REV.#	ITEM	UNIT DWG NO QTY	TAG NO	DESCRIPTION
	01	2 D-210003-03-01	V-100 A&B	36" O.D. X 6'-8" SEAM TO SEAM, VERTICAL PRIMARY VESSEL
	02	2 D-210003-03-01	V-101 A&B	24" O.D. 6'-0" SEAM TO SEAM VERTICAL POLISHER VESSEL
	03	2 D-210003-03-01	FCV-01 & 02	TRIAC, #AV-22TX-100-WEA2, BALL VALVE, 1" FNPT, FULL PORT, 316SS BODY & TRIM, RTFE SEATS, 120VAC POWER NEMA 4 ACTUATOR AND 4-20MA CONTROL SIGNAL.
	04	6 D-210003-03-01	V1A, V1B, V2A, V2B, V3A, V3B	2" FNPT DIAPHRAGM VALVE ( NORMALLY OPEN ). AQUAMATIC MODEL V42F-0000-00200 W/ SOLENOID ON VALVE, 1/4"DRILL & TAP PORT #2 ON INLET SIDE & OUTLET SIDE
	05	4 D-210003-03-01	V4A, V4B, V5A, V5B	2" FNPT DIAPHRAGM VALVE , SPRING ASSISTED CLOSE, ( NORMALLY OPEN ). AQUAMATIC MODEL V42F-0002-00200 W/ SOLENOID ON VALVE, 1/4"DRILL & TAP PORT #2 ON INLET SIDE & OUTLET SIDE
	06	2 D-210003-03-01	V9A, V9B	2" FNPT DIAPHRAGM VALVE, SPRING ASSISTED CLOSE, ( NORMALLY OPEN ). AQUAMATIC MODEL V42F-0002-00200 W/ SOLENOID ON VALVE, 1/4"DRILL & TAP PORT #2 ON INLET SIDE & OUTLET SIDE
	07	8 D-210003-03-01	V6A, V6B, V7A, V7B, V8A, V8B	1" FNPT DIAPHRAGM VALVE , ( NORMALLY OPEN ). AQUAMATIC MODEL V42C-0000-00200 W/ SOLENOID ON VALVE, 1/4"DRILL & TAP PORT #2 ON INLET SIDE & OUTLET SIDE
	08	11 D-210003-03-01		2" 200# BUTTERFLY VALVE WAFER TYPE. C/W SS DISC AND STEM,WITH EPDM SEATS HAND OPERATED, " RED-WHITE" MODEL # 937MEML
1	A80	3 D-210003-03-01		3" 200# BUTTERFLY VALVE WAFER TYPE. C/W SS DISC AND STEM,WITH EPDM SEATS HAND OPERATED, " RED-WHITE" MODEL # 937MEML
	08B	3 D-210003-03-01		2" 150# CHECK VALVE WAFER TYPE CAST IRON, DUAL PLATE CHECK VALVE,BRONZE PLATE, SS PIN & SPRING,STEEL PLUG, BUNA-N SEAT, "RED-WHITE" MODEL # FIG. # 442
	09	21 D-210003-03-01		3/4" FNPT BALL VALVE FORGED BRASS BODY W/ BRASS INTERNALS, PTFE SEAT &GLAND PACKING. HAND OPERATED, "RED-WHITE" FIG.# 5042
	10	7 D-210003-03-01		1/2" FNPT BALL VALVE PVC MOLDED IN PLACE PLASTIC BALL, EPDM SEAT AND STEM SEAL, "RED-WHITE" FIG. # 1380E
	11	2 D-210003-03-01		1" NPT GLOBE VALVE, PVC CONSTRUCTION "ASAHI" MODEL # 1261-010
	12	2 D-210003-03-01		BACKWASH FLOW CONTROLLER 2 1/2" NPT PLATED BRONZE CONSTRUCTION ,SIZED FOR 55 GPM, " DOLE" MODEL # GH55

REV# DATE	DESCRIPTION	DRWN BY	CHKD BY		APPD BY	EN-FAB, INC. BILL OF MATERIALS FOR P+ID  HOUSTON, TEXAS  SODIUM ZOLITE WATER SOFTNER	ITEMS
0 12/14/2010	ISSUED FOR CONSTRUCTION	FR	JN	SV	ABE	THIS DRAWING IN DESIGN AND DETAIL, IS THE PROPERTY OF EN-FAB, INC., AND IS CONSIDERED CONFIDENTIAL. IT MUST NOT BE USE	ED EVCEDT IN CONNECTION WITH OUR WORK IT MAY NOT BE
1 11/22/2013	AS-BUILT	SN				DRAWN BY:   F.R.   10/11/10   CUSTOMER   WORK ORDER # CUSTOMER   WORK ORDER # CUSTOMER PO#	EN-FAB, INC. 210003  B-210003-03-02

REV.#	ITEM	_	DWG NO	TAG NO	DESCRIPTION
		QTY			
	13	2	D-210003-03-01		2 1/2" NPT RINSE FLOW CONTROLLER PLATED BRONZE CONSTRUCTION. SIZED FOR 45 GPM, "DOLE" MODEL # GH45
	14	2	D-210003-03-01	AE-010, AE- 011	HACH WATER HARDNESS MONITOR MDL# SP510, 1mg/L AS CACO3 ALARM LEVEL, 120VAC 50/60HZ
	15	2	D-210003-03-01		3/4" NPT POLISH SOFTENER RINSE FLOW CONTROLLER, PLATED BRONZE CONSTRUCTION, SIZED FOR 11.5 GPM, "DOLE" MODEL # GC11.5
	16	2	D-210003-03-01	F-100 A/B	"CUNO" FILTER 2" 150# RF FLG., C.S. EXPRESS SERIES # ES-08-006-D3-A1-GA-E3-BB, W/ 6 ELEMENTS #RT30B-16G20NN
	17	2	D-210003-03-01		"GO" PRESSURE REGULATOR ASSEMBLY MODEL # PR2-2B11A5D111, W/ PRESS. GAUGE
1	18	4	D-210003-03-01		1/2" NPT BALL CHECK VALVE , S.S. CONSTRUCTION, NUPRO MDL# SS-CHF8-1, 1 PSIG CRACKING PRESSURE
	19	2	D-210003-03-01	FE/FT-01 & FE/FT-02	2" 150 # RF TURBINE METER W/C ONE PICK-UP COIL AND ONE PRE-AMP #SP714, " SPONSLER" MODEL # SP2-CB-PHL-C-6X
	20	2	D-210003-03-01	FE/FT-03,FE/ FT-04	3/4" NPT, TURBINE METER W/C ONE PICK-UP COIL AND ONE PRE-AMP #SP714, " SPONSLER" MODEL # SP3/4-CB-PHL-A-6X
	21	0	D-210003-03-01		NOT USED
	22	2	D-210003-03-01	V10A,V10B	1" FNPT DIAPHRAGM VALVE, (NORMALLY OPEM), AQUAMATIC MODEL V42C-0000-00200 W/ SOLENOID ON VALVE, 1/4" DRILL & TAP PORT #2 ON INLET SIDE & OUTLET SIDE
1	22A				NOT USED
	23	48	D-210003-03-01		1/4" MNPTxFNPT GAUGE VALVES. BRASS CONSTRUCTION, "AGCO" MODEL # H5RDB/22
	23A	1	D-210003-03-01	AE-02	JENCO, SALT ANALYZER, 120VAC POWER, @4-20MA SIGNAL TO PLC, MODEL #6308CT CONDUCTIVITY CONTROLLER AND #C621-3-4-2-20T PROBE
	24	14	D-210003-03-01		PRESSURE GAUGE RANGE 0-160 PSIG, 'WIKA" MODEL # 213.53 2 1/2" DIAL 1/4" LOWER CONN, SS CASE AND BRONZE WETTED PARTS.
1	25	6	D-210003-03-01		3/4" NPT AIR RELEASE VENT "ARMSTRONG " MODEL # 11-AV, 1/8" ORIFICE

REVIS	DATE	DESCRIPTION	DRWN BY	CHKD BY	PROJ. ENG.	APPD BY	EN-FAB, INC. BILL OF MATERIALS FOR P+II	
1	12/14/2010 11/22/2013	ISSUED FOR CONSTRUCTION AS-BUILT	FR SN	JN	SV	ABE	THIS DRAWING IN DESIGN AND DETAIL, IS THE PROPERTY OF EN-FAB, INC., AND IS CONSIDERED CONFIDENTIAL. IT MUST NOT BE UREPRODUCED OR COPIED WITHOUT WRITTEN CONSENT OF EN-FAB, INC.	
							DRAWN BY: F.R. 10/11/10  CHECKED BY JN 12/16/10  PROJ. ENG. APPROVED BY  PROVED BY  F.R. 10/11/10  CUSTOMER WORK ORDER # CUSTOMER PO# ITEM # DRAWING #	EN-FAB, INC.  210003  3  B-210003-03-02

REV.#	ITEM	UNIT QTY		TAG NO	DESCRIPTION
	26	3	D-210003-03-01		1" NPT SOLENOID VALVE PVC CONSTRUCTION, "HAYWARD " 120 VAC, MODEL # SV10100STV
	27	1	D-210003-03-01		1" GATE VALVE, NIBCO MODEL # T-111, BRONZE CONSTRUCTION
	28	3	D-210003-03-01		1/2" NPT "Y" STRAINER EPDM, # 20 MESH PVC CONSTRUCTION,"ASAHI " MODEL # 1257-005
	29	4	D-210003-03-01		1" NPT BALL CHECK VALVE, PVC CONSTRUCTION, "ASAHI " MODEL # 1210-010
	30	1	D-210003-03-01	AE-03	JENCO, PH CONTROLLER, 120VAC POWER, -2.00 T0 16.00PH @4-20MA SIGNAL TO PLC, MODEL #6308PT CONTROLLER AND #PHF-020-ST/TH PROBE
	31	1	D-210003-03-01	T-100	750 GALLON BRINE STORAGE TANK, POLETHYLENE, C/W FIBERGLASS SUPPORT 60" DAI. X 60" H
	32	1	D-210003-03-01	T-102	55 GALLON STORAGE TANK FOR "NAOH" CHEMICAL, POLYETHYLENE, C/W FIBERGLASS SUPPORT 20" DIA. X 38" H
	33	1	D-210003-03-01	T-101	165 GALLON STORAGE TANK FOR OXYGEN SCAVENGER, POLYETHYLENE, C/W FIBERGLASS SUPPORT 32" DIA X 58" H
	34	1	D-210003-03-01	T-103	55 GALLON STORAGE TANK FOR "EDTA" CHEMICAL, POLYETHYLENE, C/W FIBERGLASS SUPPORT 20"DIA X 38"H
	35A	1	D-210003-03-01	LSH-01	LEVEL SWITCH HIGH ELECTRIC, "LINC " MODEL # L471-03-5., S. S. BODY, 1 1/2" MNPT CONN.
1	35B				NOT USED
	35C	2	D-210003-03-01	P-103 A/B	CHEMICAL INJECTION PUMP C / W THREE (3) HEAD DESIGN. EACH PUMP WILL INJECT ALL THREE (3) CHEMICALS 460 VAC, 3 PHASE,60 HZ. NEMA-4, PULSAFEEDER "PULSAR" MODEL # 25HJ-3-AE, 1/4" NPT IN & OUT.
	35D	3	D-210003-03-01		CHEMICAL CALIBRATION COLUMN , RANGE 60 GPD CAPACITY, 1/2" NPT CONNECTIONS, " KENCO " MODEL 30060-S6-B-GD-L
	36A	3	D-210003-03-01	P-100 A, B, C	FEED/ BACKWASH WATER PUMPS 70 GPM @ 174 FT.TDH WITH 7.5 HP, 3500 RPM MOTOR 460 VAC, 3 PHASE, 60 HZ.,TEFC, " GOULDS " PUMP MODEL # GLW-9BF1K5C0, SIZE 1 X 2-8 ,1"NPT DISC. X 2" NPT SUCTION W JOHN CRANE TYPE 21 MECHANICAL SEAL.
	36B	2	D-210003-03-01	P-102 A/B	BRINE PUMP 20 GPM @ 52 PSI. 2 HP @ 3500 RPM MOTOR 460 VAC, 3 PHASE, 60 HZ., TEFC, "GLOUDS "MODEL # NPE (GLW-1ST1G5B2) SIZE 1 x 1 1/4-6, W / JOHN CRANE TYPE 6 MECHANICAL SEAL.

REV# DATE	DESCRIPTION	DRWN BY	CHKD BY		APPD BY	EN-FAB, INC. BILL OF MATERIALS FOR P+ID  HOUSTON, TEXAS  SODIUM ZOLITE WATER SOFTNER	ITEMS
0 12/14/2010	ISSUED FOR CONSTRUCTION	FR	JN	SV	ABE	THIS DRAWING IN DESIGN AND DETAIL, IS THE PROPERTY OF EN-FAB, INC., AND IS CONSIDERED CONFIDENTIAL. IT MUST NOT BE USE	ED EVCEDT IN CONNECTION WITH OUR WORK IT MAY NOT BE
1 11/22/2013	AS-BUILT	SN				DRAWN BY:   F.R.   10/11/10   CUSTOMER   WORK ORDER # CUSTOMER   WORK ORDER # CUSTOMER PO#	EN-FAB, INC. 210003  B-210003-03-02

REV.#	ITEM	UNIT DWG NO QTY	TAG NO	DESCRIPTION
1	36C			NOT USED
	37	11 D-210003-03-01		1" NPT BALL VALVES PVC MOLDED IN PLACE PLASTIC BALL, EPDM SEAT, SEAT SEALS, STEM SEAL, " RED-WHITE " MODEL # 1380E
	38	4 D-210003-03-01		"ERNST" SIGHT WINDOW, 3" NPT, CS, MDL# EF1-S-5400
	39	1 D-210003-03-01		CONTROL PANEL FOR ELECTRICAL AND PUMP CONTROL, "ALLEN BRADLEY " MODEL # CONTROLLOGIX PLC, "A/B " OPERATING INTERFACE WITH MOTOR CONTROL CENTER IN LOWER HALF OF PANNEL,
	40	4 D-210003-03-01		1/2" NPT CHECK VALVE, SS CONSTRUCTION, NUPRO MODEL # SS-CHF8-10, 10 PSIG CRACKING PRESSURE
	41	70 D-210003-03-01		3/4" S.S. RESIN STRAINERS, " JOHNSON " MODEL # 3170003
	42	0 D-210003-03-01		NOT USED
	42A	1 D-210003-03-01		1 1/2" NPT BALL VALVE , BRASS CONSTRUCTION, "RED-WHITE" MODEL # 5592
	43	60 D-210003-03-01		RESIN, 44 CUBIC FT. / EACH FOR PRIMARY VESSELS AND 16 CUBIC FT / EACH FOR POLISHER VESSELS. " PUROLITE " # C-100
	44	D-210003-03-01		NOT USED
1	45	1 D-210003-03-01	DPIS-05	DIFFERENTIAL PRESSURE INDICATING SWITCH MID-WEST MODEL # 121-S-A-0-0-0-E 1/4" PROCESS CONN. (1) SPDT SWITCH.
	46	3 D-210003-03-01		EN-FAB 2" STATIC MIXER FOR CHEMICAL INJECTION PORTS.
	46A	1 D-210003-03-01		EN-FAB STATIC MIXER, 2" FOR BRINE DELUTION
	47	0 D-210003-03-01		NOT USED
	48	2 D-210003-03-01		STRAIGHTENING VANES FOR 2" PIPE.S.S.
	49	18 D-210003-03-01		1/4" NPT NEEDLE VALVES PVC CONSTRUCTION, " HAYWARD " MODEL # NV10025T

REVIS	SION HISTORY		DRWN	CHKD	PRO.I	APPD	EN-FAB, INC.	BILL OF MATERIA	LS FOR P+ID	ITEMS
REV#	DATE	DESCRIPTION	BY	BY	ENG.	BY	HOUSTON, TEXAS	SODIUM ZOLITE W	ATER SOFTNER	
1	12/14/2010 11/22/2013	ISSUED FOR CONSTRUCTION  AS-BUILT	FR SN	JN	SV	ABE	THIS DRAWING IN DESIGN AND DETAIL, IS THE PROF	PERTY OF EN-FAB, INC., AND IS CONSIDERED CON		D EXCEPT IN CONNECTION WITH OUR WORK. IT MAY NOT BE
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								16/10	WORK ORDER #	210003
							PROJ. ENG. SV 12/1		CUSTOMER PO# ITEM #	3
							APPROVED BY ABE 12		DRAWING #	B-210003-03-02

REV.#	ITEM	UNIT DWG NO QTY	TAG NO	DESCRIPTION				
	50	0 D-210003-03-01		NOT USED				
	51	0 D-210003-03-01		NOT USED				
	52	2 D-210003-03-01		2" 150#NPT GLOBE VALVE BRONZE CONSTRUCTION, " NIBCO " MODEL #T-235Y				
	53	0 D-210003-03-01		NOT USED				
	54	0 D-210003-03-01		NOT USED				
	55	0 D-210003-03-01		NOT USED				
1	56			NOT USED				

RE	VIS	ION HISTORY		DRWN	CHKD	PROJ.	APPD	EN-FAB, INC. BILL OF MATERIALS FOR P+ID ITEMS
RE	V#	DATE	DESCRIPTION	ВҮ	BY	ENG.	BY	HOUSTON, TEXAS SODIUM ZOLITE WATER SOFTNER
	0	12/14/2010 11/22/2013	ISSUED FOR CONSTRUCTION  AS-BUILT	FR SN	JN	SV	ABE	THIS DRAWING IN DESIGN AND DETAIL, IS THE PROPERTY OF EN-FAB, INC., AND IS CONSIDERED CONFIDENTIAL. IT MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK. IT MAY NO
	•	11/22/2010	AC BOILT	Oiv				REPRODUCED OR COPIED WITHOUT WRITTEN CONSENT OF EN-FAB, INC.  EN-FAB, INC.
								DRAWN BY: F.R. 10/11/10 CUSTOMER WORK ORDER # 210003
								PROJ. ENG. SV 12/16/10 CUSTOMER PO#
								APPROVED BY ABE 12/16/10 ITEM #
								DRAWING # B-210003-03-02

Monday, June 25, 2018

SHEET 5 of 5