

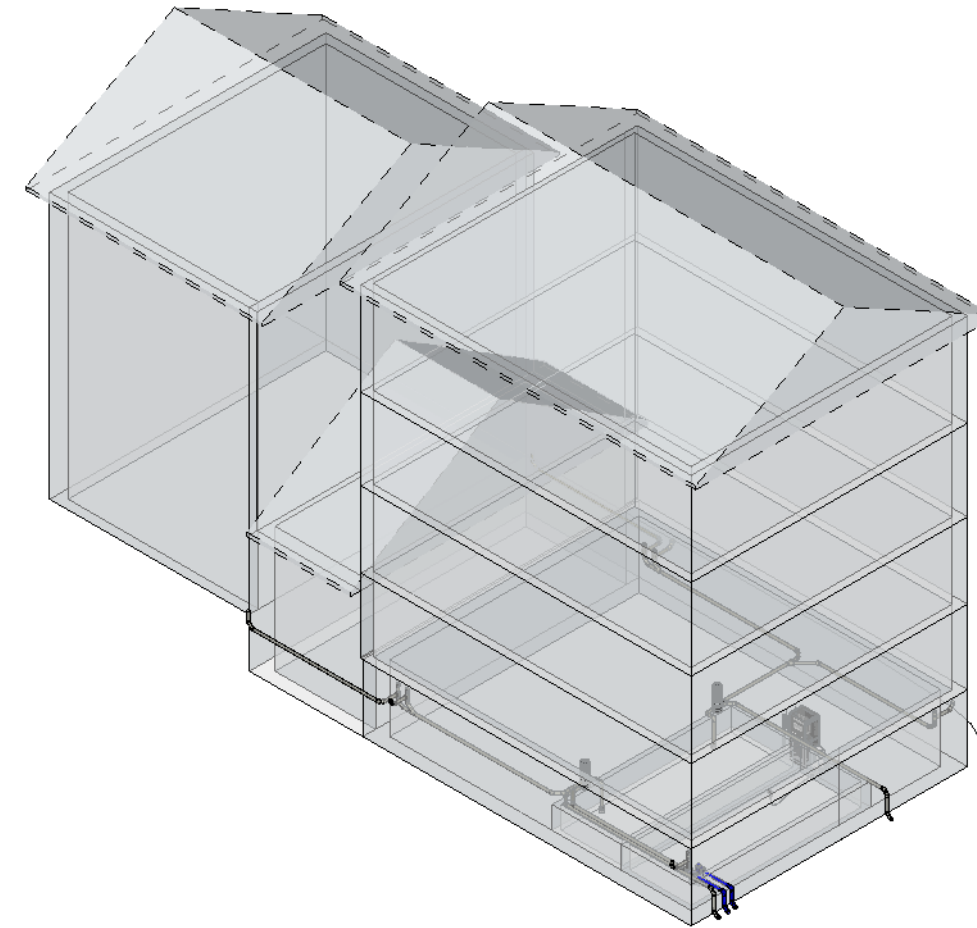
RAINWATER HARVESTING SYSTEM

YOUR - RAINWATER HARVESTING

YOUR ADDRESS

TAG	EQUIPMENT SCHEDULE
WFF100-A	PREFILTER - WISY VORTEX 100
WFF100-B	PREFILTER - WISY VORTEX 100
SMT-A	WISY SMOOTHING INLET
SMT-B	WISY SMOOTHING INLET
SKOF-A	WISY SKIMMING OVERFLOW
SKOF-B	WISY SKIMMING OVERFLOW
FOTF	WISY FLOATING FILTER
VIDA	VIDA RAIN REUSE SYSTEM PUMPING, TREATMENT AND CONTROL
TLS	- TANK LEVEL SENSOR
FOT1	- FLOAT SWITCH

TAG	PIPE AND WIRE SCHEDULE	
A	EAVESTROUGH	5" WIDE @ 0.5% SLOPE WITH CROSS FLOW AREA OF 63.3 SQ CM MIN. AGRICULTURAL - STYLE HALF ROUND
B	RAINWATER LEADERS	3" DIAMETER MIN AGRICULTURAL - STYLE
C	HORIZONTAL PIPING	4" DIAMETER @ 1.0% SLOPE PVC DRAIN PIPE OR SDR 35
D	HORIZONTAL PIPING	4" DIAMETER @ 1.5% SLOPE PVC DRAIN PIPE OR SDR 35
E	FLOATING HOSE	1.25" DIAMETER (KANAFLEX)
F	SUPPLY PIPE	1.25" DIAMETER (PVC, PEX, POLY OR COPPER)
G	SENSOR WIRE	4 C - SHIELDED 16 AWG (4 CONDUCTOR)
H	FLOAT SWITCH WIRE	2 C - 14 AWG (2 CONDUCTOR)



TIERS	WATER USES
R1	NON-POTABLE, TRAP PRIMERS, FIRE SUPPRESSION, IRRIGATION
R2	NON-POTABLE, TOILETS/URINALS, LAUNDRY MACHINE
R3	NON-POTABLE, HOSE BIBS, PRESSURE WASHING, VEHICLE WASHING
R4	POTABLE, HUMAN CONSUMPTION, ORAL CARE, FOOD PREPARATION, DISHWASHING, BATHING/SHOWERING, POOL/HOT TUBS

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CLEAN FLO WATER TECHNOLOGIES DESIGNED THE SYSTEM TO MEET THE CSA B805 STANDARDS TO PROVIDE A NON-POTABLE R2 RAINWATER HARVESTING WATER SYSTEM.

IF THE INSTALLTION IS IN ACCORDENCE WITH CLEANFLO WRITTEN INSTRUCTION THIS SYSTEM WILL PROVIDE NON POTABLE WATER. IT IS THE OWNER / OPERATORS RESPONSIBILITY TO ENSURE THE RAINWATER HARVESTING SYSTEM IS INSTALLED AND OPERATING PROPERLY. INITIAL AND ONGOING MAINTENANCE AND MONITORING IS REQUIRED AND MUST BE PERFORMED BY THE OWNER OR UNDER THE OWNER'S DIRECTION.

IF INSTRUCTIONS ARE NOT FOLLWED OR MAINTIANCE IS NOT PERFORMED OR UNKOWN SUBSTANCES ARE INTRUDCED INTO THE RAINWATER SYSTEM THE SYSTEM MAY NOT BE SAFE AND THEREFORE REGULAR MAINTENACE IS REQUIRED.

A1



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DESCRIPTION

THIS SYSTEM IS DESIGN TO MEET CANADIAN PLUMBING CODES AND CSA STANDARDS FOR RAINWATER HARVESTING CSA B805.

THE OVERALL SYSTEM DESIGN EMPLOYS A MULTI BARRIER APPROACH TO WATER QUALITY. THE FIRST STEP IS THE PRE-FILTER. THE SECOND STEP IS THE RAINWATER TANK DESIGN. THE THIRD STEP IS THE WATER TREATMENT SYSTEM.

CLEAN FLO SYSTEMS ARE DESIGNED FROM "ROOF TO TAP" ! WITH ATTENTION TO EVERY DETAIL OF YOUR RAINWATER HARVESTING SYSTEM. WHEN YOU PURCHASE THE COMPLETE SYSTEM FROM CLEAN FLO, IT IS PART OF A COMPLETE PACKAGE THAT WE WILL PROVIDE SUPPORT AND SERVICE FOR THE LIFE OF THE SYSTEM

THIS RAINWATER HARVESTING SYSTEM IS DESIGNED AS A SECONDARY SOURCE OF WATER FOR NON-POTABLE PURPOSES, SUCH TOILETS. WITH BACK-UP WATER SOURCE FROM WELL WATER IF THE RAINWATER TANK IS EMPTY ND CITY WATER IS THERE IS A POWER FAILURE.

THE SYSTEM WILL PROVIDE WATER FOR WATER USES
TIER: R2 -NON POTABLE DOMESTIC

ROOF

THE SYSTEM WILL BE HARVESTING RAIN FROM ONE BUILDING WITH THREE SEPRATE ROOFS WHICH ARE ASPHALT. WITH A TOTAL ROOF AREA OF 366 M2

GUTTER, DOWNPIPES AND CONVEYANCE PIPING

THE GUTTERS, DOWNPIPES, AND CONVEYANCE PIPING IS SIZED BASED ON SPECIFICATIONS FROM THE DESIGNS.

PREFILTER

THE SYSTEM WILL REQUIRE ONE (1) PRE-FILTER. THESE PRE-FILTERS OPERATE AS BOTH A FIRST FLUSH DIVERTER AND PREFILTER, WITH A FILTER MESH SIZE OF 320 MICRONS. THE FULL CROSS-SECTION (PIPE DIAMETER) OF THE RAINWATER DRAINAGE SYSTEM REMAINS CONTINUOUSLY OPEN, AND THERE ARE NO REDUCTION IN THE CROSS-SECTION OF THIS APPLIANCE IN WHICH DIRT OR WATER CAN COLLECT.

RAINWATER TANK / CISTERN

THIS SYSTEM WILL PROVIDE A TOTAL OF 33000 LITERS OF RAINWATER STORAGE. WITH A TOTAL OF TWO (2) POUR IN PLACE CONCRTE TANKS LOCATION IN THE BASE MENT.

THE RAINWATER TANK IS DESIGNED TO PROVIDE SAFE STORAGE OR RAINWATER, WHICH IMPROVES WATER QUALITY BECAUSE OF IT'S DESIGN AND FUNCTION. THE CALMING INLET PREVENTS AGITATION OF SETTLED FINE DUST, THE SKIMMING OVERFLOW REMOVES FLOATING PARTICLES AND THE FLOATING FILTER ENSURES WATER IS DRAWN INTO THE PUMP FROM APPROXIMELY 150 mm (6.0") BELOW THE SURFACE OF THE WATER.

WATER PUMPING AND TREATMENT SYSTEM

CLEAN FLO DETERMINED THE WATER DEMAND TO BE 10 GPM @ 60 PSI. THIS WILL BE PUMPED BY MULTI STAGE BOOSTER PUMP POWERED BY VFD. THE TREATMENT WILL BE THREE STAGES TO ENSURE WATER IS SAFE AND NO STAINING ON FIXTURES. STAGE ONE IS A SEDIMENT FILTER OF 15 MICRONS WHICH PROVIDES A SELF CLEANING FLUSH TO DRAIN. STAGE TWO A 10 CARBON FILTER. STAGE THREE A 1 MICRON SEDIMENT FILTER. STAGE FOUR IS ULTRAVIOLET SANITATION SYSYEM NSF 55 CLASS A.

WATER QUALITY AND TREATMENT

CLEAN FLO DESIGNED THIS SYSTEM TO PRODUCE WATER THAT IS SAFE FOR CSA B805 R2 USES; NAMELY NON-POTABLE DOMESTIC.

GUTTER, DOWNPIPE AND HORIZONTAL PIPING SIZING

IN ORDER TO PROPERLY SIZE THE GUTTERS, DOWNPIPE AND HORIZONTAL PIPING THE 15 MINUTE HYDRAULIC LOAD MUST BE CALCULATED. THIS METHOD IS BASED ON THE CANDIAN NATIONAL BUILDING CODE STANDARDS. THE 15 MIN HYDRAULIC LOAD IS EQUAL TO THE VOLUME OF WATER DISCHARGING OFF THE ROOF EVERY 15 MINUTES IN A 25 YEAR STORM. TO CALCULATE THE 15 MIN HYDRAULIC LOAD, MULTIPLY THE ROOF AREA BY THE 15 MIN/ 25 YEAR STORM EVENT. THE 15 MIN/25 YEAR STORM CAN BE FOUND ON AN IDF CURVE OR IN THE CANDAIN NATIONAL BUILDING CODE DESIGN TABLE. (NBC DIVISION B APPENDIX C, TABLE C-2)

THE TWO CLOSEST CITIES LISTED ARE BOTH WITH A 15 MINUTE DESIGN RAIL FALL VALUES OF 28MM, THEREFORE WE WILL EMPLOY 28 MM AS THE 15MIN/ 25 YEAR RAINFALL EVENT.

GUTTER AND DOWNPIPE SIZING

184 M2 - MILL ROOF (2 DOWNSPOUTS)
HALF OF THE ROOF 92 M2 X 28 MM = 1,288 LITRES - 15MIN HYDRAULIC LOAD
5" GUTTER @ 0.5% SLOPE
3" DOWNPIPE

70 M2 - RESIDENCE ROOF (2 DOWNSPOUTS)
HALF OF THE ROOF 35M2 X 28 MM = 980 LITRES - 15MIN HYDRAULIC LOAD
5" GUTTER @ 0.5% SLOPE
3" DOWNPIPE

112 M2 - SILO ROOF (2 DOWNSPOUTS)
HALF OF THE ROOF 56 M2 X 28 MM = 784 LITRES - 15MIN HYDRAULIC LOAD
5" GUTTER @ 0.5% SLOPE
3" DOWNPIPE

HORIZONTAL PIPING

SECTION 1 AND SECTION 2
HALF THE ROOF ON EACH SIDE OF THE BUILDING
SILO 112M2 / 2 = 56M2
RESIDENCE 70 M2 / 2 = 35M2
TOTAL 91 M2 X 28MM = 2,548 LITRES - 15 MIN HYDRAULIC LOAD
4" DIAMETER PIPE @ 1.0 % SLOPE
PIPE DROP 13M @ 1.0 % = 130 MM

SECTION 3 AND SECTION 4
HALF THE ROOF ON EACH SIDE OF THE BUILDING
MILL 184M2 / 2 = 92 M2
TOTAL 92 M2 X 28MM = 2,576 LITRES - 15 MIN HYDRAULIC LOAD
4" DIAMETER PIPE @ 1.0 % SLOPE
PIPE DROP 6 M @ 1.0 % = 60 MM

SECTION 5 AND SECTION 6
HALF THE ROOF ON EACH SIDE OF THE BUILDING
SILO 112M2 / 2 = 56M2
RESIDENCE 70 M2 / 2 = 35M2
MILL 184M2 / 2 = 92 M2
TOTAL 183 M2 X 28MM = 5,124 LITRES - 15 MIN HYDRAULIC LOAD
4" DIAMETER PIPE @ 1.5 % SLOPE
SECTION 5: PIPE DROP 1 M: 4" DIAMETER PIPE @ 1.0 % = 10 MM
SECTION 6: PIPE DROP 6.3 M: 4" DIAMETER PIPE @ 1.0 % = 63 MM

TOTAL HORIZONTAL PIPE DROP
SECTION 1 AND SECTION 3 AND SECTION 5
130 MM + 60 MM + 10 MM = 200 MM
SECTION 2 AND SECTION 4 AND SECTION 6
130 MM + 60 MM + 63 MM = 25

A2

CLEAN FLO
WATER TECHNOLOGIES

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SYSTEM NAME: - RAINWATER HARVESTING

SYSTEM TYPE: R2-NON-POTABLE

OWNERS:

LOCATION: NA

EMERGENCY CONTACT

FIRST POINT - INSTALLERS N/A

SECOND POINT - DESIGNER CLEANFLO WATER TECHNOLOGIES, CANADA
1-877-306-2146

MAINTENANCE PERSONS OWNER

SCOPE OF SYSTEM SUPPLY

WATER USES TEIR: R2 NON POTBALE TOILET

PRIMARY WATER SOURCE: RAINWATER

SECONDARY WATER SOURCE: WELL WATER AND CITY WATER

NUMBER OF PEOPLE SERVED: ~ 24 / DAY

ANNUAL WATER DEMAND: ~ 241,920 LITERS

ANNUAL WATER HARVESTED: ~ 214,675 LITERS

NUMBER OF FIXTURES

HOSE BIBS: 0

YARD HYDRANT: 0

FAUCETS: 0

LAUNDRY: 0

TOILETS: 17

DISHWASHER: 0

BATH/SHOWER: 0

MECH. EQUIPMENT: 0

FIRE SUPPRESSION: 0

SECONDARY WATER SOURCE

TYPE: WELL WATER OR CITY WATER

AUTOMATIC BY-PASS SYSTEM DUAL AUTO BY PASS

DESCRIPTION / COMMENTS: WHEN FLOAT IN RAINWATER TANK IS LOW BY PASS TO WELL WATER. WHEN PAOWER FAILURE BY PASS TO CITY WATER.

SYSTEM DESIGN AND SPECS.

DESIGNER: CLEANFLO WATER TECHNOLOGIES, CANADA, 1-877-306-2146

DATE COMPLETED: JUNE 7, 2021

SYSTEM SPECIFICATIONS

ROOF COLLECTION AREA: 366 m2

ROOF MATERIAL: METAL / ASPHALT

GUTTER MATERIAL: PAINTED STEEL

DOWNSPOUT MATERIAL: ALUMINUM, PVC SDR 35, OR PVC DRAIN PIPE

CONVEYANCE PIPING MATERIAL: ALUMINUM, PVC SDR 35, OR PVC DRAIN PIPE

STORAGE TANK SPECIFICATIONS

TOTAL VOLUME: 41,600 L

NUMBER OF TANKS: 2

VOLUME OF EACH TANK: 20,800 L + 20,800 L

TANK TYPE: ABOVE GROUND

TANK MATERIAL: POUR IN PLACE CONCRETE

TANK DIMENSIONS

LENGTH: 7635 mm

WIDTH: 2745 mm

HIEGHT: 1000 mm

DIAMETER: NA

PRE-FILTER SPECIFICATIONS

TYPE OF PREFILTER: WISY VORTEX 100

NUMNER OF PRE-FILTERS: 2 (MAIN TANK)

PRE-FILTRATION MESH SIZE: 320 MICRONS

MAXIMUIM INLET FLOW RATE: 12 LITERS PER SECOND

PUMP SPECIFICATIONS

BRAND: CLEANFLO VFD CONSTANT PRESSURE SYSTEM

MODEL: DABS ESYBOX

DESIGN FLOW RATE: 10 USGPM

MAXIMUN PSI @ 10 GPM: 70 PSI

POWER SPECIFICATIONS

HORSE POWER: 2.1 HP

VOLTAGE: 230 VAC

AMPS: ~ 10 A

WATTS: 1550 W

WATER TREATMENT SPECIFICATIONS

TYPE: CLEANFLO

BRAND: VIDA REUSE

MODEL: COMR2

AGE OF EQUIPMENT: NEW

TOTAL DYNAMIC HEAD

DESIGN FLOW RATE: 10 GPM

SUPPLY PIPE
1.25" @ 10FT (0.92 PSI LOSS/100FT)
(NPSH MUST BE MET FOR BOOSTER PUMP) 0.092 PSI / 0.1 FT HEAD

TREATMENT SKID
PSI LOSS VARIES AS WATER FILTERS BECOME CLOGGED 10 PSI / 23.3 FT HEAD

DISTRIBUTION PIPE
10 GPM - 1.25" @ 50 FT (0.92 PSI LOSS/100FT)
5 GPM - 1.0" @ 50FT (1.04 PSI LOSS/100FT)
TOTAL (0.46 + 0.52) = 0.98 0.98 PSI / 4.88 FT HEAD

MINOR LOSSES: VALVES, FITTINGS
~ 100 FT 1.25" (0.92 PSI LOSS/100FT) 0.92 PSI / 1.025 FT HEAD

ELEVATION HEAD
55FT (1.0 PSI LOSS/2.33FT) 23.61 PSI / 55 FT HEAD

STATIC PSI
30 PSI 30 PSI / 69.9 FT HEAD

TOTAL 65.6 PSI / 153 FT HEAD

A3



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Number of Full Time Occupance	24			
Parameter	Litres / Use	Total Litres / Person	Roof Material	METAL
5 Toilet Flushes Per Day	4.8	24	Initial Loss (mm)	0.25
Clothes Washer (2.5 loads/week)	na	0	Continuous Loss (%)	10%
Bath/Shower (9L /min @ 5 min)	na		Prefilter Loss (%)	10%
Faucets (5L / min @ 5 min)	na		First Flush Loss (mm/m2)	0.05
Dishwasher (2 loads/week)	na		Roof Area (sq m)	366
Per Capita Daily Water Demand		24	(sq ft)	3940
Ground Floor Public Washroom	4.8	96	Total Tank Volume (Litres)	41600
Total Daily Water Demand	672		(US Gallons)	10991
Monthly Water Demand (30 days)	20160		Bulk Water Delivery (Litres)	0
			(US Gallons)	0
Annual Water Demand	241920		Annual Rainfall	
			Months	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Anually
			Rainfall (mm)	18.4 23.4 50.7 60.1 75.4 76.4 73.9 101.2 111 97.2 74.3 40.6 802.6
			Day with rain (days)	6 8 14 17 20 19 17 22 26 27 21 11 209

Graph 2: Monthly Water Balance - 366 Sq Meters Roof Area - 41,600 L Rainwater Tank

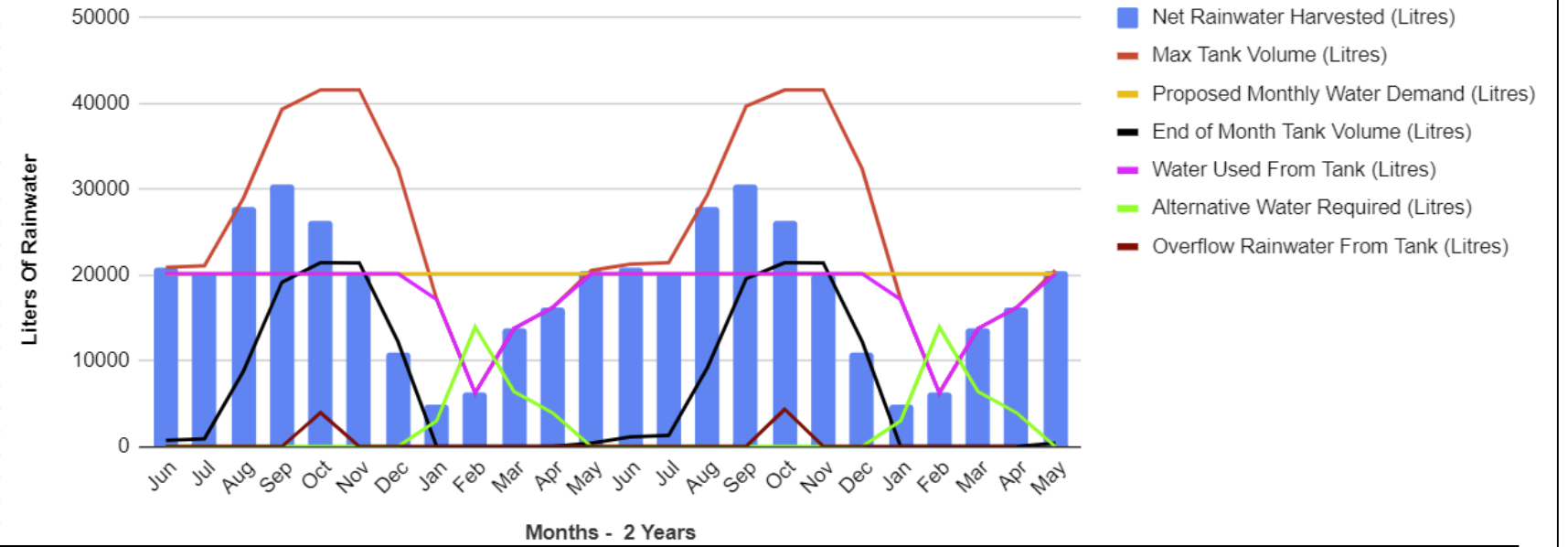


TABLE 2: Monthly Water Balance - 366 Sq Meters Roof Area - 41,600L Rainwater Tank

	Rainfall (mm)	# of Days With Rainfall	Initial Loss From Roofing (mm)	Gross Rainwater Harvested (Litres)	Contious Loss From Roofing (Litres)	Loss From First Flush (Litres)	Loss From Prefilter (Litres)	Net Rainwater Harvested (Litres)	Tank Top Up Fill (Litres)	Max Tank Volume (Litres)	Proposed Monthly Water Demand (Litres)	Net Tank Volume (Litres)	End of Month Tank Volume (Litres)	Water Used From Tank (Litres)	Alternative Water Required (Litres)	Overflow Rainwater From Tank (Litres)
Jun	76.4	19	4.85	26187	2619	355	2321	20892		20892	20160	732	732	20160	0	0
Jul	73.9	17	4.33	25462	2546	317	2260	20339		21071	20160	911	911	20160	0	0
Aug	101.2	22	5.45	35044	3504	399	3114	28026		28937	20160	8777	8777	20160	0	0
Sep	111	26	6.51	38241	3824	477	3394	30546		39322	20160	19162	19162	20160	0	0
Oct	97.2	27	6.68	33128	3313	489	2933	26394		41600	20160	21440	21440	20160	0	3956
Nov	74.3	21	5.20	25291	2529	381	2238	20143		41583	20160	21423	21423	20160	0	0
Dec	40.6	11	2.82	13827	1383	207	1224	11014		32436	20160	12276	12276	20160	0	0
Jan	18.4	6	1.59	6151	615	117	542	4877		17153	20160	-3007	0	17153	3007	0
Feb	23.4	8	1.91	7864	786	140	694	6243		6243	20160	-13917	0	6243	13917	0
Mar	50.7	14	3.49	17278	1728	256	1529	13765		13765	20160	-6395	0	13765	6395	0
Apr	60.1	17	4.37	20397	2040	320	1804	16234		16234	20160	-3926	0	16234	3926	0
May	75.4	20	4.99	25767	2577	366	2282	20542		20542	20160	382	382	20160	0	0
Jun	76.4	19	4.85	26187	2619	355	2321	20892		21274	20160	1114	1114	20160	0	0
Jul	73.9	17	4.33	25462	2546	317	2260	20339		21453	20160	1293	1293	20160	0	0
Aug	101.2	22	5.45	35044	3504	399	3114	28026		29319	20160	9159	9159	20160	0	0
Sep	111	26	6.51	38241	3824	477	3394	30546		39705	20160	19545	19545	20160	0	0
Oct	97.2	27	6.68	33128	3313	489	2933	26394		41600	20160	21440	21440	20160	0	4338
Nov	74.3	21	5.20	25291	2529	381	2238	20143		41583	20160	21423	21423	20160	0	0
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Mar	50.7	14	3.49	17278	1728	256	1529	13765		13765	20160	-6395	0	13765	6395	0
Apr	60.1	17	4.37	20397	2040	320	1804	16234		16234	20160	-3926	0	16234	3926	0
May	75.4	20	4.99	25767	2577	366	2282	20542		20542	20160	382	382	20160	0	Q
TOTAL:								219014	0					214675	27245	4147

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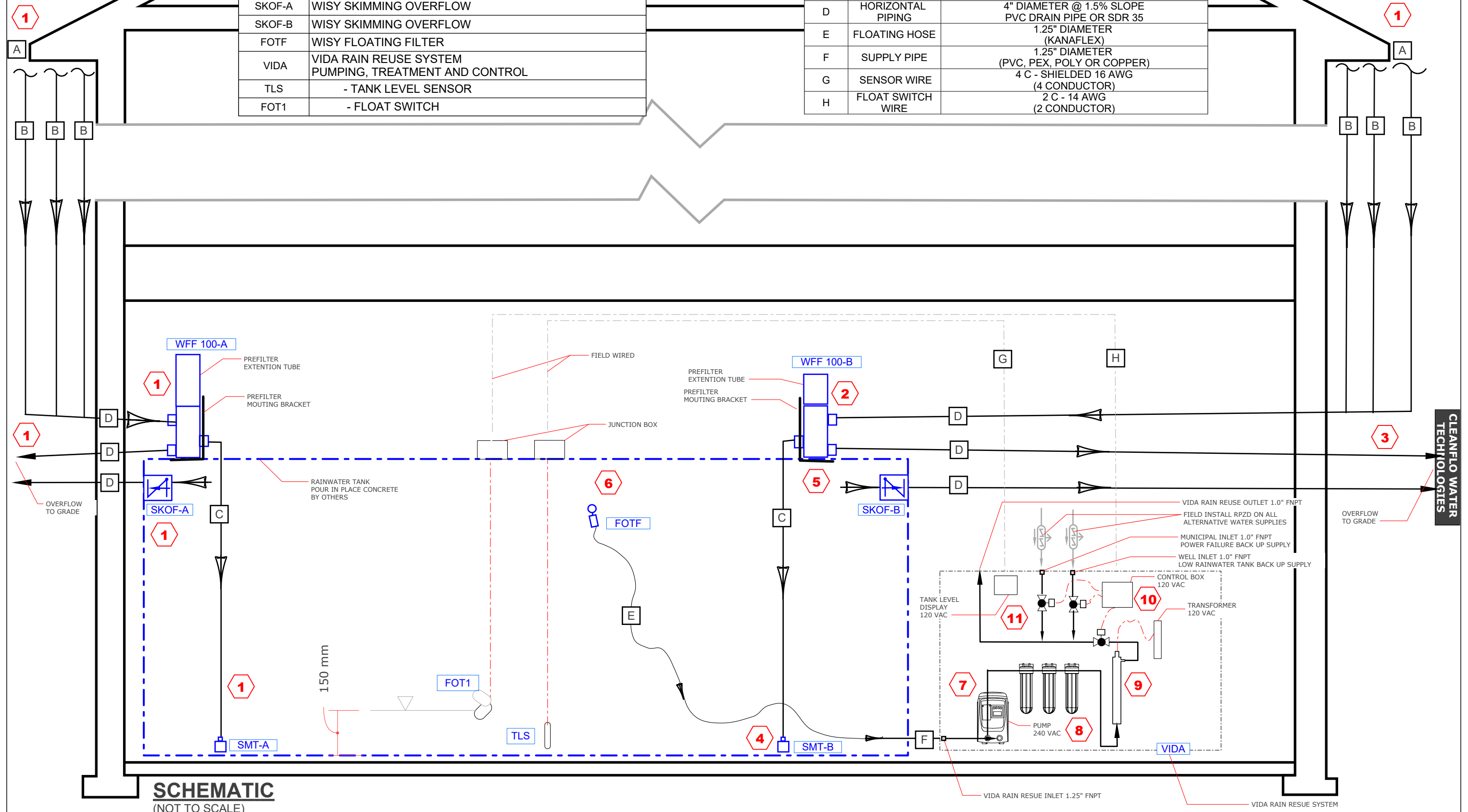
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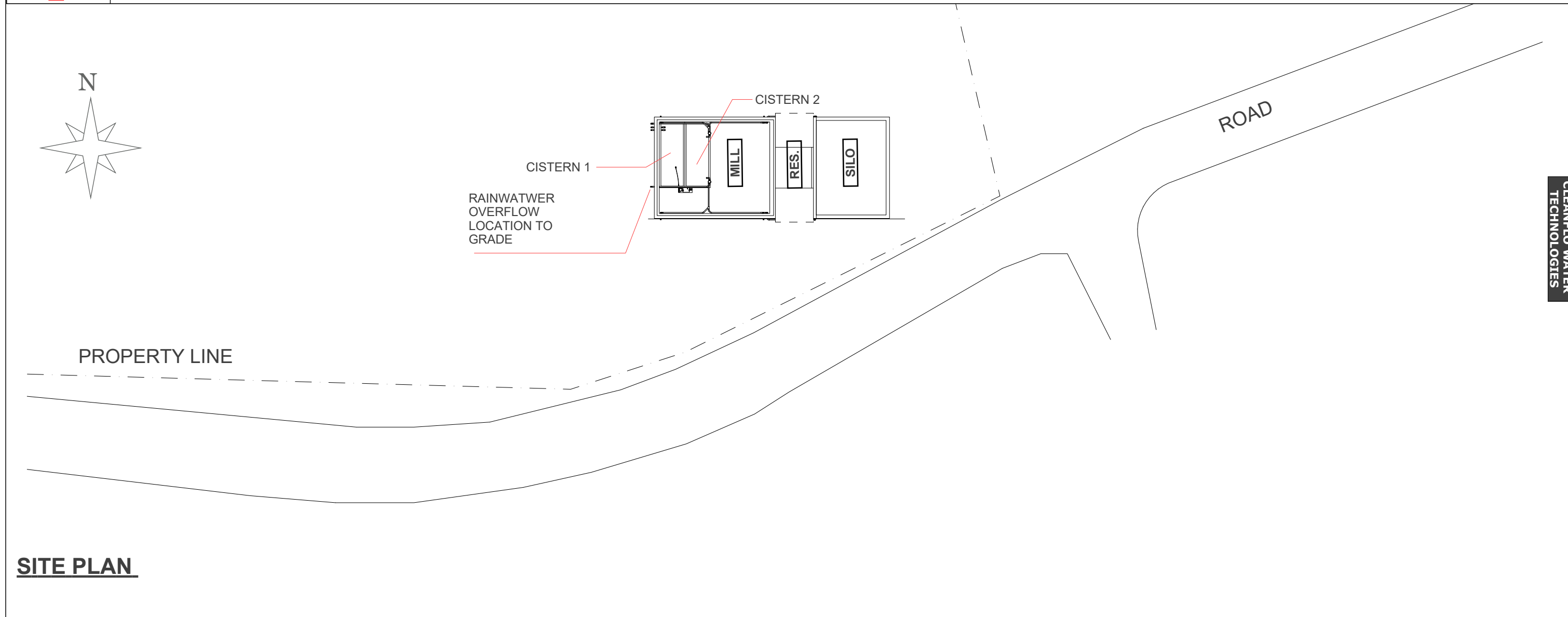
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TAG	PIPE AND WIRE SCHEDULE
A	EAVESTROUGH 5" WIDE @ 0.5% SLOPE WITH CROSS FLOW AREA OF 63.3 SQ CM MIN. AGRICULTURAL - STYLE HALF ROUND
B	RAINWATER LEADERS 3" DIAMETER MIN AGRICULTURAL - STYLE
C	HORIZONTAL PIPING 4" DIAMETER @ 1.0% SLOPE PVC DRAIN PIPE OR SDR 35
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E	FLOATING HOSE 1.25" DIAMETER (KANAFLEX)
F	SUPPLY PIPE 1.25" DIAMETER (PVC, PEX, POLY OR COPPER)
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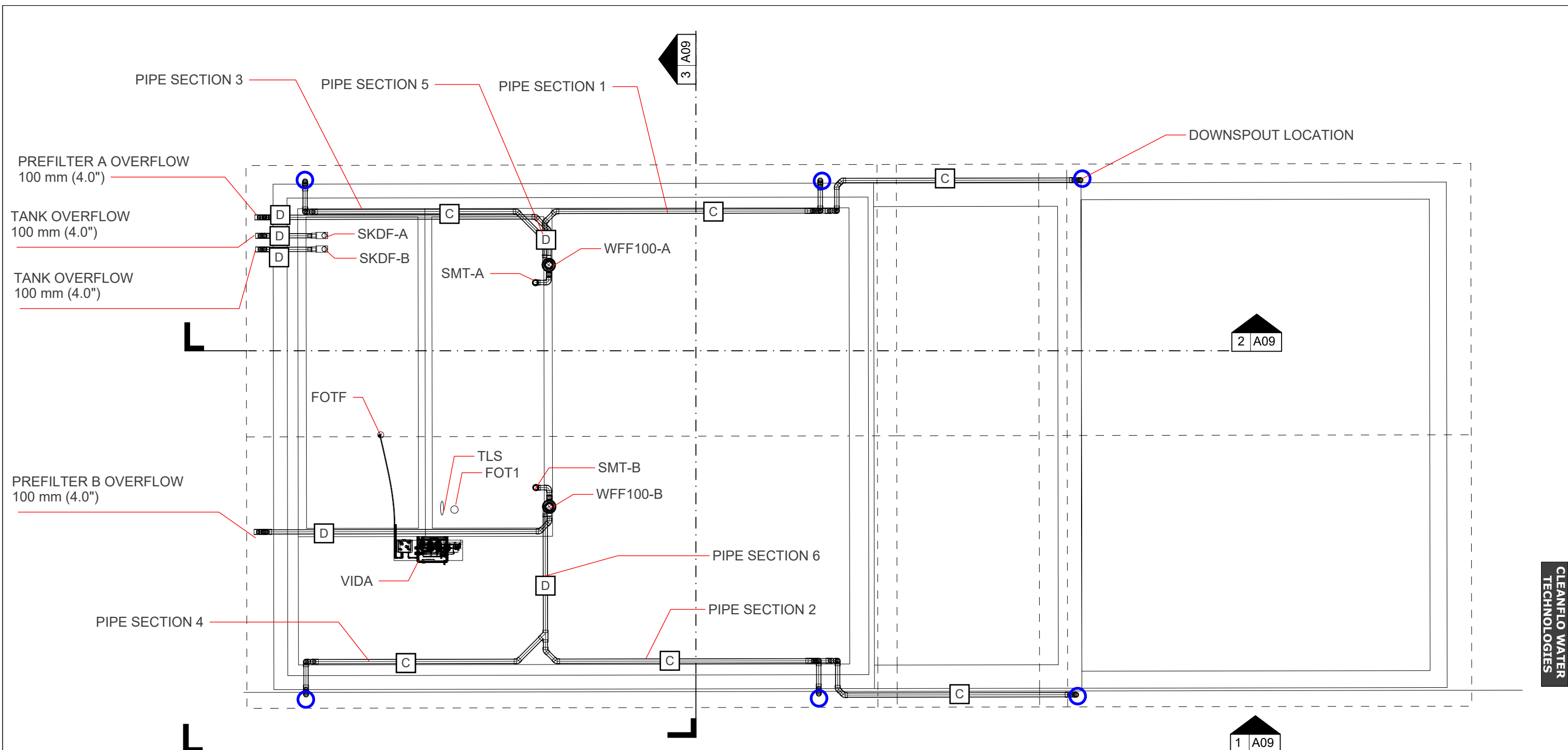


SEQUENCE OF OPERATION

1	RAINWATER IS CAPTURED FROM THE ROOF. USING GUTTERS, ROOF DRAINS, AND PIPING RAINWATER IS CONVEYED TO THE PREFILTER. IF USING RAINWATER FOR POTABLE USE - REFER TO POTABLE ROOF AND GUTTER SPECIFICATION SHEETS.
2	RAINWATER ENTERS PREFILTER SELF CLEANING 3 IN1. PROVEN BASKETLESS TECHNOLOGY PROVIDES: 1) FIRST FLUSH ACTION 2) CONTINUOUS FILTRATION 320 MICRONS 3) AERATOR.
3	RAINWATER OVERFLOWS FROM PREFILTER AND RAINWATER TANK TO A SAFE LOCATION SUCH AS: GROUND, STORM SEWER, SWALE, INFILTRATION GALLERY OR SUMP PIT/ LIFT STATION.
4	FILTERED RAINWATER LEAVES THE PREFILTER AND ENTERS THE TANK VIA STAINLESS STEEL AERATOR AND CALMING INLET DEVICE. WHICH ADDS OXYGEN TO THE RAINWATER AND REDUCES VELOCITY OF INCOMING RAINWATER TO PREVENT AGITATION OF SEDIMENT ON RAINWATER TANK FLOOR.
5	WHEN THE RAINWATER TANK IS FULL OVERFLOWED RAINWATER IS DIRECTED THROUGH THE SKIMMING OVERFLOW, BACKWATER VALVE AND VERMIN GUARD THEN EXITS THE SYSTEM.
6	WHEN REUSING RAIN IT FIRST PASSESS THROUGH A STAINLESS STEEL FLOATING INTAKE DEVICE. WHICH DRAWS IN RAINWATER TO THE PUMP FROM 150MM(6.0") BELOW WATER SURFACE WHICH IS THE CLEANEST LENS (LAYER) OF WATER IN TANK.
7	WHEN THERE IS A DROP IN PRESSURE IN THE PLUMBING SYSTEM THE RAINWATER PUMP IS ACTIVATED ON. THE PUMP WITH ADJUST SPEED TO MAINTAIN A CONSTANT PRESSURE AND MINIMIZE ENERGY USE. RAINWATER IS SUCTIONED INTO THE BUILDING BY THE PUMP SYSTEM. ENSURE A CHECK VALVE IS INSTALLED ON SUCTION PIPE INSIDE RAINWATER TANK.
8	RAINWATER UNDER PRESSURE FROM THE PUMP WILL FLOW THROUGH THREE STAGES OF FILTRATION. EACH FILTER IS 4.5" DIAMETER x 20" LONG. STAGE 1 IS 5 MICRON SEDIMENT FILTER, STAGE 2 IS 10 MICRON CARBON FILTER AND STAGE 3 IS 1 MICRON SEDIMENT.
9	RAINWATER IS SANITIZED BY A UV SYSTEM. THE UV SYSTEM IS DESIGNED TO MEET CSA B805 STANDARDS FOR DISINFECTION PROVIDING MINIMUM OF 16 mJ/cm2 UV DOSE.
10	WHEN FOT1 IS UP, RAINWATER VALVE IS OPEN. WHEN FOT1 IS DOWN RAINWATER VALVE CLOSED AND WELL WATER VALVE IS OPEN. IN POWER FAILURE MUNICIPAL WATER VALVE OPENS, RAINWATER AND WELL WATER VAVELS CLOSE.
11	THE TANK LEVEL IS MEASURED BY A LEVEL SENSOR INSIDE THE RAINWATER TANK. THE CURRENT AND HISTORICAL RAINWATER TANK LEVEL IS DISPLAYED ON THE TOUCH SCREEN.



CLEANFLO WATER TECHNOLOGIES

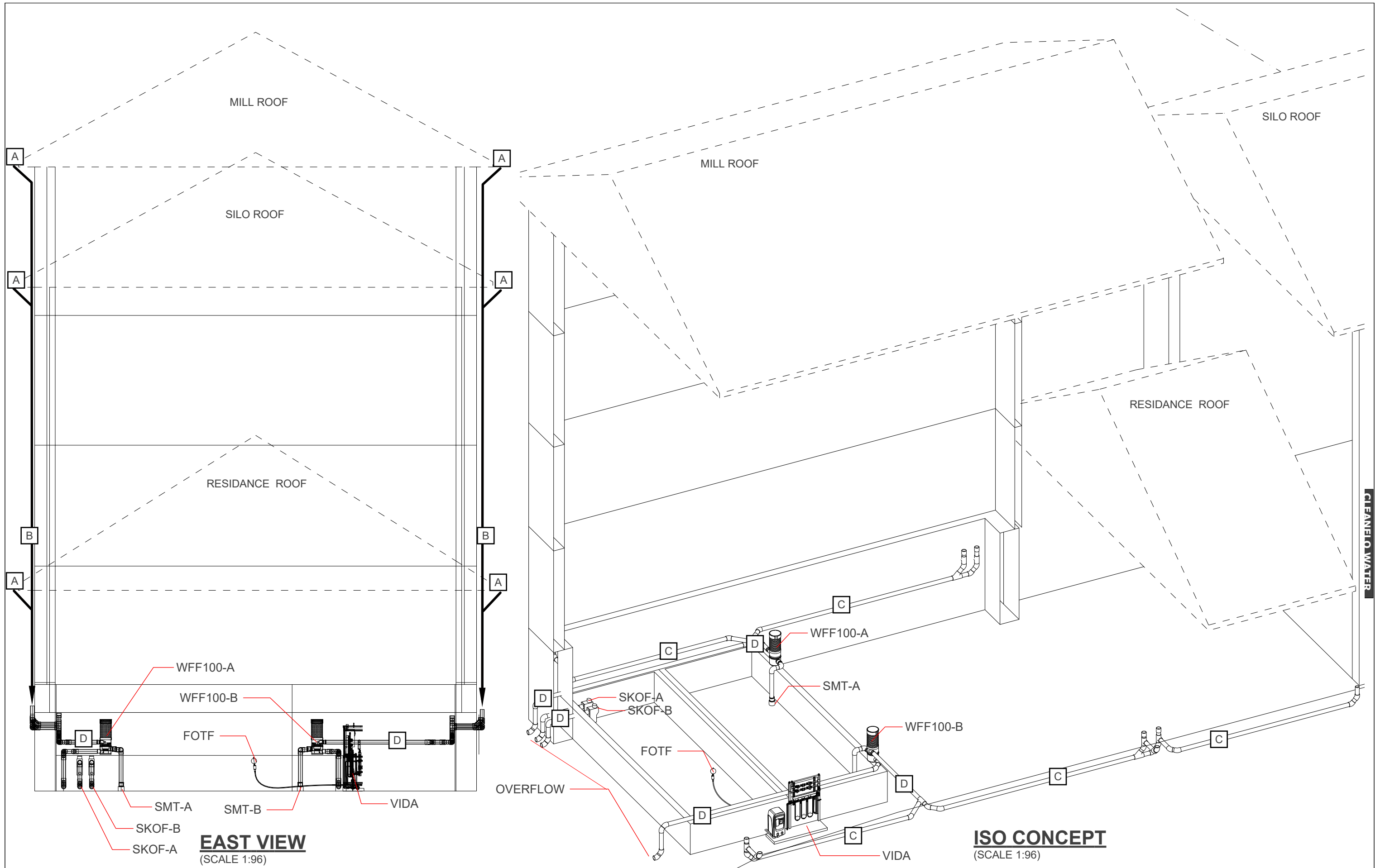


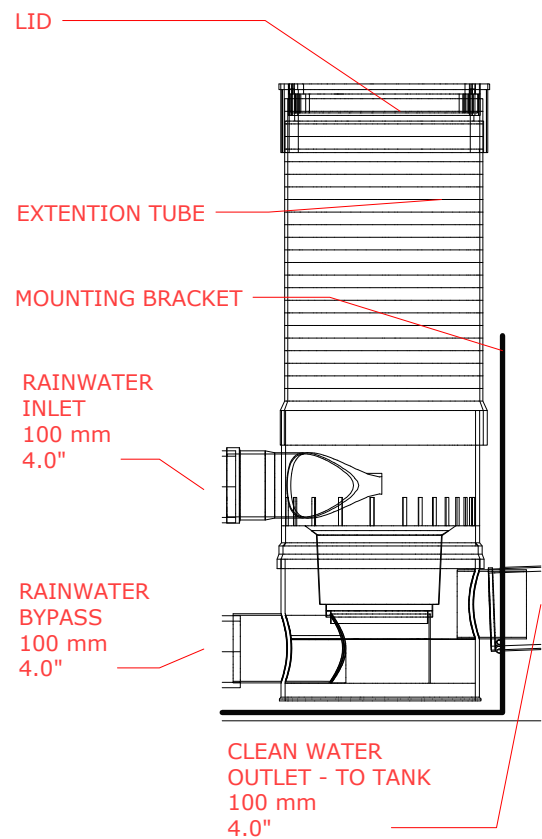
CLEANFLO WATER TECHNOLOGIES

ROOF PLAN
(SCALE 1:96)

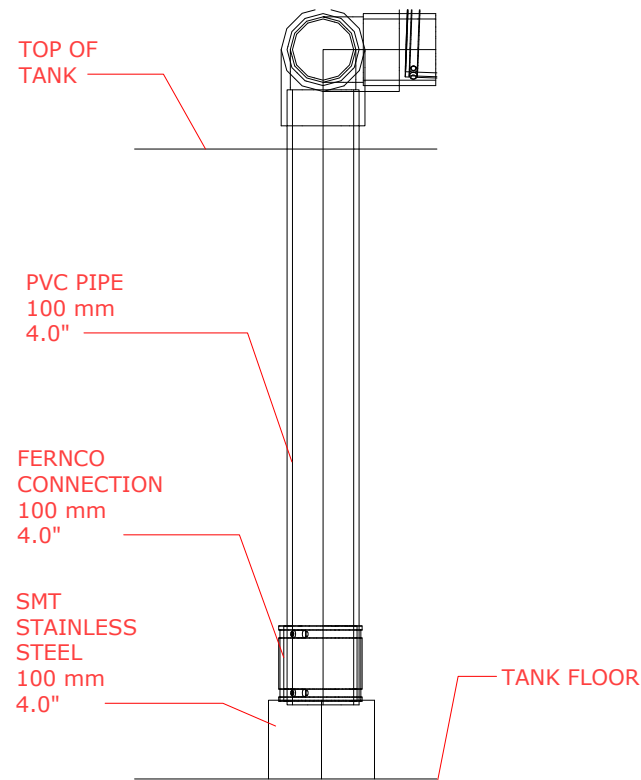
TAG	EQUIPMENT SCHEDULE
WFF100-A	PREFILTER - WISY VORTEX 100
WFF100-B	PREFILTER - WISY VORTEX 100
SMT-A	WISY SMOOTHING INLET
SMT-B	WISY SMOOTHING INLET
SKOF-A	WISY SKIMMING OVERFLOW
SKOF-B	WISY SKIMMING OVERFLOW
FOTF	WISY FLOATING FILTER
VIDA	VIDA RAIN REUSE SYSTEM PUMPING, TREATMENT AND CONTROL
TLS	- TANK LEVEL SENSOR
FOT1	- FLOAT SWITCH

TAG	PIPE AND WIRE SCHEDULE
A	EAVESTROUGH 5" WIDE @ 0.5% SLOPE WITH CROSS FLOW AREA OF 63.3 SQ CM MIN. AGRICULTURAL - STYLE HALF ROUND
B	RAINWATER LEADERS 3" DIAMETER MIN AGRICULTURAL - STYLE
C	HORIZONTAL PIPING 4" DIAMETER @ 1.0% SLOPE PVC DRAIN PIPE OR SDR 35
D	HORIZONTAL PIPING 4" DIAMETER @ 1.5% SLOPE PVC DRAIN PIPE OR SDR 35
E	FLOATING HOSE 1.25" DIAMETER (KANAFLEX)
F	SUPPLY PIPE 1.25" DIAMETER (PVC, PEX, POLY OR COPPER)
G	SENSOR WIRE 4 C - SHIELDED 16 AWG (4 CONDUCTOR)
H	FLOAT SWITCH WIRE 2 C - 14 AWG (2 CONDUCTOR)

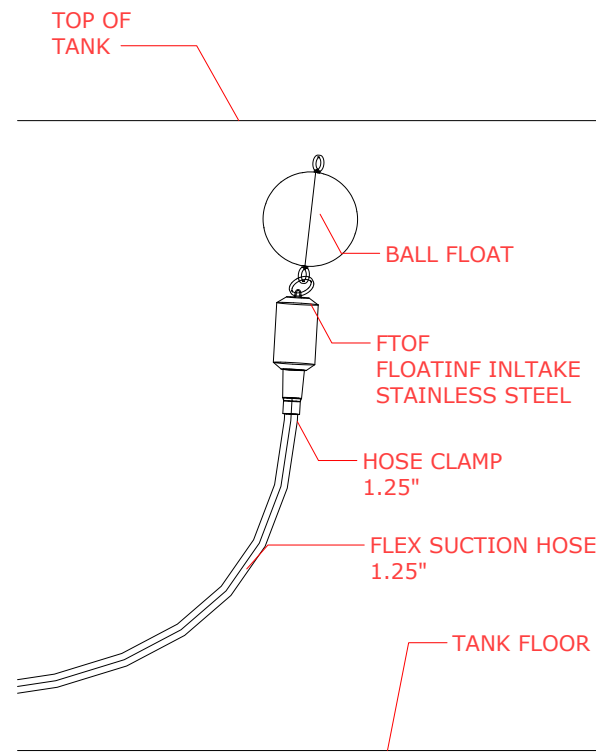




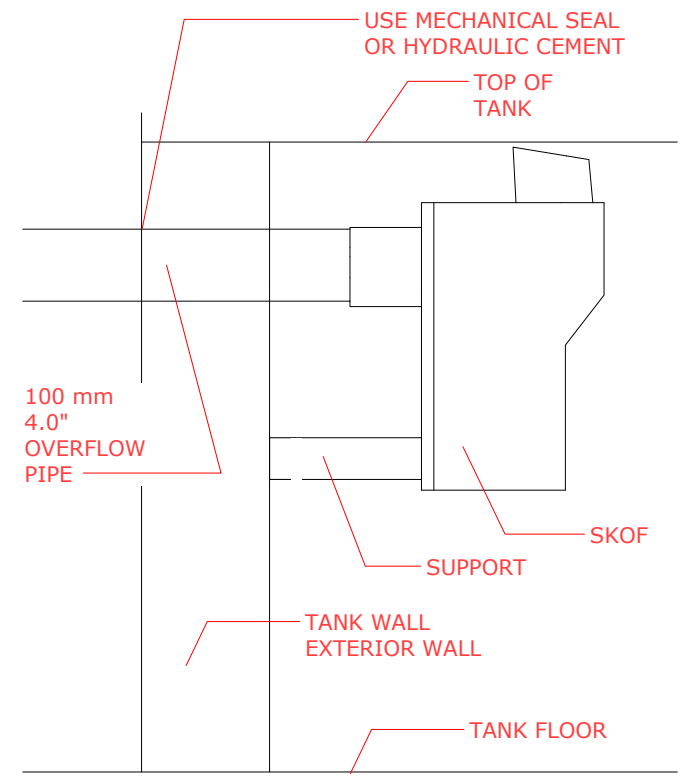
1 WFF 100 - PREFILTER VORTEX 100
SCALE: 1:12



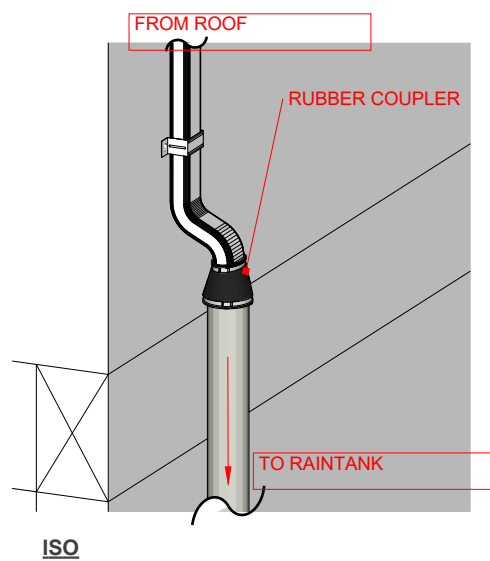
2 SMT - SMOOTHIG INLET STAINLESS STEEL
SCALE: 1:12



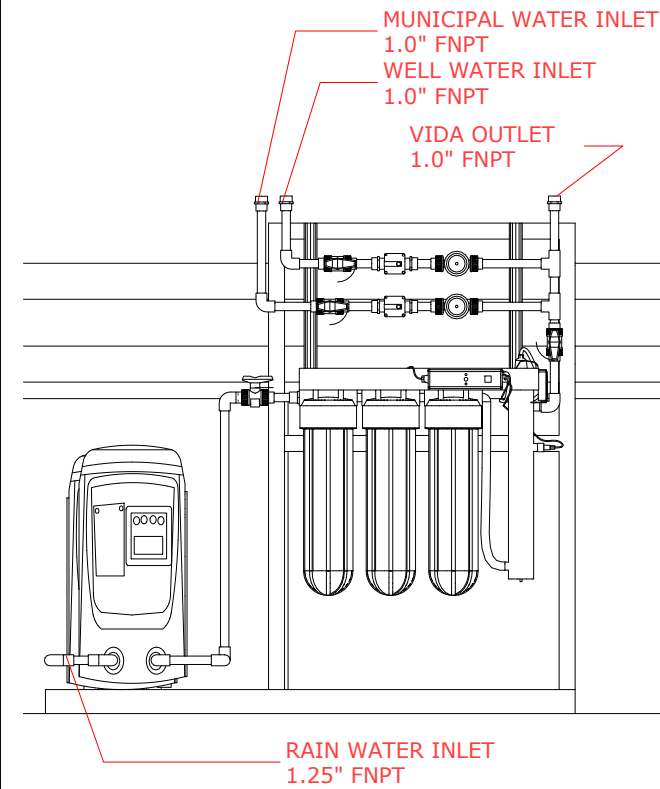
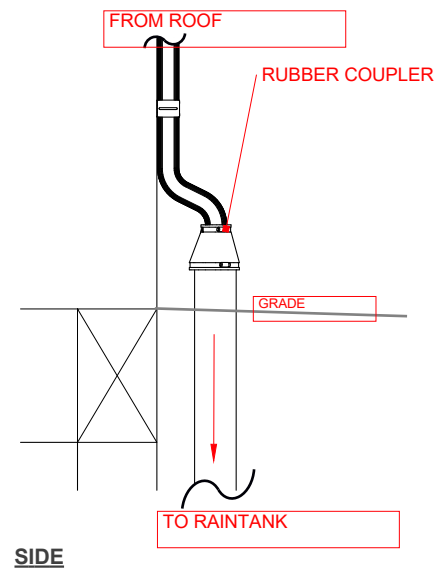
3 FOTF - FLOATING INLTAKE STAINLESS STEEL
SCALE: 1:12



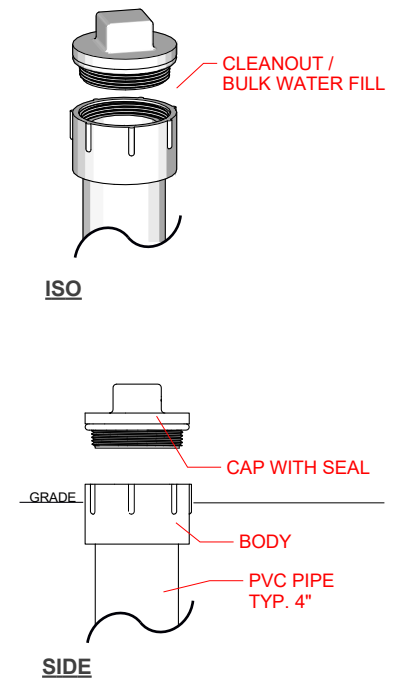
4 SKOF - SKIMMING OVERFLOW / BACKWATER VALVE
SCALE: 1:12



5 DOWNPIPE TRANSITION
SCALE: 1:20



6 VIDA RAIN REUSE
SCALE: 1:24



7 TYPICAL CLEANOUT / BULKWATER FILL
SCALE: 1:10