

NAME OF WORK :- RENOVATION, REPAIR FURNISHING, CIVIL, SANITARY, PLUMBING ELECTRICAL & ALLIED WORKS REQUIRED AT CANARA BANK CIRCLE OFFICE BUILDING BAYSITE 17-18, SEC-12, KARNAL - 132001		
SUMMARY		
S. No.	DESCRIPTION OF ITEMS HEAD WISE	Amount
1	CIVIL WORK	
2	PLUMBING WORK	
	TOTAL	
	GST AS APPLICABLE	
	TOTAL	

NAME OF WORK :- CONSULTANCY SERVICES FOR RENOVATION, REPAIR FURNISHING, CIVIL, SANITARY, PLUMBING ELECTRICAL & ALLIED WORKS REQUIRED AT CANARA BANK CIRCLE OFFICE BUILDING BAYSITE 17-18, SEC-12, KARNAL - 132001					
BILL OF QUANTITY - CIVIL WORKS					
S.NO.	ITEM DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	EARTH WORK				
1	Supplying chemical emulsion in sealed containers including delivery as specified.				
i.	Chlorpyriphos/ Lindane emulsifiable concentrate of 20%	litre	75.00		
2	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) With Chlorpyriphos/Lindane E.C. 20% with 1% concentration Along the external wall below concrete or masonry apron using chemical emulsion @ 2.25 litres per linear metre including drilling and plugging holes etc.	METRE	110.43		
2.00					
	CONCRETE WORK				
	CEMENT CONCRETE (CAST IN SITU)				
3	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets,				
	1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)	cum.	16.93		
4.00					
	REINFORCED CEMENT CONCRETE				
	CAST IN SITU				
4	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1cement : 1.5 coarse sand(zone-III) Derived from natural sources : 3 graded stone aggregate 20 mm nominal size).	cum.	0.47		
	FORM WORK (CENTERING & SHUTTERING)				
5	Centering and shuttering including strutting, propping etc. and removal of form for :				
i.	Lintels, beams, plinth beams, girders, bressumers and cantilevers	Sq.m.	8.19		
	STEEL REINFORCEMENT				
6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
	Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg	51.83		
	TOTAL FOR REINFORCED CEMENT CONCRETE				
	MASONRY WORK				
7	115mm. Thk. WALL Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
i.	Cement mortar 1:3 (1 cement :3 coarse sand)	sq.m.	19.40		
8	Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry.	sq.m.	19.40		
	TOTAL FOR MASONRY WORK				
	CLADDING WORK				

9	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high glass finish etc. complete at all levels.				
i.	Granite stone slab colour black, cherry/ rubby red				
	Area of slab over 0.50 sqm	Sqm.	16.47		
10	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.				
i.	Granite work	Meter	65.84		
11	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	Sq.m.	240.31		
TOTAL FOR CLADDING WORK					
	UPVC WINDOWS				
12	Openable Type window				
	UPVC WINDOWS Casement Type window a- Providing and fixing wooden finish-light oak colour Renolit FX foil based uPVC windows. Double panel openable casement window of 65 mm x 58 mm and Sash must be 80 mm x 65mm, wall thickness of profile must be min 1.8±0.3mm. Glass should be DG 6mm T+12mm (Arg) + 6mm T clear toughened with single/double glazing bead. Design should be as per approved drawings only. TPE (Thermo Plastic Elastomers) gasket must be using for all glazing. A minimum 2nos drain IN and 1 drain OUT slot for every 1000 mm. The drainages shall be so designed as not to puncture the reinforcement chamber and prevent water running through the reinforcement chamber.				
	(MAKE:- FENESTA/ ALUPLAST/ KÖMMERLING				
a.	casement window frame size 47x50mm i/c 5% wastageType window	Sq.m.	41.22		
b.	Fix window of 45 mm x 50 mm,	Sq.m.	41.22		
TOTAL UPVC					
STEEL WORK					
13	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as				
	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	kg	150.00		
TOTAL FOR STEEL WORK					
FLOORING					
VITRIFIED FLOOR TILES					
14	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc.. complete.	Sqm.			
	Note:- The tiles must be cut with zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.				
i.	Glazed vetrified tile matt/Antiskid finish of size.				
ii.	size of tile 600x600mm.		677.21		
	Note:- Tiles will be accepted only of "mother plants".				
SUB HE	TOTAL FOR FLOORING				
	FINISHING				

15	CEMENT PLASTER (IN COARSE SAND) 12 mm cement plaster of mix :				
i.	1:4 (1 cement: 4 coarse sand)	Sq.m.	36.36		
16	CEMENT PLASTER (IN COARSE SAND) 15 mm cement plaster on rough side of single or half brick wall of mix:				
i.	1:4 (1 cement: 4 coarse sand)	Sq.m.	36.36		
17	6MM CEMENT PLASTER 6 mm cement plaster of mix :				
i.	1:3 (1 cement : 3 fine sand)	Sq.m.	6.77		
18	NEAT CEMENT PUNNING	Sq.m.	3.64		
19	Extra for providing and mixing water proofing material in cement plaster work in proportion recommended by the manufacturers.	per bag of 50kg cement mix	8.73		
20	Finishing walls with textured exterior paint of required shade :				
	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm	Sq.m.	318.24		
21	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade .				
i.	Two or more coats on new work	Sqm.	374.96		
22	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sqm.	562.44		
23	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade				
	One or more coats on old work	Sqm.	456.00		
	TOTAL FOR FINISHING				
	DISMANTLING AND DEMOLISHING				
24	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
i.	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	cum.	4.06		
25	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in-	cum.	0.56		
26	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
i.	In cement mortar	cum.	13.29		
27	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
i.	Of area beyond 3 sq. metres	Each	112.00		
28	Providing rebate after Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
i.	Of area beyond 3 sq. metres	Each	112.00		
29	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.				
i.	For thickness of tiles 10 mm to 25 mm	Sq.m.	677.21		

30	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material within 50 meters lead as directed by Engineer-in-charge.	sqm	250.00		
31	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	Trips	20.00		
TOTAL FOR DISMANTLING AND DEMOLISHING					
WATER PROOFING					
32.0	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying :				
	(a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours.				
	(b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours.				
	(The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.)	sqm.	76.30		
TOTAL FOR WATER PROOFING					
TOTAL CIVIL WORK					

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BILL OF QUANTITY - PLUMBING WORKS

SO.NO.	ITEM DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	Note:				
	i. Detail of Sanitary fixture are for the information of the Contractor, however model / makes of all sanitary fixture shall be selected by Architect / Interior designer / client and the same shall be binding for execution.				
	ii. No additional all fixing cost shall be paid for change in type of sanitary fixture or fitting.				
	iii. Provision of extension piece for final connection of CP fitting shall be supplied and installed by the contractor accordingly (as required).				
	iv. Main storm water drain should be cast in RCC Box with SFRC cover C/C 10m distance. Cost should be include in civil estimate only. As we have not considered in PHE estimate.				
	SANITARY INSTALLATIONS				
70	Providing and fixing white vitreous china extended wall mounted water closet of approved shape including providing and fixing of concealed cistern with dual flush fitting (2.0/4.0 lts. per flushing), including sheet cover, and cistern fittings, nut bolt gasket, chair etc complete. (MAKE - ROCA: MODEL NO. OF WC WITH SEAT& COVER - RS34647A000-RA801732001, CISTERN & FACE PLATE-RA801732001-RE890195001) (KOHLER: MODEL NO. OF WC WITH SEAT& COVER - K-16817IN-SS-0, CISTERN & FACE PLATE-K-26351IN-P-NA & K-5413IN-P-CP) (JAGUAR: MODEL NO. OF WC WITH SEAT& COVER - ACS-WHT-87953BIUF-SS-0, CISTERN & FACE PLATE-JCS-WHT-2431FT & JCB-CHR-152415)	Each	9.00		
71	Providing and fixing white vitreous china flat back half stall urinal with infrared sensor battery operated automatic flushing systems for urinal to ensure pre-flush & flushing only immediately after use, comprising of all plumbing, electronic and electrical items. (0.75 lts. per flushing) with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required : (MAKE -ROCA: MODEL NO. OF URIN-RS35945J460 & SENSOR -RT525165003 RT5A8102E0N) KOHLER: MODEL NO. OF URINAL-K-20713IN-ER-0, & SENSOR -K-24199IN-C03-CP) or EQ MODEL OF HINDWARE	Each	5.00		
72	Providing & fixing glass urinal partition of Height: 900mm, Width: 450mm & Frosted Safety Glass: 8 mm with fixed with expandable anchor fasteners with C.P. brass bolts and washers, embedded in wall with anchor and set in cement concrete complete including cutting and making good the walls wherever required. (MAKE-JAGUAR: MODEL NO-Model No. JSE-CHR-810UC450X), HINDWARE: MODEL NO.- SU810SC(S)-STD-CR), SAHI METAL & DECORATORS)	Each	5.00		
73	Providing and fixing Stainless Steel AISI 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				
a.	Kitchen sink with drain board				
b.	510x1040 mm bowl depth 250 mm	Each	1.00		
c.	Kitchen sink without drain board				
d.	610x510 mm bowl depth 200 mm	-			
74	Providing and fixing hand shower (Health faucet) with 1.2mtr long with 8mm dia Easy Flex Tube with wall hook and flow restrictor with flow rate 6 litre per minute at 3 bar in chrome finish and wall hook. (MAKE -ROCA: MODEL NO. HEALTH FAUCET :RF9060A1.) KOHLER: MODEL NO. HEALTH FAUCET : K-12927IN-CP, JAGUAR: MODEL NO. HEALTH FAUCET : K-12927IN-CP)	Each	9.00		
75	Providing and fixing CP Brass 32mm size Bottle Trap Waste coupling without pop-up 32 mm full thread 130 mm of approved quality & make and as per the direction of Engineer-in-charge.(MAKE -ROCA: MODEL NO. BOTTLE TRAP :RF9066A1.RF5054017A1) (MAKE -KOHLER: MODEL NO. BOTTLE TRAP : K-75823IN-CP.20746IN-CP), MAKE-HINDWARE:EQ MODEL)	Each	9.00		
76	Providing & fixing PVC waste pipe for sink including PVC waste fitting Complete				
a.	Flexible Pipe				
b.	40mm Dia	Each	1.00		

77	Providing & fixing toilet paper holder (MAKE -KOHLER: MODEL NO. TOILET PAPER HOLDER : K-25071IN-CP OR EQUIVALENT.) (ROCA: MODEL NO. TOILET PAPER HOLDER : RA816662001 OR EQUIVALENT.), MAKE-HINDWARE: EQ MODEL)				
	C.P. brass	Each	9.00		
78	Providing, fixing, jointing and testing in position of ISI marked UV stabilized UPVC pipes for soil, waste SWR Type-B as per IS : 13592 suitable for rubber ring joints for vertical pipes and solvent cement joints for horizontal pipes, including all necessary specials and fittings (confirming to IS:14735) i.e. bends, tees, junctions (with or without doors), reducers, couplers, cowls, clamps, hangers, rubber rings, clean outs, provision for C P Grating fixing for any waste connection from washing machine etc. fixing at wall / ceiling / floor level supported by clamp & hangers etc. inside duct / suspended from floor under false ceiling for proper completion of the work. The rubber ring shall confirm to IS:5382. (SOIL, WASTE , VENT & RAIN WATER)) (MAKE:- SUPREME, PRINCE, ASHIRVAD)				
a.	75 mm diameter pipe	Metre	12.00		
b.	110 mm diameter pipe	Metre	12.00		
c.	160 mm diameter pipe	Metre	12.00		
79	Providing and fixing in position Upvc full bore P / S trap with 50 mm water seal (IS : 14735) of the following sizes . Making proper connection with solvent cement.	Each	9.00		
80	Providing, fixing & testing uPVC pipes , conforming to IS 4985 class 3 (6 kg/cm²) including injection moulded fittings, jointing with solvent cement, cutting and making good the floors and walls and jointing to trap/waste pipe, complete of outer dia. (Indirect waste) (MAKE:- SUPREME, PRINCE, ASHIRVAD)				
a.	40 mm diameter pipe	Metre	12.00		
b.	63 mm diameter pipe	Metre	12.00		
81	Providing & fixing Nickel Chromium Plated liquid soap container/dispenser with metallic bottle of approved brand & make 112 mm distance from wall of standard shape with bracket (Nickel chromium plating should pass Salt Spray Test for 200 hours) of the same materials with snap fittings of approved quality and colour, complete as per direction of Engineer in Charge. (MAKE: KOHLER : MODEL NO. - K-10712D-CP) (ROCA MODEL :NO. -RA816070105.), MAKE:- JAQUAR MODEL NO. AKP-CHR-35735P)	Each	-		
82	Providing, Fixing of CP brass Towel Ring with CP brass wall brackets and providing & fixing CP brass screws complete as required. (MAKE: KOHLER : MODEL NO. TOWEL RING : K-25067IN-CP) (ROCA MODEL NO. - RA816656001), MAKE:- JAQUAR MODEL NO. CAN-CHR-1121BN)	Each	4.00		
83	Providing, Fixing of CP brass Towel Shelf 600mm long without hanger with 3 hooks and CP brass screws complete as required. (MAKE: KOHLER : MODEL NO. TOWEL SHELF : K-25066IN-CP) (ROCA : MODEL NO. -RA816070168), MAKE:- JAQUAR MODEN NO. AHS-CHR-1581)	Each	4.00		
84	Providing & fixing soap dish holder of approved design. (MAKE: KOHLER : MODEL NO. SOAP DISH : K-25068IN-CP) (ROCA MODEL NO. -RA816683001.), MAKE:- JAQUAR MODEL NO. AKP-CHR-35731P)	Each	-		
85	Providing and fixing white vitreous china Oval shaped wash basin for top/under counter mounting with 15 mm C.P. brass pillar tap of approved quality and make with, including painting of fittings and brackets, cutting and making good the walls wherever required. (MAKE : KOHLER : MODEL NO. WASH BASIN : K-2660IN-1-O & PILLAR TAP : K-23475IN-4-CP) (ROCA MODEL NO. -RS3270Y2000 & PILLAR TAP : RT5A3C09CON), MAKE- HINDWARE-EQ MODEL OF WASH BASIN & PILLAR TAP)				
a.	White Vitreous China Oval shaped Wash basin size 584 x 460 x 174mm with 15 mm C.P. brass pillar tap auto closing type of approved make with flow rate 2.5 litre per minute at 3 bar .	Each	9.00		
86	Providing and fixing CP brass Tube spout kitchen faucet complete with flow rate 2.5 litre per minute at 3 bar including cutting and making good the walls where required. (MAKE : KOHLER : MODEL NO. KITCHEN FAUCET : K-99176IN-4-CP) (ROCA MODEL NO. -RT5A847AC0H), MAKE:- HINDWARE (EQ. MODEL)	Each	1.00		
87	Providing,Fixing wall mounted Double Coat hook on door complete. (MAKE-KOHLER: MODEL NO. COAT HOOK : - K-25073IN-CP-CP) (ROCA MODEL NO. -RA816651001), MAKE:- JAQUAR MODEL NO. AQN-CHR-7761)	Each	7.00		
88	Providing and fixing CP brass 1 Way Bib cock with wall flange with flow restrictor with flow rate 2.5 litre per minute at 3 bar. (MAKE-KOHLER: MODEL NO. 1 WAY BIB COCK : K-16093IN-4-CP) (ROCA MODEL NO. -RT5A787ACA1), MAKE:-MAKE:- HINDWARE (EQ. MODEL)	Each	9.00		
89	Providing and fixing straight type Macfit single body push fit type WC pan connector with factory supplied spring loaded seal guard of McAlpine, UK with integral single mould sealing fins made of flexible EVA body, including bush/adaptor for use with C.I. Pipe as supplied with the pan connector. (MAKE:- SUPREME, PRINCE, ASHIRVAD)	Each	-		

90	Providing and fixing mirror (1000x1000 mm) of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing complete as required. (MAKE:- MODIGUARD, SAINT GOBAIN GLASS INDIA LIMITED, ASAHI GLASS)	Sqm	7.00		
91	Providing, fixing, testing & commissioning of Floor drain made of uPVC reducing elbow (110x63 mm) with horizontal drain outlet of 63 mm OD, round top of 110 mm OD. (Floor Drain) (MAKE:- SUPREME, PRINCE PIPING SYSTEM, ASHIRVAD)	Each	21.00		
92	Providing & fixing uPVC clean out plug with suitable opening with threaded uPVC socket fixed to uPVC pipe joints as required complete in all respects. (MAKE:- SUPREME, PRINCE PIPING SYSTEM, ASHIRVAD)				
a.	110 mm dia	Each	12.00		
b.	160 mm dia	Each	12.00		
93	Providing, fixing and testing of uPVC SWR inlet fittings with two or three saddle inlets of 40, 50 or 63 mm size, fabricated from 110 mm outer dia uPVC pipes and fixed to uPVC traps with solvent cement joint complete in all respect. (MAKE:- SUPREME, PRINCE, ASHIRVAD)	Each	12.00		
94	Providing and fixing SS Grating of 125 mm dia of approved quality and colour complete as per direction of engineer in charge. (MAKE:- SYSCRAFT GLOBAL ENTERPRISES, INDIA, RELIABLE METALS INDIA, ASHIRVAD)				
a.	Circular Type				
	125 mm nominal dia with 25 mm waste hole	Each	1.00		
17.00	TOTAL OF SUB HEAD 17 - SANITARY INSTALLATIONS				
	WATER SUPPLY				
95	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
	Internal work - Exposed on Wall				
a.	15 mm nominal outer dia Pipes (LUM SUM)	Metre	-		
b.	20 mm nominal outer dia Pipes	Metre	-		
c.	25 mm nominal outer dia Pipes	Metre	-		
d.	32 mm nominal outer dia Pipes	Metre	-		
e.	40 mm nominal outer dia Pipes	Metre	-		
f.	50 mm nominal outer dia Pipes	Metre	-		
g.	65 mm nominal inner dia Pipes	Metre	-		
96	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes , having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.				
	Concealed work , including cutting chases and making good the walls etc.				
a.	15 mm nominal outer dia Pipes	Metre	1.00		
b.	20 mm nominal outer dia Pipes	Metre	100.00		
c.	25 mm nominal outer dia Pipes	Metre	20.00		
d.	32 mm nominal outer dia Pipes	Metre	10.00		
97	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge.				
	External Work				
a.	25 mm nominal outer dia Pipes	Metre	1.00		
b.	32 mm nominal outer dia Pipes	Metre	12.00		
c.	40 mm nominal outer dia Pipes	Metre	1.00		
d.	50 mm nominal outer dia Pipes	Metre	1.00		
e.	65 mm nominal inner dia Pipes	Metre	1.00		
f.	80 mm nominal inner dia Pipes	Metre	1.00		
98	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
a.	20mm nominal bore	Each	10.00		
b.	25mm nominal bore	Each	1.00		
c.	32mm nominal bore	Each	10.00		
d.	40mm nominal bore	Each	5.00		

e.	50mm nominal bore	Each	1.00		
f.	65mm nominal bore	Each	1.00		
99	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
a.	20 mm nominal bore	Each	1.00		
b.	25mm nominal bore	Each	2.00		
100	Providing and fixing uplasticised PVC connection pipe with brass unions :				
a.	45 cm length				
b.	15 mm nominal bore	Each	1.00		
a.	With common burnt clay F.P.S (non modular) bricks of class designation 7.5	Each	1.00		
101	Providing and fixing C.P. brass angle valve for basin mixture and geyser points of approved quality confirming to IS: 8931. (MAKE : KOHLER , MODEL NO. ANGLE VALVE : K-80158IN-9-CP) (ROCA MODEL NO. -RF525159700), MAKE:- JAQUAR- MODEL NO. ALI-CHR-85041)	Each	12.00		
102	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end). (MAKE: - ZOLOTO, SKS VALVES, KARTAR)				
	15mm nominal bore	Each	5.00		
103	Butterfly valve (manual) with C.I body SS disc nitrile sheet & O ring & PN 16 Pressure rating as specified 100 mm nominal bore				
	50 mm dia.	Each	5.00		
	65 mm dia.	Each	4.00		
a.	80 mm dia.	Each	2.00		
b.	100 mm dia.	Each	1.00		
104	Non - return valve with dual plate of CI Body SS plates vulcanized NBR seal flanged end & PN 16 rating as specified.				
a.	65mm dia.	Each	1.00		
b.	80 mm dia.	Each	1.00		
c.	100 mm dia.	Each	1.00		
105	Providing & fixing CI Y Strainer (screwed/ flanged) with stainless steel fine wire mesh perforated sheet basket with necessary flange/ unions nuts, bolts and washers complete as required. (MAKE: - ZOLOTO, SKS VALVES, SANT)				
a.	32mm nominal bore	Each	-		
b.	40mm nominal bore	Each	-		
c.	50mm nominal bore	Each	-		
d.	65mm nominal bore	Each	-		
e.	80mm nominal bore	Each	-		
f.	100mm nominal bore	Each	-		
g.					
106	Supplying and fixing in position of approved quality Solenoid Valve with by-pass arrangement, isolation cock etc. complete with all required accessories such as level sensor, level indicator, level controller and required cabling for the same. (MAKE: - ZOLOTO, SKS VALVES)				
a.	25 mm dia	Each	-		
b.	32 mm dia	Each	-		
c.	40 mm dia	Each	-		
d.	50 mm dia	Each	-		
e.	65 mm dia	Each	-		
f.	80 mm dia	Each	-		
g.	100 mm dia	Each	-		
h.					
107	Providing, Fixing, Testing & Commissioning of nitrile rubber insulation on hot water supply pipes. K-Flex, A-Flex, Armacell. The rate include cost of all material & labour involved in the item complete and all as per direction of engineer incharge. (MAKE: - THERMAFLEX INSULATION ASIA CO. LTD. , KFLEX)				
a.	15mm (9 mm thickness)	Metre	10.00		
b.	20mm (9 mm thickness)	Metre	-		
c.	25mm dia (9 mm thickness)	Metre	-		
d.	32mm dia (13 mm thickness)	Metre	-		
e.	40mm dia (13 mm thickness)	Metre	-		
f.	50mm dia (13 mm thickness)	Metre	-		
g.	65mm dia (19 mm thickness)	Metre	-		
h.	80mm dia (19 mm thickness)	Metre	-		
i.	100mm dia (19 mm thickness)	Metre	-		

108	Providing and fixing Bronze compact(Screwed) Diaphragm type pressure reducing valve (PRV) with strainer delivering desired rate of flow. The complete system is tested to a pressure not less than 16 Kg / Sq.cm and suitable to reduce the pressure upto 1 Kg/Sq.cm) including flanges / unions, nuts, bolts and washers complete as required. MAKE :- HONEY WELL, KARTAR, AGRICULTURE & INDUSTRIAL PUMPS				
a.	15 mm dia	Each	-		
b.	20 mm dia	Each	-		
c.	25 mm dia	Each	-		
d.	32 mm dia	Each	-		
e.	40 mm dia	Each	-		
f.	50 mm dia	Each	-		
18.00	TOTAL OF SUB HEAD 18 -WATER SUPPLY				
	DRAINAGE				
109	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design:				
a.	150 mm diameter S.W. pipe	Metre	-		
b.	200 mm diameter S.W. pipe	Metre	-		
c.	250 mm diameter S.W. pipe	Metre	-		
110	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design :				
	150 mm diameter S.W. pipe / RCC pipe	Metre	-		
	200 mm diameter S.W. pipe / RCC pipe	Metre	-		
	250 mm diameter S.W. pipe / RCC pipe	Metre	-		
	300 mm diameter S.W. pipe / RCC pipe	Metre	-		
111	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :				
a.	180 x 150mm size P-type				
b.	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	-		
112	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete : (For Sewer & Storm Line)				
a.	150 mm dia. R.C.C. pipe	Metre	-		
b.	250 mm dia. R.C.C. pipe	Metre	-		
c.	300 mm dia. R.C.C. pipe	Metre	-		
d.	450 mm dia. R.C.C. pipe	Metre	-		
e.	500 mm dia. R.C.C. pipe	Metre	-		
f.	600 mm dia. R.C.C. pipe	Metre	-		
g.	700 mm dia. R.C.C. pipe	Metre	-		
h.	800 mm dia. R.C.C. pipe	Metre	-		
i.	900 mm dia. R.C.C. pipe	Metre	-		
j.	1000 mm dia. R.C.C. pipe	Metre	-		
k.	1100 mm dia. R.C.C. pipe	Metre	-		
l.	1200 mm dia. R.C.C. pipe	Metre	-		
113	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone- III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone- III) : 8 graded stone aggregate 40 mm 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 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :				
a.	Inside size 90 x 80 cm and 45 cm deep including CI cover with frame (light duty) 455 x 610mm internal dimensiions 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 FPS bricks with class designation 7.5				
b.	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	-		
114	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :				
a.	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	-		
115	Extra for depth for manholes:				
a.	Size 90 x 80 cm				

b.	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Metre	-		
116	Size 120x90 cm				
a.	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Metre	-		
117	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand), in side cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :				
118	0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg., fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid for separately):				
a.	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	-		
119	Extra depth for circular type manhole 0.91m internal dia (at bottom) beyond 0.91 m to 1.67 m				
a.	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Metre	-		
120	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	Each	-		
121	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement and making necessary channels for the drain etc. complete :				
a.	For pipes 100 to 250 mm diameter	Each	-		
122	Constructing brick masonry road gully chamber 50x45x60cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450mm precast RCC horizontal grating with frame complete as per standard design.				
b.	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	-		
123	Providing and fixing F.R.P. Grating drain cover M.S. Angle (35 x35 x 5 mm). (Load Bearing cap. 5 T, suitable for car parking, basement, Pump room, Parking Area). MAKE:- CRESCENT, GLOBAL WORLD				
	377mm wide and 30mm thick	Metre	-		
19.00	TOTAL OF SUB HEAD 19 -DRAINAGE				
B.	TOTAL PLUMBING WORK				

List of approved make for Plumbing Works (Sanitary & Water Supply)

S. No.	Details of Equipment / Material	Make / Manufacturer
1.	Vitreous China Sanitary	Kohler / Roca/ Hindware
2.	Plastic seat cover of W.C	Kohler / Roca/ Hindware
3.	Hand Drier	Kohler / Roca/ Hindware
4.	PVC flushing cistern	Kohler / Roca/ Hindware
5.	White Glazed Fire Clay Sink	Sanfire/ Cera / Neycer / Hindware
6.	C.P. Fixture and fittings	Kohler / Roca/ Jaguar
7.	Liquid Soap Dispenser	Kohler / Roca/ Jaguar
8.	Stainless Steel Sink	Kohler / Grohe/ TOTO
9.	Gunmetal Valves	Zoloto / Leader / Kartar/ NVR
10.	Brass stop & Bib Cock	Kohler / Roca/ Hindware
11.	Copper Fittings (Capillary)	Conex - Benninger /Mexflow / Rajco Metal Works Mumbai
12.	Floor & Cockroach Trap & Cover	Chilly/ GMGR/ Camry
13.	Air Release Valve	Zoloto/AIP/NVR/Audco
14.	Anchor Fastner	Hilti / Fischer / Bosch
15.	Ball Cock	Sant / L&T/Audco
16.	Ball valves with floats	Zoloto / Leader / Sant / Audco
17.	Butterfly valves	Zoloto/Audco / NVR /Sant
18.	C. I Fitting	Neco/ Electrosteel/ Kesoram/ SKF/ BIC
19.	C.I Sluice Valve & Non Return Valve	Kirloskar / IVC/ Leader / Zoloto /NVR
20.	C.I Valves (Full way, Check and Globe Valves	Kirloskar / IVC/ Leader / Zoloto /NVR
21.	C.I. Manhole Covers	Neco / B.I.C. / Hepco / SKF
22.	Central Control	Rain Bird, USA/Toro/Nelson,
23.	Centrifugally cast C.I Rainwater fitting / Bronze gratings etc.	Electro Steel / Kesoram / Neco / BIC / Neer
24.	Centrifugal Pump	Willo+Mather & Platt / Grundfos / KBS
25.	Centrifugally casted C.I. Pipes	Neco / Hepco / BIC / SKF
26.	Chlorine Dosing System	Toshcon / Chloromax
27.	CPVC Pipes & Fittings	Astral/ Birla Aerocon/ Ashirwad
28.	Curtain Rod/Draperly Rod	Vista work / Mac Décor / Hunter Douglas
29.	Dash Fasteners	Hilti / Fischer / Bosch
30.	Disc Filter	Azud/Spain/ Amaid / Arkal,
31.	Drainage Pumps	Grundfos/ KSB/Xylem/Willo
32.	Ductile Iron Fittings (IS:9523)	Electrosteel/Kesoram/Tisco/Jindal
33.	Ductile Iron Pipes (IS:8329)	Electrosteel/ Kesoram/Tisco/Jindal
34.	Forged Steel Fittings & Flanges (For Welded joints)	Sant/ Vijay Cycle & Steel/SS
35.	G.I. Fittings	R/Unik/Zoloto/Sun/Swastik
36.	G.I. Pipes	Jindal (Hissar)/ Tata / Prakash Surya / SAIL
37.	Geyser	Jaquar / Havells
38.	Glass: Mirror	Modiguard / Saint gobain/ Asahi India Safety / Modi Float
39.	Horizontal Centrifugal / Monoblock Pumps	Wilo/Grundfos/Xylem/Salmson / Ebara

40.	Inbuilt Drip Line	Azud/ Rainbrid-USA/ Netafim
41.	Insulation of Hot water pipes	Vidoflex insulation / Superion insulation Kaiflex – Thermaflex/ Armacell
42.	Liquid Level Controllers / Indicators	Advance Auto / Minilec / Radar / Femac / Switzer
43.	M.S. Pipe	Jindal(Hissar) / Prakash – Surya / TATA
44.	Mainline Isolation Valve	Sant /Leader /Zoloto,
45.	Non Return Valve	Sant / Leader / Zoloto / NVR
46.	R.C.C Pipes	Indian Hume Pipe / Pragati Concrete Udyog /ISI Marked Pipes/ KK / JSP
47.	Paint- Cement Paint	All types of paints i.e., cement-based paints, Oil bound distemper, acrylic paints, plastic emulsion paints etc shall be First quality of Asian, Dulux, Nerolac make.
48.	Paint - Dry Distemper	
49.	Paints - Cement Based	
50.	Paints - External Emulsion Paint	
51.	Paints - Other Paints / Primer	All types of paints i.e., cement-based paints, Oil bound distemper, acrylic paints, plastic emulsion paints etc shall be First quality of Asian, Dulux, Nerolac make.
52.	Paints - Plastic Emulsion Paint	
53.	Paints - Resin Based Paints	
54.	Paints - Synthetic Enamel Paints	
55.	Pipe coat material (pipe protection)	RPG Raychem/Pypkote/Makphalt
56.	Pop up Connecting Assembly	Rain Bird/Dura/Lasco,
57.	Popup Spray Head	Rain Bird/Toro, USA/Nelson,
58.	Powder Coating Material pure Polyester	Jotun / Berger / Goodlass Nerolac
59.	Pressure Relief Valve	Honeywell/Leader/ Zoloto / Audco/API
60.	Pumps	Xylem / Wilo/ Grund foss
61.	PVC Pipes & fitting SWR Soil, Waste & Vent Pipes and fittings, Type B PVC Casing & Screen Pipes	Astral/ Birla Aerocon/ Ashirwad
62.	PVC Water Stops	Astral/ Birla Aerocon/ Ashirwad
63.	Polyethylene Storage Tank	Sintex / Astral/ Prince
64.	R.O. System	Kent/ HUL/ Auqagard
65.	Reinforcement Steel	SAIL/RINL/Tata/
66.	RQRC Hydrant	Harvel/Alprene/Rain Bird, USA
67.	RQRC Key	Harvel/ Aqua/ Drip& Drip
68.	Sensor Operated Auto Flushing System Urinals	Kohler / Roca/ Jaguar
69.	SFRC / RCC Manhole Covers/ Perfect RCC Grating	KK Manholes /SK Precast Concrete/ Advent concrete vision
70.	Sluice valve / NRV	Kirloskar/IVC/Zoloto/NVR/ Leader
71.	Solenoid valve	Rain Bird, USA/Toro/Nelson
72.	SS Gratings, Soap Dish Towel Rail etc.	Kohler / Roca/ Jaguar
73.	Stainless Steel	Salem Steel or as approved E-in-Charge
74.	Stainless Steel bolts, Washers and Nuts	Kundan / Puja / Atul
75.	Stainless Steel Clamps	Hilti /Intellotech Konzept
76.	Stainless steel CP Grating	Chilly / Camry
77.	Stainless Steel Pressure Plate Screws	Kundan/ Puja/ Atul
78.	Stainless Steel Screw for Fabrication and fixing of Windows	Kundan / Puja / Atul
79.	Stone ware pipes & Gully Traps	Perfect / R.K/ Hind / Anand

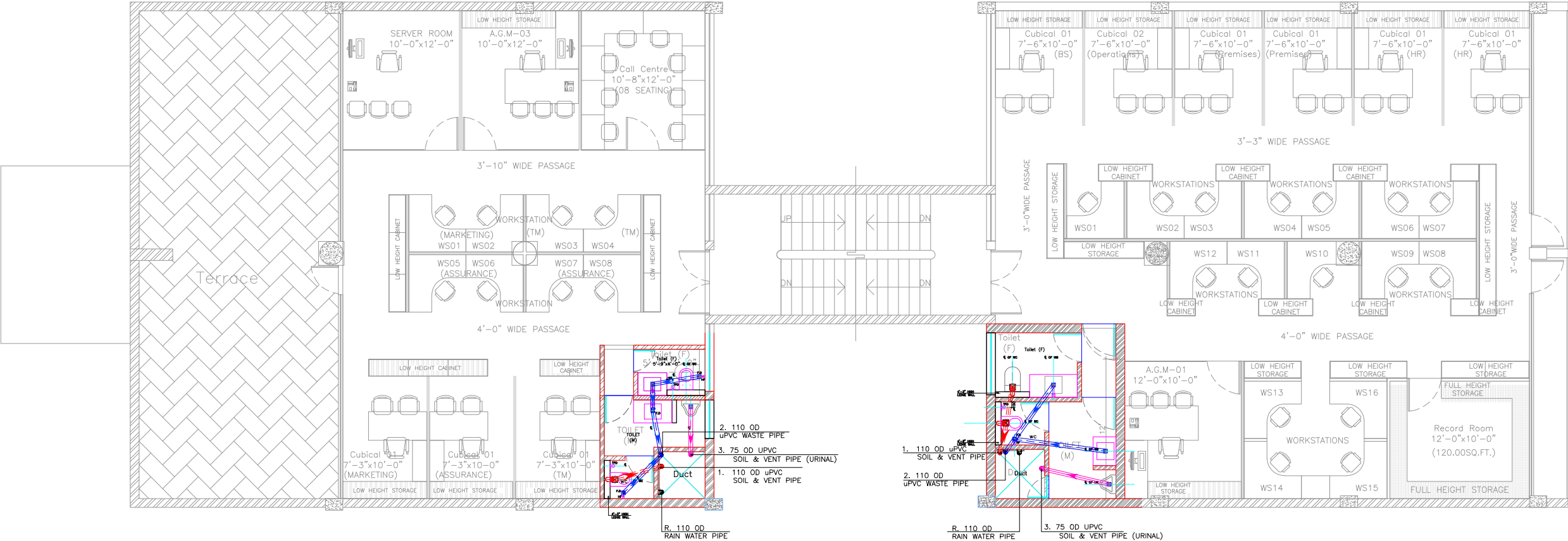
80.	Submersible Drainage pump	KSB /Grundfos/ Mather & Platt / Wilo/Xylem
81.	UPVC Pipes & fittings with Flow Guard certified	Astral/ Birla Aerocon/ Ashirwad
82.	Valve Box	Rain Bird, USA/Carson Brook, USA/Dura,
83.	VFD Pump	Kirloskar/ KSB/ Grundfos/ Mather & Platt / Ebara.
84.	Vibration Eliminator Resisto-flex Pads & Connections	Relay Corpn./ Kanwal
85.	Water Cooler	Blue Star/Voltas/Usha/Godrej
86.	Water Meter	Capstan / Kranti/ Anand/ Kant
87.	Water Proofing Materials	Dr. Fixit/ Sika / Fosroc
88.	Water supply pumps	KSB/ Grunfos/Mather & Platt/ Ebara.

List of approved make for Electrical Works

S. No.	Details of Equipment / Material	Make / Manufacturer
	PVC Conduit	Precision/AKG/ VIP
1	Ceiling Junction Boxes	Home lite/ANCHOR
2	Wires & cables	KEI/Havells/ Polycab
3	Modular Switches, Sockets etc	Legrand/Havells/L. & T.
4	Lighting Fixtures	Philips/Wipro/HAVELLS
5	M.C.B./RCCB/RCBO etc	Legrand/Havells/L&T
6	Distribution Boards	Schneider/Legrand/HAGER
7	MCCB	Schneider/Legrand/Havells
8	Change Over Switches	A.B.B./Standard/ L. & T
9	End Termination accessories	Dowells/Usha/Brecco/Cosmos
10	Telephone Cables & accessories	Havells, Krone, Finolex,
11	Fans/Exhaust fans	Crompton/Havells/USHA
12	Music Speakers	Philips/Bosch/Ahuja
13	Amplifiers	Philips/Bosch/Ahuja
14	DVR	Samsung, Honeywell, HIKVISION
15	Rg11, CAT5/CAT6 cables/Telephone wires	Legrand, Molex, D-Link, AMP
16	CCTV, Dome Camera	Honeywell, Hikvision
17	Hard Disk drive	Seagate, HIKVISION
18	Smoke/Heat/Optical Fire Detectors	Edward, Siemens, Apollo or other I.S.I. Equivalent.
19	Response Indicators, Hooters	Edward, Siemens or other ISI Approved.
20	Telephone Tag Block	Krone
21	LT Panel	CPRI approved

List of approved make for Civil Works

S. No.	Details of Equipment / Material	Make / Manufacturer
1	Cement	JK / Ultratech/ ACC
2	Sand/ Coarse Aggregate/Fine aggregate	Best locally available river sand
3	Structural Steel	TATA/ SAIL/ Jindal Steel
4	Wood	Teak Second class
5	Bricks	Best locally available table moulded bricks
6	Rebar Chemical- EPOXY	Hilti-RE 500 V4/ Wuerth-PE 500/ Fischer-EM plus 585
7	Epoxy Bonding Adhesive	CICO- Bond EPO/ Fosroc- Nitobond EP/ SIKA- Hibond
8	M16 bolt / Carbon Steel fastener- with RE 500 V3 chemical	Hilti-M16/ Fischer-RG M 16/ Wuerth M16
9	Micro Concrete	Fosroc- Rendroc RG / CICO- Microcrete / SIKA- Rep Micrprete-4
10	Waterproofing Compound	Fosroc/ Sikka/ CICO
11	Exterior Paint	Asian Paints- apex ultima/ Nerolac-Mica Marble/ Dulux- Weather Shield Max
12	Cement paint	Acro paints/ Super SNOWCEM
13	Interior Paint	Asian Paints- Health Sheild / Nerolac-Ultra Frash/ Dulux-Super Clean
14	Enamel Paints	Asian paints/ Nerolac/ Dulux
15	G.I. Pipes	Tata / Zenith / Jindal
16	uPVC/ CPVC/ PVC drain Pipes / fittings	Ashirwad/ Birla Aircon/ Astral
17	Aluminium Sections	Jindal/ Hindalco/ NALCO
18	Wall Putty	Narolac/ JK/ Asian Paint
19	Design Mix Concrete	JK / Ultratech/ ACC
20	uPVC Windows	FENESTA/ ALUPLAST/ KÖMMERLING



LEGEND:-		
1.	110 OD uPVC SOIL PIPE	①
2.	110 OD uPVC WASTE PIPE	②
R.	110OD RAIN WATER SUPPLY PIPE	④
3.	32ø CPVC DOMESTIC WATER PIPE	⑤
4.	32ø CPVC DOMESTIC WATER RISER PIPE TO OVER HEAD TANK	⑥
5.	FLOW DIRECTION	➡
6.	BALL VALVE	⊗
7.	FLOOR S,TRAP	FT ⊗
8.	FLOOR DRAIN	FD ⊗
9.	FLOOR CLEAN OUT PLUG	FCO ⊗
10.	URINAL TARP	UT ⊗
DETAIL OF PIPE CONNECTIONS		
FROM WC TO STACK.....110 OD uPVC SOIL PIPE		
FROM FT TO STACK.....110 OD uPVC WASTE PIPE		
FROM FD TO FT.....63 OD PVC WASTE PIPE		
FROM WB WASTE TO FT.....40 OD PVC WASTE PIPE		

1.	SEWERAGE PIPE LINE	—
2.	STORM WATER PIPE LINE	- - -
3.	WASTE WATER PIPE LINE	—
4.	WATER TANK PIPE LINE	—
5.	SUBMERSIBLE PIPE LINE	—

2nd Floor plumbing layout plan

for tender drawing

PROJECT :

INTERIOR FURNISHING WORKS OF CANARA BANK CIRCLE OFFICE, KARNAL (H.R)

CLIENT NAME & ADDRESS :

केनरा बैंक Canara Bank

सिंडिकेट Syndicate

Together We Can

Circle office, Baysite 17-18, sec-12, karnal- 132001,
Mob:- 90100-75111
e,ail:- pecokar@canarabank.com

CONSULTANTS NAME & ADDRESS :

VaASTU Vikalp Architects

Sh-24, First Floor, S2S Square, Garh Road, Meerut- 250002
Ph:9899328602, 9997591118,
vva.global@gmail.com

ARCHITECT:

Ar. Rahul Chaudhary

NORTH:

N

DRAWING TITLE :

PROPOSED 2ND FLOOR PLUMBING LAYOUT PLAN

SHEET No

1

DEALT :

Ar. Rahul Chaudhary

CHECKED :

Ar. Manoj Kumar

SCALE :

1:75

DATE :

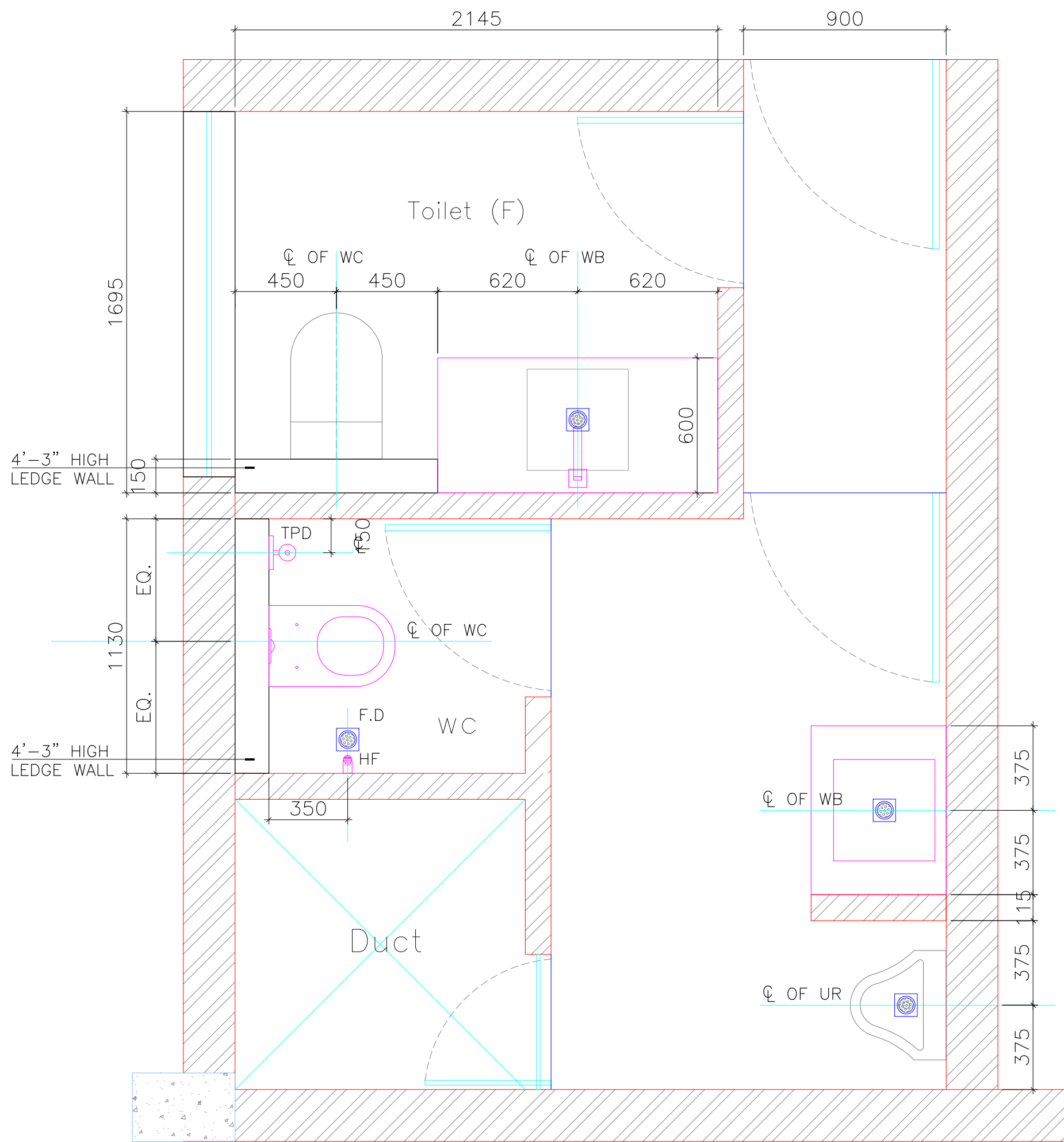
18Nov'2023

DRAWING NO. :

VVA/BANK/CNR/CO/PL/6.1

OPTION/ REVISION

R-0



1st & 2nd Floor plumbing - right side toilet part layout plan

for tender drawing

PROJECT :

INTERIOR FURNISHING WORKS OF CANARA BANK CIRCLE OFFICE, KARNAL (H.R)

CLIENT NAME & ADDRESS :



Circle office, Baysite 17-18, sec-12, karnal- 132001,
Mob:- 90100-75111
e,ail:- pecokar@canarabank.com

CONSULTANTS NAME & ADDRESS :



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Ph:9899328602, 9997591118,
vva.global@gmail.com

ARCHITECT:

Ar. Rahul Chaudhary

NORTH:



DRAWING TITLE :

1st & 2nd Floor plumbing - right side toilet part layout plan

SHEET No

1/1

DEALT :

Ar. Rahul Chaudhary

CHECKED :

Ar. Manoj Kumar

SCALE :

1:75

DATE :

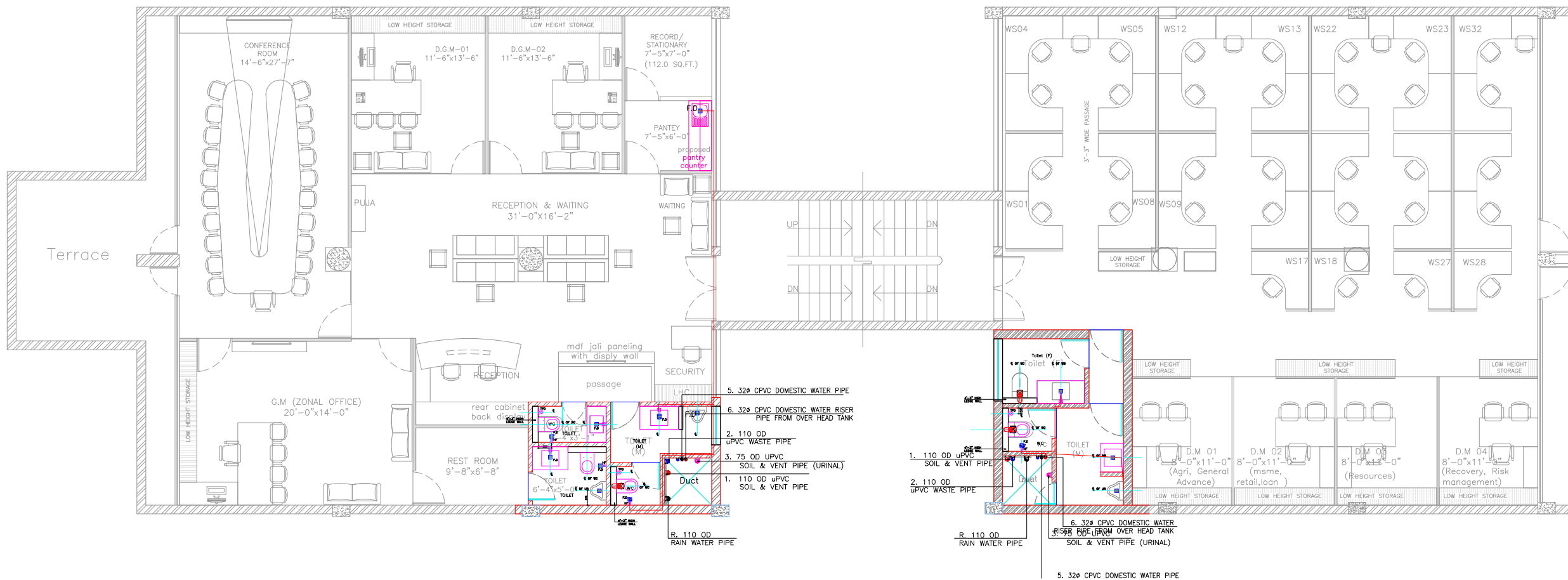
18Nov'2023

DRAWING NO. :

VVA/BANK/CNR/CO/PL/6.6

OPTION/ REVISION

R-0



LEGEND:-		
1.	110 OD uPVC SOIL PIPE	①
2.	110 OD uPVC WASTE PIPE	②
R.	110OD RAIN WATER SUPPLY PIPE	④
3.	32ø CPVC DOMESTIC WATER PIPE	⑤
4.	32ø CPVC DOMESTIC WATER RISER PIPE TO OVER HEAD TANK	⑥
5.	FLOW DIRECTION	➡
6.	BALL VALVE	⋈
7.	FLOOR S,TRAP	FT Ⓜ
8.	FLOOR DRAIN	FD Ⓜ
9.	FLOOR CLEAN OUT PLUG	FCO Ⓜ
10.	URINAL TARP	UT Ⓜ
DETAIL OF PIPE CONNECTIONS		
FROM WC TO STACK.....110 OD uPVC SOIL PIPE		
FROM FT TO STACK.....110 OD uPVC WASTE PIPE		
FROM FD TO FT.....63 OD PVC WASTE PIPE		
FROM WB WASTE TO FT.....40 OD PVC WASTE PIPE		

1.	SEWERAGE PIPE LINE	—
2.	STORM WATER PIPE LINE	- - -
3.	WASTE WATER PIPE LINE	—
4.	WATER TANK PIPE LINE	—
5.	SUBMERSIBLE PIPE LINE	—

1st Floor water supply layout plan

Internal

for tender drawing

PROJECT :
INTERIOR FURNISHING WORKS OF CANARA BANK CIRCLE OFFICE, KARNAL (H.R)

CLIENT NAME & ADDRESS :



केनरा बैंक Canara Bank
A Government of India Undertaking
सिंडिकेट Syndicate Together We Can

Circle office, Baysite 17-18, sec-12, karnal- 132001,
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e,ail:- pecokar@canarabank.com

CONSULTANTS NAME & ADDRESS :



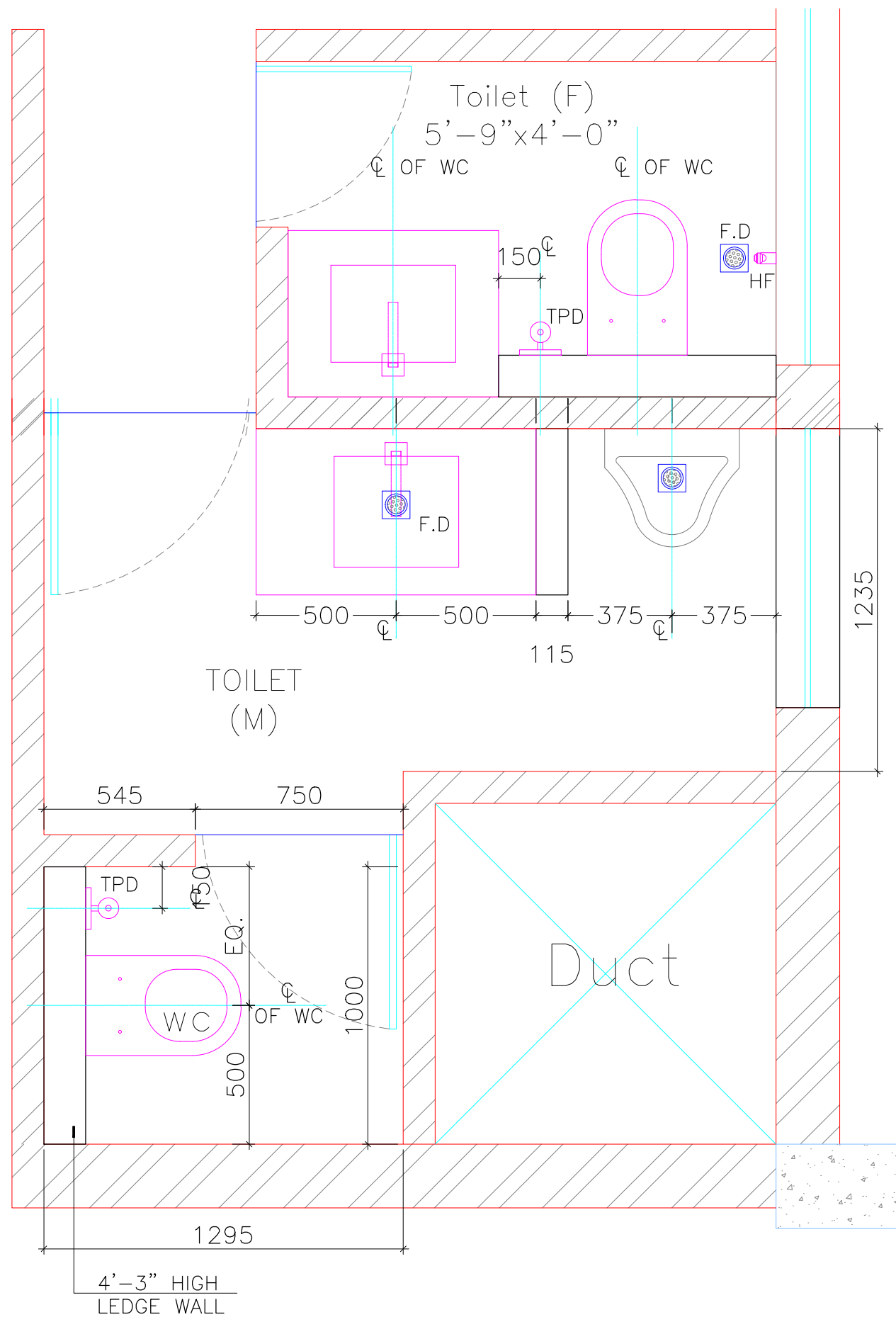
Vaastu Vikalp
Architects

Sh-24, First Floor, S2S Square, Garh Road, Meerut- 250002
Ph:9899328602, 9997591118,
vva.global@gmail.com

ARCHITECT:	NORTH: 
Ar. Rahul Chaudhary	

DRAWING TITLE : 1st Floor water supply layout plan	SHEET No 1 1
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DEALT : Ar. Rahul Chaudhary	CHECKED : Ar. Manoj Kumar
SCALE : 1:75	DATE : 18Nov'2023
DRAWING NO. : WA/BANK/CNR/CO/PL/6.4	OPTION/ REVISION R-0



for tender drawing

PROJECT :
INTERIOR FURNISHING WORKS OF CANARA
BANK CIRCLE OFFICE, KARNAL (H.R)

CLIENT NAME & ADDRESS :



Circle office, Baysite 17-18, sec-12,
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CONSULTANTS NAME & ADDRESS :



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Garh Road, Meerut- 250002
Ph:9899328602, 9997591118,
vva.global@gmail.com

ARCHITECT:

Ar. Rahul Chaudhary

NORTH:



DRAWING TITLE :
2nd floor plumbing - left side toilet part
layout plan

SHEET No
1
1

DEALT :
Ar. Rahul Chaudhary

CHECKED :
Ar. Manoj Kumar

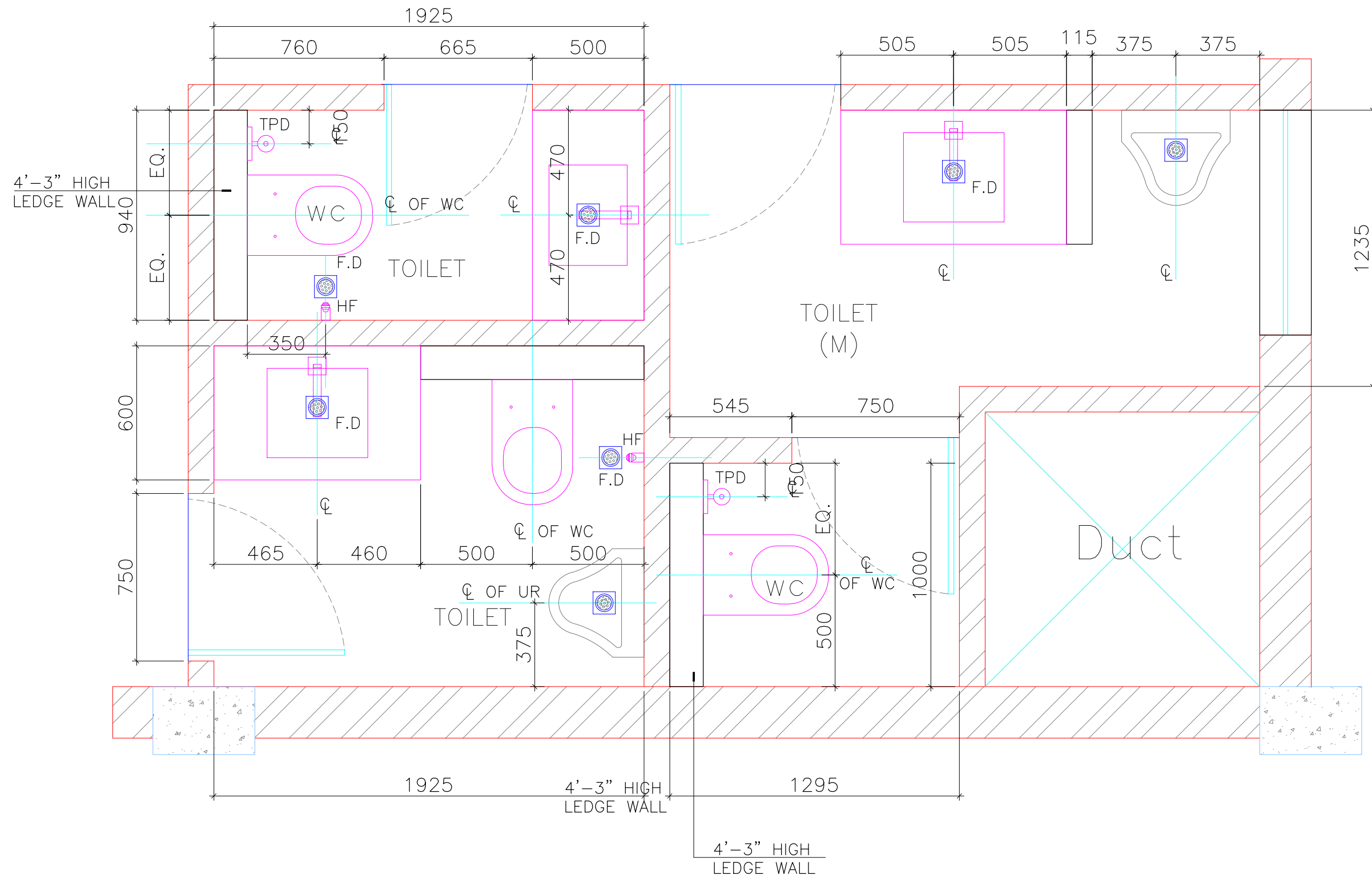
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DATE :
18Nov'2023

DRAWING NO. :
VVA/BANK/CNR/CO/PL/6.5

OPTION/ REVISION
R-0

2nd floor plumbing - left side toilet part layout plan



1st floor plumbing - left side toilet part layout plan

for tender drawing

PROJECT :

INTERIOR FURNISHING WORKS OF CANARA BANK CIRCLE OFFICE, KARNAL (H.R)

CLIENT NAME & ADDRESS :



Circle office, Baysite 17-18, sec-12, karnal- 132001,
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Ar. Rahul Chaudhary

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DRAWING TITLE :

1st floor plumbing - left side toilet part layout plan

SHEET No

1
1

DEALT :

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CHECKED :

Ar. Manoj Kumar

SCALE :

1:75

DATE :

18Nov'2023

DRAWING NO. :

VVA/BANK/CNR/CO/PL/6.7

OPTION/ REVISION

R-0