

										MANHOUR UNIT RATE		\$ 75
SR. NO.	DESCRIPTION	QUANTITY	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT COST	MATERIAL COST	MANHOURS UNIT RATE	MANHOURS	MANHOURS COST	TOTAL TRADE COST	
<b>INSTALLED BY MECHANICAL CONTRACTOR</b>												
<b>CHILLED WATER PUMP DECK WITH TANK</b>												
1	TNK-300, CHW Tank Deck & Pump Deck.	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
<b>PTW PUMP DECK WITH TANK</b>												
1	TNK-200, PTW Tank Deck & Pump Deck.	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
<b>CITY WATER BREAK TANK</b>												
1	TNK-7201, City Water Break Tank, 20000 Gallon City Water Break Tank, 144" D x ~26'6"H, 4,400 lbs. AUGUSTA FIBERGLASS , 20,000 GAL 12' DIA FRP TANK	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
<b>CITY WATER BREAK TANK ACCESSORIES</b>												
1	2" Dia Level Sensor	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
2	24" Dia Side Manway W/ Dome Cover. Bolting & Gasket	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
3	4" Dia CIP Inlet	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
4	6" Dia Inlet Spare W/ Blind, Bolting & Gasket	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
5	6" Dia Outlet Spare W/ Blind, Bolting & Gasket	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
6	6" Dia Recapture Water	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
7	8" Dia Inlet	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
8	10" Dia Full Drain	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
9	10" Dia Overflow	2	0%	2	EA		\$ -	\$ 75		\$ -	\$ -	
10	10" Dia Vent	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
<b>CARBON TOWER</b>												
1	ACT-7221, CW Carbon Tower, MANUF: DIACO SERVICE FLOW: 550 GPM BACKWASH FLOW: 700 GPM SIZE: 96"x192" FT <sup>3</sup> CARBON: 664 INLET: 4" OUTLET: 4" STEAM INLET: 1"	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
2	ACT-7222, CW Carbon Tower, MANUF: DIACO SERVICE FLOW: 550 GPM BACKWASH FLOW: 700 GPM SIZE: 96"x192" FT <sup>3</sup> CARBON: 664 INLET: 4" OUTLET: 4" STEAM INLET: 1"	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	
<b>REVERSE OSMOSIS UNIT</b>												
1	RO-7401, RO Skid, 22'-10"L x 8'-8"W x 11'-9"H 20,000 lbs	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -	

DRINKING WATER STORAGE SILO											
1	TNK-7411, 50000 Gallon Purified Drinking Water Silo, 12' 6" D x 66'-0"H, 30,000 lbs. FELDMIEER 50,000 GALLON SS TANK	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
DRINKING WATER STORAGE SILO ACCESSORIES											
1	2" Dia Sanitary clamp connection	2	0%	2	EA		\$ -	\$ 75		\$ -	\$ -
2	2" Dia sanitary clamp connection with a spray dish mounted in a 3" sanitary clamp connection with a 2" OD tube extending down the sidewall with gaskets etc	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
3	3 lifting lugs welded to the top head and 2 lifting holes in the base	5	0%	5	EA		\$ -	\$ 75		\$ -	\$ -
4	6" Dia Sanitary clamp connection	2	0%	2	EA		\$ -	\$ 75		\$ -	\$ -
5	8" Dia 150# RFSO Flange connection	2	0%	2	EA		\$ -	\$ 75		\$ -	\$ -
6	120V volt electric heat tape with single thermostat contractor control box, mounting bracket and insulations	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
7	16"x20" Elliptical inside swing manway W/ gasket 1-1/2" sanitary clamp connection for PERLICK F38305SS Sample valve and grab handle.	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
8	External 6" Dia OD vent Tube extending from the top head to the alcove area with CIP jumper and mini spray ball from the clip line, 6" Dia Non capping sanitary clamp connection includes non capping UV Adapter tee, silicon blow off cap, mounting bracket and fuller FG 2144HPB UV air purifier W/8 micron pre-filter, 0.3 hepa filter & 1 Hp high pressure blowers - 120vac	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
9	External 8" Dia OD Overflow tubing extending from the upper sidewall to the alcove area with CIP jumper and mini sprayball from the CIP line.	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
10	External 8" Line with No-foam elbow to alcove area ending with a sanitary clamp connection	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
11	Hold down - shipped loose for field installation by others	9	0%	9	EA		\$ -	\$ 75		\$ -	\$ -
12	Louvered manway door for use during CIP	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
13	Ozone diffuser mounted in a sanitary clamp connection	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
14	Stainless steel tubular hook-up device for connection CIP line to overflow & vent lines in alcove	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
15	Vortex breaker welded	2	0%	2	EA		\$ -	\$ 75		\$ -	\$ -
CENTRAL MINERAL SKID											
1	CMS-7501, Central Mineral Skid, DAICO CENTRAL MINERAL INJECTION SKID	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
METERING SYSLAS											
1	MET-7511, Metering Syslas- ozone sample and quality station, DAICO	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
2	MET-7521, Metering Syslas- ozone sample and quality station, DAICO	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -

OZONE INJECTION SKIDS & CONTACT TANKS											
1	OIS-7511, Ozone Injection Skid, Ozone Contact tanks	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
2	OIS-7521, Ozone Injection Skid, Ozone Contact tanks	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
<b>CIP SKID</b>											
1	CIP-7601, CIP Skid/Tank, CIP SYSTEM, DAICO	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
<b>BLOWDOWN SAPERATOR</b>											
1	BDS-7701, Blowdwn saperator, MUIRA, LX150 STEAM BOILER AUX. COMPONENT	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
<b>BOILER &amp; FEEDWATER SKID</b>											
1	BLR-7701, Boiler, Feedwater Skid. MUIRA, LX150 STEAM BOILER	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
<b>FEED WATER TANK</b>											
1	FWT-7701, Feed Water Tank, MUIRA, LX150 STEAM BOILER AUX. COMPONENT	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
<b>SOFT WATER TANK</b>											
1	SWT-7701, Water Softener, MUIRA, LX150 STEAM BOILER AUX. COMPONENT										
<b>INSTALLED BY PROCESS CONTRACTOR</b>											
<b>WATER FILTER</b>											
1	FLT-7211/7212, Tekleen Water Filter, MANUF: TEKLEEN MODEL: LPF6-XLP CAPACITY: 1500 GPM ELEMENT: WEDGEWIRE SCREEN CONNECTIONS: 10" FLANGE FLUSH: 3" FLANGE	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
<b>STEAM PRE-FILTER</b>											
1	FLT-7701, Steam Prefilter, DONALDSON 25 UM FILTER WITH TRAP, BY OWNER	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
<b>STEAM CULLINARY FINAL FILTER</b>											
1	FLT-7702, Steam Cullinary Final Filter, DONALDSON 5 UM FILTER WITH TRAP, BY OWNER	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
<b>WATER BUFFER TANK VENT UV</b>											
1	UV-7201, City Water Buffer Tank Vent UV	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -
<b>ULTRAVOILET</b>											
1	UV-7411, Ultraviolet Sanitary, FULLER, FG 2144.2020 6" TC	1	0%	1	EA		\$ -	\$ 75		\$ -	\$ -

PUMP											
1	PMP-7201, City Water Supply Pump, MANUF: ALFA LAVAL MODEL: LKH-70 CAPACITY: 750 GPM @ 240' TDH TYPE: CENTRIFUGAL CONNECTIONS: TRI-CLAMP SPEED: 3500 RPM MOTOR: 75 HP IMPELLER: 8.5"	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
2	PMP-7202, City Water Supply Pump, , MANUF: ALFA LAVAL MODEL: LKH-70 CAPACITY: 750 GPM @ 240' TDH TYPE: CENTRIFUGAL CONNECTIONS: TRI-CLAMP SPEED: 3500 RPM MOTOR: 75 HP IMPELLER: 8.5"	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
RO ANTISCALANT CHEM PUMP											
1	CFU-7401, RO Antiscalant Chem Pump, DAICO, GRUNDFOS CHEMICAL FEED PUMP	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
RO ACID CHEM PUMP											
1	CFU-7402, RO Acid Chem Pump, DAICO, GRUNDFOS CHEMICAL FEED PUMP	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
PUMP											
1	PMP-7421, DW Delivery Pump, MANUF: ALFA LAVAL MODEL: LKH-25 CAPACITY: 250 GPM @ 175 TDH TYPE: CENTRIFUGAL CONNECTIONS: TRI-CLAMP SPEED: 3500 RPM MOTOR: 25 HP IMPELLER: 7.1"	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
2	PMP-7422, DW Delivery Pump, MANUF: ALFA LAVAL MODEL: LKH-25 CAPACITY: 250 GPM @ 175 TDH TYPE: CENTRIFUGAL CONNECTIONS: TRI-CLAMP SPEED: 3500 RPM MOTOR: 25 HP IMPELLER: 7.1"	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
3	PMP-7429, CIP & MIS Batching Pump, MANUF: ALFA LAVAL MODEL: LKH-45 CAPACITY: 525 GPM @ 75' TDH TYPE: CENTRIFUGAL CONNECTIONS: TRI CLAMP SPEED: 3500 RPM MOTOR: 20 HP IMPELLER: X"	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
PANEL											
1	FDP-7690, CIP Flow Divert Panel, CUSTOM 9-PORT CIP FLOW DIVERT PANEL, BRUNS BROS.	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
COLORMETRY											
1	CMU-224HE, Colormetry, MUIRA, LX150 STEAM BOILER AUX. COMPONENT	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
COOLING TOWER											
1	CT-001, Cooling Tower, 14' L x 26'-4" x W x 21'-3" H 49,089 lbs.	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
2	CT-002, Cooling Tower, 14' L x 26'-4" x W x 21'-3" H, 49,089 lbs.	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	

<b>COOLING TOWER BASIN SAPERATOR</b>										
1	SEP-001, Separator Unit, 57" L x 40" W X 62" H, 850 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
2	SEP-002, Separator Unit, 57" L x 40" W X 62" H, 850 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
<b>WATER COOLED CHILLER</b>										
1	CHI-001, Water Cooled Chiller, 12,920 lbs. Chiller Model HDWA, 250Ton, 152.3kW, R513A refrigerant, 460V, 60Hz, VFD Type.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
<b>LOW PRESSER COMPRESSOR</b>										
1	LPC-001, Low Pressure Air Compressor, 101" L x 72" W x 97 H", 7,088 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
<b>LOW PRESSER COMPRESSED AIR DRYER</b>										
1	LPD-001, Low Pressure Air Dryer, 33" W x 77" L x 69"H, TBD lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
<b>LOW PRESSER COMPRESSED AIR RECIEVER</b>										
1	LPR-001, Low Pressure Air Receiver, 69"W x 238"H, 5,000 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
<b>LOW PRESSER COMPRESSED AIR RECIEVER ACCESSORIES</b>										
1	6" 300# RFSOF On Sch 80 Pipe, Material SA-106 Gr B	2	0%	2	EA	\$ -	\$ 75	\$ -	\$ -	
2	12x16x1x4 Elliptical Manway, Material SA-675 Gr 70	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
3	1.5" 3000# Half Coupling, Material SA-105	2	0%	2	EA	\$ -	\$ 75	\$ -	\$ -	
4	0.5" 3000# Half Coupling, Material SA-105	2	0%	2	EA	\$ -	\$ 75	\$ -	\$ -	
<b>HIGH PRESSURE AIR COMPRESSOR</b>										
1	HPC-001, High Pressure Air Compressor Skid, 25'-11"L x 15'-7"W x 10'-7"H, 66,000 lbs	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
2	HPC-002 (No detail found)	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
3	HPC-003 (No detail found)	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
<b>HIGH PRESSURE DRYER AND RECIEVER TANK SKID</b>										
1	HPD-001, HP Dryer#1, HP Dryer & Small Buffer Tank Skid, 13'-9" L x 5' W x 6' H, 11,000 lbs	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
<b>HIGH PRESSURE COMPRESSED AIR RECIEVER</b>										
1	HPR-001, High Pressure Air Receiver.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
<b>CLOSURE INJECTION MOLDING MACHINE</b>										
1	IMM-001, Injection Unit 26,500 lbs, Clamp Unit 32,900 lbs, Total Mold Weight 11,522 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	

PERFORM INSPECTION MACHINE										
1	IMM-002, Injection Unit (No Oil), 31,245 lbs. VIF, Clamp Unit, 39,690 lbs. VIF, Robot Unit, 9,415 lbs. VIF, 128 Cavity Mold Hot Half, 11,907 lbs, 128 Cavity Mold Cold Half, 6,394 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
2	IMM-003, Injection Unit (No Oil), 31,245 lbs. VIF, Clamp Unit, 39,690 lbs. VIF, Robot Unit, 9,415 lbs. VIF, 128 Cavity Mold Hot Half, 11,907 lbs, 128 Cavity Mold Cold Half, 6,394 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
MOLD DEHUMIDIFICATION UNIT										
1	DEH-001, Mold Dehumidification Unit, 34" x 43" x 66", 700 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
CLOSURE INSPECTION MACHINE										
1	CIU-001, Vision System, 67"L x 45"W x 96"H, 1,364 lbs., Cap Sorter, 85"L x 75"W x 82"H, 2,222 lbs., Bunker, 74"L x 59"W x 64"H, 979 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
COOLPIK DEHUMIDIFACTION UNIT										
1	CPC-002, CoolPik Dehumidification Unit, 84" L x 64"W x 92"H, 4,460 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
2	CPC-003, CoolPik Dehumidification Unit, 84" L x 64"W x 92"H, 4,460 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
STRETCH WRAPPERS										
1	STW-011, Stretch Wrappers, 12,000 lbs	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
2	STW-021, Stretch Wrappers, 12,000 lbs	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
WASTE MATERIAL BALERS										
1	BAL-001, Waste Material Balers, 7'-5" L x 4'-0" W x 12'-3" H, 4,594 lbs	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
2	BAL-002, Waste Material Balers, 7'-5" L x 4'-0" W x 12'-3" H, 4,594 lbs	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
3	BAL-003, Waste Material Balers, 7'-5" L x 4'-0" W x 12'-3" H, 4,594 lbs	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
PALLET LABELERS										
1	LBL-012, Domino Pallet Labelers, 500 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
2	LBL-022, Domino Pallet Labelers, 500 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
CENTRAL MINERAL INJECTION SKID										
1	MIS-7501, Central Mineral Injection Skid & Tank, 14,897 lbs.	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
HOSE REEL										
1	HR-7212, Hose Reel	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
2	HR-7214, Hose Reel	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
3	HR-7511, Hose Reel	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	
4	HR-7521, Hose Reel	1	0%	1	EA	\$ -	\$ 75	\$ -	\$ -	

<b>CONVEYER DRIVEN</b>											
1	9-54-SS, Every Roller Conveyer Driven (Need confirmation, included or not)	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
<b>SOFT WATER SKID</b>											
1	SWS-7701, Soft Water Skid	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
<b>BLP (No detail found)</b>											
1	BLP-001	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
2	BLP-002	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
3	BLP-003	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
4	BLP-011	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
5	BLP-021	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
<b>INJECTIONS</b>											
1	Acid Injection	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
2	Anti-Scalant Injection	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
<b>HMI PANEL</b>											
1	HMI, Water Process	1	0%	1	EA	\$ -	\$ 75		\$ -	\$ -	
									<b>TOTAL MATERIAL COST</b>	\$ -	
									<b>TOTAL MANHOURS' COST</b>	\$ -	
									<b>TOTAL COST</b>	\$ -	
									<b>OVERHEADS &amp; PROFIT</b>	25%	
									<b>TOTAL BID</b>	\$ -	

SCOPE OF ESTIMATE:	
I	SUPPLY & INSTALLATION
1	CHILLED WATER PUMP DECK WITH TANK
2	PTW PUMP DECK WITH TANK
3	CITY WATER BREAK TANK
4	CITY WATER BREAK TANK ACCESSORIES
5	DRINKING WATER STORAGE SILO
6	DRINKING WATER STORAGE SILO ACCESSORIES
7	COOLING TOWER
8	COOLING TOWER BASIN SAPERATOR
9	WATER COOLED CHILLER
10	LOW PRESSER COMPRESSOR
11	LOW PRESSER COMPRESSED AIR DRYER
12	LOW PRESSER COMPRESSED AIR RECIEVER
13	LOW PRESSER COMPRESSED AIR RECIEVER ACCESSORIES
14	HIGH PRESSURE AIR COMPRESSOR
15	HIGH PRESSURE DRYER AND RECIEVER TANK SKID
16	HIGH PRESSURE COMPRESSED AIR RECIEVER
17	CLOSURE INJECTION MOLDING MACHINE
18	PERFORM INSPECTION MACHINE
19	MOLD DEHUMIDIFICATION UNIT
20	CLOSURE INSPECTION MACHINE
21	COOLPIK DEHUMIDIFACTION UNIT
22	STRETCH WRAPPERS
23	WASTE MATERIAL BALERS
24	PALLET LABELERS
25	CARBON TOWER
26	REVERSE OSMOSIS UNIT
27	CENTRAL MINERAL INJECTION SKID
28	CIP SKID
29	OZONE INJECTION SKIDS & CONTACT TANKS
30	BOILER & FEEDWATER SKID
31	HOSE REEL
32	PUMP
33	CONVEYER DRIVEN
34	WATER FILTER
35	SOFT WATER SKID
36	FEED WATER TANK
37	WATER BUFFER TANK VENT UV
38	BLP (No detail found)
39	INJECTIONS
40	PANEL
41	HMI PANEL