

VALVE OPERATION MODE													
MODE OF OPERATION	VLV A1	VLV A2	VLV A3	VLV A4	VLV A5	VLV A6	VLV B1	VLV B2	VLV B3	VLV B4	VLV B5	VLV B6	VLV B7
UNIT A (ONLY) OPERATION	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	CLOSE	CLOSE	CLOSE	CLOSE	CLOSE	CLOSE	CLOSE
UNIT B (ONLY) OPERATION	CLOSE	CLOSE	CLOSE	CLOSE	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	CLOSE
SERIES FLOW OPERATION UNIT A TO UNIT B	OPEN	CLOSE	CLOSE	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	OPEN	OPEN	CLOSE	CLOSE	CLOSE
SERIES FLOW OPERATION UNIT B TO UNIT A	CLOSE	CLOSE	OPEN	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	CLOSE	CLOSE	CLOSE	CLOSE
PARALLEL FLOW OPERATION UNIT A & UNIT B	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	CLOSE
UNIT A (ONLY) BACKWASH / ISOLATE B	CLOSE	OPEN	CLOSE	CLOSE	OPEN	CLOSE	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	OPEN
UNIT B (ONLY) BACKWASH / ISOLATE A	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	OPEN
UNIT A (ONLY) FILTER TO WASTE / ISOLATE B	OPEN	OPEN	OPEN	CLOSE	CLOSE	OPEN	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	CLOSE
UNIT B (ONLY) FILTER TO WASTE / ISOLATE A	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	OPEN	OPEN	OPEN	CLOSE	CLOSE	OPEN	CLOSE

ASSEMBLY MATERIALS

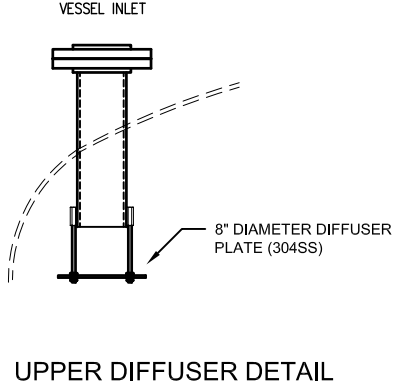
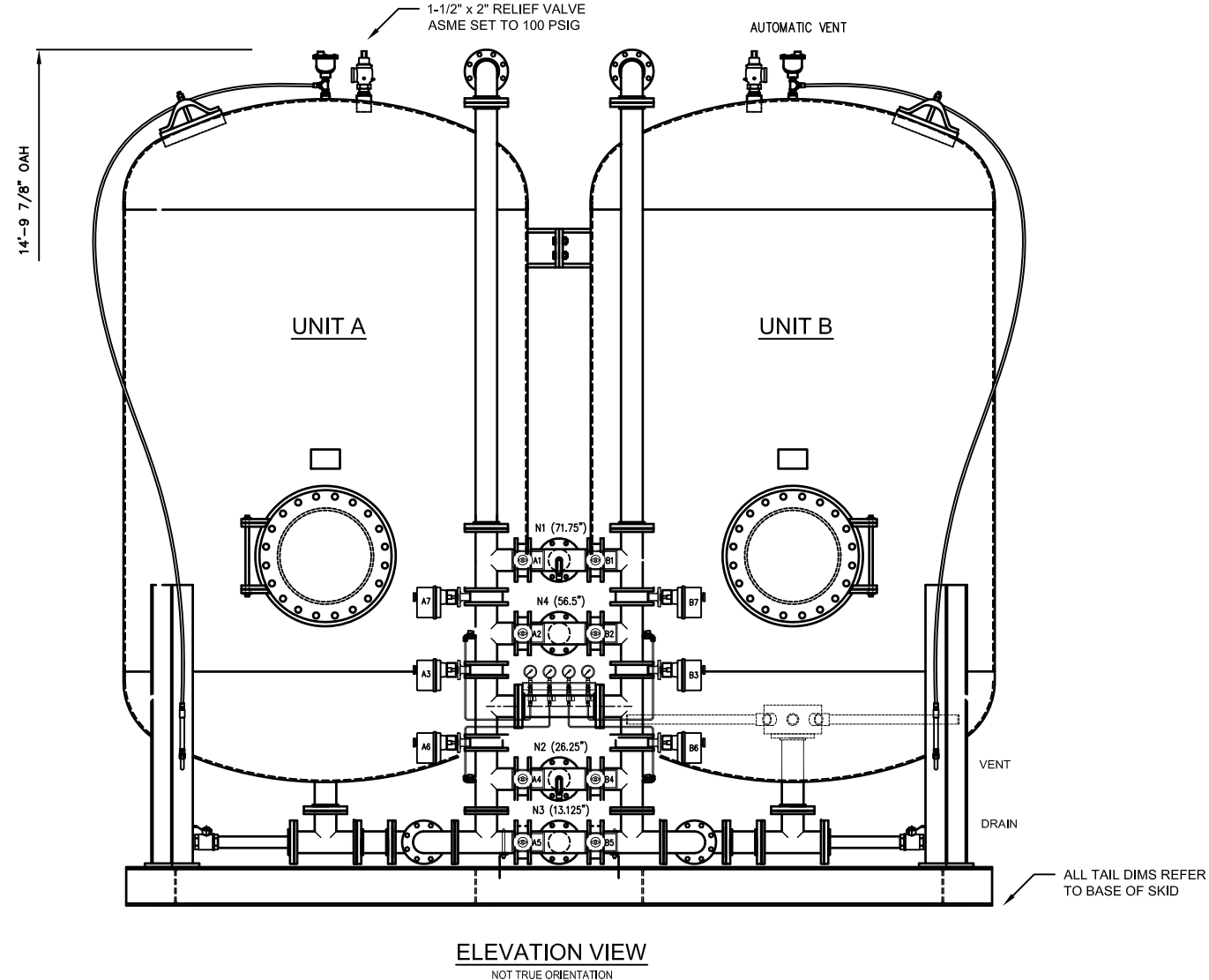
VALVES
 PROCESS & BACKWASH: Keystone 221, 4" CI Butterfly (wafer) with 316SS Disc, EPDM seat, 416SS Stem with Pneumatic Actuator (Fail Closed)
 DRAIN: J&M Model 32SS, 2" SS Full Port Ball Valve, 2 Piece 150# Flanged Body, PTFE Seat, SS Stem and Ball
 VENT: J&M Model 511, 1/2" SS Reduced Port Ball Valve, 1 Piece Thd Body, PTFE Seat, SS Stem and Ball with Lever Handle
 AUTOMATIC VENT: Crispin M5, 1/16" Orifice
 PRV: Kunkle Spec # 910BGGM01, 100 PSIG Set Pressure

PIPING
 4" PROCESS: CI Tees & Elbows 125#, ASTM A53 Steel Pipe Sch 40 with A105 Flanges 150#
 1" VENT: A-53 Sch80 Pipe, Screwed Ends

INSTRUMENTATION & OTHER DEVICES
 HUB: 4" FNPT Hub with (8) 1-1/2" Lateral Connections, PVC Construction
 LATERALS: 1-1/2" Wedge Wire Screen x 30" OAL (.012" Slot Opening), PVC80 Construction
 PRESSURE GAUGES: Trefice Model 700LFSS-25-04-L-A-110, Liquid Filled 2-1/2" Process Gauge with SS Body
 PRESSURE TRANSDUCERS: Dwyer Model 626-10-CH-P1-S1, 0-100 PSIG, 4-20 mA Output
 DIFFUSER PLATE: 304SS removable splash plate mounted to upper nozzle

FILTRATION MEDIA
 Grade and Manufacturer to be determined, GAC Loaded on-site after hydrotest and disinfection.

GENERAL NOTES
 1. System and supplied components utilize components and media acceptable to ANSINSF requirements for municipal potable water applications.



NOZZLE SCHEDULE OF OPENINGS					
Mark	Size	Rating	Type	Qty	Nozzle Description / or Service
N1	4"	150#	FFSO	1	RAW WATER INLET
N2	4"	150#	FFSO	1	TREATED WATER DISCHARGE
N3	4"	150#	FF	1	BACKWASH FEED
N4	4"	150#	FF	1	BACKWASH DISCHARGE
N5	2"	150#	FFSO	2	DRAIN
N6	1"	150#	FFSO	2	VENT
N7	20"	150#	RFSO	2	BED ACCESS
N8	12x16	n/a	ELLIP	2	BED ACCESS

VESSEL DESIGN DATA			
Vessel Registration	NATIONAL BOARD # -	Year Built	2009
Vessel Construction	ASME Sec VIII, Div 1, 2007 Edition, No Addenda	Vessel Serial Number	-
Internal Design Pressure	100 PSIG	Capacity (Volume)	Head: 96 ft3 Shell: 301 ft3
Internal Design Temperature	140 Deg F,	Shipping Weight (Empty)	Vessel: 5,630 lbs (each) Piping: 2,857 lbs
External Design Pressure	15 PSI	Operational Weight	76,405 lbs
Operating Pressure	NOT APPLICABLE	Nominal GAC Capacity	7,000 lbs (each)
Operating Temperature	NOT APPLICABLE		
Min. Design Metal Temp.	0 Deg F, AT 100 PSIG		
MAWP (New & Cold)	100 PSIG (LIMITED BY HEAD)	Gaskets	Access: EPDM (Ring) Piping: Red Rubber (Full Face)
MAWP (Hot & Corroded)	100 PSIG (LIMITED BY HEAD)	Studs and Nuts	SA-193-B7 / SA-194-2H
Hydrostatic Test Pressure	130 PSIG AT AMBIENT TEMP. / Medium = WATER	Surface Prep.	Internal SSPC-SP10 (2-3 mil), External (SSPC-SP10)
Corrosion Allowance	NONE	Internal Coating	S. Williams Duraplate 235 NSF 12 mils DFT (SYS #2)
Radiography	NONE	External Primer	S. Williams Macropoxy 646 5 mils DFT
Post Weld Heat Treat	NOT APPLICABLE	External Paint or Coating	S. Williams Macropoxy 646 5 mils DFT (ANSI LL, Grey)
Material Impact Tests	EXEMPT PER UG 20(f) 1-5	Insulation (type & thickness)	NOT APPLICABLE
Material Hardness	MAX HRC 22		

Continental Carbon Group
 1100 South Service Road, Suite 321
 Stoney Creek, ON L8E-0C5
 Tel: 905-643-7615
 info@continental-carbon.com | www.continental-carbon.com

PROJECT: Multi-Media Filter Unit

CUSTOMER: / END USER:

DRAWING TITLE: GENERAL ASSEMBLY

JOB #:	TAG #:	CUST PO:
DWN BY:	DATE:	Qty Req:
CHK BY:	DATE:	SCALE:
APP BY:	DATE:	DWG #:
		REV: 0