

## **Annexure I**

### **Quantity Details of Plumbing work, Drainage System and Electrical work**

- Two Storied (02 Storied) family accommodation Block (04 houses) for Army Officers of Major Rank at Rajouri Lines near Pre-Primary School in Jammu District

#### **Plumbing work**

SN	Details of Items	Quantity	Unit
1	Providing & fixing of white vitreous China pedestial type water closet (European Type) with cistern with CP bolts, nuts, CI chair hanging arrangements, bakelite seat & cover with CP hinges & rubber buffers, CP brass screw, washer with all accessories with WC connector with Rubber Lip / Buffer and side gap filled with silicon sealant wherever required. Including brass / SS screws and washer complete including cutting, making good the walls, floors, slab wherever required as per direction of Engineer-in-charge.	16.00	Each
2	Providing & fixing of white vitreous china under counter oval wash basin/circular basin with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes , wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	12.00	Each
3	Providing & fixing of white vitreous china wash basin with pedestal with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	4.00	Each
4	Providing and fixing CP single liver extended basin mixer (height 85mm) without Popup waste system with 450mm long Braided Hoses and brass nuts with all fittings and accessories as per direction of Engineer-in-charge	16.00	Each
5	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required. Kitchen sink with drain board 510 x 1040mm bowl depth 225mm	8.00	Each
6	Providing and fixing, testing and commissioning of C.P. brass single hole sink mixer with CP wall flange, swinging spout complete as required and making good as per direction of Engineer-in-Charge	8.00	Each
7	Providing & fixing C.P. hand spray with lever control (health faucet) and flexible hose 1 m long connection with C.P. holder for hand spray complete in all respects as per direction of Engineer-Incharge.	16.00	Each
8	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	80.00	Each

9	Providing & fixing C.P. brass robe hook fixed to wall/door with plastic rawl plugs and C.P brass screws including cutting and making good the walls wherever required as per direction of Engineer-Incharge.	16.00	Each
10	Providing & fixing recessed liquid soap dispenser as per direction of Engineer-Incharge.	16.00	Each
11	P/F of Soap Dish Holder with all fittings as per direction of Engineer-in-charge	16.00	Each
12	Providing and fixing of Tumbler Holder with all fittings as per direction of Engineer-in-charge	16.00	Each
13	Providing and fixing Bottle Trap and other ancillary fittings. Cutting and making good the walls wherever required compete as per directions of Engineer-Incharge.	48.00	Each
14	Providing and fixing 6mm copper backed float glass mirror MODI / SAINT-GOBAIN including 6mm thick BWR type ply board, 40mm stainless steel channel plugged to wall, hard wood treated with two coats of wood preservative, etc. all complete as specified and to the satisfaction of Engineer in charge.	20.00	Each
15	Providing and fixing CP brass towel rail of approved make complete with CP brackets fixed to wooden cleats with CP brass screws.	16.00	Each
16	P/F brass towel ring round with round flange of approved make complete with all fittings	20.00	Each
17	Providing and fixing of glass shelf 600mm long with all C.P fittings of approved quality complete item	16.00	Each
18	Providing and fixing toilet paper holder with all fittings	12.00	Each
19	Providing and fixing 15 mm dia. C.P. brass bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. (Short Body)	16.00	Each
20	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. (15 mm dia.)	16.00	Each
21	P/F of regular body concealed stop cock suitable for 15mm pipe line with protection cap with exposed part angular stop cock with flange	16.00	Each
22	Providing and fixing of wall mixer with provision for overhead shower with 115mm long bend pipe on upper side connecting legs and wall flanges of approved quality with all fittings	12.00	Each
23	Providing and fixing of wall mounted over head shower 200mm dia with shower arm 450mm long round shape with 90 degree bend with flanges with all fittings.	12.00	Each

## **Drainage Work**

SNo	Details of Items	Quantity	Unit
1	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) R.C.C. top slab with 1 :2:4 mix ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix ( 1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 ( 1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design.		
1.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm. internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) With F.P.S. bricks with class designation 75 & with Crushed stone aggregate.	8.00	Each
1.2	Inside size 90x80 cm and 60 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)	8.00	Each
2	Providing and fixing PVC pipes 6kg/cm <sup>2</sup> pressure excluding pvc fittings, jointing with adhesive/seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion of approved make Supreme/Finolex/ Astral or equilant.		
	110 mm dia	70.00	Mtrs.
	75 mm dia	40.00	Mtrs.
	160 mm dia	55.00	Mtrs.
3	Providing and fixing PVC plain Bend of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm dia	16.00	no
	160 mm dia	16.00	no
4	Providing and fixing PVC Floor Trap of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	16.00	no
	160 mm X 110 mm	16.00	no
5	Providing and fixing PVC Plain Tee of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	12.00	no

6	Providing and fixing PVC Door Bend of approved make Supreme/Finolex/Astral or equivalent complete.		
	110 mm	16.00	no
7	Providing and fixing PVC Door Tee of approved make Supreme/Finolex/Astral or equivalent complete.		
	110 mm	16.00	no
8	Providing and fixing PVC Coupler of approved make Supreme/Finolex/Astral or equivalent complete.		
	110 mm	16.00	no
9	Providing and fixing PVC Clamps for pvc pipes of approved make complete.		
	110 mm	64.00	no
10	Providing and fixing PVC Cowl of approved make complete.		
	110 mm	16.00	no
11	Providing and fixing C.P Jali of approved make complete.		
	110 mm	48.00	no
12	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked indicating the BIS License No. with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank (Sintex, Electroplast, star, Lotous or equivalent having valid ISI license) (2000 ltr. Capacity 6 No.).	12000.00	Ltr
14	Cutting holes upto 30x30 cm in walls including making good the same with common burnt clay F.P.S.(non modular) bricks	24.00	Nos.
15	Providing & fixing full way lever operated forged brass ball valve of brass body with forged brass hard chrome plated steel ball tested to a pressure not less than 16 Kg / sqcm with threaded / flanged joints complete with nuts, bolts, gaskets, washers etc.		
	20 mm Diameter	4.00	Nos.
	25 mm Diameter	8.00	Nos.
16.0	Supply, assembly, erection, testing Pump Capacity 180 lpm, at 30 m head (1 working + 1 standby) (Domestic water relift pump).	4.00	sets

### **Electrical Work**

SNo	Details of Items	Quantity	Unit
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
	Group C	410.00	Point

2	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.		
2.1	2x1.5 +1 1x1.5 sq. mm	640.00	Metre
2.2	2 x 2.5 + 1x2.5sq. mm	240.00	Metre
2.3	2 x 4.0 +1x4.0 sq. mm	430.00	Metre
2.4	2 X 6.0 +1x6.0 sq. mm	310.00	Metre
2.5	2 x 10.0 + 1x6.0 sq. mm	230.00	Metre
2.6	4 x 6 sq.mm +2 X 6 sq.mm earth wire	200.00	Metre
2.7	4 X 10 sq.mm +2 X 6 sq.mm earth wire	200.00	Metre
3	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		
3.1	20mm Conduit	710.00	Metre
3.2	25mm Conduit	1640.00	Metre
3.3	40mm Conduit	760.00	Metre
3.4	deep junction box	200.00	Nos
3.5	surface junction box	140.00	Nos
3.6	5" dia fan box	68.00	Nos
4	Supplying and fixing following size/modules , GI box alongwith modular base & cover plate for modular switches in recess etc. as required.		
4.1	1 or 2 module ( 75mm x 75mm)	34.00	Each
4.2	3 Module (100mmX75mm)	34.00	Each
4.3	4 Module ( 125mm x 75mm)	48.00	Each
4.4	6 Module ( 200mm x 75mm)	48.00	Each
4.5	8 Module ( 125mm x 125mm)	34.00	Each
4.6	12 Module ( 200mm x 150mm)	34.00	Each
5	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc as required.	78.00	Each
6	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 5 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection, painting etc as required.	94.00	Each
7	Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required		
7.1	5/6Amp Switch	64.00	Each
7.2	3 pin 5/6 Amp socket outlet	64.00	Each
7.3	Telephone socket outlet	40.00	Each
8	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc., as required.	64.00	Each
9	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	98.00	Each
10	Installation, Testing and commissioning of pre-wired, fluorescent fitting of all types complete with all accessories and tube etc. directly on ceiling / wall, including connection with 1.5sqmm FRLS PVC insulated , copper conductor, single core cable and earthing etc. as required.	164.00	Each

11	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	64.00	Each
12	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.	28.00	Each
13	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	28.00	Each
14	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.		
14.1	2 Pair	240.00	Meter
14.2	4 Pair	200.00	Meter
15	Supplying and drawing of UTP 4 pair CAT 6A LAN Cable in the existing surface/ recessed steel/ PVC conduit as required.	460.00	Meter
16	Supplying and fixing 5 amps to 32 amps 10kA rating, 240 Volts, 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
16.1	Single pole	200.00	Each
16.2	Single pole & Neutral	24.00	Each
16.3	Trip pole & Neutral	28.00	Each
17	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	60.00	Each
18	Providing and fixing M.V. danger notice plate of 200mm x 150mm , made of mild steel, at least 2 mm thick , and viterous enamelled white on both sides, and with inscription in single red colour on front side as required.	14.00	Each
19	Supply, Installation, Testing and commissioning of following Distribution boards made of sheet steel in IP43 construction with key lock with sheet metal door of Legrand(Ekinox3) or equivalent in Siemens/Schneider makes		
19.1	8 Way TPN	10.00	Each
19.2	6 Way TPN	24.00	Each
20	Supply of following LED lighting fixtures		
20.1	Supply of Wall / Ceiling Fans 230V 50Hz celing fan with double ball bearing with low power consumption of following sweeps:		
20.2	1200mm Ceiling Fan	64.00	Each
20.3	400mm Wall Fan	28.00	Each
21	Supply of following sizes of heavy duty exhaust fan as per approved makes		
21.1	450mm Sweep	28.00	Each
21.2	200mm Sweep	16.00	Each
22	Supply of 1.1kV grade , XLPE insulated, Aluminium conductor, Heavy Duty , Armoured cables of following ratings as per IS : 7098 Part-1 with latest amendments.		
22.1	3.5C x 400sqmm	140.00	Meter
22.2	3.5C x 120sqmm	180.00	Meter
22.3	3.5C x 70sqmm	120.00	Meter

23	Supplying and Installing Following Size of Perforated Hot Dipped Galvanized Cable Tray with Perforation not more than 17.5% in convenient Sections ,joined with connectors ,suspended from the Ceiling including bolts and Nuts ,etc as required.		
23.1	300mm (W) x 50 mm (H)x 1.6 mm (T)cable tray Perforated type	120.00	Meter
24	Providing and fixing Fire Extinguishers (A, B, C type powder) complete with all accessories as per manufacturers specifications.	20.00	Nos
25	Supply, installation, testing and commissioning of 75 mm Cu. Pipe Filled with Crystalline conductive Mixture with Copper Strip of Size 40 mm x 6 mm of Length 2 mtr with Ecofriendly Backfill Compound 50 Kg. Necessary soil treatment is to be made by the contractor in order to improve the Pit resistance value & Earth pit chamber (300mm x 300mm) with CI cover for the above as required complete Job.	2.00	Job
26	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	20.00	Meter
27	Supplying,Installation,Testing and Commissioning of Cubical Type LT Panel Board Suitable for 415 V 3 Phase 4 Wire 50 HZ AC Supply System including Incomers,Out Goings,Bus Bars, etc. as required as per the Following Description. INCOMER i) MCCB 400 Amps 4 P with Breaking Capacity 36 KA (1 Nos) ii) Indicating Lamps RYB (1 Set) iii) Voltmeter-0-500 Volts & Ammeter (0-600 A) (1 No Each) iv) Selector Switch (2 Nos) & Current Transformer 500/5 A 10 VABurden'Class-1 v) Aluminium Busbar 600 Amps FP E-91 E Grade Electrolytic Aluminium vi) Digital Load Manager , SP MCB 2 A & ON/OFF TRIP (02 Sets)		
	OUTGOINGS i) MCB 100 Amps TPN C curv (36 Nos) ii) MCCB 100 Amps 4 P with Breaking Capacity 25 KA (1 Nos) v) Load Bearing Members to be made out of 2.0 mm CRCA Sheet. vi) Partitions to be made out of 1.6 mm CRCA Sheet & Gland Plates to be 3.0 mm Thick.	2.00	Nos
28	S&F 30 W IP66 LED Street light luminaries comprising of rectangular Die-Cast aluminium housing with weather proof gasket for lamp & driver compartment with system wattage of 30 W +/- 10% W. The LED make must be with 120 degree view angle, >120 lumen/watt, lumen maintenance > 70% at 50,000 hrs, colour temperature of 5000-6500, > 70 colour rendering and LM 80 test complianced. The driver must be integral APFC and constant current type having THD < 15% and power factor >0.95 with short circuit protection, open circuit protection, reverse polarity protection, high voltage protection, protection against 5 KV high surges and comply to IEC 60598-1, IEC 61000-3-2, IEC 61547. The luminaries must have secondary optics with perfectly matched lens for batter light control excluding suitable size and length of GI bracket which shall be measured and paid for separately all as specified. Make : Havels/Philips/CG.	8.00	Each

## Annexure II

### Quantity Details of Plumbing work, Drainage System and Electrical work

- Two Storied (02 Storied) family accommodation Block (04 houses) for Army Officers of Major Rank at Rajouri Lines near Pre-Primary School in Jammu District

#### Plumbing work

SN	Details of Items	Quantity	Unit
1	Providing & fixing of white vitreous China pedestal type water closet (European Type) with cistern with CP bolts, nuts, CI chair hanging arrangements, bakelite seat & cover with CP hinges & rubber buffers, CP brass screw, washer with all accessories with WC connector with Rubber Lip / Buffer and side gap filled with silicon sealant wherever required. Including brass / SS screws and washer complete including cutting, making good the walls, floors, slab wherever required as per direction of Engineer-in-charge.	12.00	Each
2	Providing & fixing of white vitreous china under counter oval wash basin/circular basin with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes , wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	8.00	Each
3	Providing & fixing of white vitreous china wash basin with pedestal with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	8.00	Each
4	Providing and fixing CP single liver extended basin mixer (height 85mm) without Popup waste system with 450mm long Braided Hoses and brass nuts with all fittings and accessories as per direction of Engineer-in-charge	12.00	Each
5	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required. Kitchen sink with drain board 510 x 1040mm bowl depth 225mm	4.00	Each
6	Providing and fixing, testing and commissioning of C.P. brass single hole sink mixer with CP wall flange, swinging spout complete as required and making good as per direction of Engineer-in-Charge	4.00	Each
7	Providing & fixing C.P. hand spray with lever control (health faucet) and flexible hose 1 m long connection with C.P. holder for hand spray complete in all respects as per direction of Engineer-Incharge.	12.00	Each
8	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	56.00	Each

9	Providing & fixing C.P. brass robe hook fixed to wall/door with plastic rawl plugs and C.P brass screws including cutting and making good the walls wherever required as per direction of Engineer-Incharge.	12.00	Each
10	Providing & fixing recessed liquid soap dispenser as per direction of Engineer-Incharge.	12.00	Each
11	P/F of Soap Dish Holder with all fittings as per direction of Engineer-in-charge	12.00	Each
12	Providing and fixing of Tumbler Holder with all fittings as per direction of Engineer-in-charge	12.00	Each
13	Providing and fixing Bottle Trap and other ancillary fittings. Cutting and making good the walls wherever required compete as per directions of Engineer-Incharge.	28.00	Each
14	Providing and fixing 6mm copper backed float glass mirror MODI / SAINT-GOBAIN including 6mm thick BWR type ply board, 40mm stainless steel channel plugged to wall, hard wood treated with two coats of wood preservative, etc. all complete as specified and to the satisfaction of Engineer in charge.	16.00	Each
15	Providing and fixing CP brass towel rail of approved make complete with CP brackets fixed to wooden cleats with CP brass screws.	12.00	Each
16	P/F brass towel ring round with round flange of approved make complete with all fittings	16.00	Each
17	Providing and fixing of glass shelf 600mm long with all C.P fittings of approved quality complete item	12.00	Each
18	Providing and fixing toilet paper holder with all fittings	8.00	Each
19	Providing and fixing 15 mm dia. C.P. brass bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. (Short Body)	12.00	Each
20	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. (15 mm dia.)	12.00	Each
21	P/F of regular body concealed stop cock suitable for 15mm pipe line with protection cap with exposed part angular stop cock with flange	12.00	Each
22	Providing and fixing of wall mixer with provision for overhead shower with 115mm long bend pipe on upper side connecting legs and wall flanges of approved quality with all fittings	8.00	Each
23	Providing and fixing of wall mounted over head shower 200mm dia with shower arm 450mm long round shape with 90 degree bend with flanges with all fittings.	8.00	Each

### **Drainage Work**

SNo	Details of Items	Quantity	Unit
1	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) R.C.C. top slab with 1 :2:4 mix ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix ( 1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 ( 1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design.		
1.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm. internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) With F.P.S. bricks with class designation 75 & with Crushed stone aggregate.	6.00	Each
1.2	Inside size 90x80 cm and 60 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)	6.00	Each
2	Providing and fixing PVC pipes 6kg/cm <sup>2</sup> pressure excluding pvc fittings, jointing with adhesive/seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion of approved make Supreme/Finolex/ Astral or equivalent.		
	110 mm dia	50.00	Mtrs.
	75 mm dia	40.00	Mtrs.
	160 mm dia	50.00	Mtrs.
3	Providing and fixing PVC plain Bend of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm dia	12.00	no
	160 mm dia	12.00	no
4	Providing and fixing PVC Floor Trap of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm X 80 mm	10.00	no
	160 mm X 110 mm	10.00	no
5	Providing and fixing PVC Plain Tee of approved make Supreme/Finolex/ Astral or equivalent complete.		

	110 mm X 80 mm	8.00	no
6	Providing and fixing PVC Door Bend of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	10.00	no
7	Providing and fixing PVC Door Tee of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	10.00	no
8	Providing and fixing PVC Coupler of approved make Supreme/Finolex/ Astral or equivalent complete.		
	160 mm	10.00	no
9	Providing and fixing PVC Clamps for pvc pipes of approved make complete.		
	110 mm	15.00	no
10	Providing and fixing PVC Cowl of approved make complete.		
	110 mm	10.00	no
11	Providing and fixing C.P Jali of approved make complete.		
	110 mm	20.00	no
12	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked indicating the BIS License No. with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank (Sintex, Electroplast, star, Lotus or equivalent having valid ISI license) (2000 ltr. Capacity 3 No.).	6000.00	Ltr
14	Cutting holes upto 30x30 cm in walls including making good the same with common burnt clay F.P.S.(non modular) bricks	14.00	Nos.
15	Providing & fixing full way lever operated forged brass ball valve of brass body with forged brass hard chrome plated steel ball tested to a pressure not less than 16 Kg / sqcm with threaded / flanged joints complete with nuts, bolts, gaskets, washers etc.		
	20 mm Diameter	2.00	Nos.
	25 mm Diameter	4.00	Nos.
16.0	Supply, assembly, erection, testing Pump Capacity 180 lpm, at 30 m head (1 working + 1 standby) (Domestic water relift pump).	2.00	sets

### **Electrical Work**

SNo	Details of Items	Quantity	Unit
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
	Group C	370.00	Point

2	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.		
2.1	2x1.5 +1 1x1.5 sq. mm	600.00	Metre
2.2	2 x 2.5 + 1x2.5sq. mm	220.00	Metre
2.3	2 x 4.0 +1x4.0 sq. mm	400.00	Metre
2.4	2 X 6.0 +1x6.0 sq. mm	300.00	Metre
2.5	2 x 10.0 + 1x6.0 sq. mm	220.00	Metre
2.6	4 x 6 sq.mm +2 X 6 sq.mm earth wire	180.00	Metre
2.7	4 X 10 sq.mm +2 X 6 sq.mm earth wire	180.00	Metre
3	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		
3.1	20mm Conduit	700.00	Metre
3.2	25mm Conduit	1600.00	Metre
3.3	40mm Conduit	750.00	Metre
3.4	deep junction box	180.00	Nos
3.5	surface junction box	130.00	Nos
3.6	5" dia fan box	60.00	Nos
4	Supplying and fixing following size/modules , GI box alongwith modular base & cover plate for modular switches in recess etc. as required.		
4.1	1 or 2 module ( 75mm x 75mm)	30.00	Each
4.2	3 Module (100mmX75mm)	30.00	Each
4.3	4 Module ( 125mm x 75mm)	44.00	Each
4.4	6 Module ( 200mm x 75mm)	44.00	Each
4.5	8 Module ( 125mm x 125mm)	30.00	Each
4.6	12 Module ( 200mm x 150mm)	30.00	Each
5	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc as required.	70.00	Each
6	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 5 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection, painting etc as required.	90.00	Each
7	Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required		
7.1	5/6Amp Switch	60.00	Each
7.2	3 pin 5/6 Amp socket outlet	60.00	Each
7.3	Telephone socket outlet	35.00	Each
8	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc., as required.	60.00	Each
9	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	90.00	Each
10	Installation, Testing and commissioning of pre-wired, fluorescent fitting of all types complete with all accessories and tube etc. directly on ceiling / wall, including connection with 1.5sqmm FRLS PVC insulated , copper conductor, single core cable and earthing etc. as required.	160.00	Each

11	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	60.00	Each
12	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.	24.00	Each
13	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	24.00	Each
14	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.		
14.1	2 Pair	220.00	Meter
14.2	4 Pair	180.00	Meter
15	Supplying and drawing of UTP 4 pair CAT 6A LAN Cable in the existing surface/ recessed steel/ PVC conduit as required.	440.00	Meter
16	Supplying and fixing 5 amps to 32 amps 10kA rating, 240 Volts, 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
16.1	Single pole	180.00	Each
16.2	Single pole & Neutral	20.00	Each
16.3	Trip pole & Neutral	24.00	Each
17	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	50.00	Each
18	Providing and fixing M.V. danger notice plate of 200mm x 150mm , made of mild steel, at least 2 mm thick , and vitreous enamelled white on both sides, and with inscription in single red colour on front side as required.	10.00	Each
19	Supply, Installation, Testing and commissioning of following Distribution boards made of sheet steel in IP43 construction with key lock with sheet metal door of Legrand(Ekinox3) or equivalent in Siemens/Schneider makes		
19.1	8 Way TPN	8.00	Each
19.2	6 Way TPN	20.00	Each
20	Supply of following LED lighting fixtures		
20.1	Supply of Wall / Ceiling Fans 230V 50Hz ceiling fan with double ball bearing with low power consumption of following sweeps:		
20.2	1200mm Ceiling Fan	60.00	Each
20.3	400mm Wall Fan	24.00	Each
21	Supply of following sizes of heavy duty exhaust fan as per approved makes		
21.1	450mm Sweep	20.00	Each
21.2	200mm Sweep	16.00	Each
22	Supply of 1.1kV grade , XLPE insulated, Aluminium conductor, Heavy Duty , Armoured cables of following ratings as per IS : 7098 Part-1 with latest amendments.		
22.1	3.5C x 400sqmm	130.00	Meter
22.2	3.5C x 120sqmm	170.00	Meter
22.3	3.5C x 70sqmm	110.00	Meter

23	Supplying and Installing Following Size of Perforated Hot Dipped Galvanized Cable Tray with Perforation not more than 17.5% in convenient Sections ,joined with connectors ,suspended from the Ceiling including bolts and Nuts ,etc as required.		
23.1	300mm (W) x 50 mm (H)x 1.6 mm (T)cable tray Perforated type	110.00	Meter
24	Providing and fixing Fire Extinguishers (A, B, C type powder) complete with all accessories as per manufacturers specifications.	16.00	Nos
25	Supply, installation, testing and commissioning of 75 mm Cu. Pipe Filled with Crystalline conductive Mixture with Copper Strip of Size 40 mm x 6 mm of Length 2 mtr with Ecofriendly Backfill Compound 50 Kg. Necessary soil treatment is to be made by the contractor in order to improve the Pit resistance value & Earth pit chamber (300mm x 300mm) with CI cover for the above as required complete Job.	2.00	Job
26	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	20.00	Meter
27	Supplying, Installation, Testing and Commissioning of Cubical Type LT Panel Board Suitable for 415 V 3 Phase 4 Wire 50 HZ AC Supply System including Incomers, Out Goings, Bus Bars, etc. as required as per the Following Description. INCOMER i) MCCB 400 Amps 4 P with Breaking Capacity 36 KA (1 Nos) ii) Indicating Lamps RYB (1 Set) iii) Voltmeter-0-500 Volts & Ammeter (0-600 A) (1 No Each) iv) Selector Switch (2 Nos) & Current Transformer 500/5 A 10 VABurden'Class-1 v) Aluminium Busbar 600 Amps FP E-91 E Grade Electrolytic Aluminium vi) Digital Load Manager , SP MCB 2 A & ON/OFF TRIP (02 Sets)		
	OUTGOINGS i) MCB 100 Amps TPN C curv (36 Nos) ii) MCCB 100 Amps 4 P with Breaking Capacity 25 KA (1 Nos) v) Load Bearing Members to be made out of 2.0 mm CRCA Sheet. vi) Partitions to be made out of 1.6 mm CRCA Sheet & Gland Plates to be 3.0 mm Thick.	2.00	Nos
28	S&F 30 W IP66 LED Street light luminaries comprising of rectangular Die-Cast aluminium housing with weather proof gasket for lamp & driver compartment with system wattage of 30 W +/- 10% W. The LED make must be with 120 degree view angle, >120 lumen/watt, lumen maintenance > 70% at 50,000 hrs, colour temperature of 5000-6500, > 70 colour rendering and LM 80 test complianced. The driver must be integral APFC and constant current type having THD < 15% and power factor >0.95 with short circuit protection, open circuit protection, reverse polarity protection, high voltage protection, protection against 5 KV high surges and comply to IEC 60598-1, IEC 61000-3-2, IEC 61547. The luminaries must have secondary optics with perfectly matched lens for batter light control excluding suitable size and length of GI bracket which shall be measured and paid for separately all as specified. Make : Havels/Philips/CG.	8.00	Each

### **Annexure III**

#### **Quantity Details of Plumbing work, Drainage System and Electrical work**

- Two Storied (02 Storied) family accommodation Block (04 houses) for Army Officers of Major Rank at Uri Lines in Jammu District

#### **Plumbing work**

SN	Details of Items	Quantity	Unit
1	Providing & fixing of white vitreous China pedestal type water closet (European Type) with cistern with CP bolts, nuts, CI chair hanging arrangements, bakelite seat & cover with CP hinges & rubber buffers, CP brass screw, washer with all accessories with WC connector with Rubber Lip / Buffer and side gap filled with silicon sealant wherever required. Including brass / SS screws and washer complete including cutting, making good the walls, floors, slab wherever required as per direction of Engineer-in-charge.	16.00	Each
2	Providing & fixing of white vitreous china under counter oval wash basin/circular basin with CP brass waste assembly, CP cast brass bottle trap with extension piece, 450mm long CP copper connections pipes, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	12.00	Each
3	Providing & fixing of white vitreous china wash basin with pedestal with CP brass waste assembly, CP cast brass bottle trap with extension piece, 450mm long CP copper connections pipes, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	4.00	Each
4	Providing and fixing CP single liver extended basin mixer (height 85mm) without Popup waste system with 450mm long Braided Hoses and brass nuts with all fittings and accessories as per direction of Engineer-in-charge	16.00	Each
5	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required. Kitchen sink with drain board 510 x 1040mm bowl depth 225mm	8.00	Each
6	Providing and fixing, testing and commissioning of C.P. brass single hole sink mixer with CP wall flange, swinging spout complete as required and making good as per direction of Engineer-in-Charge	8.00	Each
7	Providing & fixing C.P. hand spray with lever control (health faucet) and flexible hose 1 m long connection with C.P. holder for hand spray complete in all respects as per direction of Engineer-Incharge.	16.00	Each
8	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	80.00	Each

9	Providing & fixing C.P. brass robe hook fixed to wall/door with plastic rawl plugs and C.P brass screws including cutting and making good the walls wherever required as per direction of Engineer-Incharge.	16.00	Each
10	Providing & fixing recessed liquid soap dispenser as per direction of Engineer-Incharge.	16.00	Each
11	P/F of Soap Dish Holder with all fittings as per direction of Engineer-in-charge	16.00	Each
12	Providing and fixing of Tumbler Holder with all fittings as per direction of Engineer-in-charge	16.00	Each
13	Providing and fixing Bottle Trap and other ancillary fittings. Cutting and making good the walls wherever required compete as per directions of Engineer-Incharge.	48.00	Each
14	Providing and fixing 6mm copper backed float glass mirror MODI / SAINT-GOBAIN including 6mm thick BWR type ply board, 40mm stainless steel channel plugged to wall, hard wood treated with two coats of wood preservative, etc. all complete as specified and to the satisfaction of Engineer in charge.	20.00	Each
15	Providing and fixing CP brass towel rail of approved make complete with CP brackets fixed to wooden cleats with CP brass screws.	16.00	Each
16	P/F brass towel ring round with round flange of approved make complete with all fittings	20.00	Each
17	Providing and fixing of glass shelf 600mm long with all C.P fittings of approved quality complete item	16.00	Each
18	Providing and fixing toilet paper holder with all fittings	12.00	Each
19	Providing and fixing 15 mm dia. C.P. brass bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. (Short Body)	16.00	Each
20	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. (15 mm dia.)	16.00	Each
21	P/F of regular body concealed stop cock suitable for 15mm pipe line with protection cap with exposed part angular stop cock with flange	16.00	Each
22	Providing and fixing of wall mixer with provision for overhead shower with 115mm long bend pipe on upper side connecting legs and wall flanges of approved quality with all fittings	12.00	Each
23	Providing and fixing of wall mounted over head shower 200mm dia with shower arm 450mm long round shape with 90 degree bend with flanges with all fittings.	12.00	Each

## **Drainage Work**

SNo	Details of Items	Quantity	Unit
1	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) R.C.C. top slab with 1 :2:4 mix ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix ( 1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 ( 1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design.		
1.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm. internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) With F.P.S. bricks with class designation 75 & with Crushed stone aggregate.	8.00	Each
1.2	Inside size 90x80 cm and 60 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)	8.00	Each
2	Providing and fixing PVC pipes 6kg/cm <sup>2</sup> pressure excluding pvc fittings, jointing with adhesive/seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion of approved make Supreme/Finolex/ Astral or equilant.		
	110 mm dia	65.00	Mtrs.
	80 mm dia	40.00	Mtrs.
	160 mm dia	50.00	Mtrs.
3	Providing and fixing PVC plain Bend of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm dia	16.00	no
	160 mm dia	16.00	no
4	Providing and fixing PVC Floor Trap of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	16.00	no
	160 mm X 110 mm	16.00	no
5	Providing and fixing PVC Plain Tee of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	12.00	no

6	Providing and fixing PVC Door Bend of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	16.00	no
7	Providing and fixing PVC Door Tee of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	16.00	no
8	Providing and fixing PVC Coupler of approved make Supreme/Finolex/ Astral or equivalent complete.		
	160 mm	16.00	no
9	Providing and fixing PVC Clamps for pvc pipes of approved make complete.		
	110 mm	64.00	no
10	Providing and fixing PVC Cowl of approved make complete.		
	110 mm	16.00	no
11	Providing and fixing C.P Jali of approved make complete.		
	110 mm	48.00	no
12	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked indicating the BIS License No. with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank (Sintex, Electroplast, star, Lotous or equivalent having valid ISI license) (2000 ltr. Capacity 3 No.).	12000.00	Ltr
14	Cutting holes upto 30x30 cm in walls including making good the same with common burnt clay F.P.S.(non modular) bricks	24.00	Nos.
15	Providing & fixing full way lever operated forged brass ball valve of brass body with forged brass hard chrome plated steel ball tested to a pressure not less than 16 Kg / sqcm with threaded / flanged joints complete with nuts, bolts, gaskets, washers etc.		
	20 mm Diameter	4.00	Nos.
	25 mm Diameter	8.00	Nos.
16.0	Supply, assembly, erection, testing Pump Capacity 180 lpm, at 30 m head (1 working + 1 standby) (Domestic water relift pump).	4.00	sets

### **Electrical Work**

SNo	Details of Items	Quantity	Unit
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
	Group C	410.00	Point
2	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.		

2.1	2x1.5 +1 1x1.5 sq. mm	640.00	Metre
2.2	2 x 2.5 + 1x2.5sq. mm	240.00	Metre
2.3	2 x 4.0 +1x4.0 sq. mm	430.00	Metre
2.4	2 X 6.0 +1x6.0 sq. mm	310.00	Metre
2.5	2 x 10.0 + 1x6.0 sq. mm	230.00	Metre
2.6	4 x 6 sq.mm +2 X 6 sq.mm earth wire	200.00	Metre
2.7	4 X 10 sq.mm +2 X 6 sq.mm earth wire	200.00	Metre
3	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		
3.1	20mm Conduit	710.00	Metre
3.2	25mm Conduit	1640.00	Metre
3.3	40mm Conduit	760.00	Metre
3.4	deep junction box	200.00	Nos
3.5	surface junction box	140.00	Nos
3.6	5" dia fan box	68.00	Nos
4	Supplying and fixing following size/modules , GI box alongwith modular base & cover plate for modular switches in recess etc. as required.		
4.1	1 or 2 module ( 75mm x 75mm)	34.00	Each
4.2	3 Module (100mmX75mm)	34.00	Each
4.3	4 Module ( 125mm x 75mm)	48.00	Each
4.4	6 Module ( 200mm x 75mm)	48.00	Each
4.5	8 Module ( 125mm x 125mm)	34.00	Each
4.6	12 Module ( 200mm x 150mm)	34.00	Each
5	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc as required.	78.00	Each
6	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 5 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection, painting etc as required.	94.00	Each
7	Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required		
7.1	5/6Amp Switch	64.00	Each
7.2	3 pin 5/6 Amp socket outlet	64.00	Each
7.3	Telephone socket outlet	40.00	Each
8	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc., as required.	64.00	Each
9	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	98.00	Each
10	Installation, Testing and commissioning of pre-wired, fluorescent fitting of all types complete with all accessories and tube etc. directly on ceiling / wall, including connection with 1.5sqmm FRLS PVC insulated , copper conductor, single core cable and earthing etc. as required.	164.00	Each

11	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	64.00	Each
12	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.	28.00	Each
13	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	28.00	Each
14	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.		
14.1	2 Pair	240.00	Meter
14.2	4 Pair	200.00	Meter
15	Supplying and drawing of UTP 4 pair CAT 6A LAN Cable in the existing surface/ recessed steel/ PVC conduit as required.	460.00	Meter
16	Supplying and fixing 5 amps to 32 amps 10kA rating, 240 Volts, 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
16.1	Single pole	200.00	Each
16.2	Single pole & Neutral	24.00	Each
16.3	Trip pole & Neutral	28.00	Each
17	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	60.00	Each
18	Providing and fixing M.V. danger notice plate of 200mm x 150mm , made of mild steel, at least 2 mm thick , and vitreous enamelled white on both sides, and with inscription in single red colour on front side as required.	14.00	Each
19	Supply, Installation, Testing and commissioning of following Distribution boards made of sheet steel in IP43 construction with key lock with sheet metal door of Legrand(Ekinox3) or equivalent in Siemens/Schneider makes		
19.1	8 Way TPN	10.00	Each
19.2	6 Way TPN	24.00	Each
20	Supply of following LED lighting fixtures		
20.1	Supply of Wall / Ceiling Fans 230V 50Hz ceiling fan with double ball bearing with low power consumption of following sweeps:		
20.2	1200mm Ceiling Fan	64.00	Each
20.3	400mm Wall Fan	28.00	Each
21	Supply of following sizes of heavy duty exhaust fan as per approved makes		
21.1	450mm Sweep	28.00	Each
21.2	200mm Sweep	16.00	Each
22	Supply of 1.1kV grade , XLPE insulated, Aluminium conductor, Heavy Duty , Armoured cables of following ratings as per IS : 7098 Part-1 with latest amendments.		
22.1	3.5C x 400sqmm	140.00	Meter
22.2	3.5C x 120sqmm	180.00	Meter
22.3	3.5C x 70sqmm	120.00	Meter

23	Supplying and Installing Following Size of Perforated Hot Dipped Galvanized Cable Tray with Perforation not more than 17.5% in convenient Sections ,joined with connectors ,suspended from the Ceiling including bolts and Nuts ,etc as required.		
23.1	300mm (W) x 50 mm (H)x 1.6 mm (T)cable tray Perforated type	120.00	Meter
24	Providing and fixing Fire Extinguishers (A, B, C type powder) complete with all accessories as per manufacturers specifications.	20.00	Nos
25	Supply, installation, testing and commissioning of 75 mm Cu. Pipe Filled with Crystalline conductive Mixture with Copper Strip of Size 40 mm x 6 mm of Length 2 mtr with Ecofriendly Backfill Compound 50 Kg. Necessary soil treatment is to be made by the contractor in order to improve the Pit resistance value & Earth pit chamber (300mm x 300mm) with CI cover for the above as required complete Job.	2.00	Job
26	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	20.00	Meter
27	Supplying, Installation, Testing and Commissioning of Cubical Type LT Panel Board Suitable for 415 V 3 Phase 4 Wire 50 HZ AC Supply System including Incomers, Out Goings, Bus Bars, etc. as required as per the Following Description. INCOMER i) MCCB 400 Amps 4 P with Breaking Capacity 36 KA (1 Nos) ii) Indicating Lamps RYB (1 Set) iii) Voltmeter-0-500 Volts & Ammeter (0-600 A) (1 No Each) iv) Selector Switch (2 Nos) & Current Transformer 500/5 A 10 VABurden'Class-1 v) Aluminium Busbar 600 Amps FP E-91 E Grade Electrolytic Aluminium vi) Digital Load Manager , SP MCB 2 A & ON/OFF TRIP (02 Sets)		
	OUTGOINGS i) MCB 100 Amps TPN C curv (36 Nos) ii) MCCB 100 Amps 4 P with Breaking Capacity 25 KA (1 Nos) v) Load Bearing Members to be made out of 2.0 mm CRCA Sheet. vi) Partitions to be made out of 1.6 mm CRCA Sheet & Gland Plates to be 3.0 mm Thick.	2.00	Nos
28	S&F 30 W IP66 LED Street light luminaries comprising of rectangular Die-Cast aluminium housing with weather proof gasket for lamp & driver compartment with system wattage of 30 W +/- 10% W. The LED make must be with 120 degree view angle, >120 lumen/watt, lumen maintenance > 70% at 50,000 hrs, colour temperature of 5000-6500, > 70 colour rendering and LM 80 test complianced. The driver must be integral APFC and constant current type having THD < 15% and power factor >0.95 with short circuit protection, open circuit protection, reverse polarity protection, high voltage protection, protection against 5 KV high surges and comply to IEC 60598-1, IEC 61000-3-2, IEC 61547. The luminaries must have secondary optics with perfectly matched lens for batter light control excluding suitable size and length of GI bracket which shall be measured and paid for separately all as specified. Make : Havels/Philips/CG.	8.00	Each



## **Annexure IV**

### **Quantity Details of Plumbing work, Drainage System and Electrical work**

➤ Two Storey Family Accomodation Block (4 houses) for JCO's at district Jammu, UT of J&K

#### **Plumbing work**

SN	Details of Items	Quantity	Unit
1	Providing & fixing of white vitreous China pedestal type water closet (European Type) with cistern with CP bolts, nuts, CI chair hanging arrangements, bakelite seat & cover with CP hinges & rubber buffers, CP brass screw, washer with all accessories with WC connector with Rubber Lip / Buffer and side gap filled with silicon sealant wherever required. Including brass / SS screws and washer complete including cutting, making good the walls, floors, slab wherever required as per direction of Engineer-in-charge.	4.00	Each
2	Providing & fixing of white vitreous china under counter oval wash basin/circular basin with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes , wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	4.00	Each
3	Providing & fixing of white vitreous china wash basin with pedestal with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	4.00	Each
4	Providing and fixing CP single liver extended basin mixer (height 85mm) without Popup waste system with 450mm long Braided Hoses and brass nuts with all fittings and accessories as per direction of Engineer-in-charge	4.00	Each
5	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required. Kitchen sink with drain board 510 x 1040mm bowl depth 225mm	4.00	Each
6	Providing and fixing, testing and commissioning of C.P. brass single hole sink mixer with CP wall flange, swinging spout complete as required and making good as per direction of Engineer-in-Charge	4.00	Each
7	Providing & fixing C.P. hand spray with lever control (health faucet) and flexible hose 1 m long connection with C.P. holder for hand spray complete in all respects as per direction of Engineer-Incharge.	4.00	Each
8	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	24.00	Each

9	Providing & fixing C.P. brass robe hook fixed to wall/door with plastic rawl plugs and C.P brass screws including cutting and making good the walls wherever required as per direction of Engineer-Incharge.	4.00	Each
10	Providing & fixing recessed liquid soap dispenser as per direction of Engineer-Incharge.	4.00	Each
11	P/F of Soap Dish Holder with all fittings as per direction of Engineer-in-charge	4.00	Each
12	Providing and fixing of Tumbler Holder with all fittings as per direction of Engineer-in-charge	4.00	Each
13	Providing and fixing Bottle Trap and other ancillary fittings. Cutting and making good the walls wherever required compete as per directions of Engineer-Incharge.	12.00	Each
14	Providing and fixing 6mm copper backed float glass mirror MODI / SAINT-GOBAIN including 6mm thick BWR type ply board, 40mm stainless steel channel plugged to wall, hard wood treated with two coats of wood preservative, etc. all complete as specified and to the satisfaction of Engineer in charge.	4.00	Each
15	Providing and fixing CP brass towel rail of approved make complete with CP brackets fixed to wooden cleats with CP brass screws.	4.00	Each
16	P/F brass towel ring round with round flange of approved make complete with all fittings	4.00	Each
17	Providing and fixing of glass shelf 600mm long with all C.P fittings of approved quality complete item	4.00	Each
18	Providing and fixing toilet paper holder with all fittings	4.00	Each
19	Providing and fixing 15 mm dia. C.P. brass bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. (Short Body)	8.00	Each
20	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. (15 mm dia.)	4.00	Each
21	P/F of regular body concealed stop cock suitable for 15mm pipe line with protection cap with exposed part angular stop cock with flange	4.00	Each
22	Providing and fixing of wall mixer with provision for overhead shower with 115mm long bend pipe on upper side connecting legs and wall flanges of approved quality with all fittings	4.00	Each
23	Providing and fixing of wall mounted over head shower 200mm dia with shower arm 450mm long round shape with 90 degree bend with flanges with all fittings.	4.00	Each

## **Drainage Work**

SNo	Details of Items	Quantity	Unit
1	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) R.C.C. top slab with 1 :2:4 mix ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix ( 1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 ( 1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design.		
1.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm. internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) With F.P.S. bricks with class designation 75 & with Crushed stone aggregate.	28.00	Each
1.2	Inside size 90x80 cm and 60 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)	28.00	Each
2	Providing and fixing PVC pipes 6kg/cm <sup>2</sup> pressure excluding pvc fittings, jointing with adhesive/seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion of approved make Supreme/Finolex/ Astral or equilant.		
	110 mm dia	40.00	Metre
	75 mm dia	25.00	Metre
	160 mm dia	40.00	Metre
3	Providing and fixing PVC plain Bend of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm dia	10.00	no
	160 mm dia	10.00	no
4	Providing and fixing PVC Floor Trap of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	10.00	no
	160 mm X 110 mm	10.00	no
5	Providing and fixing PVC Plain Tee of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	10.00	no

6	Providing and fixing PVC Door Bend of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	10.00	no
7	Providing and fixing PVC Door Tee of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	10.00	no
8	Providing and fixing PVC Coupler of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	10.00	no
9	Providing and fixing PVC Clamps for pvc pipes of approved make complete.		
	110 mm	50.00	no
10	Providing and fixing PVC Cowl of approved make complete.		
	110 mm	10.00	no
11	Providing and fixing C.P Jali of approved make complete.		
	110 mm	20.00	no
12	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked indicating the BIS License No. with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank (Sintex, Electoplast, star, Lotus or equivalent having valid ISI license) (2000 ltr. Capacity 3 No.).	4000.00	Ltr
14	Cutting holes upto 30x30 cm in walls including making good the same with common burnt clay F.P.S.(non modular) bricks	20.00	Nos.
15	Providing & fixing full way lever operated forged brass ball valve of brass body with forged brass hard chrome plated steel ball tested to a pressure not less than 16 Kg / sqcm with threaded / flanged joints complete with nuts, bolts, gaskets, washers etc.		
	20 mm Diameter	10.00	Nos.
	25 mm Diameter	10.00	Nos.
16.0	Supply, assembly, erection, testing Pump Capacity 180 lpm, at 30 m head (1 working + 1 standby) (Domestic water relift pump).	8.00	sets

### **Electrical Work**

SNo	Details of Items	Quantity	Unit
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
	Group C	180.00	Point
2	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.		

2.1	2x1.5 +1 1x1.5 sq. mm	300.00	Metre
2.2	2 x 2.5 + 1x2.5sq. mm	110.00	Metre
2.3	2 x 4.0 +1x4.0 sq. mm	190.00	Metre
2.4	2 X 6.0 +1x6.0 sq. mm	150.00	Metre
2.5	2 x 10.0 + 1x6.0 sq. mm	110.00	Metre
2.6	4 x 6 sq.mm +2 X 6 sq.mm earth wire	90.00	Metre
2.7	4 X 10 sq.mm +2 X 6 sq.mm earth wire	90.00	Metre
3	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		
3.1	20mm Conduit	670.00	Metre
3.2	25mm Conduit	2290.00	Metre
3.3	40mm Conduit	730.00	Metre
3.4	deep junction box	90.00	Nos
3.5	surface junction box	70.00	Nos
3.6	5" dia fan box	50.00	Nos
4	Supplying and fixing following size/modules , GI box alongwith modular base & cover plate for modular switches in recess etc. as required.		
4.1	1 or 2 module ( 75mm x 75mm)	20.00	Each
4.2	3 Module (100mmX75mm)	20.00	Each
4.3	4 Module ( 125mm x 75mm)	30.00	Each
4.4	6 Module ( 200mm x 75mm)	30.00	Each
4.5	8 Module ( 125mm x 125mm)	20.00	Each
4.6	12 Module ( 200mm x 150mm)	20.00	Each
5	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc as required.	40.00	Each
6	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 5 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection, painting etc as required.	50.00	Each
7	Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required		
7.1	5/6Amp Switch	40.00	Each
7.2	3 pin 5/6 Amp socket outlet	40.00	Each
7.3	Telephone socket outlet	20.00	Each
8	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc., as required.	50.00	Each
9	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	50.00	Each
10	Installation, Testing and commissioning of pre-wired, fluorescent fitting of all types complete with all accessories and tube etc. directly on ceiling / wall, including connection with 1.5sqmm FRLS PVC insulated , copper conductor, single core cable and earthing etc. as required.	90.00	Each

11	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	50.00	Each
12	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.	20.00	Each
13	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	20.00	Each
14	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.		
14.1	2 Pair	110.00	Meter
14.2	4 Pair	90.00	Meter
15	Supplying and drawing of UTP 4 pair CAT 6A LAN Cable in the existing surface/ recessed steel/ PVC conduit as required.	210.00	Meter
16	Supplying and fixing 5 amps to 32 amps 10kA rating, 240 Volts, 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
16.1	Single pole	90.00	Each
16.2	Single pole & Neutral	10.00	Each
16.3	Trip pole & Neutral	20.00	Each
17	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	30.00	Each
18	Providing and fixing M.V. danger notice plate of 200mm x 150mm , made of mild steel, at least 2 mm thick , and vitreous enamelled white on both sides, and with inscription in single red colour on front side as required.	10.00	Each
19	Supply, Installation, Testing and commissioning of following Distribution boards made of sheet steel in IP43 construction with key lock with sheet metal door of Legrand(Ekinox3) or equivalent in Siemens/Schneider makes		
19.1	8 Way TPN	10.00	Each
19.2	6 Way TPN	10.00	Each
20	Supply of following LED lighting fixtures		
20.1	Supply of Wall / Ceiling Fans 230V 50Hz ceiling fan with double ball bearing with low power consumption of following sweeps:		
20.2	1200mm Ceiling Fan	50.00	Each
20.3	400mm Wall Fan	20.00	Each
21	Supply of following sizes of heavy duty exhaust fan as per approved makes		
21.1	450mm Sweep	10.00	Each
21.2	200mm Sweep	10.00	Each
22	Supply of 1.1kV grade , XLPE insulated, Aluminium conductor, Heavy Duty , Armoured cables of following ratings as per IS : 7098 Part-1 with latest amendments.		
22.1	3.5C x 400sqmm	70.00	Meter
22.2	3.5C x 120sqmm	90.00	Meter
22.3	3.5C x 70sqmm	60.00	Meter

23	Supplying and Installing Following Size of Perforated Hot Dipped Galvanized Cable Tray with Perforation not more than 17.5% in convenient Sections ,joined with connectors ,suspended from the Ceiling including bolts and Nuts ,etc as required.		
23.1	300mm (W) x 50 mm (H)x 1.6 mm (T)cable tray Perforated type	60.00	Meter
24	Providing and fixing Fire Extinguishers (A, B, C type powder) complete with all accessories as per manufacturers specifications.	10.00	Nos
25	Supply, installation, testing and commissioning of 75 mm Cu. Pipe Filled with Crystalline conductive Mixture with Copper Strip of Size 40 mm x 6 mm of Length 2 mtr with Ecofriendly Backfill Compound 50 Kg. Necessary soil treatment is to be made by the contractor in order to improve the Pit resistance value & Earth pit chamber (300mm x 300mm) with CI cover for the above as required complete Job.	10.00	Job
26	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	40.00	Meter
27	Supplying,Installation,Testing and Commissioning of Cubical Type LT Panel Board Suitable for 415 V 3 Phase 4 Wire 50 HZ AC Supply System including Incomers,Out Goings,Bus Bars, etc. as required as per the Following Description. INCOMER i) MCCB 400 Amps 4 P with Breaking Capacity 36 KA (1 Nos) ii) Indicating Lamps RYB (1 Set) iii) Voltmeter-0-500 Volts & Ammeter (0-600 A) (1 No Each) iv) Selector Switch (2 Nos) & Current Transformer 500/5 A 10 VABurden'Class-1 v) Aluminium Busbar 600 Amps FP E-91 E Grade Electrolytic Aluminium vi) Digital Load Manager , SP MCB 2 A & ON/OFF TRIP (02 Sets)		
	OUTGOINGS i) MCB 100 Amps TPN C curv (36 Nos) ii) MCCB 100 Amps 4 P with Breaking Capacity 25 KA (1 Nos) v) Load Bearing Members to be made out of 2.0 mm CRCA Sheet. vi) Partitions to be made out of 1.6 mm CRCA Sheet & Gland Plates to be 3.0 mm Thick.	4.00	Nos
28	S&F 30 W IP66 LED Street light luminaries comprising of rectangular Die-Cast aluminium housing with weather proof gasket for lamp & driver compartment with system wattage of 30 W +/- 10% W. The LED make must be with 120 degree view angle, >120 lumen/watt, lumen maintenance > 70% at 50,000 hrs, colour temperature of 5000-6500, > 70 colour rendering and LM 80 test complianced. The driver must be integral APFC and constant current type having THD < 15% and power factor >0.95 with short circuit protection, open circuit protection, reverse polarity protection, high voltage protection, protection against 5 KV high surges and comply to IEC 60598-1, IEC 61000-3-2, IEC 61547. The luminaries must have secondary optics with perfectly matched lens for batter light control excluding suitable size and length of GI bracket which shall be measured and paid for separately all as specified. Make : Havels/Philips/CG.	8.00	Each



## Annexure V

### Quantity Details of Plumbing work, Drainage System and Electrical work

➤ 6 Storey Family Accomodation Block of 24 No's for JCO's at district Jammu

#### Plumbing work

SN	Details of Items	Quantity	Unit
1	Providing & fixing of white vitreous China pedestial type water closet (European Type) with cistern with CP bolts, nuts, CI chair hanging arrangements, bakelite seat & cover with CP hinges & rubber buffers, CP brass screw, washer with all accessories with WC connector with Rubber Lip / Buffer and side gap filled with silicon sealant wherever required. Including brass / SS screws and washer complete including cutting, making good the walls, floors, slab wherever required as per direction of Engineer-in-charge.	48.00	Each
2	Providing & fixing of white vitreous china under counter oval wash basin/circular basin with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes , wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	24.00	Each
3	Providing & fixing of white vitreous china wash basin with pedestal with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	24.00	Each
4	Providing and fixing CP single liver extended basin mixer (height 85mm) without Popup waste system with 450mm long Braided Hoses and brass nuts with all fittings and accessories as per direction of Engineer-in-charge	24.00	Each
5	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required. Kitchen sink with drain board 510 x 1040mm bowl depth 225mm	24.00	Each
6	Providing and fixing, testing and commissioning of C.P. brass single hole sink mixer with CP wall flange, swinging spout complete as required and making good as per direction of Engineer-in-Charge	24.00	Each
7	Providing & fixing C.P. hand spray with lever control (health faucet) and flexible hose 1 m long connection with C.P. holder for hand spray complete in all respects as per direction of Engineer-Incharge.	48.00	Each
8	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	144.00	Each

9	Providing & fixing C.P. brass robe hook fixed to wall/door with plastic rawl plugs and C.P brass screws including cutting and making good the walls wherever required as per direction of Engineer-Incharge.	48.00	Each
10	Providing & fixing recessed liquid soap dispenser as per direction of Engineer-Incharge.	48.00	Each
11	P/F of Soap Dish Holder with all fittings as per direction of Engineer-in-charge	48.00	Each
12	Providing and fixing of Tumbler Holder with all fittings as per direction of Engineer-in-charge	48.00	Each
13	Providing and fixing Bottle Trap and other ancillary fittings. Cutting and making good the walls wherever required compete as per directions of Engineer-Incharge.	144.00	Each
14	Providing and fixing 6mm copper backed float glass mirror MODI / SAINT-GOBAIN including 6mm thick BWR type ply board, 40mm stainless steel channel plugged to wall, hard wood treated with two coats of wood preservative, etc. all complete as specified and to the satisfaction of Engineer in charge.	48.00	Each
15	Providing and fixing CP brass towel rail of approved make complete with CP brackets fixed to wooden cleats with CP brass screws.	48.00	Each
16	P/F brass towel ring round with round flange of approved make complete with all fittings	48.00	Each
17	Providing and fixing of glass shelf 600mm long with all C.P fittings of approved quality complete item	48.00	Each
18	Providing and fixing toilet paper holder with all fittings	48.00	Each
19	Providing and fixing 15 mm dia. C.P. brass bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. (Short Body)	96.00	Each
20	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. (15 mm dia.)	48.00	Each
21	P/F of regular body concealed stop cock suitable for 15mm pipe line with protection cap with exposed part angular stop cock with flange	48.00	Each
22	Providing and fixing of wall mixer with provision for overhead shower with 115mm long bend pipe on upper side connecting legs and wall flanges of approved quality with all fittings	48.00	Each
23	Providing and fixing of wall mounted over head shower 200mm dia with shower arm 450mm long round shape with 90 degree bend with flanges with all fittings.	48.00	Each

## **Drainage Work**

SNo	Details of Items	Quantity	Unit
1	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) R.C.C. top slab with 1 :2:4 mix ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix ( 1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 ( 1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design.		
1.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm. internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) With F.P.S. bricks with class designation 75 & with Crushed stone aggregate.	28.00	Each
1.2	Inside size 90x80 cm and 60 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)	28.00	Each
2	Providing and fixing PVC pipes 6kg/cm <sup>2</sup> pressure excluding pvc fittings, jointing with adhesive/seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion of approved make Supreme/Finolex/ Astral or equilant.		
	110 mm dia	220.00	Metre
	75 mm dia	135.00	Metre
	160 mm dia	220.00	Metre
3	Providing and fixing PVC plain Bend of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm dia	52.00	no
	160 mm dia	52.00	no
4	Providing and fixing PVC Floor Trap of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	52.00	no
	160 mm X 110 mm	52.00	no
5	Providing and fixing PVC Plain Tee of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	52.00	no

6	Providing and fixing PVC Door Bend of approved make Supreme/Finolex/Astral or equivalent complete.		
	110 mm	52.00	no
7	Providing and fixing PVC Door Tee of approved make Supreme/Finolex/Astral or equivalent complete.		
	110 mm	52.00	no
8	Providing and fixing PVC Coupler of approved make Supreme/Finolex/Astral or equivalent complete.		
	110 mm	52.00	no
9	Providing and fixing PVC Clamps for pvc pipes of approved make complete.		
	110 mm	280.00	no
10	Providing and fixing PVC Cowl of approved make complete.		
	110 mm	32.00	no
11	Providing and fixing C.P Jali of approved make complete.		
	110 mm	108.00	no
12	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked indicating the BIS License No. with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank (Sintex, Electroplast, star, Lotus or equivalent having valid ISI license) (2000 ltr. Capacity 3 No.).	24000.00	Ltr
14	Cutting holes upto 30x30 cm in walls including making good the same with common burnt clay F.P.S.(non modular) bricks	110.00	Nos.
15	Providing & fixing full way lever operated forged brass ball valve of brass body with forged brass hard chrome plated steel ball tested to a pressure not less than 16 Kg / sqcm with threaded / flanged joints complete with nuts, bolts, gaskets, washers etc.		
	20 mm Diameter	12.00	Nos.
	25 mm Diameter	24.00	Nos.
16.0	Supply, assembly, erection, testing Pump Capacity 180 lpm, at 30 m head (1 working + 1 standby) (Domestic water relift pump).	8.00	sets

### **Electrical Work**

SNo	Details of Items	Quantity	Unit
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
	Group C	1050.00	Point
2	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.		

2.1	2x1.5 +1 1x1.5 sq. mm	1750.00	Metre
2.2	2 x 2.5 + 1x2.5sq. mm	630.00	Metre
2.3	2 x 4.0 +1x4.0 sq. mm	1130.00	Metre
2.4	2 X 6.0 +1x6.0 sq. mm	880.00	Metre
2.5	2 x 10.0 + 1x6.0 sq. mm	630.00	Metre
2.6	4 x 6 sq.mm +2 X 6 sq.mm earth wire	500.00	Metre
2.7	4 X 10 sq.mm +2 X 6 sq.mm earth wire	500.00	Metre
3	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		
3.1	20mm Conduit	4000.00	Metre
3.2	25mm Conduit	13730.00	Metre
3.3	40mm Conduit	4370.00	Metre
3.4	deep junction box	500.00	Nos
3.5	surface junction box	380.00	Nos
3.6	5" dia fan box	300.00	Nos
4	Supplying and fixing following size/modules , GI box alongwith modular base & cover plate for modular switches in recess etc. as required.		
4.1	1 or 2 module ( 75mm x 75mm)	80.00	Each
4.2	3 Module (100mmX75mm)	80.00	Each
4.3	4 Module ( 125mm x 75mm)	130.00	Each
4.4	6 Module ( 200mm x 75mm)	130.00	Each
4.5	8 Module ( 125mm x 125mm)	80.00	Each
4.6	12 Module ( 200mm x 150mm)	80.00	Each
5	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc as required.	210.00	Each
6	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 5 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection, painting etc as required.	250.00	Each
7	Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required		
7.1	5/6Amp Switch	190.00	Each
7.2	3 pin 5/6 Amp socket outlet	190.00	Each
7.3	Telephone socket outlet	110.00	Each
8	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc., as required.	300.00	Each
9	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	250.00	Each
10	Installation, Testing and commissioning of pre-wired, fluorescent fitting of all types complete with all accessories and tube etc. directly on ceiling / wall, including connection with 1.5sqmm FRLS PVC insulated , copper conductor, single core cable and earthing etc. as required.	530.00	Each

11	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	300.00	Each
12	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.	70.00	Each
13	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	70.00	Each
14	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.		
14.1	2 Pair	630.00	Meter
14.2	4 Pair	500.00	Meter
15	Supplying and drawing of UTP 4 pair CAT 6A LAN Cable in the existing surface/ recessed steel/ PVC conduit as required.	1250.00	Meter
16	Supplying and fixing 5 amps to 32 amps 10kA rating, 240 Volts, 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
16.1	Single pole	500.00	Each
16.2	Single pole & Neutral	60.00	Each
16.3	Trip pole & Neutral	80.00	Each
17	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	150.00	Each
18	Providing and fixing M.V. danger notice plate of 200mm x 150mm , made of mild steel, at least 2 mm thick , and viterous enamelled white on both sides, and with inscription in single red colour on front side as required.	30.00	Each
19	Supply, Installation, Testing and commissioning of following Distribution boards made of sheet steel in IP43 construction with key lock with sheet metal door of Legrand(Ekinox3) or equivalent in Siemens/Schneider makes		
19.1	8 Way TPN	30.00	Each
19.2	6 Way TPN	60.00	Each
20	Supply of following LED lighting fixtures		
20.1	Supply of Wall / Ceiling Fans 230V 50Hz celing fan with double ball bearing with low power consumption of following sweeps:		
20.2	1200mm Ceiling Fan	300.00	Each
20.3	400mm Wall Fan	76.00	Each
21	Supply of following sizes of heavy duty exhaust fan as per approved makes		
21.1	450mm Sweep	26.00	Each
21.2	200mm Sweep	39.00	Each
22	Supply of 1.1kV grade , XLPE insulated, Aluminium conductor, Heavy Duty , Armoured cables of following ratings as per IS : 7098 Part-1 with latest amendments.		
22.1	3.5C x 400sqmm	375.00	Meter
22.2	3.5C x 120sqmm	500.00	Meter
22.3	3.5C x 70sqmm	312.00	Meter

23	Supplying and Installing Following Size of Perforated Hot Dipped Galvanized Cable Tray with Perforation not more than 17.5% in convenient Sections ,joined with connectors ,suspended from the Ceiling including bolts and Nuts ,etc as required.		
23.1	300mm (W) x 50 mm (H)x 1.6 mm (T)cable tray Perforated type	312.00	Meter
24	Providing and fixing Fire Extinguishers (A, B, C type powder) complete with all accessories as per manufacturers specifications.	51.00	Nos
25	Supply, installation, testing and commissioning of 75 mm Cu. Pipe Filled with Crystalline conductive Mixture with Copper Strip of Size 40 mm x 6 mm of Length 2 mtr with Ecofriendly Backfill Compound 50 Kg. Necessary soil treatment is to be made by the contractor in order to improve the Pit resistance value & Earth pit chamber (300mm x 300mm) with CI cover for the above as required complete Job.	26.00	Job
26	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	226.00	Meter
27	Supplying,Installation,Testing and Commissioning of Cubical Type LT Panel Board Suitable for 415 V 3 Phase 4 Wire 50 HZ AC Supply System including Incomers,Out Goings,Bus Bars, etc. as required as per the Following Description. INCOMER i) MCCB 400 Amps 4 P with Breaking Capacity 36 KA (1 Nos) ii) Indicating Lamps RYB (1 Set) iii) Voltmeter-0-500 Volts & Ammeter (0-600 A) (1 No Each) iv) Selector Switch (2 Nos) & Current Transformer 500/5 A 10 VABurden'Class-1 v) Aluminium Busbar 600 Amps FPE-91 E Grade Electrolytic Aluminium vi) Digital Load Manager , SP MCB 2 A & ON/OFF TRIP (02 Sets)		
	OUTGOINGS i) MCB 100 Amps TPN C curv (36 Nos) ii) MCCB 100 Amps 4 P with Breaking Capacity 25 KA (1 Nos) v) Load Bearing Members to be made out of 2.0 mm CRCA Sheet. vi) Partitions to be made out of 1.6 mm CRCA Sheet & Gland Plates to be 3.0 mm Thick.	12.00	Nos
28	S&F 30 W IP66 LED Street light luminaries comprising of rectangular Die-Cast aluminium housing with weather proof gasket for lamp & driver compartment with system wattage of 30 W +/- 10% W. The LED make must be with 120 degree view angle, >120 lumen/watt, lumen maintenance > 70% at 50,000 hrs, colour temperature of 5000-6500, > 70 colour rendering and LM 80 test complianced. The driver must be integral APFC and constant current type having THD < 15% and power factor >0.95 with short circuit protection, open circuit protection, reverse polarity protection, high voltage protection, protection against 5 KV high surges and comply to IEC 60598-1, IEC 61000-3-2, IEC 61547. The luminaries must have secondary optics with perfectly matched lens for batter light control excluding suitable size and length of GI bracket which shall be measured and paid for separately all as specified. Make : Havels/Philips/CG.	8.00	Each



## Annexure VI

### Quantity Details of Plumbing work, Drainage System and Electrical work

- 02 Nos of 6 Storey Family Accommodation Block of 24 No's for OR's at district Jammu, UT of J&K

#### Plumbing work

SN	Details of Items	Quantity	Unit
1	Providing & fixing of white vitreous China pedestal type water closet (European Type) with cistern with CP bolts, nuts, CI chair hanging arrangements, bakelite seat & cover with CP hinges & rubber buffers, CP brass screw, washer with all accessories with WC connector with Rubber Lip / Buffer and side gap filled with silicon sealant wherever required. Including brass / SS screws and washer complete including cutting, making good the walls, floors, slab wherever required as per direction of Engineer-in-charge.	48.00	Each
2	Providing & fixing of white vitreous china under counter oval wash basin/circular basin with CP brass waste assembly, CP cast brass bottle trap with extension piece, 450mm long CP copper connections pipes, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	24.00	Each
3	Providing & fixing of white vitreous china wash basin with pedestal with CP brass waste assembly, CP cast brass bottle trap with extension piece, 450mm long CP copper connections pipes, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	24.00	Each
4	Providing and fixing CP single liver extended basin mixer (height 85mm) without Popup waste system with 450mm long Braided Hoses and brass nuts with all fittings and accessories as per direction of Engineer-in-charge	24.00	Each
5	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required. Kitchen sink with drain board 510 x 1040mm bowl depth 225mm	24.00	Each
6	Providing and fixing, testing and commissioning of C.P. brass single hole sink mixer with CP wall flange, swinging spout complete as required and making good as per direction of Engineer-in-Charge	24.00	Each
7	Providing & fixing C.P. hand spray with lever control (health faucet) and flexible hose 1 m long connection with C.P. holder for hand spray complete in all respects as per direction of Engineer-Incharge.	48.00	Each
8	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	144.00	Each

9	Providing & fixing C.P. brass robe hook fixed to wall/door with plastic rawl plugs and C.P brass screws including cutting and making good the walls wherever required as per direction of Engineer-Incharge.	48.00	Each
10	Providing & fixing recessed liquid soap dispenser as per direction of Engineer-Incharge.	48.00	Each
11	P/F of Soap Dish Holder with all fittings as per direction of Engineer-in-charge	48.00	Each
12	Providing and fixing of Tumbler Holder with all fittings as per direction of Engineer-in-charge	48.00	Each
13	Providing and fixing Bottle Trap and other ancillary fittings. Cutting and making good the walls wherever required compete as per directions of Engineer-Incharge.	144.00	Each
14	Providing and fixing 6mm copper backed float glass mirror MODI / SAINT-GOBAIN including 6mm thick BWR type ply board, 40mm stainless steel channel plugged to wall, hard wood treated with two coats of wood preservative, etc. all complete as specified and to the satisfaction of Engineer in charge.	48.00	Each
15	Providing and fixing CP brass towel rail of approved make complete with CP brackets fixed to wooden cleats with CP brass screws.	48.00	Each
16	P/F brass towel ring round with round flange of approved make complete with all fittings	48.00	Each
17	Providing and fixing of glass shelf 600mm long with all C.P fittings of approved quality complete item	48.00	Each
18	Providing and fixing toilet paper holder with all fittings	48.00	Each
19	Providing and fixing 15 mm dia. C.P. brass bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. (Short Body)	96.00	Each
20	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. (15 mm dia.)	48.00	Each
21	P/F of regular body concealed stop cock suitable for 15mm pipe line with protection cap with exposed part angular stop cock with flange	48.00	Each
22	Providing and fixing of wall mixer with provision for overhead shower with 115mm long bend pipe on upper side connecting legs and wall flanges of approved quality with all fittings	48.00	Each
23	Providing and fixing of wall mounted over head shower 200mm dia with shower arm 450mm long round shape with 90 degree bend with flanges with all fittings.	48.00	Each

## **Drainage Work**

SNo	Details of Items	Quantity	Unit
1	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) R.C.C. top slab with 1 :2:4 mix ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix ( 1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 ( 1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design.		
1.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm. internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) With F.P.S. bricks with class designation 75 & with Crushed stone aggregate.	24.00	Each
1.2	Inside size 90x80 cm and 60 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)	24.00	Each
2	Providing and fixing PVC pipes 6kg/cm <sup>2</sup> pressure excluding pvc fittings, jointing with adhesive/seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion of approved make Supreme/Finolex/ Astral or equilant.		
	110 mm dia	200.00	m
	80 mm dia	122.00	m
	160 mm dia	190.00	m
3	Providing and fixing PVC plain Bend of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm dia	48.00	no
	160 mm dia	48.00	no
4	Providing and fixing PVC Floor Trap of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	48.00	no
	160 mm X 110 mm	48.00	no
5	Providing and fixing PVC Plain Tee of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	48.00	no

6	Providing and fixing PVC Door Bend of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	48.00	no
7	Providing and fixing PVC Door Tee of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	48.00	no
8	Providing and fixing PVC Coupler of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	48.00	no
9	Providing and fixing PVC Clamps for pvc pipes of approved make complete.		
	110 mm	240.00	no
10	Providing and fixing PVC Cowl of approved make complete.		
	110 mm	24.00	no
11	Providing and fixing C.P Jali of approved make complete.		
	110 mm	96.00	no
12	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked indicating the BIS License No. with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank (Sintex, Electroplast, star, Lotus or equivalent having valid ISI license) (2000 ltr. Capacity 3 No.).	24000.00	Ltr
14	Cutting holes upto 30x30 cm in walls including making good the same with common burnt clay F.P.S.(non modular) bricks	110.00	Nos.
15	Providing & fixing full way lever operated forged brass ball valve of brass body with forged brass hard chrome plated steel ball tested to a pressure not less than 16 Kg / sqcm with threaded / flanged joints complete with nuts, bolts, gaskets, washers etc.		
	20 mm Diameter	12.00	Nos.
	25 mm Diameter	24.00	Nos.
16.0	Supply, assembly, erection, testing Pump Capacity 180 lpm, at 30 m head (1 working + 1 standby) (Domestic water relift pump).	8.00	sets

### **Electrical Work**

SNo	Details of Items	Quantity	Unit
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
	Group C	874.00	Point
2	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.		

2.1	2x1.5 +1 1x1.5 sq. mm	1456.00	Metre
2.2	2 x 2.5 + 1x2.5sq. mm	520.00	Metre
2.3	2 x 4.0 +1x4.0 sq. mm	936.00	Metre
2.4	2 X 6.0 +1x6.0 sq. mm	728.00	Metre
2.5	2 x 10.0 + 1x6.0 sq. mm	520.00	Metre
2.6	4 x 6 sq.mm +2 X 6 sq.mm earth wire	416.00	Metre
2.7	4 X 10 sq.mm +2 X 6 sq.mm earth wire	416.00	Metre
3	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		
3.1	20mm Conduit	3328.00	Metre
3.2	25mm Conduit	11440.00	Metre
3.3	40mm Conduit	3640.00	Metre
3.4	deep junction box	416.00	Nos
3.5	surface junction box	312.00	Nos
3.6	5" dia fan box	250.00	Nos
4	Supplying and fixing following size/modules , GI box alongwith modular base & cover plate for modular switches in recess etc. as required.		
4.1	1 or 2 module ( 75mm x 75mm)	63.00	Each
4.2	3 Module (100mmX75mm)	63.00	Each
4.3	4 Module ( 125mm x 75mm)	104.00	Each
4.4	6 Module ( 200mm x 75mm)	104.00	Each
4.5	8 Module ( 125mm x 125mm)	63.00	Each
4.6	12 Module ( 200mm x 150mm)	63.00	Each
5	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc as required.	167.00	Each
6	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 5 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection, painting etc as required.	208.00	Each
7	Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required		
7.1	5/6Amp Switch	156.00	Each
7.2	3 pin 5/6 Amp socket outlet	156.00	Each
7.3	Telephone socket outlet	84.00	Each
8	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc., as required.	250.00	Each
9	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	208.00	Each
10	Installation, Testing and commissioning of pre-wired, fluorescent fitting of all types complete with all accessories and tube etc. directly on ceiling / wall, including connection with 1.5sqmm FRLS PVC insulated , copper conductor, single core cable and earthing etc. as required.	437.00	Each

11	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	250.00	Each
12	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.	52.00	Each
13	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	52.00	Each
14	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.		
14.1	2 Pair	520.00	Meter
14.2	4 Pair	416.00	Meter
15	Supplying and drawing of UTP 4 pair CAT 6A LAN Cable in the existing surface/ recessed steel/ PVC conduit as required.	1040.00	Meter
16	Supplying and fixing 5 amps to 32 amps 10kA rating, 240 Volts, 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
16.1	Single pole	416.00	Each
16.2	Single pole & Neutral	42.00	Each
16.3	Trip pole & Neutral	63.00	Each
17	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	125.00	Each
18	Providing and fixing M.V. danger notice plate of 200mm x 150mm , made of mild steel, at least 2 mm thick , and viterous enamelled white on both sides, and with inscription in single red colour on front side as required.	21.00	Each
19	Supply, Installation, Testing and commissioning of following Distribution boards made of sheet steel in IP43 construction with key lock with sheet metal door of Legrand(Ekinox3) or equivalent in Siemens/Schneider makes		
19.1	8 Way TPN	21.00	Each
19.2	6 Way TPN	42.00	Each
20	Supply of following LED lighting fixtures		
20.1	Supply of Wall / Ceiling Fans 230V 50Hz celing fan with double ball bearing with low power consumption of following sweeps:		
20.2	1200mm Ceiling Fan	250.00	Each
20.3	400mm Wall Fan	63.00	Each
21	Supply of following sizes of heavy duty exhaust fan as per approved makes		
21.1	450mm Sweep	21.00	Each
21.2	200mm Sweep	32.00	Each
22	Supply of 1.1kV grade , XLPE insulated, Aluminium conductor, Heavy Duty , Armoured cables of following ratings as per IS : 7098 Part-1 with latest amendments.		
22.1	3.5C x 400sqmm	312.00	Meter
22.2	3.5C x 120sqmm	416.00	Meter
22.3	3.5C x 70sqmm	260.00	Meter

23	Supplying and Installing Following Size of Perforated Hot Dipped Galvanized Cable Tray with Perforation not more than 17.5% in convenient Sections ,joined with connectors ,suspended from the Ceiling including bolts and Nuts ,etc as required.		
23.1	300mm (W) x 50 mm (H)x 1.6 mm (T)cable tray Perforated type	260.00	Meter
24	Providing and fixing Fire Extinguishers (A, B, C type powder) complete with all accessories as per manufacturers specifications.	42.00	Nos
25	Supply, installation, testing and commissioning of 75 mm Cu. Pipe Filled with Crystalline conductive Mixture with Copper Strip of Size 40 mm x 6 mm of Length 2 mtr with Ecofriendly Backfill Compound 50 Kg. Necessary soil treatment is to be made by the contractor in order to improve the Pit resistance value & Earth pit chamber (300mm x 300mm) with CI cover for the above as required complete Job.	21.00	Job
26	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	188.00	Meter
27	Supplying,Installation,Testing and Commissioning of Cubical Type LT Panel Board Suitable for 415 V 3 Phase 4 Wire 50 HZ AC Supply System including Incomers,Out Goings,Bus Bars, etc. as required as per the Following Description. INCOMER i) MCCB 400 Amps 4 P with Breaking Capacity 36 KA (1 Nos) ii) Indicating Lamps RYB (1 Set) iii) Voltmeter-0-500 Volts & Ammeter (0-600 A) (1 No Each) iv) Selector Switch (2 Nos) & Current Transformer 500/5 A 10 VABurden'Class-1 v) Aluminium Busbar 600 Amps FP E-91 E Grade Electrolytic Aluminium vi) Digital Load Manager , SP MCB 2 A & ON/OFF TRIP (02 Sets)		
	OUTGOINGS i) MCB 100 Amps TPN C curv (36 Nos) ii) MCCB 100 Amps 4 P with Breaking Capacity 25 KA (1 Nos) v) Load Bearing Members to be made out of 2.0 mm CRCA Sheet. vi) Partitions to be made out of 1.6 mm CRCA Sheet & Gland Plates to be 3.0 mm Thick.	12.00	Nos
28	S&F 30 W IP66 LED Street light luminaries comprising of rectangular Die-Cast aluminium housing with weather proof gasket for lamp & driver compartment with system wattage of 30 W +/- 10% W. The LED make must be with 120 degree view angle, >120 lumen/watt, lumen maintenance > 70% at 50,000 hrs, colour temperature of 5000-6500, > 70 colour rendering and LM 80 test complianced. The driver must be integral APFC and constant current type having THD < 15% and power factor >0.95 with short circuit protection, open circuit protection, reverse polarity protection, high voltage protection, protection against 5 KV high surges and comply to IEC 60598-1, IEC 61000-3-2, IEC 61547. The luminaries must have secondary optics with perfectly matched lens for batter light control excluding suitable size and length of GI bracket which shall be measured and paid for separately all as specified. Make : Havels/Philips/CG.	8.00	Each



## **Annexure VII**

### **Quantity Details of Plumbing work, Drainage System and Electrical work**

- Two Storied (02 Storeyed) family accomodation Block (04 houses) for Army Officers of Major Rank at Rajouri Lines near Children Park in Jammu District, UT of J&K

#### **Plumbing work**

<b>SN</b>	<b>Details of Items</b>	<b>Quantity</b>	<b>Unit</b>
1	Providing & fixing of white vitreous China pedestial type water closet (European Type) with cistern with CP bolts, nuts, CI chair hanging arrangements, bakelite seat & cover with CP hinges & rubber buffers, CP brass screw, washer with all accessories with WC connector with Rubber Lip / Buffer and side gap filled with silicon sealant wherever required. Including brass / SS screws and washer complete including cutting, making good the walls, floors, slab wherever required as per direction of Engineer-in-charge.	16.00	Each
2	Providing & fixing of white vitreous china under counter oval wash basin/circular basin with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes , wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	12.00	Each
3	Providing & fixing of white vitreous china wash basin with pedestal with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	4.00	Each
4	Providing and fixing CP single liver extended basin mixer (height 85mm) without Popup waste system with 450mm long Braided Hoses and brass nuts with all fittings and accessories as per direction of Engineer-in-charge	16.00	Each
5	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required. Kitchen sink with drain board 510 x 1040mm bowl depth 225mm	8.00	Each
6	Providing and fixing, testing and commissioning of C.P. brass single hole sink mixer with CP wall flange, swinging spout complete as required and making good as per direction of Engineer-in-Charge	8.00	Each
7	Providing & fixing C.P. hand spray with lever control (health faucet) and flexible hose 1 m long connection with C.P. holder for hand spray complete in all respects as per direction of Engineer-Incharge.	16.00	Each
8	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	80.00	Each

9	Providing & fixing C.P. brass robe hook fixed to wall/door with plastic rawl plugs and C.P brass screws including cutting and making good the walls wherever required as per direction of Engineer-Incharge.	16.00	Each
10	Providing & fixing recessed liquid soap dispenser as per direction of Engineer-Incharge.	16.00	Each
11	P/F of Soap Dish Holder with all fittings as per direction of Engineer-in-charge	16.00	Each
12	Providing and fixing of Tumbler Holder with all fittings as per direction of Engineer-in-charge	16.00	Each
13	Providing and fixing Bottle Trap and other ancillary fittings. Cutting and making good the walls wherever required compete as per directions of Engineer-Incharge.	48.00	Each
14	Providing and fixing 6mm copper backed float glass mirror MODI / SAINT-GOBAIN including 6mm thick BWR type ply board, 40mm stainless steel channel plugged to wall, hard wood treated with two coats of wood preservative, etc. all complete as specified and to the satisfaction of Engineer in charge.	20.00	Each
15	Providing and fixing CP brass towel rail of approved make complete with CP brackets fixed to wooden cleats with CP brass screws.	16.00	Each
16	P/F brass towel ring round with round flange of approved make complete with all fittings	20.00	Each
17	Providing and fixing of glass shelf 600mm long with all C.P fittings of approved quality complete item	16.00	Each
18	Providing and fixing toilet paper holder with all fittings	12.00	Each
19	Providing and fixing 15 mm dia. C.P. brass bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. (Short Body)	16.00	Each
20	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. (15 mm dia.)	16.00	Each
21	P/F of regular body concealed stop cock suitable for 15mm pipe line with protection cap with exposed part angular stop cock with flange	16.00	Each
22	Providing and fixing of wall mixer with provision for overhead shower with 115mm long bend pipe on upper side connecting legs and wall flanges of approved quality with all fittings	12.00	Each
23	Providing and fixing of wall mounted over head shower 200mm dia with shower arm 450mm long round shape with 90 degree bend with flanges with all fittings.	12.00	Each

## **Drainage Work**

SNo	Details of Items	Quantity	Unit
1	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) R.C.C. top slab with 1 :2:4 mix ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix ( 1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 ( 1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design.		
1.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm. internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) With F.P.S. bricks with class designation 75 & with Crushed stone aggregate.	8.00	Each
1.2	Inside size 90x80 cm and 60 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)	8.00	Each
2	Providing and fixing PVC pipes 6kg/cm <sup>2</sup> pressure excluding pvc fittings, jointing with adhesive/seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion of approved make Supreme/Finolex/ Astral or equilant.		
	110 mm dia	65.00	Metre
	80 mm dia	40.00	Metre
	160 mm dia	60.00	Metre
3	Providing and fixing PVC plain Bend of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm dia	16.00	no
	160 mm dia	16.00	no
4	Providing and fixing PVC Floor Trap of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	16.00	no
	160 mm X 110 mm	16.00	no
5	Providing and fixing PVC Plain Tee of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	12.00	no

6	Providing and fixing PVC Door Bend of approved make Supreme/Finolex/Astral or equivalent complete.		
	110 mm	16.00	no
7	Providing and fixing PVC Door Tee of approved make Supreme/Finolex/Astral or equivalent complete.		
	110 mm	16.00	no
8	Providing and fixing PVC Coupler of approved make Supreme/Finolex/Astral or equivalent complete.		
	110 mm	16.00	no
9	Providing and fixing PVC Clamps for pvc pipes of approved make complete.		
	110 mm	64.00	no
10	Providing and fixing PVC Cowl of approved make complete.		
	110 mm	16.00	no
11	Providing and fixing C.P Jali of approved make complete.		
	110 mm	48.00	no
12	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked indicating the BIS License No. with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank (Sintex, Electroplast, star, Lotus or equivalent having valid ISI license) (2000 ltr. Capacity 3 No.).	12000.00	Ltr
14	Cutting holes upto 30x30 cm in walls including making good the same with common burnt clay F.P.S.(non modular) bricks	24.00	Nos.
15	Providing & fixing full way lever operated forged brass ball valve of brass body with forged brass hard chrome plated steel ball tested to a pressure not less than 16 Kg / sqcm with threaded / flanged joints complete with nuts, bolts, gaskets, washers etc.		
	20 mm Diameter	4.00	Nos.
	25 mm Diameter	8.00	Nos.
16.0	Supply, assembly, erection, testing Pump Capacity 180 lpm, at 30 m head (1 working + 1 standby) (Domestic water relift pump).	4.00	sets

### **Electrical Work**

SNo	Details of Items	Quantity	Unit
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
	Group C	410.00	Point
2	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.		

2.1	2x1.5 +1 1x1.5 sq. mm	640.00	Metre
2.2	2 x 2.5 + 1x2.5sq. mm	240.00	Metre
2.3	2 x 4.0 +1x4.0 sq. mm	430.00	Metre
2.4	2 X 6.0 +1x6.0 sq. mm	310.00	Metre
2.5	2 x 10.0 + 1x6.0 sq. mm	230.00	Metre
2.6	4 x 6 sq.mm +2 X 6 sq.mm earth wire	200.00	Metre
2.7	4 X 10 sq.mm +2 X 6 sq.mm earth wire	200.00	Metre
3	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		
3.1	20mm Conduit	710.00	Metre
3.2	25mm Conduit	1640.00	Metre
3.3	40mm Conduit	760.00	Metre
3.4	deep junction box	200.00	Nos
3.5	surface junction box	140.00	Nos
3.6	5" dia fan box	68.00	Nos
4	Supplying and fixing following size/modules , GI box alongwith modular base & cover plate for modular switches in recess etc. as required.		
4.1	1 or 2 module ( 75mm x 75mm)	34.00	Each
4.2	3 Module (100mmX75mm)	34.00	Each
4.3	4 Module ( 125mm x 75mm)	48.00	Each
4.4	6 Module ( 200mm x 75mm)	48.00	Each
4.5	8 Module ( 125mm x 125mm)	34.00	Each
4.6	12 Module ( 200mm x 150mm)	34.00	Each
5	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc as required.	78.00	Each
6	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 5 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection, painting etc as required.	94.00	Each
7	Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required		
7.1	5/6Amp Switch	64.00	Each
7.2	3 pin 5/6 Amp socket outlet	64.00	Each
7.3	Telephone socket outlet	40.00	Each
8	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc., as required.	64.00	Each
9	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	98.00	Each
10	Installation, Testing and commissioning of pre-wired, fluorescent fitting of all types complete with all accessories and tube etc. directly on ceiling / wall, including connection with 1.5sqmm FRLS PVC insulated , copper conductor, single core cable and earthing etc. as required.	164.00	Each

11	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	64.00	Each
12	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.	28.00	Each
13	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	28.00	Each
14	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.		
14.1	2 Pair	240.00	Meter
14.2	4 Pair	200.00	Meter
15	Supplying and drawing of UTP 4 pair CAT 6A LAN Cable in the existing surface/ recessed steel/ PVC conduit as required.	460.00	Meter
16	Supplying and fixing 5 amps to 32 amps 10kA rating, 240 Volts, 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
16.1	Single pole	200.00	Each
16.2	Single pole & Neutral	24.00	Each
16.3	Trip pole & Neutral	28.00	Each
17	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	60.00	Each
18	Providing and fixing M.V. danger notice plate of 200mm x 150mm , made of mild steel, at least 2 mm thick , and viterous enamelled white on both sides, and with inscription in single red colour on front side as required.	14.00	Each
19	Supply, Installation, Testing and commissioning of following Distribution boards made of sheet steel in IP43 construction with key lock with sheet metal door of Legrand(Ekinox3) or equivalent in Siemens/Schneider makes		
19.1	8 Way TPN	10.00	Each
19.2	6 Way TPN	24.00	Each
20	Supply of following LED lighting fixtures		
20.1	Supply of Wall / Ceiling Fans 230V 50Hz celing fan with double ball bearing with low power consumption of following sweeps:		
20.2	1200mm Ceiling Fan	64.00	Each
20.3	400mm Wall Fan	28.00	Each
21	Supply of following sizes of heavy duty exhaust fan as per approved makes		
21.1	450mm Sweep	28.00	Each
21.2	200mm Sweep	16.00	Each
22	Supply of 1.1kV grade , XLPE insulated, Aluminium conductor, Heavy Duty , Armoured cables of following ratings as per IS : 7098 Part-1 with latest amendments.		
22.1	3.5C x 400sqmm	140.00	Meter
22.2	3.5C x 120sqmm	180.00	Meter
22.3	3.5C x 70sqmm	120.00	Meter

23	Supplying and Installing Following Size of Perforated Hot Dipped Galvanized Cable Tray with Perforation not more than 17.5% in convenient Sections ,joined with connectors ,suspended from the Ceiling including bolts and Nuts ,etc as required.		
23.1	300mm (W) x 50 mm (H)x 1.6 mm (T)cable tray Perforated type	120.00	Meter
24	Providing and fixing Fire Extinguishers (A, B, C type powder) complete with all accessories as per manufacturers specifications.	20.00	Nos
25	Supply, installation, testing and commissioning of 75 mm Cu. Pipe Filled with Crystalline conductive Mixture with Copper Strip of Size 40 mm x 6 mm of Length 2 mtr with Ecofriendly Backfill Compound 50 Kg. Necessary soil treatment is to be made by the contractor in order to improve the Pit resistance value & Earth pit chamber (300mm x 300mm) with CI cover for the above as required complete Job.	2.00	Job
26	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	20.00	Meter
27	Supplying,Installation,Testing and Commissioning of Cubical Type LT Panel Board Suitable for 415 V 3 Phase 4 Wire 50 HZ AC Supply System including Incomers,Out Goings,Bus Bars, etc. as required as per the Following Description. INCOMER i) MCCB 400 Amps 4 P with Breaking Capacity 36 KA (1 Nos) ii) Indicating Lamps RYB (1 Set) iii) Voltmeter-0-500 Volts & Ammeter (0-600 A) (1 No Each) iv) Selector Switch (2 Nos) & Current Transformer 500/5 A 10 VABurden'Class-1 v) Aluminium Busbar 600 Amps FPE-91 E Grade Electrolytic Aluminium vi) Digital Load Manager , SP MCB 2 A & ON/OFF TRIP (02 Sets)		
	OUTGOINGS i) MCB 100 Amps TPN C curv (36 Nos) ii) MCCB 100 Amps 4 P with Breaking Capacity 25 KA (1 Nos) v) Load Bearing Members to be made out of 2.0 mm CRCA Sheet. vi) Partitions to be made out of 1.6 mm CRCA Sheet & Gland Plates to be 3.0 mm Thick.	2.00	Nos
28	S&F 30 W IP66 LED Street light luminaries comprising of rectangular Die-Cast aluminium housing with weather proof gasket for lamp & driver compartment with system wattage of 30 W +/- 10% W. The LED make must be with 120 degree view angle, >120 lumen/watt, lumen maintenance > 70% at 50,000 hrs, colour temperature of 5000-6500, > 70 colour rendering and LM 80 test complianced. The driver must be integral APFC and constant current type having THD < 15% and power factor >0.95 with short circuit protection, open circuit protection, reverse polarity protection, high voltage protection, protection against 5 KV high surges and comply to IEC 60598-1, IEC 61000-3-2, IEC 61547. The luminaries must have secondary optics with perfectly matched lens for batter light control excluding suitable size and length of GI bracket which shall be measured and paid for separately all as specified. Make : Havels/Philips/CG.	8.00	Each



## **Annexure VII**

### **Quantity Details of Plumbing work, Drainage System and Electrical work**

➤ OR Institute

#### **Plumbing work**

SN	Details of Items	Quantity	Unit
1	Providing & fixing of white vitreous China pedestal type water closet (European Type) with cistern with CP bolts, nuts, CI chair hanging arrangements, bakelite seat & cover with CP hinges & rubber buffers, CP brass screw, washer with all accessories with WC connector with Rubber Lip / Buffer and side gap filled with silicon sealant wherever required. Including brass / SS screws and washer complete including cutting, making good the walls, floors, slab wherever required as per direction of Engineer-in-charge.	2.00	Each
2	Providing & fixing of white vitreous china under counter oval wash basin/circular basin with CP brass waste assembly, CP cast brass bottle trap with extension piece, 450mm long CP copper connections pipes, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	2.00	Each
3	Providing & fixing of white vitreous china wash basin with pedestal with CP brass waste assembly, CP cast brass bottle trap with extension piece, 450mm long CP copper connections pipes, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	2.00	Each
4	Providing and fixing CP single liver extended basin mixer (height 85mm) without Popup waste system with 450mm long Braided Hoses and brass nuts with all fittings and accessories as per direction of Engineer-in-charge	2.00	Each
5	Providing and fixing, testing and commissioning of C.P. brass single hole sink mixer with CP wall flange, swinging spout complete as required and making good as per direction of Engineer-in-Charge	2.00	Each
6	Providing & Fixing at site white Flat full back Urinal pot with electronic sensor of Standard size ( 580 x 380 x 350 ) or as per approved make to be fixed at site including waste coupling, necessary PVC waste pipe, all fittings accessories, labour Of Hindware, parry, Kohlar, Jacquar or EQ make	2.00	Each
7	Providing & fixing C.P. hand spray with lever control (health faucet) and flexible hose 1 m long connection with C.P. holder for hand spray complete in all respects as per direction of Engineer-Incharge.	2.00	Each
8	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	10.00	Each

9	Providing & fixing C.P. brass robe hook fixed to wall/door with plastic rawl plugs and C.P brass screws including cutting and making good the walls wherever required as per direction of Engineer-Incharge.	2.00	Each
10	Providing & fixing recessed liquid soap dispenser as per direction of Engineer-Incharge.	2.00	Each
11	P/F of Soap Dish Holder with all fittings as per direction of Engineer-in-charge	2.00	Each
12	Providing and fixing of Tumbler Holder with all fittings as per direction of Engineer-in-charge	2.00	Each
13	Providing and fixing Bottle Trap and other ancillary fittings. Cutting and making good the walls wherever required compete as per directions of Engineer-Incharge.	4.00	Each
14	Providing and fixing 6mm copper backed float glass mirror MODI / SAINT-GOBAIN including 6mm thick BWR type ply board, 40mm stainless steel channel plugged to wall, hard wood treated with two coats of wood preservative, etc. all complete as specified and to the satisfaction of Engineer in charge.	2.00	Each
18	Providing and fixing toilet paper holder with all fittings	4.00	Each
19	Providing and fixing 15 mm dia. C.P. brass bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. (Short Body)	4.00	Each
20	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. (15 mm dia.)	4.00	Each
21	P/F of regular body concealed stop cock suitable for 15mm pipe line with protection cap with exposed part angular stop cock with flange	2.00	Each

## Drainage Work

SNo	Details of Items	Quantity	Unit
1	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) R.C.C. top slab with 1 :2:4 mix ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix ( 1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 ( 1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design.		
1.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm. internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) With F.P.S. bricks with class designation 75 & with Crushed stone aggregate.	1.00	Each
1.2	Inside size 90x80 cm and 60 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)	1.00	Each
2	Providing and fixing PVC pipes 6kg/cm <sup>2</sup> pressure excluding pvc fittings, jointing with adhesive/seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion of approved make Supreme/Finolex/ Astral or equilant.		
	110 mm dia	10.00	Metre
	80 mm dia	6.00	Metre
	160 mm dia	8.00	Metre
3	Providing and fixing PVC plain Bend of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm dia	4.00	no
	160 mm dia	4.00	no
4	Providing and fixing PVC Floor Trap of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	4.00	no
	160 mm X 110 mm	4.00	no
5	Providing and fixing PVC Plain Tee of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	2.00	no

6	Providing and fixing PVC Door Bend of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	2.00	no
7	Providing and fixing PVC Door Tee of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	2.00	no
8	Providing and fixing PVC Coupler of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	2.00	no
9	Providing and fixing PVC Clamps for pvc pipes of approved make complete.		
	110 mm	2.00	no
10	Providing and fixing PVC Cowl of approved make complete.		
	110 mm	2.00	no
11	Providing and fixing C.P Jali of approved make complete.		
	110 mm	6.00	no
12	Providing & fixing full way lever operated forged brass ball valve of brass body with forged brass hard chrome plated steel ball tested to a pressure not less than 16 Kg / sqcm with threaded / flanged joints complete with nuts, bolts, gaskets, washers etc.		
	20 mm Diameter	1.00	Nos.
	25 mm Diameter	2.00	Nos.

### **Electrical Work**

SN o	Details of Items	Quantity	Unit
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
	Group C	15.00	Point
2	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.		
2.1	2x1.5 +1 1x1.5 sq. mm	As per the requirement at site	Metre
2.2	2 x 2.5 + 1x2.5sq. mm		Metre
2.3	2 x 4.0 +1x4.0 sq. mm		Metre
2.4	2 X 6.0 +1x6.0 sq. mm		Metre
2.5	2 x 10.0 + 1x6.0 sq. mm		Metre
2.6	4 x 6 sq.mm +2 X 6 sq.mm earth wire		Metre
2.7	4 X 10 sq.mm +2 X 6 sq.mm earth wire		Metre
3	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		

3.1	20mm Conduit		Metre
3.2	25mm Conduit		Metre
3.3	40mm Conduit		Metre
3.4	deep junction box	10.00	Nos
3.5	surface junction box	12.00	Nos
3.6	5" dia fan box	4.00	Nos
4	Supplying and fixing following size/modules , GI box alongwith modular base & cover plate for modular switches in recess etc. as required.		
4.1	1 or 2 module ( 75mm x 75mm)	2.00	Each
4.2	3 Module (100mmX75mm)	2.00	Each
4.3	4 Module ( 125mm x 75mm)	3.00	Each
4.4	6 Module ( 200mm x 75mm)	3.00	Each
4.5	8 Module ( 125mm x 125mm)	2.00	Each
4.6	12 Module ( 200mm x 150mm)	2.00	Each
5	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc as required.	6.00	Each
6	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 5 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection, painting etc as required.	8.00	Each
7	Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required		
7.1	5/6Amp Switch	8.00	Each
7.2	3 pin 5/6 Amp socket outlet	8.00	Each
7.3	Telephone socket outlet	6.00	Each
8	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc., as required.	4.00	Each
9	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	8.00	Each
10	Installation, Testing and commissioning of pre-wired, fluorescent fitting of all types complete with all accessories and tube etc. directly on ceiling / wall, including connection with 1.5sqmm FRLS PVC insulated , copper conductor, single core cable and earthing etc. as required.	9.00	Each
11	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	4.00	Each
12	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.	2.00	Each
13	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	2.00	Each
14	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.		
14.1	2 Pair		Meter

14.2	4 Pair	As per the requirement at site	Meter
15	Supplying and drawing of UTP 4 pair CAT 6A LAN Cable in the existing surface/ recessed steel/ PVC conduit as required.		Meter
16	Supplying and fixing 5 amps to 32 amps 10kA rating, 240 Volts, 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
16.1	Single pole	8.00	Each
16.2	Single pole & Neutral	2.00	Each
16.3	Trip pole & Neutral	2.00	Each
17	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	5.00	Each
18	Providing and fixing M.V. danger notice plate of 200mm x 150mm , made of mild steel, at least 2 mm thick , and vitreous enamelled white on both sides, and with inscription in single red colour on front side as required.	2.00	Each
19	Supply, Installation, Testing and commissioning of following Distribution boards made of sheet steel in IP43 construction with key lock with sheet metal door of Legrand(Ekinox3) or equivalent in Siemens/Schneider makes		
19.1	8 Way TPN	2.00	Each
19.2	6 Way TPN	5.00	Each
20	Supply of following LED lighting fixtures		
20.1	Supply of Wall / Ceiling Fans 230V 50Hz ceiling fan with double ball bearing with low power consumption of following sweeps:		
20.2	1200mm Ceiling Fan	64.00	Each
20.3	400mm Wall Fan	28.00	Each
21	Supply of following sizes of heavy duty exhaust fan as per approved makes		
21.1	450mm Sweep	28.00	Each
21.2	200mm Sweep	16.00	Each

➤ **Vocational Training Centre**

**Plumbing work**

SN	Details of Items	Quantity	Unit
1	Providing & fixing of white vitreous China pedestal type water closet (European Type) with cistern with CP bolts, nuts, CI chair hanging arrangements, bakelite seat & cover with CP hinges & rubber buffers, CP brass screw, washer with all accessories with WC connector with Rubber Lip / Buffer and side gap filled with silicon sealant wherever required. Including brass / SS screws and washer complete including cutting, making good the walls, floors, slab wherever required as per direction of Engineer-in-charge.	9.00	Each
2	Providing & fixing of white vitreous china under counter oval wash basin/circular basin with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes , wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	9.00	Each

3	Providing & fixing of white vitreous china wash basin with pedestal with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	9.00	Each
4	Providing and fixing CP single liver extended basin mixer (height 85mm) without Popup waste system with 450mm long Braided Hoses and brass nuts with all fittings and accessories as per direction of Engineer-in-charge	9.00	Each
5	Providing and fixing, testing and commissioning of C.P. brass single hole sink mixer with CP wall flange, swinging spout complete as required and making good as per direction of Engineer-in-Charge	9.00	Each
6	Providing & Fixing at site white Flat full back Urinal pot with electronic sensor of Standard size ( 580 x 380 x 350 ) or as per approved make to be fixed at site including waste coupling, necessary PVC waste pipe, all fittings accessories, labour Of Hindware, parry, Kohlar, Jacquar or EQ make	3.00	Each
7	Providing & fixing C.P. hand spray with lever control (health faucet) and flexible hose 1 m long connection with C.P. holder for hand spray complete in all respects as per direction of Engineer-Incharge.	9.00	Each
8	Providing & fixing at site Light colored Ist quality Indian orrissa pan of Standard size ( 580 x 440 ) Indian WC including Light colored and matching pvc low level water tank ( 10 lt, ) of Hindware/ Parryware/ RAK make Ist quality, including fixing at site with all necessary accessories, all materials, labour etc complete	3.00	Each
8	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	6.00	Each
9	Providing & fixing C.P. brass robe hook fixed to wall/door with plastic rawl plugs and C.P brass screws including cutting and making good the walls wherever required as per direction of Engineer-Incharge.	9.00	Each
10	Providing & fixing recessed liquid soap dispenser as per direction of Engineer-Incharge.	5.00	Each
11	P/F of Soap Dish Holder with all fittings as per direction of Engineer-in-charge	5.00	Each
12	Providing and fixing of Tumbler Holder with all fittings as per direction of Engineer-in-charge	5.00	Each
13	Providing and fixing Bottle Trap and other ancillary fittings. Cutting and making good the walls wherever required compete as per directions of Engineer-Incharge.	5.00	Each
14	Providing and fixing 6mm copper backed float glass mirror MODI / SAINT-GOBAIN including 6mm thick BWR type ply board, 40mm stainless steel channel plugged to wall, hard wood treated with two coats of wood preservative, etc. all complete as specified and to the satisfaction of Engineer in charge.	4.00	Each
18	Providing and fixing toilet paper holder with all fittings	5.00	Each
19	Providing and fixing 15 mm dia. C.P. brass bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. (Short Body)	10.00	Each
20	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. (15 mm dia.)	10.00	Each

21	P/F of regular body concealed stop cock suitable for 15mm pipe line with protection cap with exposed part angular stop cock with flange	10.00	Each
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### **Drainage Work**

SNo	Details of Items	Quantity	Unit
1	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) R.C.C. top slab with 1 :2:4 mix ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix ( 1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 ( 1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design.		
1.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm. internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) With F.P.S. bricks with class designation 75 & with Crushed stone aggregate.	1.00	Each
1.2	Inside size 90x80 cm and 60 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)	1.00	Each
2	Providing and fixing PVC pipes 6kg/cm <sup>2</sup> pressure excluding pvc fittings, jointing with adhesive/seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion of approved make Supreme/Finolex/ Astral or equilant.		
	110 mm dia	10.00	Metre
	80 mm dia	6.00	Metre
	160 mm dia	8.00	Metre
3	Providing and fixing PVC plain Bend of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm dia	4.00	no
	160 mm dia	4.00	no
4	Providing and fixing PVC Floor Trap of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	4.00	no
	160 mm X 110 mm	4.00	no
5	Providing and fixing PVC Plain Tee of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	2.00	no

6	Providing and fixing PVC Door Bend of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	2.00	no
7	Providing and fixing PVC Door Tee of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	2.00	no
8	Providing and fixing PVC Coupler of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	2.00	no
9	Providing and fixing PVC Clamps for pvc pipes of approved make complete.		
	110 mm	2.00	no
10	Providing and fixing PVC Cowl of approved make complete.		
	110 mm	2.00	no
11	Providing and fixing C.P Jali of approved make complete.		
	110 mm	6.00	no
12	Providing & fixing full way lever operated forged brass ball valve of brass body with forged brass hard chrome plated steel ball tested to a pressure not less than 16 Kg / sqcm with threaded / flanged joints complete with nuts, bolts, gaskets, washers etc.		
	20 mm Diameter	1.00	Nos.
	25 mm Diameter	2.00	Nos.

### **Electrical Work**

SN o	Details of Items	Quantity	Unit
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
	Group C	24.00	Point
2	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.		
2.1	2x1.5 +1 1x1.5 sq. mm	As per the requirement at site	Metre
2.2	2 x 2.5 + 1x2.5sq. mm		Metre
2.3	2 x 4.0 +1x4.0 sq. mm		Metre
2.4	2 X 6.0 +1x6.0 sq. mm		Metre
2.5	2 x 10.0 + 1x6.0 sq. mm		Metre
2.6	4 x 6 sq.mm +2 X 6 sq.mm earth wire		Metre
2.7	4 X 10 sq.mm +2 X 6 sq.mm earth wire		Metre

3	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		
3.1	20mm Conduit		Metre
3.2	25mm Conduit		Metre
3.3	40mm Conduit		Metre
3.4	deep junction box	20.00	Nos
3.5	surface junction box	15.00	Nos
3.6	5" dia fan box	20.00	Nos
4	Supplying and fixing following size/modules , GI box alongwith modular base & cover plate for modular switches in recess etc. as required.		
4.1	1 or 2 module ( 75mm x 75mm)	20.00	Each
4.2	3 Module (100mmX75mm)	20.00	Each
4.3	4 Module ( 125mm x 75mm)	24.00	Each
4.4	6 Module ( 200mm x 75mm)	24.00	Each
4.5	8 Module ( 125mm x 125mm)	20.00	Each
4.6	12 Module ( 200mm x 150mm)	20.00	Each
5	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc as required.	10.00	Each
6	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 5 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection, painting etc as required.	10.00	Each
7	Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required		
7.1	5/6Amp Switch	20.00	Each
7.2	3 pin 5/6 Amp socket outlet	20.00	Each
7.3	Telephone socket outlet	20.00	Each
8	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc., as required.	20.00	Each
9	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	20.00	Each
10	Installation, Testing and commissioning of pre-wired, fluorescent fitting of all types complete with all accessories and tube etc. directly on ceiling / wall, including connection with 1.5sqmm FRLS PVC insulated , copper conductor, single core cable and earthing etc. as required.	29.00	Each
11	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	20.00	Each
12	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.	14.00	Each
13	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	14.00	Each

14	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.		
14.1	2 Pair	As per the requirement at site	Meter
14.2	4 Pair		Meter
15	Supplying and drawing of UTP 4 pair CAT 6A LAN Cable in the existing surface/ recessed steel/ PVC conduit as required.		Meter
16	Supplying and fixing 5 amps to 32 amps 10kA rating, 240 Volts, 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
16.1	Single pole	10.00	Each
16.2	Single pole & Neutral	10.00	Each
16.3	Trip pole & Neutral	10.00	Each
17	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	10.00	Each
18	Providing and fixing M.V. danger notice plate of 200mm x 150mm , made of mild steel, at least 2 mm thick , and vitreous enamelled white on both sides, and with inscription in single red colour on front side as required.	10.00	Each
19	Supply, Installation, Testing and commissioning of following Distribution boards made of sheet steel in IP43 construction with key lock with sheet metal door of Legrand(Ekinox3) or equivalent in Siemens/Schneider makes		
19.1	8 Way TPN	10.00	Each
19.2	6 Way TPN	9.00	Each
20	Supply of following LED lighting fixtures		
20.1	Supply of Wall / Ceiling Fans 230V 50Hz ceiling fan with double ball bearing with low power consumption of following sweeps:		
20.2	1200mm Ceiling Fan	64.00	Each
20.3	400mm Wall Fan	28.00	Each
21	Supply of following sizes of heavy duty exhaust fan as per approved makes		
21.1	450mm Sweep	28.00	Each
21.2	200mm Sweep	16.00	Each

➤ **Officer's Mess**

Plumbing work

SN	Details of Items	Quantity	Unit
1	Providing & fixing of white vitreous China pedestal type water closet (European Type) with cistern with CP bolts, nuts, CI chair hanging arrangements, bakelite seat & cover with CP hinges & rubber buffers, CP brass screw, washer with all accessories with WC connector with Rubber Lip / Buffer and side gap filled with silicon sealant wherever required. Including brass / SS screws and washer complete including cutting, making good the walls, floors, slab wherever required as per direction of Engineer-in-charge.	7.00	Each

2	Providing & fixing of white vitreous china under counter oval wash basin/circular basin with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes , wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	7.00	Each
3	Providing & fixing of white vitreous china wash basin with pedestal with CP brass waste assembly, CP cast brass bottle trap with extension piece , 450mm long CP copper connections pipes, wall flanges and rubber adapters for waste connection complete including CI/MS brackets duly painted, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge.	7.00	Each
4	Providing and fixing CP single liver extended basin mixer (height 85mm) without Popup waste system with 450mm long Braided Hoses and brass nuts with all fittings and accessories as per direction of Engineer-in-charge	7.00	Each
5	Providing and fixing, testing and commissioning of C.P. brass single hole sink mixer with CP wall flange, swinging spout complete as required and making good as per direction of Engineer-in-Charge	7.00	Each
6	Providing & Fixing at site white Flat full back Urinal pot with electronic sensor of Standard size ( 580 x 380 x 350 ) or as per approved make to be fixed at site including waste coupling, necessary PVC waste pipe, all fittings accessories, labour Of Hindware, parry, Kohlar, Jacuzzi or EQ make	4.00	Each
7	Providing & fixing C.P. hand spray with lever control (health faucet) and flexible hose 1 m long connection with C.P. holder for hand spray complete in all respects as per direction of Engineer-Incharge.	7.00	Each
8	Providing & fixing at site Light colored 1st quality Indian orissa pan of Standard size ( 580 x 440 ) Indian WC including Light colored and matching pvc low level water tank ( 10 lt, ) of Hindware/ Parryware/ RAK make 1st quality, including fixing at site with all necessary accessories, all materials, labour etc complete	0.00	Each
8	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	7.00	Each
9	Providing & fixing C.P. brass robe hook fixed to wall/door with plastic rawl plugs and C.P brass screws including cutting and making good the walls wherever required as per direction of Engineer-Incharge.	7.00	Each
10	Providing & fixing recessed liquid soap dispenser as per direction of Engineer-Incharge.	7.00	Each
11	P/F of Soap Dish Holder with all fittings as per direction of Engineer-in-charge	5.00	Each
12	Providing and fixing of Tumbler Holder with all fittings as per direction of Engineer-in-charge	5.00	Each
13	Providing and fixing Bottle Trap and other ancillary fittings. Cutting and making good the walls wherever required compete as per directions of Engineer-Incharge.	5.00	Each
14	Providing and fixing 6mm copper backed float glass mirror MODI / SAINT-GOBAIN including 6mm thick BWR type ply board, 40mm stainless steel channel plugged to wall, hard wood treated with two coats of wood preservative, etc. all complete as specified and to the satisfaction of Engineer in charge.	5.00	Each
18	Providing and fixing toilet paper holder with all fittings	5.00	Each
19	Providing and fixing 15 mm dia. C.P. brass bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. (Short Body)	15.00	Each
20	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. (15 mm dia.)	15.00	Each

21	P/F of regular body concealed stop cock suitable for 15mm pipe line with protection cap with exposed part angular stop cock with flange	15.00	Each
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### **Drainage Work**

SNo	Details of Items	Quantity	Unit
1	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) R.C.C. top slab with 1 :2:4 mix ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix ( 1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 ( 1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design.		
1.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm. internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) With F.P.S. bricks with class designation 75 & with Crushed stone aggregate.	1.00	Each
1.2	Inside size 90x80 cm and 60 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)	1.00	Each
2	Providing and fixing PVC pipes 6kg/cm <sup>2</sup> pressure excluding pvc fittings, jointing with adhesive/seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion of approved make Supreme/Finolex/ Astral or equilant.		
	110 mm dia	10.00	Metre
	80 mm dia	6.00	Metre
	160 mm dia	8.00	Metre
3	Providing and fixing PVC plain Bend of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm dia	4.00	no
	160 mm dia	4.00	no
4	Providing and fixing PVC Floor Trap of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	4.00	no
	160 mm X 110 mm	4.00	no
5	Providing and fixing PVC Plain Tee of approved make Supreme/Finolex/ Astral or equilant complete.		
	110 mm X 80 mm	2.00	no

6	Providing and fixing PVC Door Bend of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	2.00	no
7	Providing and fixing PVC Door Tee of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	2.00	no
8	Providing and fixing PVC Coupler of approved make Supreme/Finolex/ Astral or equivalent complete.		
	110 mm	2.00	no
9	Providing and fixing PVC Clamps for pvc pipes of approved make complete.		
	110 mm	2.00	no
10	Providing and fixing PVC Cowl of approved make complete.		
	110 mm	2.00	no
11	Providing and fixing C.P Jali of approved make complete.		
	110 mm	6.00	no
12	Providing & fixing full way lever operated forged brass ball valve of brass body with forged brass hard chrome plated steel ball tested to a pressure not less than 16 Kg / sqcm with threaded / flanged joints complete with nuts, bolts, gaskets, washers etc.		
	20 mm Diameter	1.00	Nos.
	25 mm Diameter	2.00	Nos.

### **Electrical Work**

SN o	Details of Items	Quantity	Unit
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
	Group C	52.00	Point
2	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.		
2.1	2x1.5 +1 1x1.5 sq. mm	As per the requirement at site	Metre
2.2	2 x 2.5 + 1x2.5sq. mm		Metre
2.3	2 x 4.0 +1x4.0 sq. mm		Metre
2.4	2 X 6.0 +1x6.0 sq. mm		Metre
2.5	2 x 10.0 + 1x6.0 sq. mm		Metre
2.6	4 x 6 sq.mm +2 X 6 sq.mm earth wire		Metre
2.7	4 X 10 sq.mm +2 X 6 sq.mm earth wire		Metre
3	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		

3.1	20mm Conduit		Metre
3.2	25mm Conduit		Metre
3.3	40mm Conduit		Metre
3.4	deep junction box	80.00	Nos
3.5	surface junction box	59.00	Nos
3.6	5" dia fan box	26.00	Nos
4	Supplying and fixing following size/modules , GI box alongwith modular base & cover plate for modular switches in recess etc. as required.		
4.1	1 or 2 module ( 75mm x 75mm)	60.00	Each
4.2	3 Module (100mmX75mm)	60.00	Each
4.3	4 Module ( 125mm x 75mm)	75.00	Each
4.4	6 Module ( 200mm x 75mm)	75.00	Each
4.5	8 Module ( 125mm x 125mm)	75.00	Each
4.6	12 Module ( 200mm x 150mm)	60.00	Each
5	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet and 15/16 amps modular switch, connection, painting etc as required.	70.00	Each
6	Supplying and fixing on exisitng GI Box modular plate and cover in front on surface or in recess, including providing and fixing 5 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection, painting etc as required.	70.00	Each
7	Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required		
7.1	5/6Amp Switch	100.00	Each
7.2	3 pin 5/6 Amp socket outlet	80.00	Each
7.3	Telephone socket outlet	70.00	Each
8	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc., as required.	52.00	Each
9	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	52.00	Each
10	Installation, Testing and commissioning of pre-wired, fluorescent fitting of all types complete with all accessories and tube etc. directly on ceiling / wall, including connection with 1.5sqmm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	60.00	Each
11	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	30.00	Each
12	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.	26.00	Each
13	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	26.00	Each
14	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.		
14.1	2 Pair		Meter

14.2	4 Pair	As per the requirement at site	Meter
15	Supplying and drawing of UTP 4 pair CAT 6A LAN Cable in the existing surface/ recessed steel/ PVC conduit as required.		Meter
16	Supplying and fixing 5 amps to 32 amps 10kA rating, 240 Volts, 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
16.1	Single pole	60.00	Each
16.2	Single pole & Neutral	60.00	Each
16.3	Trip pole & Neutral	60.00	Each
17	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	60.00	Each
18	Providing and fixing M.V. danger notice plate of 200mm x 150mm , made of mild steel, at least 2 mm thick , and vitreous enamelled white on both sides, and with inscription in single red colour on front side as required.	60.00	Each
19	Supply, Installation, Testing and commissioning of following Distribution boards made of sheet steel in IP43 construction with key lock with sheet metal door of Legrand(Ekinox3) or equivalent in Siemens/Schneider makes		
19.1	8 Way TPN	60.00	Each
19.2	6 Way TPN	30.00	Each
20	Supply of following LED lighting fixtures		
20.1	Supply of Wall / Ceiling Fans 230V 50Hz ceiling fan with double ball bearing with low power consumption of following sweeps:		
20.2	1200mm Ceiling Fan	64.00	Each
20.3	400mm Wall Fan	28.00	Each
21	Supply of following sizes of heavy duty exhaust fan as per approved makes		
21.1	450mm Sweep	28.00	Each
21.2	200mm Sweep	16.00	Each