

TAG	BS-1
DESCRIPTION	BAR SCREEN
SPACING	30mm
MOC	MSEP
QUANTITY	1NO.
SIZE	0.8m x 1.2m

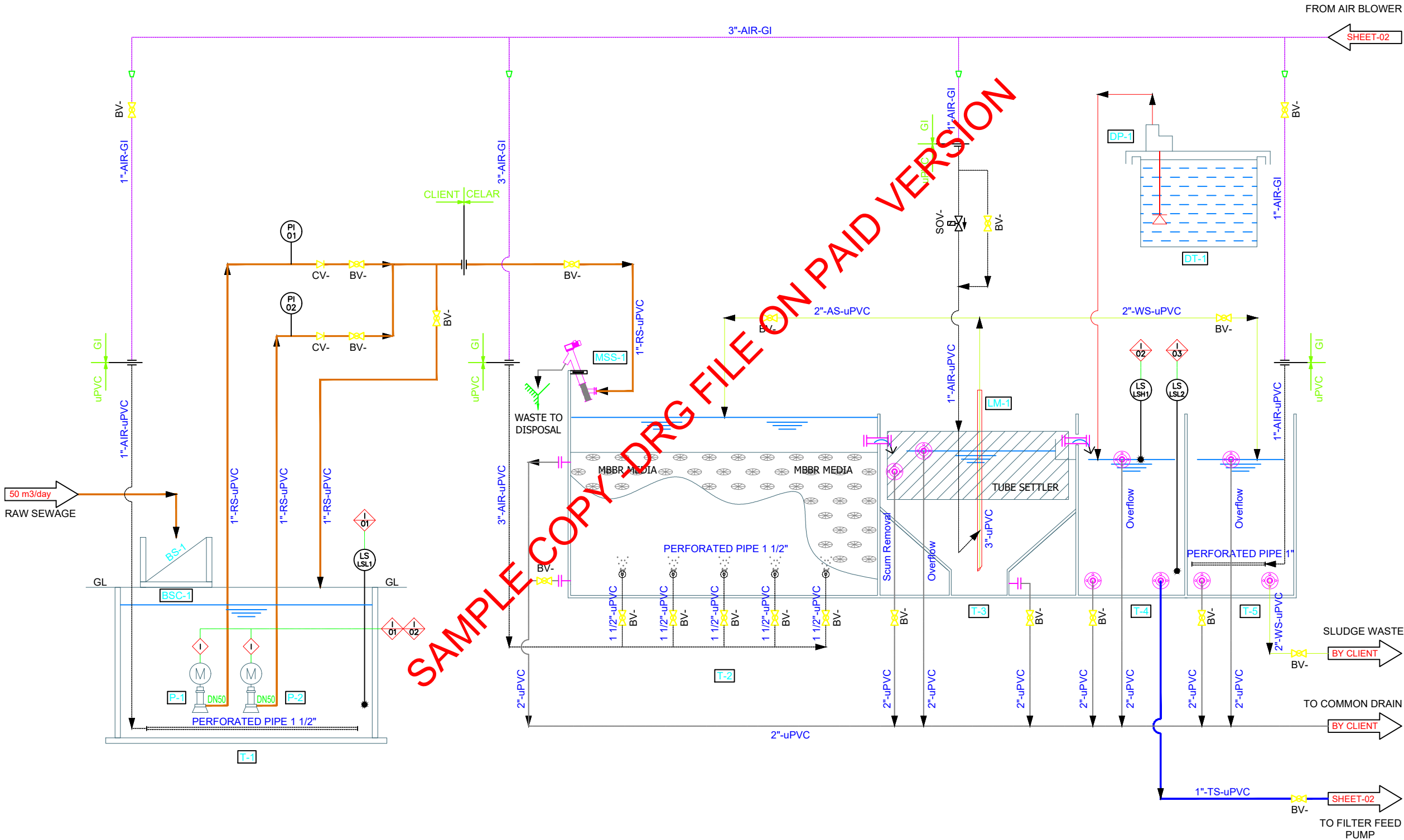
TAG	BSC-1 (BY CLIENT)
DESCRIPTION	BAR SCREEN CHAMBER
MOC	MS-EP (BY CLIENT)
QUANTITY	1 No.
CAPACITY	0.65 m3
DIMENSION	0.8m x 0.8m x 1.0m

TAG	T-1 (BY CLIENT)
DESCRIPTION	EQUALIZATION (UNDERGROUND)
CAPACITY	6.5 m3
MOC	RCC / GRP
QUANTITY	1NO.
SIZE	1.8m x 1.8m x 2.0 + 0.5m

TAG	P-1 & P-2 (BY CLIENT)
DESCRIPTION	SEWAGE TRANSFER PUMPS
CAPACITY	2.1 m3/hr @ 10 m
MOC	CI BODY, SS IMPELLER
QUANTITY	2NOS. 1 DUTY + 1 STANDBY
MAKE	LOWARA / EBARA / EQUAL

TAG	MSS-1
DESCRIPTION	MINI SCREW SCREENS
CAPACITY	2.1 m3/hr
MOC	SS316
QUANTITY	1NO. 1 DUTY
TYPE	AUTOMATIC

TAG	T-2
DESCRIPTION	MBBR TANK
CAPACITY	25.3 m3
MOC	MS-EP
QUANTITY	1NO.
SIZE	4.0m x 2.0m x 3.0m



TAG	T-3
DESCRIPTION	SETTLING TANK
CAPACITY	10.8 m3
MOC	MS-EP
QUANTITY	1NO.
SIZE	1.8m x 2.0m x 3.0m

TAG	T-4
DESCRIPTION	FILTER FEED TANK
CAPACITY	3.0 m3
MOC	MS-EP
QUANTITY	1NO.
SIZE	1.0m x 1.0m x 3.0m

TAG	T-5
DESCRIPTION	SLUDGE HOLDING TANK
CAPACITY	3.0 m3
MOC	MS-EP
QUANTITY	1NO.
SIZE	1.0m x 1.0m x 3.0m

TAG	AB-1 & 2
DESCRIPTION	AIR BLOWERS (EQT+MBBR+AIR LIFT+SHT)
CAPACITY	150 m3/hr @ 350 mBAR
MOC	AS PER MANUFACTURER STD.
QUANTITY	2NOS. 1 DUTY + 1 STANDBY
MAKE	FLUIDTEC / EQUAL

TAG	LM-1
DESCRIPTION	AIR LIFTING MECHANISM
FLOW	1-2 m3/hr
MOC	PVC
QUANTITY	2 NOS. 2 DUTY

SHOP DRAWING

TAG	P-1 & 2
DESCRIPTION	FILTER FEED PUMP/BACK WASH PUMP
CAPACITY	2.1 m3/hr @ 25-30 m
MOC	CASING-CI/ IMPELLER & SHAFT-SS
QUANTITY	2NOS. 1 DUTY + 1 STANDBY
MAKE	LOWARA / EBARA / EQUAL

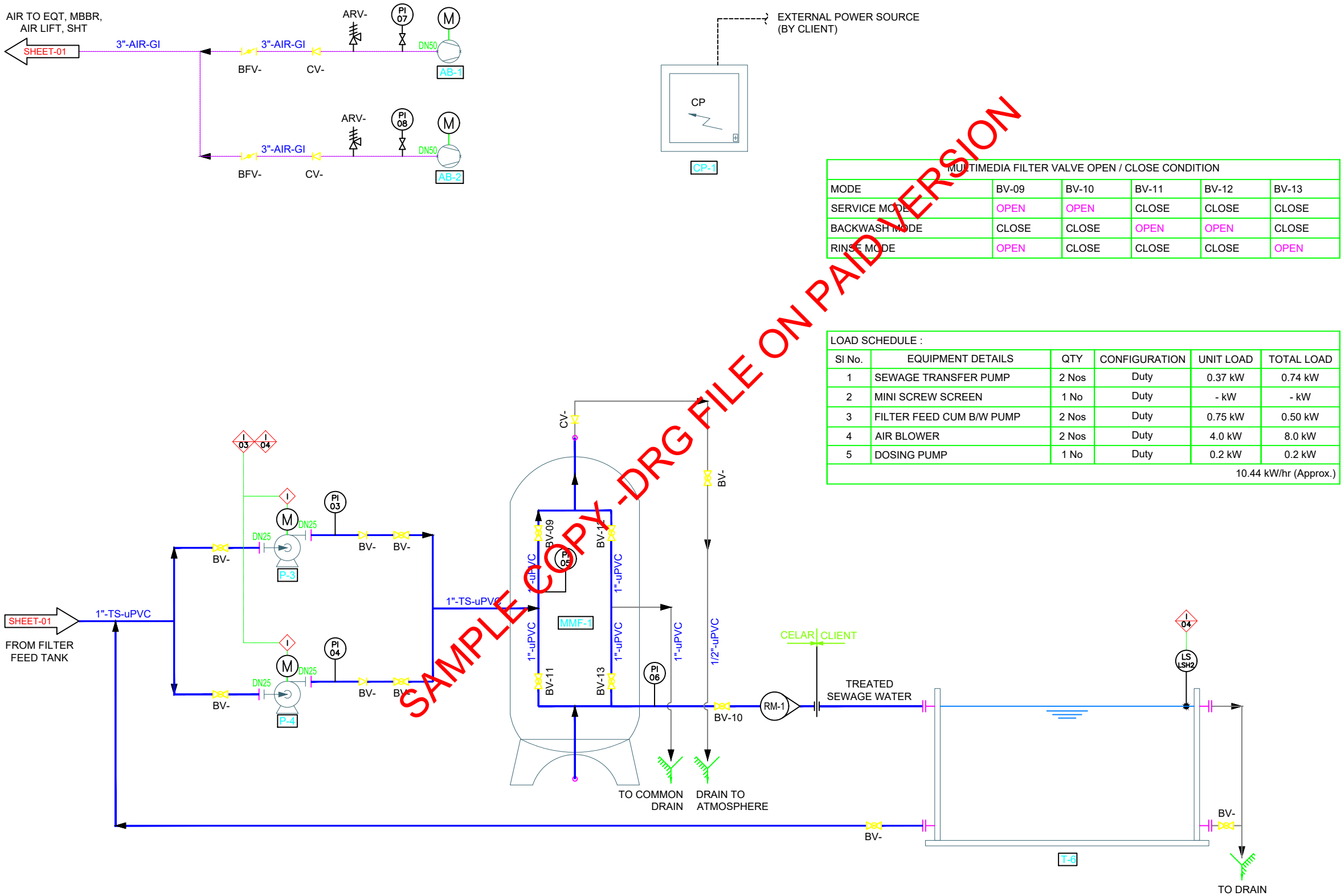
TAG	MMF-1 (MANUAL)
DESCRIPTION	MULTI MEDIA FILTER
FLOW	2.1 m3/h (24" x 72")
MOC	FRP
QUANTITY	1 NOS. 1 DUTY
MAKE	AVENTURA / PANTAIR

TAG	DT-1
DESCRIPTION	DISINFECTANT DOSING TANK (HYPO)
CAPACITY	50 L
MOC	PE
QUANTITY	1 NOS. 1 DUTY
MAKE	JIEMMING / EQUAL

TAG	DP-1
DESCRIPTION	DISINFECTANT DOSING PUMP (HYPO)
CAPACITY	0-4 LPH @ 2BAR
MOC	PP
QUANTITY	1 NOS. 1 DUTY
MAKE	SEKO / EQUAL

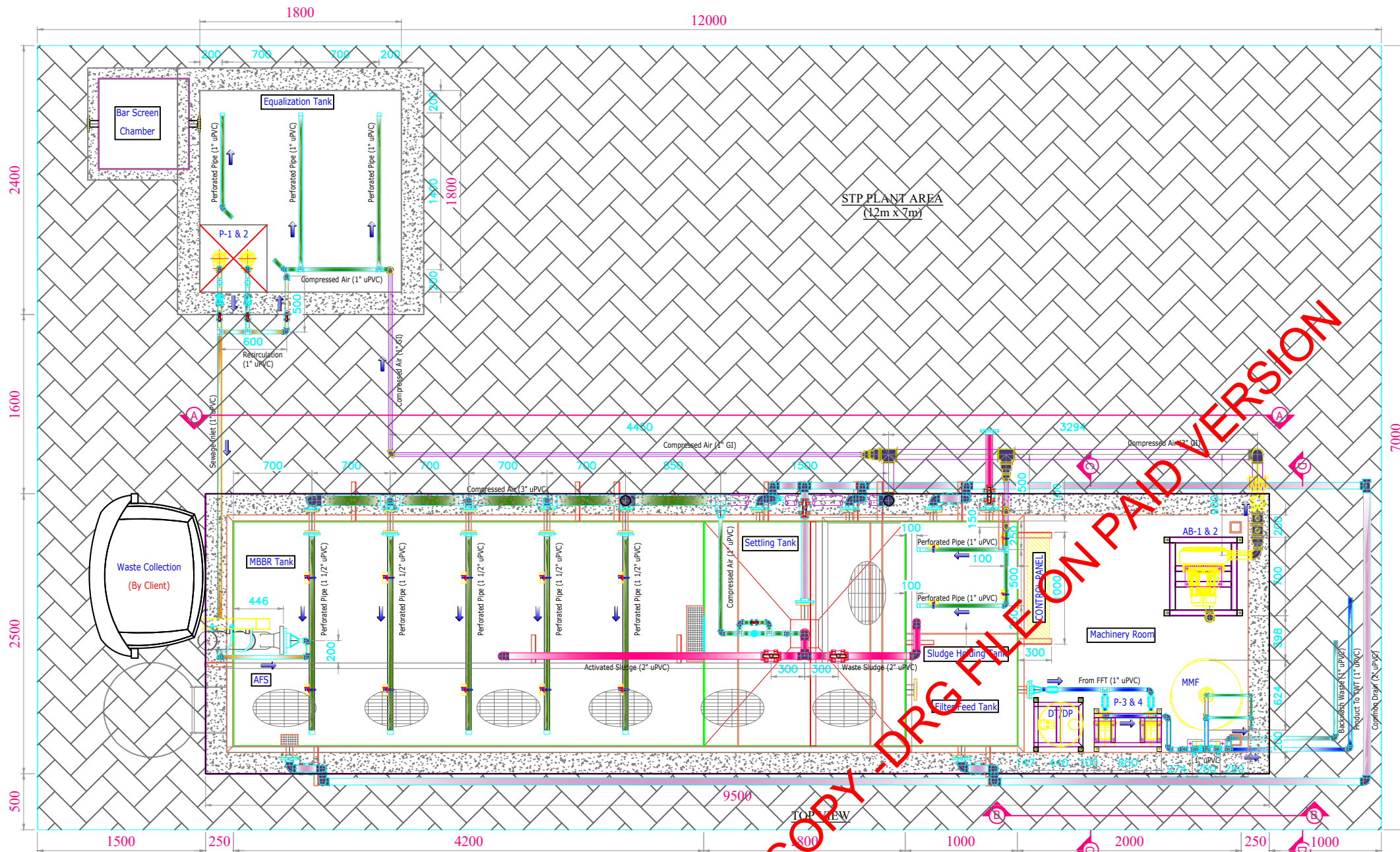
TAG	T-6 (BY CLIENT)
DESCRIPTION	TREATED WATER TANK
CAPACITY	AS PER SITE REQUIREMENT
MOC	RCC / GRP
QUANTITY	1NO.
SIZE	AS PER SITE REQUIREMENT

TAG	CP-1
DESCRIPTION	CONTROL PANEL
QUANTITY	1NO.
SIZE	-

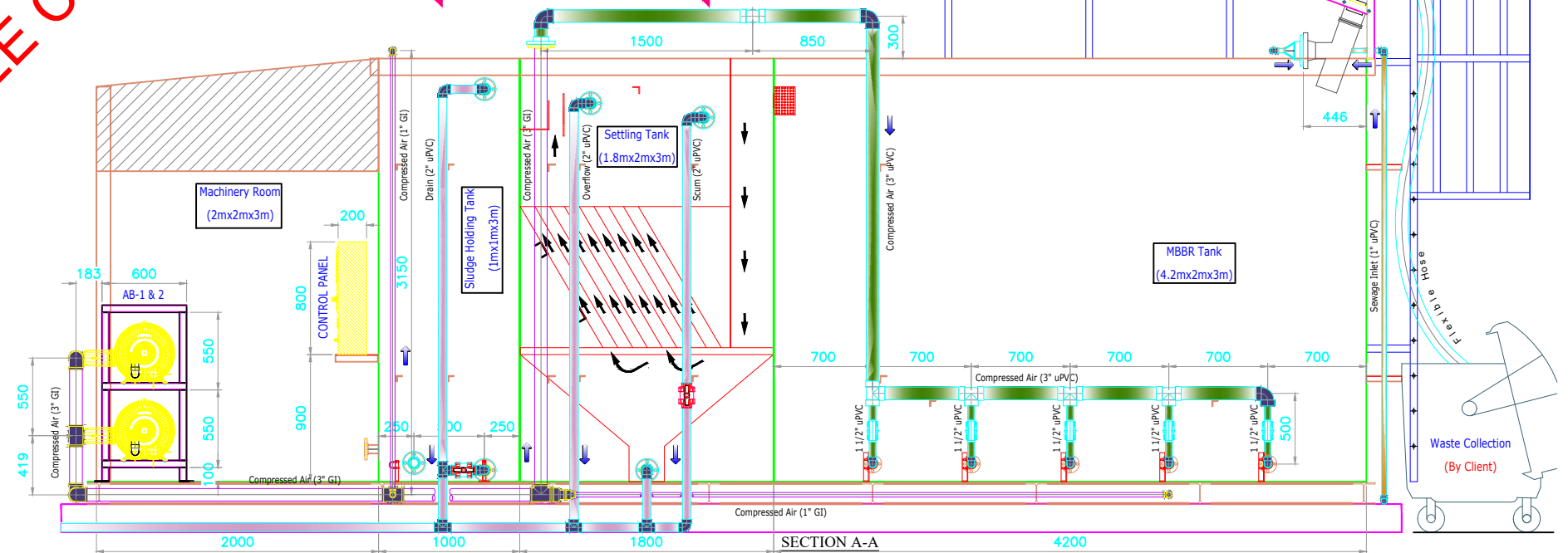
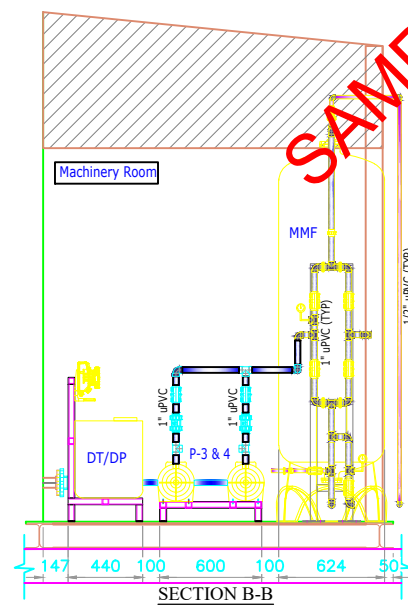
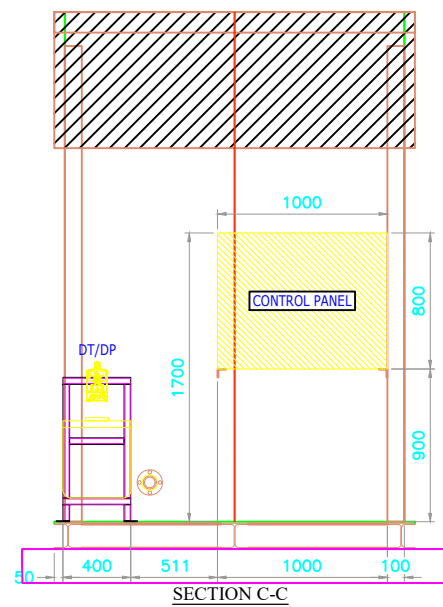
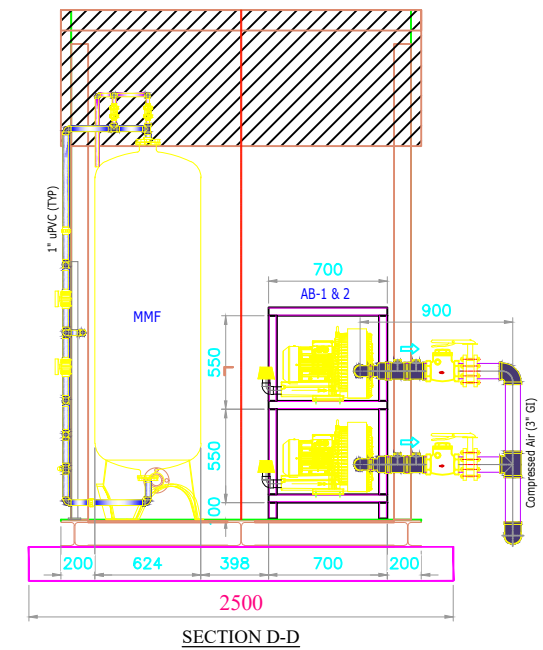


SHOP DRAWING

VALVES SYMBOLS		INSTRUMENT SYMBOLS		MECHANICAL SYMBOLS		EQUIPMENT		PIPE LINE/PIPING		GENERAL	
BUTTERFLY BALL GATE GLOBE NEEDLE SWING CHECK DUO CHECK SOLENOID DIAPHRAGM SPRING LOADED PRESSURE CONTROL MOTORIZED SAMPLE VALVE INJECTION PLUG VALVE, STRAIGHT PORT PRESSURE RELIEF THREE-WAY, BASIC SYMBOL FLOW CONTROL PNEUMATIC BALL PNEUMATIC BUTTERFLY MOTORIZED BALL MOTORIZED BUTTERFLY ANGLE, BASIC SYMBOL AIR VENT		PRESSURE GAUGE PRESSURE SWITCH PRESSURE TRANSMITTER PRESSURE DIFFERENTIAL GAUGE PRESSURE DIFFERENTIAL SWITCH LEVEL TRANSMITTER LEVEL SWITCH FLOW METER FLOW SWITCH MOTOR DANIEL SENSOR ORIFICE FLOW METER (VENTURI TYPE) HAND OPERATED SWITCH (STATUS INDICATION IN CONTROL ROOM UNLESS OTHERWISE STATED) SOLENOID VALVE NORMALLY ENERGIZED WITH LOCAL RESET CONTROL (ARROW SHOWS DIRECTION OF FLOW WHEN DE-ENERGIZED) WHEN ENERGIZED FLOW IS STRAIGHT THROUGH INSTRUMENT SIGNAL LINE (PNEUMATIC, ELECTRIC, HYDRAULIC) ARROW (IF INCLUDED) INDICATES DIRECTION OF SIGNAL FLOW INSTRUMENT SIGNAL LINES (JUNCTIONS) INSTRUMENT SIGNAL LINES (CROSSINGS) LOCAL MOUNTED INSTRUMENT (BASIC SYMBOL) XX = FIRST TWO DIGITS OF UNIT NUMBER Y = INSTRUMENT FUNCTION CODE ZZZ = SERIAL NUMBER CONTROL ROOM MOUNTED INSTRUMENT LOCAL PANEL MOUNTED INSTRUMENT SIGNAL TO/FROM TELEMETRY		BELLOW (FLANGED) FLEXIBLE HOSE (FLANGED) STEAM TRAP ASSEMBLY DRAIN TRAP (BASIC SYMBOL) CONTINUOUS DRAINER STEAM TRAP WITHOUT STRAINER THERMOSTATIC OR THERMODYNAMIC TYPE OPEN VENT CORROSION COUPON / COSASCO FITTING FUNNEL VORTEX BREAKER FLARE PULSATION DAMPENER ROTAMETER STRAINER, FILTER Y-TYPE STRAINER VORTEX BREAKER FLAME ARRESTER SILENCER SIGHT GLASS ELECTROMAGNETIC FLOW METER ROTA METER PIG SIGNALLER TIE-IN SCOPE DEFINITION DRAIN AIR VENT WATER METER		CENTRIFUGAL PUMP ROTARY POSITIVE DISPLACEMENT PUMP RC = RECIPROCATING COMPRESSOR, (SINGLE-STAGE) RP = RECIPROCATING PUMP METERING PUMP AIR BLOWER ROTARY COMPRESSOR C = CENTRIFUGAL P = POSITIVE DISPLACEMENT RECIPROCATING ENGINE AIR FAN HEATER BASKET FILTER STEAM TURBINE SETTLING TANK/CLARIFIER TANK (SCALE 1:2) VESSELS (SCALE 1:2) VESSEL WITH SUMP (SCALE 1:2) MANHOLE COVER EQUIPMENT NOZZLES		RAW SEWAGE TREATED SEWAGE SLUDGE LINE COMPRESSED AIR (G) COMPRESSED AIR (UPVC) OCU AIR DRAIN & OVERFLOW DOS LINE ISOLATION FUNCTION (CONNECTED) FENCE INDICATION OF FALL (OR RISE) PIPING HEADER INDICATION OF CHANGE OF PIPING CLASS SPECTACLE BLIND (CLOSED) SPECTACLE BLIND (OPEN) SPADE BLIND TRACED LINE INSULATION HOSE CONNECTION PIPELINE TEE CONNECTION (BARRED) MAIN PROCESS LINE (ARROW INDICATES DIRECTION OF FLUID FLOW) SECONDARY PROCESS LINE AND UTILITY LINE FUTURE LINE ECCENTRIC REDUCER, FLUSH TOP ECCENTRIC REDUCER, FLUSH BOTTOM INSULATING COUPLING INSULATING GASKET SET INSULATING SPOOL SPOOL PIECE CONCENTRIC REDUCER LINE CROSSING, UNCONNECTED		CONTINUATION ARROWS : 1) LEFT SIDE OF SHEET : FROM EQUIPMENT ON PREVIOUS SHEET SHEET nr. TO EQUIPMENT ON PREVIOUS SHEET SHEET nr. 2) RIGHT SIDE OF SHEET : TO EQUIPMENT ON NEXT SHEET SHEET nr. FROM EQUIPMENT ON NEXT SHEET SHEET nr. REVISION TRIANGLE PIPING IDENTIFICATION LINE NUMBER 2'- P 15 003-600CS3 PIPING CLASS/MATERIAL LINE SUB-NUMBER FIRST TWO DIGITS OF PROCESS UNIT 200 SERVICE INDICATION NOMINAL PIPE SIZE ABBREVIATION (GENERAL) A/G - ABOVE GROUND B/G - BELOW GROUND CC - CORROSION COUPON CI - CHEMICAL INJECTION CK - CASTELLO KEYED VALVE D - DRAIN EL - ELEVATION FB - FULL BORE FO - FLUSHING OUT GO - GEAR OPERATED HC - HOSE CONNECTION IH - INSPECTION HOLE LC - LOOKED CLOSED LO - LOOKED OPEN M - MOTOR MH - MAIN HOLE MOV - MOTOR OPERATED VALVE NCF - NORMALLY CLOSED NNF - NORMALLY NO FLOW NO - NORMALLY OPEN PV - PRESSURE VACUUM VALVE RE - REFERENCE ELECTRODE RO - RESTRICTION ORIFICE RV - RELIEF VALVE SC - SAMPLE CONNECTION SCR - SCREWED CONNECTION SP - SET POINT TSO - TIGHT SHUT OFF UC - UTILITY CONNECTION V - VENT CS - CARBON STEEL PE - POLY ETHYLENE PP - POLY PROPYLENE GRE - GLASS REINFORCED EPOXY SS - STAINLESS STEEL CS3 - CARBON STEEL WITH 3MM CORROSION ALLOWANCE CS10(PE) - CARBON STEEL WITH 1MM CORROSION ALLOWANCE & POLYETHYLENE LINED	
BASIC SYMBOL ANGLE VALVE ACTUATING MEDIUM FAILURE OPEN ACTUATING MEDIUM FAILURE CLOSE WITH ADJUSTABLE MECHANICAL MINIMUM STOP WITH ADJUSTABLE MECHANICAL MAXIMUM STOP		WITH HANDWHEEL DIRECTLY OPERATED BY HANDWHEEL WITH LOCK-UP DEVICE SELF ACTING WITH ADJUSTABLE MECHANICAL MIN. & MAX. STOP FLOW CONTROL VALVE		ABBREVIATIONS (INSTRUMENTS) ARW - ANTI-RESET WIND-UP DE - DE-ENERGIZED DIR - DIRECT ACTION ESD - EMERGENCY SHUTDOWN H - HIGH HH - HIGH HIGH O/C - LIMIT SWITCHES FOR OPEN/CLOSE POSITION OF VALVE TVP - TRUE VAPOUR PRESSURE L - LOW LL - LOW LOW MR - MANUAL RESET MV - MEASURED VALUE OR - OVERRIDE SR - SPLIT RANGE SV - SET VALUE SERVICE INDICATION P = PROCESS G = INERT GAS S = STEAM / CONDENSATE W = WATER A = AIR D = DRAIN F = FUEL R = REFRIGERANT B = BLOW-DOWN AND RELIEF K = KILL LINE C = CHEMICAL		NOTES 1) INSTRUMENTS ARE NUMBERED SEQUENTIALLY ACCORDING TO THE PROPERTY MEASURED (FIRST LETTER CODE) 2) SEPARATE GROUPS ARE TO BE FORMED BY : PRIMARY FLOW ELEMENTS PRESSURE POINT (WITH ELEMENT) LOCAL PRESSURE GAUGES PRESSURE POINT (WITHOUT ELEMENT) TEMPERATURE POINT (THERMOWELLS WITH ELEMENT) LOCAL TEMPERATURE INDICATORS TEMPERATURE POINT (THERMOWELLS WITHOUT ELEMENT) 3) INDICATE NEXT TO CIRCLE, HIGH (H), HIGH HIGH (HH), LOW(L), LOW LOW(LL) OPEN(O) CLOSE(C) FUNCTION 4) HAND OPERATION-MANUAL LOADER HC HBS(HBZ) HSB(HZ) 5) ANY OTHER PROPERTY -X- INDICATE NEXT TO CIRCLE PROPERTY OF MEASUREMENT (a) OR FUNCTION (b) (a) EVACUATION ALARM (b) BY-PASS					
SHOP DRAWING											



TAG	DESCRIPTION	SIZE / CAP	MOC	QTY
T-1 (BY CLIENT)	BAR SCREEN CHAMBER	0.65m ³ (0.8m x 0.8m x 1.0m)	MS-EP	1 NO.
T-2 (BY CLIENT)	EQUALIZATION TANK (UG)	6.5m ³ (1.8m x 1.8m x 2.0 + 0.5m)	RCC/GRP	1 NO.
T-3	MBBR TANK	25.2m ³ (4.2m x 2.0m x 3.0m)	MS-EP	1 NO.
T-4	SETTLING TANK	10.8m ³ (1.8m x 2.0m x 3.0m)	MS-EP	1 NO.
T-5	FILTER FEED TANK	3.0m ³ (1.0m x 1.0m x 3.0m)	MS-EP	1 NO.
T-6	SLUDGE HOLDING TANK	3.0m ³ (1.0m x 1.0m x 3.0m)	MS-EP	1 NO.
T-7 (BY CLIENT)	TREATED WATER TANK	AS PER SITE CONDI.	RCC/GRP	1 NO.
P-1 & 2	RAW TRANSFER PUMP	2.1m ³ /hr @ 10m	CI BODY, SS IMPELLER	2 NOS. (1D+1S)
P-3 & 4	FILTER FEED CUM BW PUMP	2.3m ³ /hr @ 25-30m	CI BODY, SS IMPELLER	2 NOS. (1D+1S)
P-5	FILTER PRESS FEED PUMP	2.0m ³ /hr @ 40m	-	1 NO.
AB-1 & 2	AIR BLOWER	AS PER MANUFA. STD.	-	2 NOS. (1D+1S)
AFS	AUTOMATIC FINE SCREEN	150m ³ /hr @ 350 Bar	SS316	1 NO.
MMF	MULTIMEDIA FILTER	21" x 62"	FRP	1 NO.
DT/DP	CHLORINE DOSING SYSTEM	50 L / 0-4 LPH @ 2 Bar	PE	1 NO.
CP	CONTROL PANEL	1.0m x 0.2m x 0.8m	-	1 NO.
PLANT ROOM	PLANT ROOM	2m x 2m x 3m	GI SHEET	1 NO.



6.00

6B

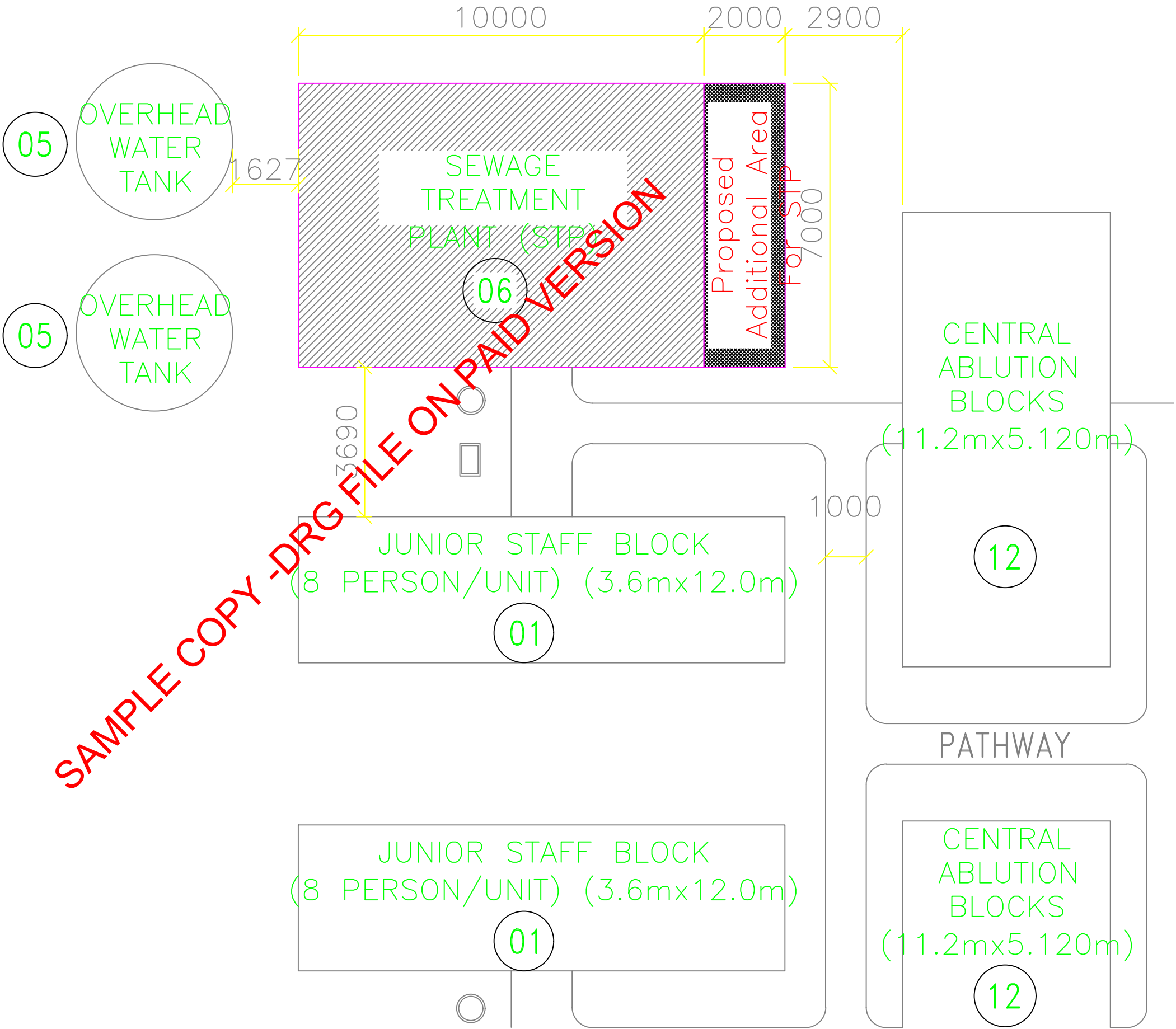
ELEC. SUB-STATION/LV/
GENERATOR ROOM

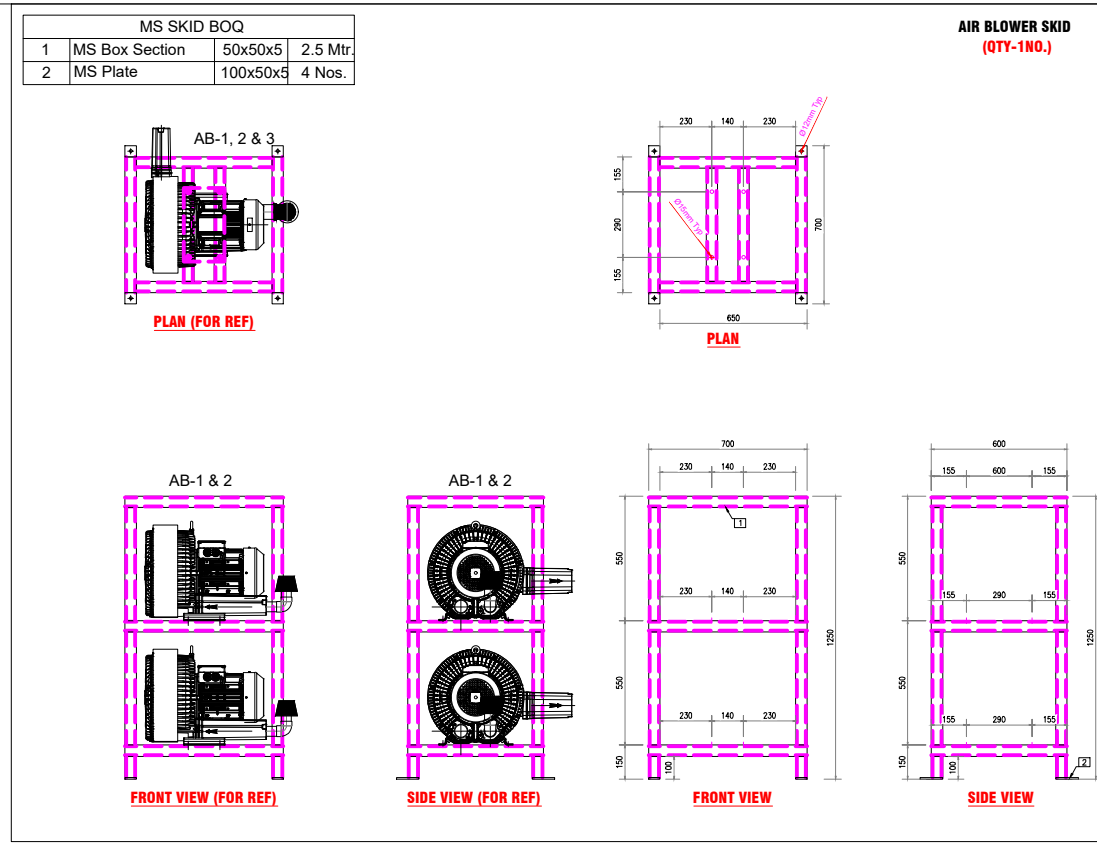
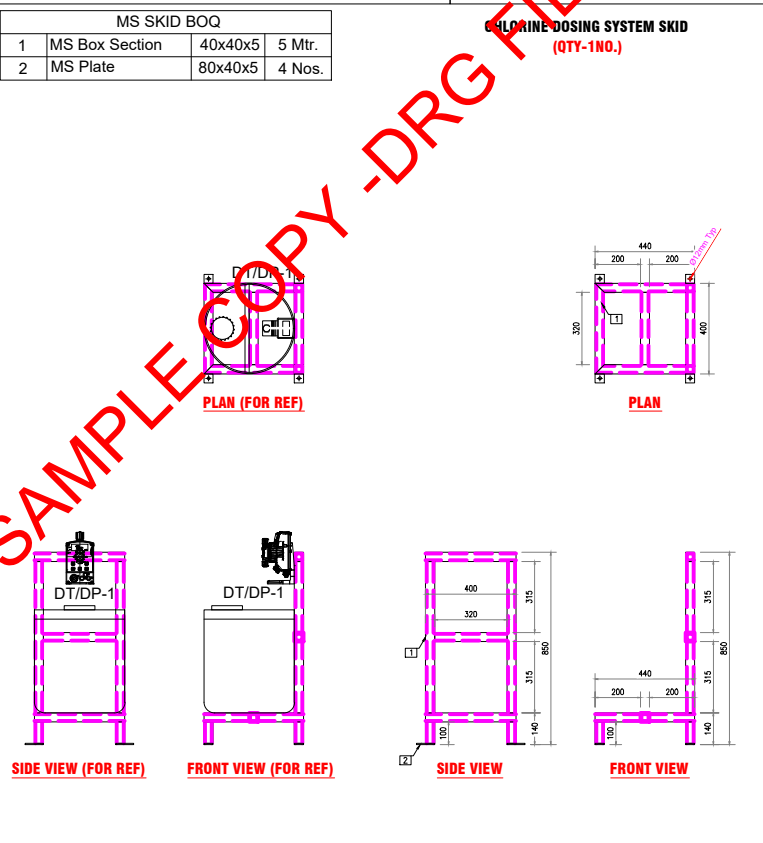
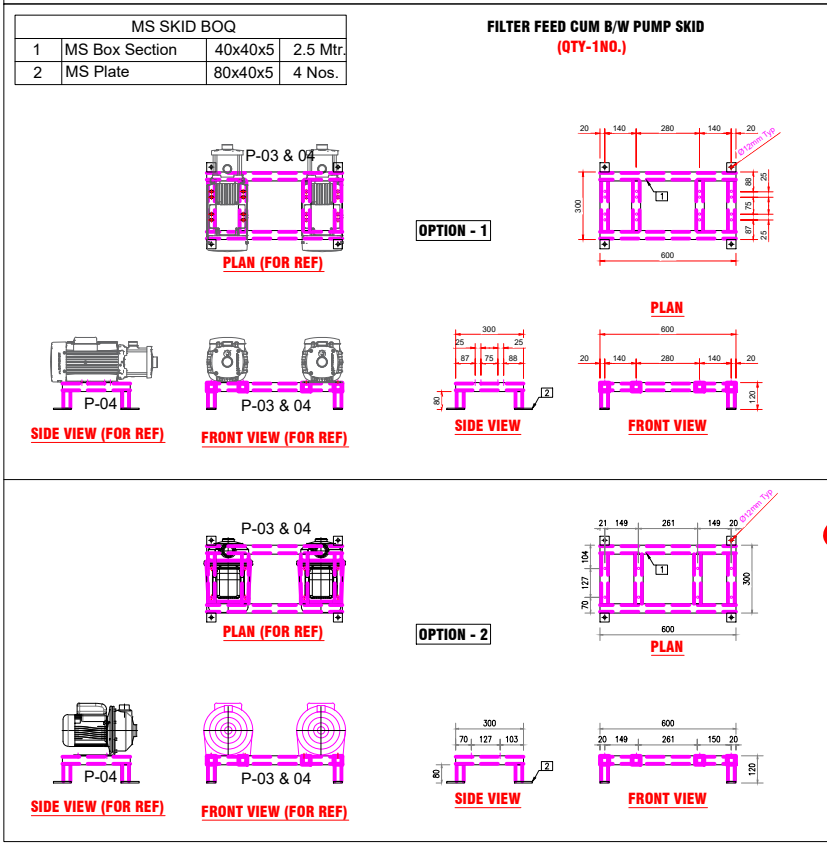
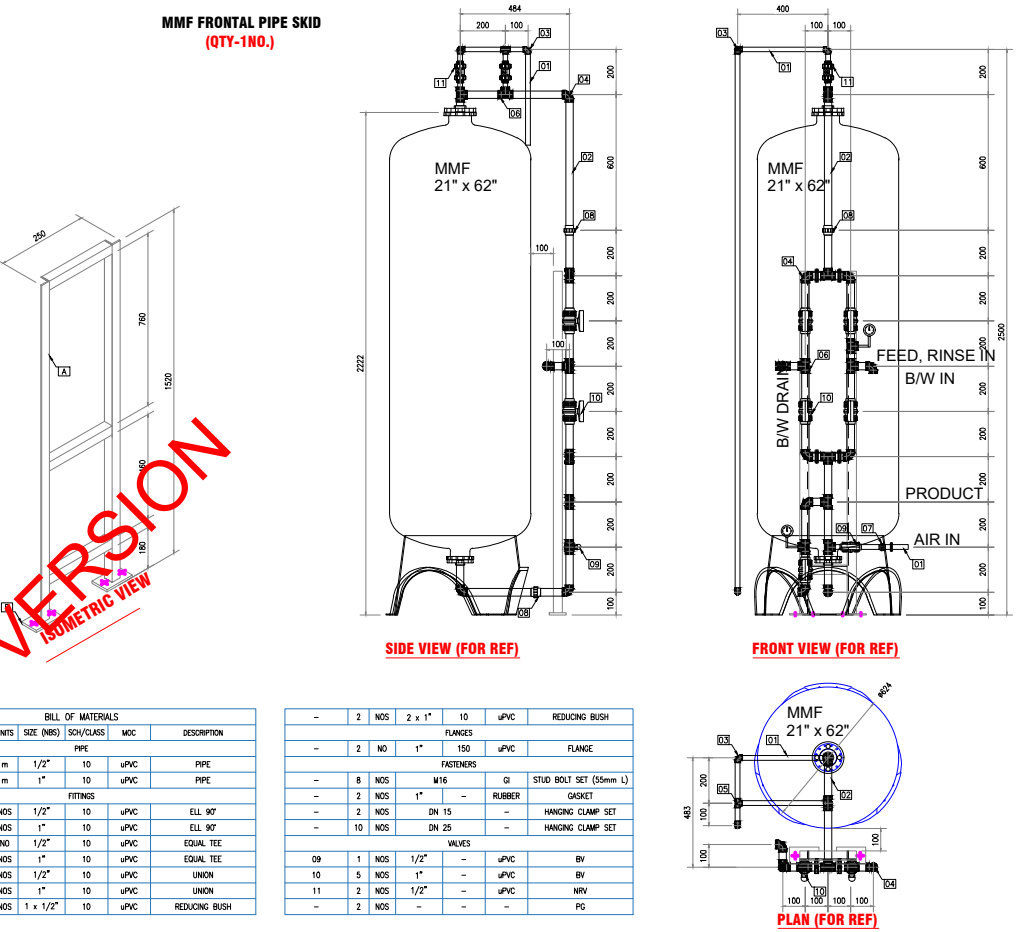
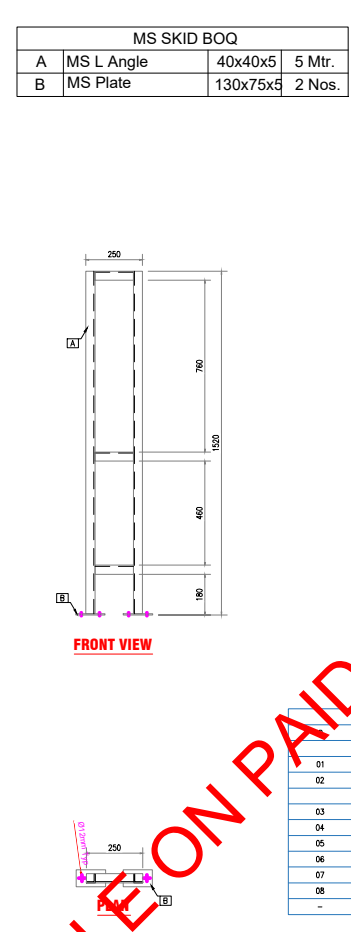
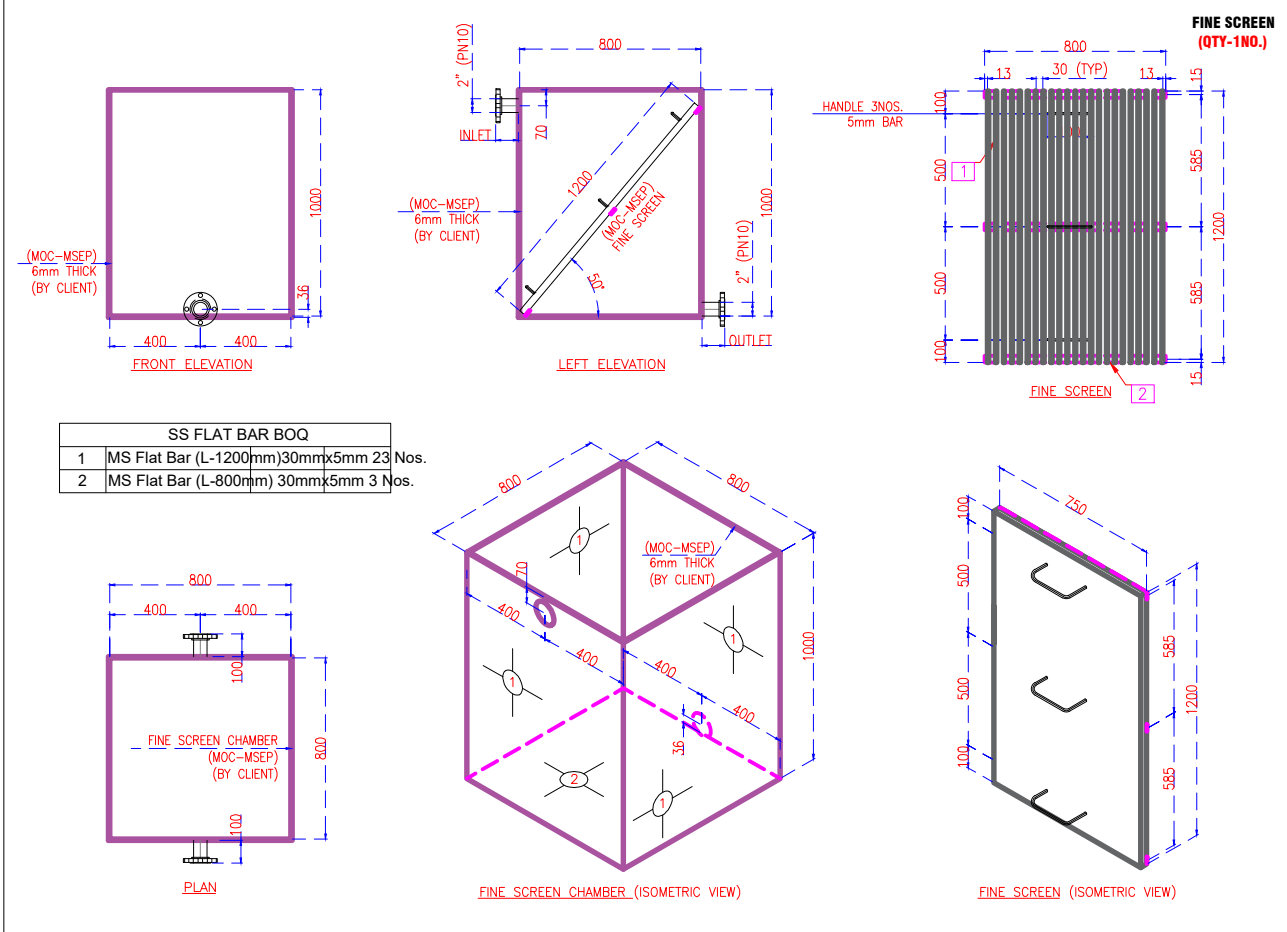
5.80

LIST OF FACILITIES

SR. NO.	DESCRIPTION	NOS. OF BUILDING	OCCUPANCY	REMARKS
01.	JUNIOR STAFF BLOCK (8 PERSON/UNIT) (3.6mx12.0m)	22	176	PORTACABIN
02.	SENIOR STAFF BLOCK (2 PERSON/UNIT) (5.0mx6.0m)	14	28	PORTACABIN
03.	LIGHT VEHICLE PARKING SHED	TO BE SUBMITTED		
04.	SECURITY ROOM (6.00mx3.66m)	02	---	PORTACABIN
05.	OVERHEAD WATER TANK	TO BE SUBMITTED		
06.	SEWAGE TREATMENT PLANT (STP)	AS PER SUPPLIER DETAILS		
6B.	ELEC. SUB-STATION/LV/ GENERATOR ROOM	01	---	
07.	RECREATION ROOM (27.7mx7.5m)	01	---	PORTACABIN
08.	MASJID/PRAYER ROOM (7.2mx12.15m)	01	---	PORTACABIN

08.	MASJID/PRAYER ROOM (7.2mx12.15m)	01	---	PORTACABIN
09.	CANTEEN FOR JUNIOR STAFF (19.5mx18.0m)	01	180	
10.	CANTEEN FOR SENIOR STAFF (11.0mx6.4m)	01	28	
11.	KITCHEN (11.0mx8.6m)	01	---	
12.	CENTRAL ABLUTION BLOCKS (11.2mx5.120m)	10	---	
13.	ELECTRICAL ROOM (3.5mx4.0m)	01	---	
14.	CONTROL ROOM (3.4mx4.0m) NEW	01	---	
15.	FIRST AID ROOM (5.0mx6.0m)NEW	01	---	PORTACABIN
16.	LAUNDRY (3.5mx3.6m) NEW	01	---	

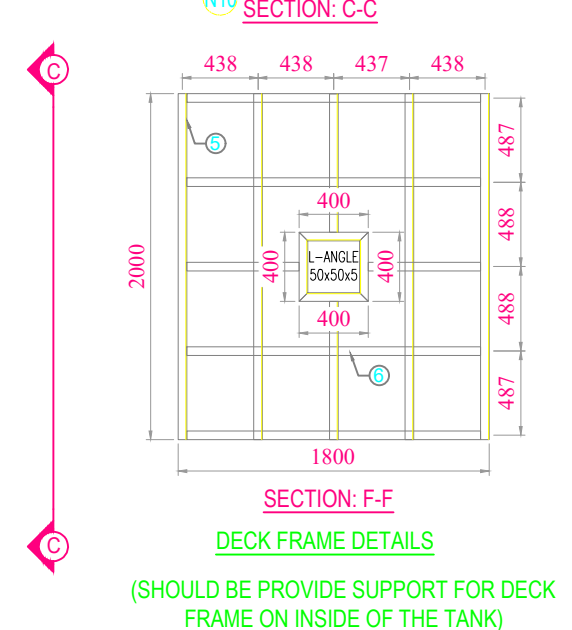
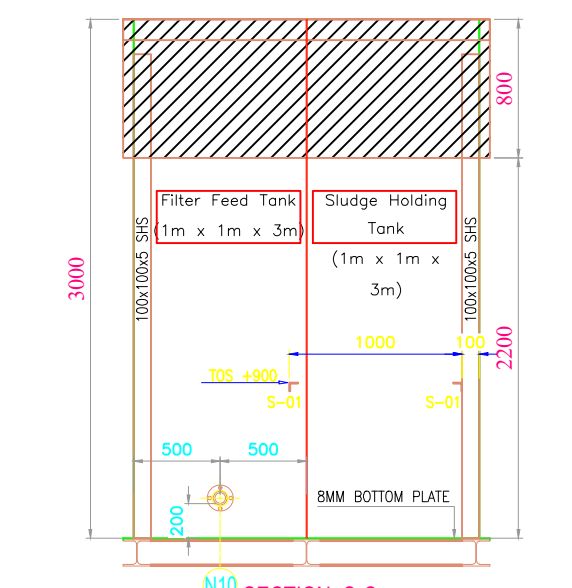
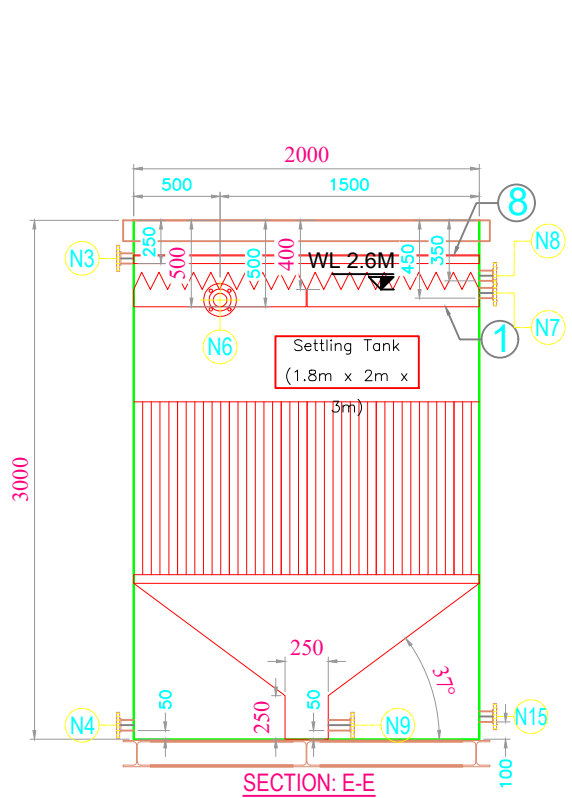
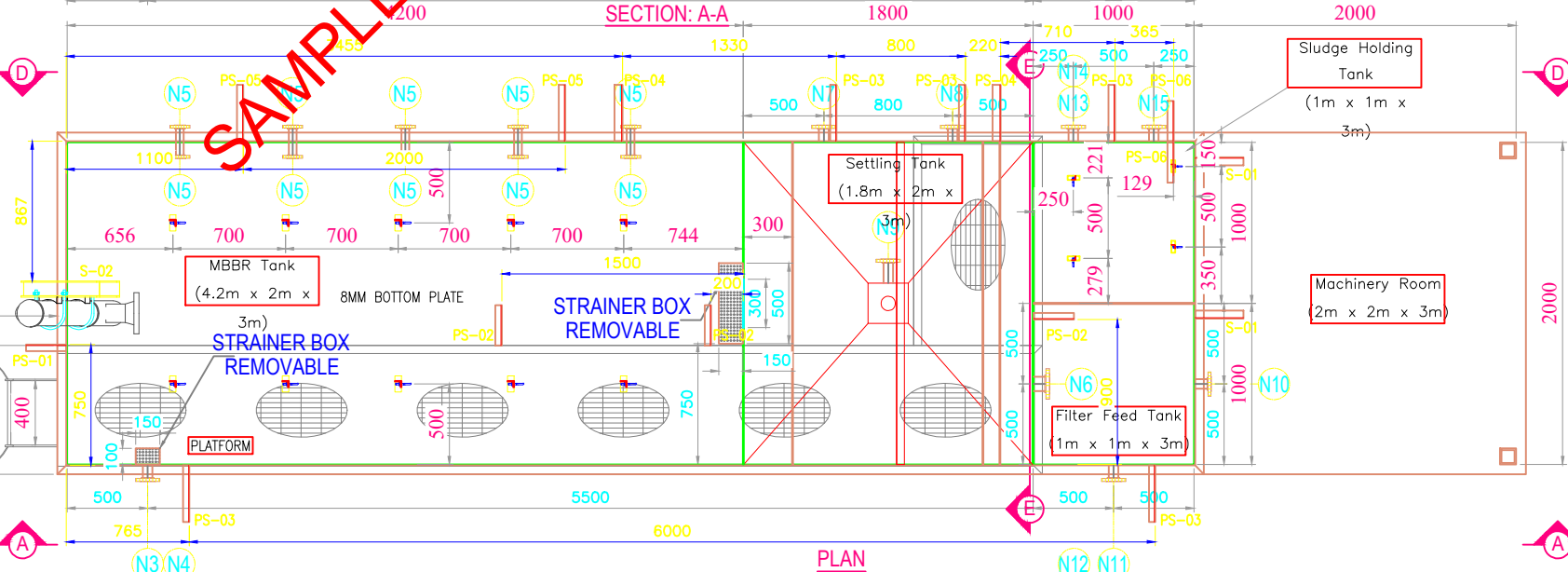
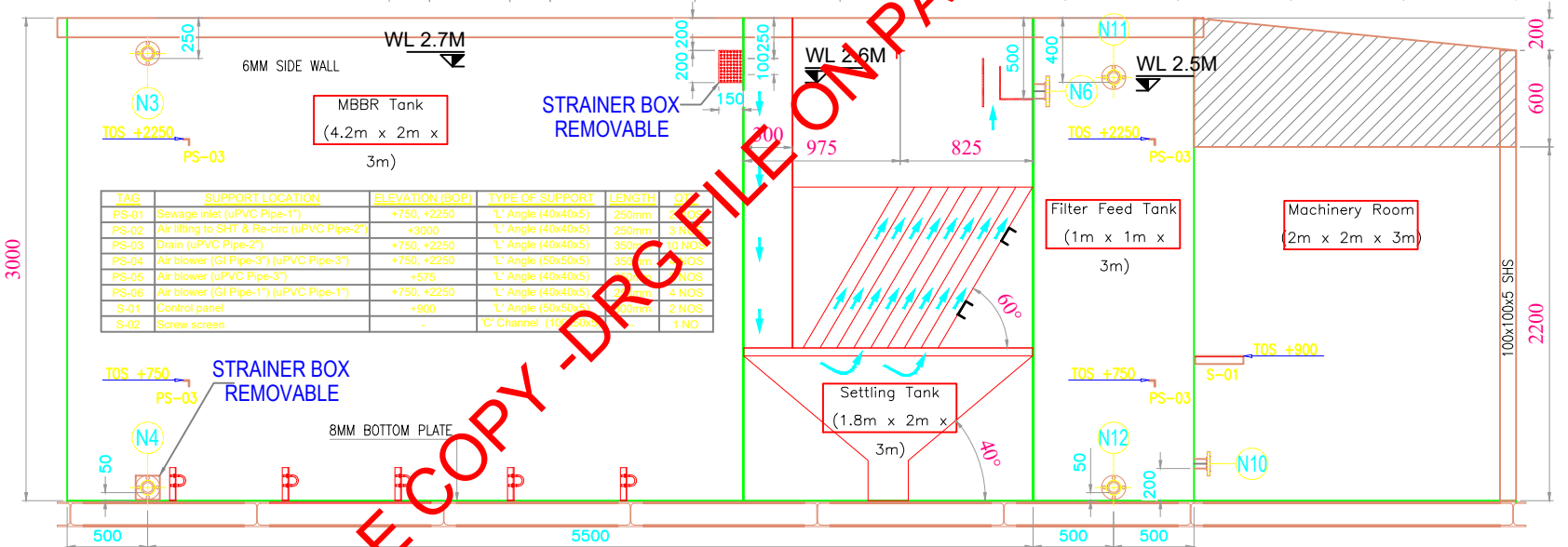
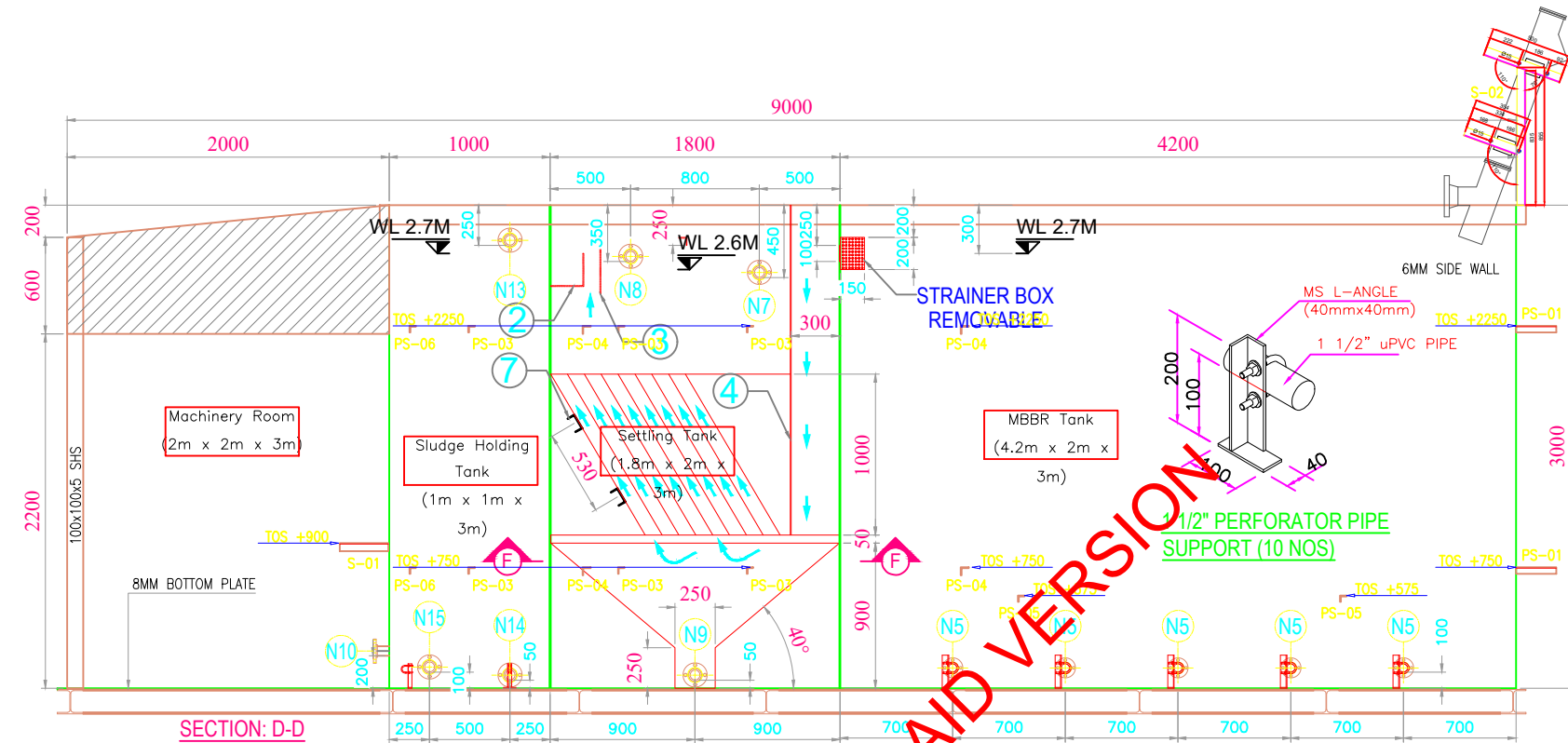
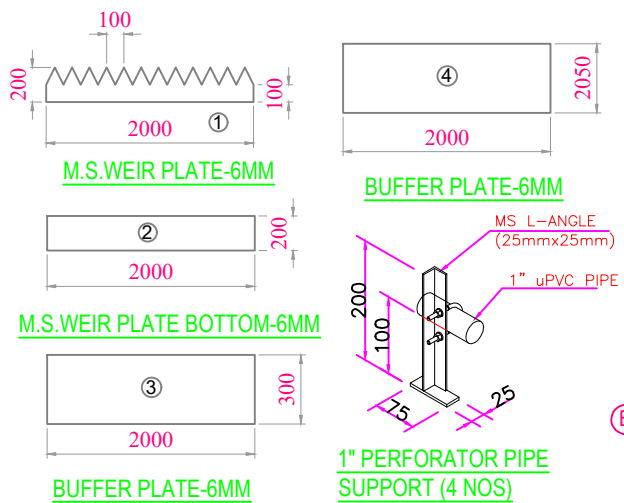
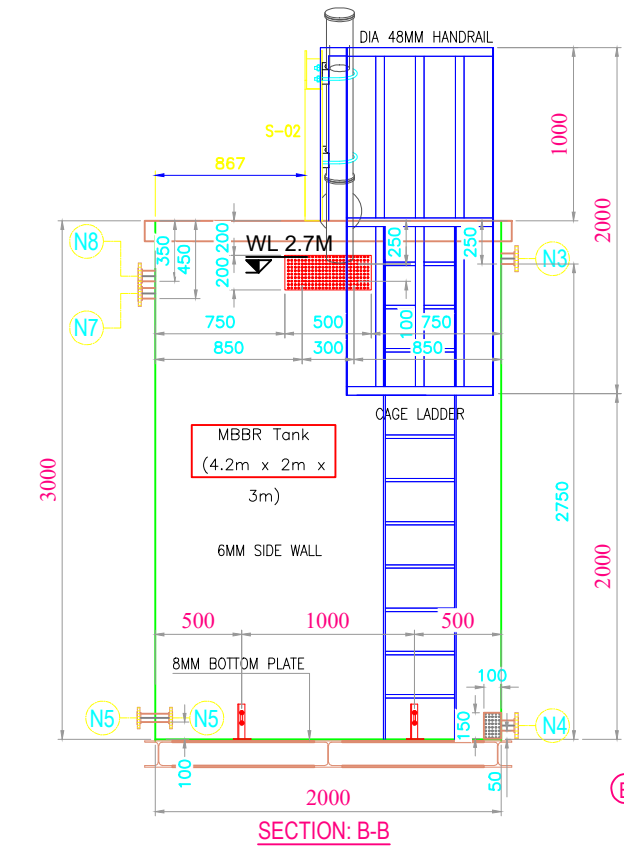




GENERAL NOTES				PROJECT NAME:		CLIENT:		DESIGNER:		DRAWING TITLE:		PROJECT NO.:		DATE:		SCALE:		SHEET SIZE:				
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED				SEWAGE TREATMENT PLANT-MBBR						FABRICATION DRAWING						AS SHOWN		A3				
2. COLLECTION & TREATED WATER TANK SHOULD BE 10m FROM STP PLANT, IT IS MORE THEN 10m, PIPING & CABLING SHALL BE IN CLINET SCOPE				50 METER CUBIC PER DAY																		
REV	DESCRIPTION	BY	CHK/APP	DATE							DRAWING NO.:		DRAWN BY:		CHECKED BY:		APPROVED BY:		SHEET NO.:		REVISION:	
1																					0	
0																						

NOZZLE	NOZZLE DETAILS (SLIP ON FLANGE CLASS 150)	QTY	PROJECTION	ELEVATION (BOP)
N3	2" MBBR TANK OVERFLOW NOZZLE	1 NO	100mm	+2750mm
N4	2" MBBR TANK DRAIN NOZZLE	1 NO	100mm	+50mm
N5	1 1/2" MBBR TANK PERFORATOR NOZZLE	10 NOS	100mm	+100mm
N6	3" SETTLING TANK OUTLET NOZZLE	1 NO	100mm	+2500mm
N7	2" SETTLING SCUM REMOVAL NOZZLE	1 NO	100mm	+2550mm
N8	2" SETTLING OVERFLOW NOZZLE	1 NO	100mm	+2650mm
N9	2" SETTLING TANK DRAIN NOZZLE	1 NO	150mm	+50mm
N10	2" FILTER FEED TANK OUTLET NOZZLE	1 NO	100mm	+200mm
N11	2" FILTER FEED TANK OVERFLOW NOZZLE	1 NO	100mm	+2600mm
N12	2" FILTER FEED TANK DRAIN NOZZLE	1 NO	100mm	+50mm
N13	2" SLUDGE HOLDING TANK OVERFLOW NOZZLE	1 NO	100mm	+2750mm
N14	2" SLUDGE HOLDING TANK DRAIN NOZZLE	1 NO	100mm	+50mm
N15	2" SLUDGE OUTLET NOZZLE	1 NO	100mm	+100mm

SL. NO.	DESCRIPTION	QTY	MATERIAL
1	WEIR PLATE PL-6X200X2000	1 NO	ASTM A36
2	WEIR PLATE BOTTOM PL-6X200X2000	1 NO	ASTM A36
3	BUFFER PLATE PL-6X300X2000	1 NO	ASTM A36
4	BUFFER PLATE PL-6X2050X2000	1 NO	ASTM A36
5	ANGLE-L50X50X5-2000	5 NOS	ASTM A36
6	FLAT BAR FB-5X50-1800	5 NOS	ASTM A36
7	CHANNEL-UPN-100-2000	2 NOS	ASTM A36
8	ANGLE-L50X50X5-2000	1 NO	ASTM A36



(SHOULD BE PROVIDE SUPPORT FOR DECK FRAME ON INSIDE OF THE TANK)

STP PLANT-CONTROL PANEL
400VAC/3PH/4W/50Hz

R

Y

B

ESD	PF	ELR	LSL-01	LSH-01	HPS-02 ON	LPS-03 ON	TDS HIGH	CONTROL SUPPLY ON

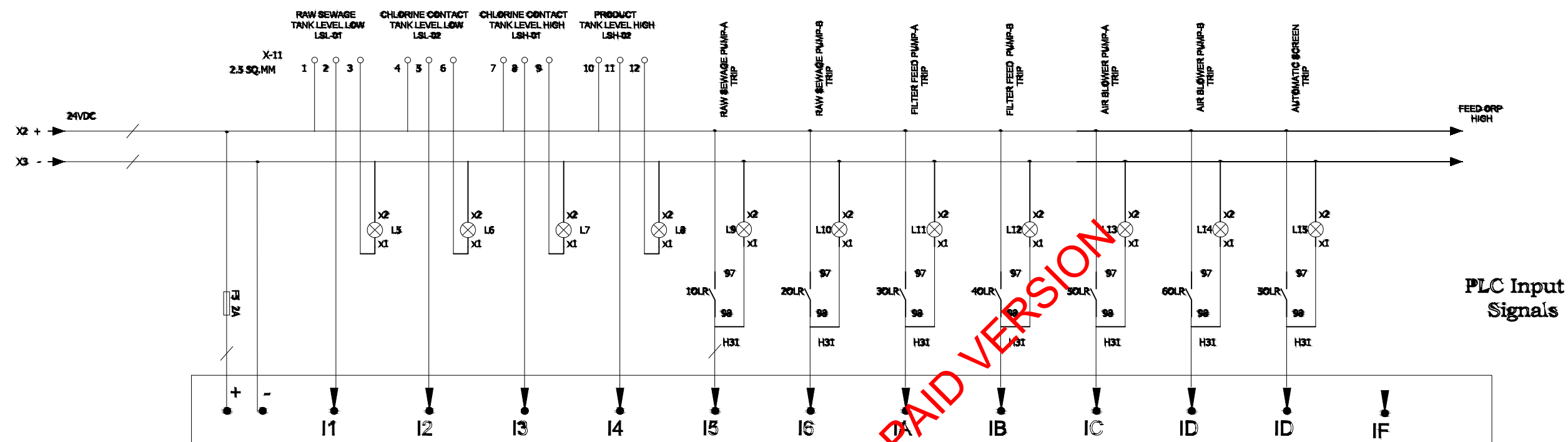
RAW SEWAGE PUMP-A P-101 A		RAW SEWAGE PUMP-B P-101 B		FILTER FEED PUMP-A P-102 A		FILTER FEED PUMP-B P-102 B		AIR BLOWER-A AB-01		AIR BLOWER-B AB-02	
1L1	1L2	2L1	2L2	3L1	3L2	1L1	1L2	2L1	2L2	3L1	3L2
HOA		HOA		HOA		HOA		HOA		HOA	

AUTOMATIC SCREEN AC-01		SOLENOID VALVE AB-02	
2L1	2L2	3L1	3L2
HOA		HOA	

BUZZER

ALR MUTE

E-STOP



(PLC) Zelio SR2D201BD

