

**Annexure - I**

**Name of work: "Provision of PVC pipe line, sluice valve for irrigation in Cultivation Area and G.I. pipe line in Herbal Garden at FFDC Campus, Kannauj."**

Sl. No.	Description of Items	Quantity	Unit
1	<b>EARTH WORK</b>		
1.1	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 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 5 m :		
1.1.1	All kinds of soil.		
1.1.1.1	Pipes, cables etc. exceeding 80 mm dia. But not exceeding 300 mm dia.	850	Metre
2	<b>CONCRETE WORK</b>		
2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level:		
2.1.1	1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size).	6	Cum.
3	<b>BRICK WORK</b>		
3.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:		
3.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand).	7	Cum.
4	<b>FINISHING</b>		
4.1	12 mm cement plaster of mix:		
4.1.1	1:6 (1 cement : 6 coarse sand).	10	Sqm.
5	<b>WATER SUPPLY</b>		
5.1	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. Internal work – Exposed on wall		
5.1.1	20 mm dia. Nominal bore.	36	Metre
5.2	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work:		
5.2.1	65 mm dia. Nominal bore.	440	Metre
5.3	Constructing masonry Chamber 120 x 120 x 100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design:		

Sl. No.	Description of Items	Quantity	Unit
5.3.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5.	28	Each
5.4	Painting G.I. pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat, both of approved quality for new work:		
5.4.1	20 mm diameter pipe.	36	Metre
5.5	Painting G.I. Pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality		
5.5.1	65 mm diameter pipe.	440	Metre
5.6	Providing and filling sand of grading zone V or coarser grade all-round the G.I. pipes in external work.		
5.6.1	65 mm. diameter pipe.	440	Metre
5.7	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work).		
5.7.1	65 mm. nominal bore.	10	Each
5.8	Providing and fixing 100 mm dia. Nominal bore G.I. pipe of approved quality (Jindal B class or equivalent) all as per direction of the Engineer-in-charge.	30	Metre
5.9	Providing and fixing G.I. bend (90 degree) of 100 mm dia. Nominal bore of approved quality as per direction of the Engineer-in-charge.	20	Each
5.10	Providing and fixing G.I. socket of 100 mm dia. Nominal bore of approved quality.	20	Each
5.11	Providing and fixing gun metal gate valve of 20 mm dia. Nominal bore with C.I. wheel of approved quality (screwed end).	32	Each
5.12	Providing and fixing selfit PVC- U pipes of 110 mm outer diameter of Class V (pressure 10 kgf/sqcm) of approved quality (Finolex or equivalent) as per IS 4985:2000 jointing with approved solvent cement all as per direction of the Engineer-in- charge.	860	Metre
5.13	Providing and fixing PVC moulded fittings of approved quality (Finolex or equivalent) as per IS 7834:1987 jointing with approved solvent cement all as per direction of the Engineer-in-charge.		
5.13.1	Tee (10 Kgf/sqcm) of 110 x 110 x 110 mm outer	32	Each
5.13.2	Male threaded adopter of 110 mm outer dia.	25	Each
5.13.3	Bend 90 degree (6 Kgf/sqcm) of 110 mm outer dia.	44	Each
5.13.4	Elbow (10 Kgf/sqcm) of 110 mm outer dia.	8	Each
5.13.5	End cap plain for 110 mm outer diameter pipe.	8	Each
5.13.6	End cap threaded for 110 mm outer diameter pipe.	8	Each
5.13.7	Female threaded adopter of 110 mm outer dia.	10	Each
5.13.8	Coupler of 110 mm outer dia.	35	Each
5.13.9	Tail piece of 110 mm outer dia.	8	Each
5.13.10	Service saddle of 110 mm outer dia.	5	Each
5.14	Providing and fixing PVC double acting air valve of 110 mm dia. of approved quality and make (Jain or equivalent).	4	Each
5.15	Providing and fixing PVC sluice valve of 110 mm dia. of approved quality and make (Jain or equivalent).	28	Each
5.16	Providing and fixing selfit PVC – U pipes of 32 mm outer diameter of Class V (pressure 10 Kgf/sqcm) of approved quality (Finolex or equivalent) as per IS 4985:2000 jointing with approved solvent cement all as per direction of the Engineer-in-charge.	8	Metre