as under. In case of non-availability of these makes, the Engineer-in-Charge may allow use of alternative BIS makes of Materials in the work.

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S. No.	Material	List of Preferred Makes
1	(i) Ordinary Portland Cement / Portland Pozzolona Cement / Sulphate Resisting Portland cement	ACC, Ultratech, Ambuja Cement, J.K.Cement, Century Cement, Shree Cement, Jaypee Cement, Vikram Cement.
	(ii) White Cement	Birla White, J.K.White
2	Reinforcement Steel TMT bars Fe-500D	SAIL, Tata Steel, Rastriya Ispat Nigam Ltd (RINL), JSW Steel Ltd., Jindal Steel & Power Ltd.
3	Bricks (Non-Modular)	1st Class U.P. or equivalent
4	Particle Board	Kitply, Action TESA, Greenlam, Merino.
5	Laminated Particle Board / Laminates	Kitply, Action TESA, Greenlam, Century Ply, Merino, Sunmica.
6	Flush Door shutters	Duro, Kitply Industries (Swastik), Century, Durian, Green Ply.
7	Plywood / Veneer	Green ply, Century Merino, Kitply, Duro Durian.
8	Locks	Godrej/... locks or equivalent approved
9	Door Closer	Doorking/Everite
10	Floor Spring & Door Closure	Godrej, Dorma, Dorset, Kich
11	Dash / Anchoring Fasteners	HILTI, Fischer, Bosch, Wurth.

12	Structural Steel	SAIL, Tata Steel, Rastriya Ispat Nigam Ltd (RINL), and JSW Steel Ltd., Jindal Steel & Power Ltd.
13	Wood Primer	Asian Paints (Wood Primer – White / Pink), Berger, ICI, Nerolac.
14	Steel Primer (Red Oxide Zinc Chromate Primer)	Asian Paints, Nerolac, Berger, ICI
15	Water Proofing Compounds, Admixtures, Plasticizer, Super Plasticizer, Curing Compounds.	Fosroc, ROFF/Dr.Fixit (Pidilite Industries), CICO, Sika, BASF, Ardex Endura (Bal Endura)
16	Integral Water Proofing compound with cement (For Plaster & Mortar)	Fosroc : Conplant 421 Dr.Fixit : L.W+ Sika : Sikacin Asian Paints : Smart Case Vitalia & equivalent product of BASF, CICO, Ardex Endura
17	Water Proofing for bathroom / toilet / balcony & other wet areas	Fosroc : Brush Bond Dr.Fixit : Pidifine 2K Sika : Nito Bond Asian Paints : Damp Block 2 K & equivalent product of BASF, CICO, Ardex Endura
18	Crystalline water proofing compound	Fosroc : Fosroc Crystalline Dr.Fixit : Dr.Fixit Crystalline Sika : Sika Crystalline Asian Paints : Crystalline Quarty & equivalent product of BASF, CICO, Ardex Endura, Pentron
19	Grouts, Tile Adhesive	Latecrete, Kerokoal, BASF, Ardex Endura, Ferrous Crete.
20	Polycarbonate Sheet	GE Plastic, LEXAN

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21	Profile steel sheet (Precoated)	Ezydeck of TATA, Lloyd Superdeck, JSW / Jindal
22	Melamine Polish	Asian Paints Melamine Gold, Wudfine of Pidilite, Timbertone of ICI Dulux.
23	(a) Aluminium Section	Hindalco, Jindal, Indian Aluminium Co.
24	Clear/Float/Frosted/Refractive/Coated Glass	Saint Gobain, Modiguard, Asai
25	Stainless Steel Railing, Accessories etc.	JINDAL, Dorma, Kich, GEZE, Godrej, Hardwyn
26	S.S.Door & Window & fittings	Jindal, Dorma, Kich, Doorset, Godrej, Ozone
27	Silicon based water repellent / Weather sealant	G.E. Plastics, Dow Corning, (Wacker), BASF, Pidilite (Dr.Fixit/Roff)
28	Poly-Sulphide Sealant	Fosroc, Pidilite (Dr.Fixit/Roff), Sika, BASF
29	Mosaic Tiles / Chequerred Tiles	Ultra Tiles, NITCO, Hyper(Mayur), Pavcon
30	Ceramic Tiles	Somany, Kajaria, RAK, NITCO
31	Vitrified Tiles (Antiskid/Matt/Glazed)	Somany, Kajaria, RAK, NITCO
32	Paver Block & Kerb Stone	Pavcon, Hyper Tiles / Dynamic Industries/Mayur, KK, Power, Sharda, Navya
33	Cement Based Wall putty	Birla wall care, JK White, Berger, Asian Paints.

34	Oil Bound Washable Distemper / Dry Distemper	Asian Paints (Professional Acrylic Distemper), Nerolac : Beauty Acrylic Distemper, Berger: Bison Acrylic Distemper, Dulux ICI:Maxilite
35	1st Quality Acrylic Distemper (washable / Ready Mix / Low VOC)	Asian Paints (Tractor Aqua Lock Paint) Berger : Commando Or equivalent paints of Nerolac or ICI Dulax.
36	Acrylic Emulsion Paints	Asian Paints : (Professional Premium Interior Emulsion Paint) Nerolac : Beauty Gold Berger : Rangoli total care ICI-Dulux : Super Cover
37	Plastic Emulsion Paint	Asian Paints : (Apcolite Heavy Duty Premium Emulsion Paint) Nerolac : Impression Berger : Easy Clean ICI-Dulux : 3 in 1
38	Premium Acrylic Emulsion Paints (Interior)	Asian Paints (Royale Luxury Emulsion) Nerolac : Impression Berger : Silk ICI Dulux : Velvet Touch
39	Acrylic Smooth Exterior Paint	Asian Paints : (Apex / Professional Premium Exterior Emulsion) Nerolac : XL Berger : Weather Coat ICI-Dulux : Weather Shield
40	Premium Acrylic Smooth Exterior Paint with silicon additive	Asian Paints : (Apex Ultima) Nerolac : XL Total Berger : Weather Coat all guard ICI-Dulux : Weather Shield max
41	Synthetic Enamel Paint	Asian (Apcolite Premium gloss enamel), Nerolac : Synthetic Hi gloss

Berger : Luxol Hi gloss  
ICI-Dulux : Gloss Synthetic  
enamel

42	Cement Primer	Nerolac, Berger, BP White (Berger), Decoprime WT(Asian), White Primer(ICI)
43	Epoxy Paint	Asian, Nerolac, Berger, ICI, Kansai Akzo Nobel.
44	G.I. / M.S. Pipe	Tata, Jindal (Hisar)
45	G.I. Fittings	Unik, AVR, Zoloto
46	PPR pipes	Finolex
47	Solid Pipe	10 kg. pressure
48	S. W. Pipes	Anand, Perfect
49	PVC Rain Water	6 kg. pressure PVC Rain water
50	HDPE Pipes	Reliance, Jain Pipes, ORIPLAST, Supreme
51	UPVC pipe and Fittings	Astral, Supreme, Ashirwad
52	Centrifugally Cast (Spun) Iron Pipes & Fittings	NECO, Kapilansh, Electrosteel, SKF.
53	C.I. Manhole covers, frames & GI Gratings	NECO, RAJ Iron Foundary Agra, BIC, SKF, Kapilansh
54	SFRC Manhole covers & gratings	KK, JAIN, PARGATI
55	CP Brass Fittings (Superior Range)	Jaquar, Grohe, Roca
56	CP Brass Fittings	Hindware, Jaquar, (Normal Range) ESSCO, Parryware

57	Sanitary ware, Fittings & accessories (Superior Range)	Kohler, Roca, Hindware, Parryware
58	Sanitary ware, Fittings & accessories	Hindware, CERA, Parryware, Jaquar
59	Mirror Glass	Atul, Modi Guard, Golden Fish
60	CPVC Pipe & fitting	Astral, Supreme, Ashirwad
61	Stainless Steel Sink	Neelkanth, Nirali, Jyna
62	RCC Pipes (NP-2)	Lakshmi, Sood & Sood, Jain Pipe Co. (Newai), Mahaveer Enterprises (Newai), work well spun pipes (pali)
63	Gypsum Plaster	Ferrous Crete, Gyproc Saint Gobain, Ultratech
64	Floor hardener	Ironite, Ferrok, Hardonate
65	Modular Expansion Joint	Herculus, Sanfield India Ltd. Vexcolt
66	Glass Wool/ Rock Wool	Dow Corning, U.P. Twiga, Isover
67	Tile Fixer/Adhesive	As approved by Engineer – in- Charge.



Sl. No.	Description of Item	Unit	Quantity	Rate	Amount	Ref. to DSR 2021
1	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge.					2.6
1.1	All kinds of soil	cum	3.54	205.45	727	2.6.1
2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.					2.8
2.1	All kinds of soil.	cum	1.58	286.85	454	2.8.1
3	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :					2.10
3.1	All kinds of soil					2.10.1
3.1.1	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	metre	5.00	417.35	2087	2.10.1.2
4	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.					
		cum	1.71	253.95	434	2.25
5	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m.					2.28
5.1	All kinds of soil	sqm	50	28.15	1408	2.28.1

6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :					
6.1	1:1½:3 (1 Cement: 1½ coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	cum	0.04	7783.65	349	4.1.2
6.2	1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources : 10 graded stone aggregate 40 mm nominal size derived from natural sources)	cum	0.74	6050.65	4492	4.1.10
7	Centering and shuttering including strutting, propping etc. and removal of form work for :					4.3
7.1	Foundations, footings, bases for columns	sqm	0.82	307.95	251	4.3.1
8	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:					6.1
8.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	1.49	6882.00	10268	6.1.1
9	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :					6.4
9.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	3.54	8512.10	30150	6.4.1
10	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 ( cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	sqm	34.62	1063.45	36817	8.31
11	Providing and fixing hard drawn steel wire fabric 75x25 mm mesh of weight not less than 7.75 Kg per sqm to SS tube frames including SS welding, buffing etc. all complete.	sqm	24.30	983.05	23888	A.R on 9.50
12	Providing and fixing carbon steel galvanised ( minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm <sup>2</sup> ), counter sunk head, comprising of 10 mm dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.					10.27

12.1	10x160 mm	each	14	191.95	2687	10.27.5
13	Providing and fixing stainless steel ( Grade 304) railing or posts etc. made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing or posts etc. with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-incharge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	kg	132.00	612.25	80817	10.28
14	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :					11.26
14.1	25 mm thick	sqm	18.41	1706.60	31419	11.26.1
15	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	sqm	7.32	2038.55	14922	11.27
16	40 mm thick rubbed stone flooring over 20 mm (average) thick base of cement mortar 1:5 (1 cement : 5 coarse sand) with joints 3 mm thick, side bordered with cement mortar 1:2 (1 cement : 2 stone dust) admixed with pigment to match the shade of stone and pointing with same mortar.					11.3
16.1	Red sand stone	sqm	15.00	1292	19380	11.30.1
17	Providing and laying rectified Glazed Ceramic floor tiles of size 300x300 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in colours White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement: 4 Coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete.	sqm	22.85	1142	26095	11.39

18	Providing & fixing UV stabilised fiberglass enforced plastic sheet roofing up to any pitch, including fixing with polymer coated 'J' or 'L' hooks, bolts & nuts 8mm dia. G.I plain/bitumen washers complete but excluding the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovigs incorporating minimum 0.3% ultra-violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866. The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified.					12.47
18.1	2 mm thick corrugated (2.5" or 4.2" or 6") or step-down (2" or 3" or 6" ) as specified	sqm	5.60	1179.25	6604	12.47.1
19	12 mm cement plaster of mix :					13.1
19.1	1:4 (1 cement: 4 fine sand)	sqm	13.34	294.85	3933	13.1.1
20	6 mm cement plaster of mix :					13.16
20.1	1:3 (1 cement : 3 fine sand)	sqm	20.00	253.05	5061	13.16.1
21	Extra for providing and mixing water proofing material in cement plaster work in roportion recommended by the manufacturers.	per bag of 50 kg cement used in the mix	26.00	60.55	1574	13.21
22	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine sand):					13.31
22.1	Flush / Ruled/ Struck or weathered pointing	sqm	30.00	214.40	6432	13.31.1
23	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :					13.43
23.1	Water thinnable cement primer	sqm	34.00	64.45	2191	13.43.1
24	Finishing walls with Acrylic Smooth exterior paint of required shade :					13.46
24.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	sqm	30.00	166.85	5006	13.46.1
25	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :					13.60
25.1	Two or more coats on new work	sqm	34.00	137.85	4687	13.60.1
26	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	sqm	34.00	123.85	4211	13.8

27	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	sqm	30.00	20.85	626	13.91
28	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.					15.2
28.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	cum	1.18	2007.10	2361	15.2.1
29	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in - charge.	cum	0.44	2829.10	1239	15.3
30	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.					15.7
30.1	In cement mortar	cum	3.33	1698.45	5664	15.7.4
31	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured):					15.8
31.1	From brick work in cement mortar	1000 nos.	800	5.52225	4418	15.8.3
32	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.					15.23
32.1	For thickness of tiles 10 mm to 25 mm	sqm	10.97	60.50	664	15.23.1
33	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	sqm	7.31	219.75	1606	15.25
34	Dismantling G.I./ PTMT/PPR pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge :					15.44
34.1	15 mm to 40 mm nominal bore	metre	13.32	124.10	1653	15.44.1
35	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	sqm	10.22	45.05	460	15.56
36	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	each	9	886.25	7976	17.22A

37	Providing and fixing soil, waste and vent pipes :					17.35
37.1	100 mm dia					17.35.1
37.1.1	Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989	mete	27.00	1077.40	29090	17.35.1.2
38	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 ( 1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :					17.36
38.1	100 mm dia pipe	each	12	163.45	1961	17.36.2
39	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.					17.38
39.1	100 mm dia					17.38.1
39.1.1	Sand cast iron S&S as per IS - 3989	each	2	597.60	1195	17.38.1.2
40	Providing and fixing heel rest sanitary bend					17.4
40.1	100 mm dia					17.40.1
40.1.1	Sand cast iron S&S as per IS - 3989	each	2	439.75	880	17.40.1.2
41	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.					17.43
41.1	100x100x100 mm					17.43.1
41.1.1	Sand cast iron S&S as per IS - 3989	each	7	731.40	5120	17.43.1.2
42	Providing and fixing terminal guard					17.56
42.1	100 mm					17.56.1
42.1.1	Sand cast iron S&S as per IS - 3989	each	1	439.75	440	17.56.1.2
43	Providing and fixing collar :					17.57
43.1	100 mm					17.57.1
43.1.1	Sand cast iron S&S as per IS - 3989	each	3	439.75	1319	17.57.1.2
44	Providing and fixing M.S. stays and clamps for sand cast iron/ centrifugally cast (spun) iron pipes of diameter :					17.59
44.1	100 mm	each	1	128.65	129	17.59.2
45	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :					17.60
45.1	100 mm inlet and 100 mm outlet					17.60.1
45.1.1	Sand cast iron S&S as per IS: 3989	each	5	1604.10	8021	17.60.1.1
46	Providing and supplying heavy duty SFRC drain covers of sizes including frame all complete.					
46.1	600 x 600 mm	each	3	700.00	2100	M.R.
46.2	680 x 625 mm	each	2	900.00	1800	M.R.


47	Cutting chases in brick masonry walls for following diameter sand cast iron/ centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 ( 1 cement : 3 coarse sand :6 graded stone aggregate 12.5 mm nominal size), including necessary plaster and pointing in cement mortar 1:4 (1 cement : 4 coarse sand) :					17.61
47.1	100 mm dia	metre	6.87	615.7	4230	17.61.1
48	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work :					
48.1	100 mm diameter pipe	metre	27.00	69.55	1878	17.65.1
49	Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour.					
49.1	Waste coupling 38 mm dia of 83 mm length and 77mm breadth, weighing not less than 60 gms	each	9	109.70	987	17.69.2
50	Providing and fixing PTMT Bottle Trap for Wash basin and sink.					17.70
50.1	Bottle trap 38 mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 263 gms	each	9	325.10	2926	17.70.2
51	Providing and fixing M.S. holder bat clamp of approved design to sand cast iron/ cast iron (spun) pipes comprising of M.S. flat brackets of 50x5 mm flat of specified shape, projecting 75 mm outside the wall surface and fixed on wall with 4nos, 6mm dia expansion hold fasteners, including drilling necessary holes in brick wall/ CC/ RCC surface and the cost of bolts etc. The pipes shall be fixed to the already fixed brackets with the help of 30 mm x1.6 mm galvanised M.S. flats of specified shape and of total length 420 mm and shall be fixed with M.S. nuts, bolts, & washers of size 25x6 mm, one bolts on each side of the pipe.					17.77
51.1	Total bracket length 580 mm of approved shape and design (for single 100 mm dia pipe)	each	7	247.95	1736	17.77.1

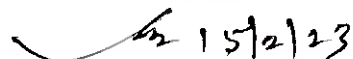
52	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.					18.7
Internal work - Exposed on wall						
52.1	15 mm nominal dia Pipes	metre	3.60	255.90	921	18.7.1
52.2	20 mm nominal dia Pipes	metre	13.32	325.10	4330	18.7.2
52.3	25 mm nominal dia Pipes	metre	17.50	408.55	7150	18.7.3
52.4	40 mm nominal dia Pipes	metre	20.00	674.35	13487	18.7.5
53	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :					18.17
53.1	2" nominal bore	each	2	532.35	1065	18.17.1
53.2	4" nominal bore	each	4	707.30	2829	18.17.3
54	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931					18.53
54.1	15mm nominal bore	each	18	500.35	9006	18.53.1
55	Providing and fixing PTMT, push cock of approved quality and colour.					18.57
55.1	15 mm nominal bore, 98 mm long, weighing not less than 75 gms	each	18	96.45	1736	18.57.1
56	Providing and fixing PTMT grating of approved quality and colour.					18.58
56.1	Circular type					18.58.1
56.1.1	100 mm nominal dia	each	5	33.20	166	18.58.1.1
57	Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts, collar and bush of approved quality and colour.					18.74
57.1	15 mm nominal bore with 45 cm length	each	18	107.90	1942	18.74.2
58	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.					18.75
58.1	15 mm nominal bore, weighing not less than 32 gms	each	18	43.05	775	18.75.1
59	Cutting holes up to 30x30 cm in walls including making good the same:					18.76
59.1	With common burnt clay F.P.S. (non modular) bricks	each	5	362.40	1812	18.76.1
60	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.	each	5	377.10	1886	18.77



61	Making chases up to 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	metre	13.32	171.80	2288	18.78
62	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :					19.1
62.1	150 mm diameter	metre	26.00	591.40	15376	19.1.2
63	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design :					19.2
63.1	150 mm diameter S.W. pipe	metre	26.00	1095.15	28474	19.2.2
64	Constructing brick masonry road gully chamber 500x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design :					19.27
64.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	3	5589.45	16768	19.27.1
64	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of: (i) 1st course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. (ii) 2nd course of 20 mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. (iii) 3rd course of applying blown or residual bitumen applied hot at 1.7 kg. per sqm of area. (iv) 4th course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 kg/sqm).	sqm	15	774.25	11614	22.3
66	Brick work with old available common burnt clay F.P.S. (non modular) bricks of class designation 7.5 above plinth level up to floor V level in all shapes and sizes in :					
66.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	1.218375	5150.30	6275	A.R base 6.4.2

67	Providing, installing and fixing Stainless Steel (grade 304) easily cleanable machine moulded Satin finish water trough carved out of SS sheet 1.2 mm thick with smooth folded edges 25 mm size, rear skirting 200 mm high and bowl 900 mm x 380 mm x 150 mm deep or bigger in size with 38 mm dia waste water outlet with wall hanging arrangement all complete.	each	9	15000.00	135000	Market Rate
<b>TOTAL</b>					679723	
Added for multiplying factor effect of GST being 18% as on date ( 1.0633)		Rs679723+ Rs 43,026			722749	
Added for Cost Index effect @ 10 %		Rs 7,22,749+ Rs. 72,275			<b>795024</b>	

  
Head (W.U.)

 15/2/23  
Project Engineer

Registrar (D.K.)  
Bharatiya Vidya Bhavan