RFQ # COR61561

ALL LABOR, MATERIALS, EQUIPMENT, AND SUPPLIES NECESSARY TO REBUILD THE EXISTING WATER SOFTENER SYSTEM AND REPLACE THE EXISTING HIGH LOW WATER MANIFOLD SYSTEM LAKIN CORRECTIONAL CENTER

MASON COUNTY

BID FORM

Bidder's Company Name: GO WATER, INC. D/B/A CULLIGAN WATER

Bidder's Address: ROUTE 25, MT. CLARE ROAD
CLARKSBURG, W.VA. 26301

Remittance Address (If different): P.O. BOX 1336
CLARKSBURG, W.VA. 26302-1336

Phone Number: (304) 624-0022

Fax Number: (304) 624-0060

Email Address: WVTMWA@AOL.com

WV Contractor's License Number: WV 027608

We, the undersigned, hereby propose to furnish all materials, equipment, and labor to complete all work in a workmanlike manner, as described in the Bidding Documents.

HIGH LOW WATER MANIFOLD SYSTEM BID: $ 34,758.00 THIRTY FOUR THOUSAND SEVEN HUNDRED FIFTY-EIGHT DOLLARS (High low water manifold system bid to be written in words and numbers.)

WATER SOFTENER SYSTEM BID: SEVENTY THOUSAND DOLLARS ($ 70,000.00) (Water softener system bid to be written in words and numbers.)

CONTRACT BASE BID: ONE HUNDRED FOUR THUSAND - SEVEN HUNDRED FIFY EIGHT DOLLARS ($ 104,758.00) (Contract base bid to be written in words and numbers.)

ALTERNATE #1 BID (Please see Part III, Section 1.3, Subsection B – Warranty - cost for four (4) additional years on the system including parts and labor):

Year 2 Warranty Cost: 6,000 -

Year 3 Warranty Cost: 6000 -

Year 4 Warranty Cost: 6,00 -

Year 5 Warranty Cost: 6,000 -

Total: 24,000 -

Total Amount for Alternate #1 ($ 24,000 TWENTY-FOUR THOUSAND DOLLARS)
(Alternate #1 bid to be written in words and numbers.)

CONTRACT TOTAL BID including High Low Water Manifold System, Water Softener System and Alternate #1: ONE HUNDRED TWENTY-EIGHT THOUSAND SEVEN HUNDRED FIFTY EIGHT DOLLARS

($ 128,758 ~) (Contract total bid to be written in words and numbers.)

The Bidder understands that to the extent allowed by the West Virginia Code, the OWNER reserves the right to waive any informality or irregularity in any Bid, or Bids, and to reject any or all Bids in whole or in part; to reject a bid not accompanied by the required bid security or by other data required by the Bidding Documents; to reject any conditions of the bid by the Bidder that is in any way inconsistent with the requirements, terms, and conditions of the Bidding Documents; or to reject a bid that is in any way incomplete or irregular.

It is recommended to submit the bid using this bid form.

Company Name: GO WATER, INC. D/B/A CULLIGAN WATER

Contact Name: TERRINZ M. WEAVER

Authorized Signature: Terry M Weaver, Pres.

RFQ # COR61561

ALL LABOR, MATERIALS, EQUIPMENT, AND SUPPLIES NECESSARY TO REBUILD THE EXISTING WATER SOFTENER SYSTEM AND REPLACE THE EXISTING HIGH LOW WATER MANIFOLD SYSTEM LAKIN CORRECTIONAL CENTER

MASON COUNTY

BID FORM

Bidder's Company Name: GO WATER, INC. DIB/A CULLIGAN WATER

ALTERNATE #2 BID NEW WATER SOFTENERS

We, the undersigned, hereby propose to furnish all materials, equipment, and labor to complete all work in a workmanlike manner, as described in the Bidding Documents.

HIGH LOW WATER MANIFOLD SYSTEM BID: THIRTY FOUR THOUSAND SEVEN HUNDRED FIFTY EIGHT DOLLARS

($ 34758 00) (High low water manifold system bid to be written in words and numbers.)

NEW WATER SOFTENER SYSTEM BID: FORTY THREE THOUSAND THREE HUNDED TWO DOLLARS

($ 43,302) (NEW Water softener system bid to be written in words and numbers.)

CONTRACT BASE BID: SEVENTY EIGHT THOUSAND AND SIXTY DOLLARS

($ 78,060) (Contract base bid to be written in words and numbers.)

ALTERNATE #1 BID (Please see Part III, Section 1.3, Subsection B – Warranty - cost for four (4) additional years on the system including parts and labor):

Year 2 Warranty Cost: 4000

Year 3 Warranty Cost: 4000

Year 4 Warranty Cost: 5000

Year 5 Warranty Cost: 5000

Total: 18,000

Total Amount for Alternate #1 ($ 18,000 EIGHTEEN THOUSAND DOLLARS)
(Alternate #1 bid to be written in words and numbers.)

ALTERNATE #2 NEW
CONTRACT TOTAL BID including High Low Water Manifold System, Water Softener System and Alternate #1: NINETY-SIX THOUSAND AND SIXTY DOLLARS

($ 96,060) (Contract total bid to be written in words and numbers.)

The Bidder understands that to the extent allowed by the West Virginia Code, the OWNER reserves the right to waive any informality or irregularity in any Bid, or Bids, and to reject any or all Bids in whole or in part; to reject a bid not accompanied by the required bid security or by other data required by the Bidding Documents; to reject any conditions of the bid by the Bidder that is in any way inconsistent with the requirements, terms, and conditions of the Bidding Documents; or to reject a bid that is in any way incomplete or irregular.

It is recommended to submit the bid using this bid form.

Company Name: GO WATER, INC. D/B/A CULLIGAN WATER

Contact Name: TERRY M. WEAVER

Authorized Signature: Terry M Weaver, Pres.

EXHIBIT 10

REQUISITION NO.: CDR61561

ADDENDUM ACKNOWLEDGEMENT

I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.

ADDENDUM NO.'S:

NO. 1 ...✓...

NO. 2 .....

NO. 3 .....

NO. 4 .....

NO. 5 .....

I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS. VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.

Terry M. Wemer Pres.
SIGNATURE

GO WATER, INC. DBA COLLIGAN WATER
COMPANY

5/30/12
DATE

REV. 11/96

RFQ No. COR 61561

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

DEFINITIONS:
"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (*West Virginia Code* §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: GO WATER, INC. D/B/A CULLIGAN WATER

Authorized Signature: _____, Pres. Date: 5/30/12

State of West Virginia

County of Harrison, to-wit:

Taken, subscribed, and sworn to before me this 30 day of May, 2012.

My Commission expires 12/18/2016, 20__.

AFFIX SEAL HERE

OFFICIAL SEAL
NOTARY PUBLIC
State of West Virginia
CLAUDIA A. CARRAHER
Harrison County Bank
1215 Johnson Avenue
Bridgeport, WV 26330
My Commission Expires December 16, 2016

NOTARY PUBLIC Claudia A. Carraher

Rev. 09/08

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with ***West Virginia Code***, §5A-3-37. (Does not apply to construction contracts). ***West Virginia Code***, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the ***West Virginia Code***. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1. **Application is made for 2.5% resident vendor preference for the reason checked:**
___ Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or,**
___ Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or,**
___ Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or,**

2. **Application is made for 2.5% resident vendor preference for the reason checked:**
___ Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

3. **Application is made for 2.5% resident vendor preference for the reason checked:**
___ Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

4. **Application is made for 5% resident vendor preference for the reason checked:**
X Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or,**

5. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
___ Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or,**

6. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
___ Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: CJ WATER, INC. D/B/A COLLIERS WATER Signed: [signature]

Date: 5/22/12 Title: President

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

State of West Virginia
DRUG FREE WORKPLACE CONFORMANCE AFFIDAVIT
***West Virginia Code* §21-1D-5**

STATE OF West Virginia

COUNTY OF Harrison, **TO-WIT:**

I, TERRING WEAVER, after being first duly sworn, depose and state as follows:

1. I am an employee of GO WATER, INC. D/B/A CULLIGAN WATER (Company Name) and,

2. I do hereby attest that GO WATER, INC. D/B/A CULLIGAN WATER (Company Name)

maintains a valid written drug free workplace policy and that such policy is in compliance with ***West Virginia Code*** §21-1D-5.

The above statements are sworn to under the penalty of perjury.

GO WATER, INC. D/B/A CULLIGAN WATER
(Company Name)

By: [signature]

Title: Pres

Date: 5/30/12

Taken, subscribed and sworn to before me this 30 day of May 2012.

By Commission expires 12/18/2016

(Seal)

OFFICIAL SEAL
NOTARY PUBLIC
State of West Virginia
CLAUDIA A. CARRAHER
Harrison County Bank
1215 Johnson Avenue
Bridgeport, WV 26330
My Commission Expires December 18, 2016

[signature]
(Notary Public)

THIS AFFIDAVIT MUST BE SUBMITTED WITH THE BID IN ORDER TO COMPLY WITH WV CODE PROVISIONS. FAILURE TO INCLUDE THE AFFIDAVIT WITH THE BID SHALL RESULT IN DISQUALIFICATION OF THE BID.

Rev March 2009

OFFICIAL CHECK

Harrison County Bank
P.O. Box 98
Lost Creek, WV 26835
(304) 745-3342

69-291/515

001434

DATE 05/30/2012

$ 6,437.90

PAY TO THE ORDER OF State of West Virginia

$6,437.90 DOLLARS

**** **** **** **** DOLLAR SIX COMMA FOUR THREE SEVEN PERIOD NINE ZERO

RFQ COR61561

REMITTER Go Water, Inc

AUTHORIZED SIGNATURE

[redacted]

ITEM # 80775

ENDORSE HERE:

DO NOT WRITE, STAMP OR SIGN BELOW THIS LINE
RESERVED FOR FINANCIAL INSTITUTION USE

* FEDERAL RESERVE BOARD OF GOVERNORS REG. CC

Hi-Flo® 3e Water Softener
System Design Data

Project Name: Lakin Correctional Facility
Design by: Stu Middaugh **Date:** 5/29/2012

Softener System Selected is: HCE-900-3 Duplex Alternating/Water Meter/Demand

Design Based On Peak Flow
Each Tank Regenerating Every 53586 gals Treated | Regeneration Frequency is every 1.9 days.

Input Parameters:

Water Hardness, gpg	: 14.0	Flow Rate, gpm	: 250.0
Soluble Iron, mg/l as ion	: 0.00	Daily Water Usage, gpd	: 28000.0
Eff. Hardness, gpg @ 100% Cap.	: 14.0	Hours of Oper/Day	: 24
Daily Capacity Req'd, kgr	: 392.0	Salt Dosage, lbs/ft³	: 10

The HCE-900-3 will Provide (Each Unit):

Design Flow, gpm	: 250.0 @ 21.9 psi loss
Continuous Flow, gpm	: 200.0 @ 15.0 psi loss
Peak Flow, gpm	: 270.0 @ 25.0 psi loss
Min. Recommended Flow, gpm	: 19.2
Design Softening Rate, gpm/ft²	: 25.98
Resin Quantity, ft³	: 30.0
Unit Capacity, kgr	: 750.2 @ 300 lbs Salt
Maximum Capacity, kgr	: 900.0 @ 450 lbs Salt
Minimum Capacity, kgr	: 600.0 @ 180 lbs Salt
Tank Size, in.	: 42x72
Tank Area, ft²	: 9.62
Freeboard, in.	: 27.0

Regeneration Data:

Brine Tank Size, in.	: 42x48 (2400.0 lbs)		
Max. Salt Load, lbs	: 1184.0 (Wet)	Backwash Flow Req'd, gpm	: 35.0
Number of Regens/Salt Fill	: 3.9	Recond. Water Req'd, gals	: 1370.0
Salt Usage, lbs/Regen	: 300.0	Total Regen Time, min.	: 80

The HCE-900-3 System Requirements:

Operating Press., psi	: 30-120	Voltage	: 24 Volts AC, 50/60 Hz, 1 Ph
Operating Temp., °F	: 40-100	Full Load Amps	: 0.32
Pipe Conn, in NPT...			
Inlet	: 3.0		
Outlet	: 3.0		
Drain	: 2.0		
Weight, lbs...			
Shipping	: 5690.0		
Operating	: 11710.0		
Overall Dimensions, in....			
Width x Depth x Height	: 148.0 x 45.0 x 106.0		

Project Name: Lakin Correctional Facility
Prepared By: Stu Middaugh

Date: 5/29/2012

1.0 SCOPE

1.1 Provide as indicated a vertical pressure type water softener system complete with pressure vessel, softening resin, control valve, brine maker and electronic controller. The system will be of an approved design as fabricated by a manufacturer regularly engaged in the production of water treatment equipment. All equipment and material will be supplied in compliance with the specifications as intended for a complete and operational system.

1.2 Qualified manufacturers of water treatment equipment of the type specified are Culligan International Company or the Engineer's approved equal.

2.0 GENERAL DESCRIPTION

2.1 The system specifications are based on Culligan International model HCE-900-3 configured as Duplex Alternating/Water Meter/Demand.

The purpose of the Culligan International Series Hi-Flo® 3e Duplex Alternating/Water Meter/Demand automatic water softener will be to remove mineral hardness from a known water supply to a level not to exceed 17.1 mg/l, as determined by an accepted ASTM or EDTA test method, when the system is operated at 250.0 gpm and in accordance with the operating instructions. The system will be capable of supplying 53586.4 gallons of softened water between regenerations based on the influent water analysis listed in Section 3.1 of this equipment specification.

The systems performance is rated at a design flow rate of 250.0 gpm with a rated pressure drop of 21.9 psi, and will be capable of a peak flow rate of 270.0 gpm for sustained periods of 90 minutes with a pressure drop of 25.0 psi.

There shall be a quantity of one (1) of the above described systems.

3.0 PERFORMANCE AND DESIGN DATA

3.1 INFLUENT WATER ANALYSIS

Total Hardness, gpg	: 14.0	Eff. Hardness, gpg @ 100% Cap.	: 14.0
Calcium, Ca	: N/A	Magnesium, Mg	: N/A

(Constituents above are expressed in mg/l as CaCO3 or as otherwise specified.)

Iron, Fe	: 0	Turbidity, NTU	: 0.3
Total Dissolved Solids, TDS	: N/A	pH	: 7.8
Manganese, Mn	: 0	Color	: 0

(Constituents above are expressed in mg/l or as otherwise specified.)

3.2 DESIGN PARAMETERS

Normal System Flow & Pressure Drop	: 200.0 gpm @ 15.0 psi
Maximum System Flow & Pressure Drop	: 270.0 gpm @ 25.0 psi
Backwash/Rinse Flow	: 35.0 gpm
Backwash Volume	: 1370.0 gallons nominal
Daily Water Usage	: 28000.0 gpd
Daily Hours of Water Demand	: 24
Operating Temperature Range	: 40-100 °F

NOTES:

(1) ITEMS SHOWN IN BROKEN LINES TO BE FURNISHED BY OTHERS.

(2) ALL DIMENSIONS ARE ± 1 INCH (25mm) AND SUBJECT TO CHANGE WITHOUT NOTICE.

(3) UNIONS SHOULD BE LOCATED ON INLET AND OUTLET CONNECTIONS OF HARNESS TO FACILITATE SERVICING.

(4) THE USE OF DISSIMILAR METALS IN A PIPING SYSTEM IS NOT RECOMMENDED. WHERE DISSIMILAR METALS MUST BE CONNECTED IN A WATER SYSTEM, THE USE OF NONCONDUCTIVE (DIELECTRIC) FITTINGS MAY REDUCE GALVANIC CORROSION.

(5) AN ELECTRICAL OUTLET SHOULD BE PROVIDED WITHIN FIVE FEET OF THE EQUIPMENT LOCATION.

(6) ALLOW A MINIMUM OF 24 INCHES ABOVE SOFTENER FOR FILLING.

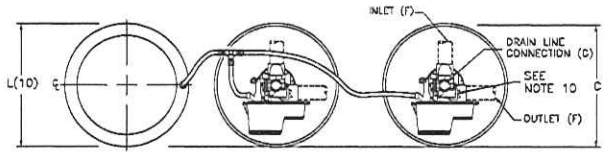
(7) DO NOT MAKE A DIRECT CONNECTION TO THE DRAIN. PROVIDE AN AIR GAP OF AT LEAST FOUR TIMES THE DRAIN PIPE OR CONFORM TO LOCAL SANITATION CODES. A SIPHON BREAK SHOULD ALSO BE INSTALLED ON THE DRAIN LINE. SEE DETAIL BELOW FOR RECOMMENDED DRAIN CONFIGURATION.

(8) WHEN USING A WATER METER, THERE MUST BE A MINIMUM AMOUNT OF STRAIGHT PIPE BEFORE AND AFTER THE SENSOR. REFER TO THE INSTALLATION INSTRUCTIONS FOR DETAILS.

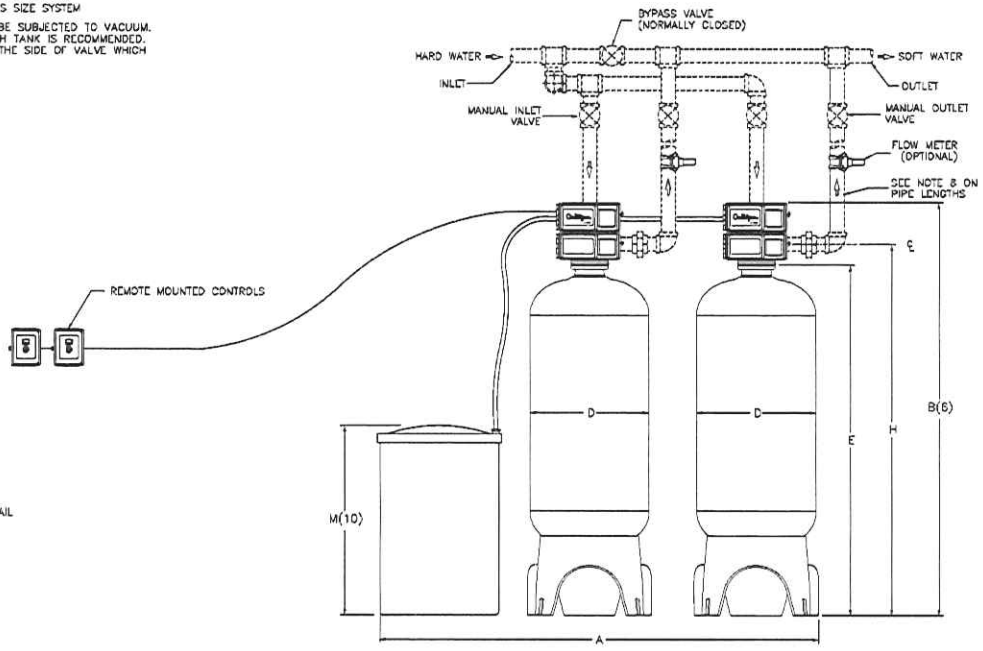
(9) BRINE TANK DIMENSIONS SHOWN ARE FOR THE BRINE TANK MOST COMMONLY SELECTED FOR USE WITH THIS SIZE SYSTEM

(10) SYSTEM USES FRP TANKS WHICH MUST NOT BE SUBJECTED TO VACUUM. INSTALLATION OF VACUUM BREAKERS ON EACH TANK IS RECOMMENDED. THESE SYSTEMS PROVIDE A CONNECTION ON THE SIDE OF VALVE WHICH CAN BE USED TO MOUNT VACUUM BREAKER.

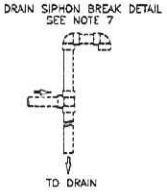
	DIMENSIONS (INCHES)										UNIT DATA PER TANK							
MODEL	WIDTH A	HEIGHT B(6)	DEPTH C	TANK DIA. D	TANK HEIGHT E	INLET/OUTLET PIPE SIZES F	DRAIN SIZE G	FLOOR TO INLET H	BRINE TANK DIA. L(10)	BRINE TANK HEIGHT M(10)	MAX. CAPACITY KGR @ SALT DOSAGE	RESIN VOLUME (ft^3)	CONTINUOUS FLOW gpm @ 15 psi drop	PEAK FLOW gpm @ 25 psi drop	DRAIN FLOW gpm	MIN. DRAIN PIPE SIZE IN.	DUPLEX OPER. WT. lbs.	DUPLEX SHIP. WT. lbs.
HCE-450-3	110.9	104.7	31.5	30	86.9	3.0	2.0	94.2	30	48	450 @ 150	15	150	210	20	1.25	8207	3009
HCE-600-3	133.5	106.2	38.9	36	90.4	3.0	2.0	95.7	39	48	600 @ 200	20	185	250	30	1.25	8571	3851
HCE-900-3	147.7	105.9	44.8	42	90.1	3.0	2.0	95.4	42	48	900 @ 300	30	200	270	35	2	12006	5098
HCE-1200-3	165.9	106.7	50.8	48	92.9	3.0	2.0	98.2	48	60	1200 @ 400	40	215	280	45	2	15591	7924



TOP VIEW



DUPLEX INSTALLATION



DO NOT SCALE DRAWING
TOLERANCES: ±1/8" UNLESS OTHERWISE NOTED

Let.	Change	By	App	Date

Culligan® ENGINEERED SYSTEMS
ROSEMONT, ILLINOIS

NAME: HI-FLO® Jr. 3900 AUTOMATIC SOFTENER DUPLEX TECHNICAL DATA SHEET

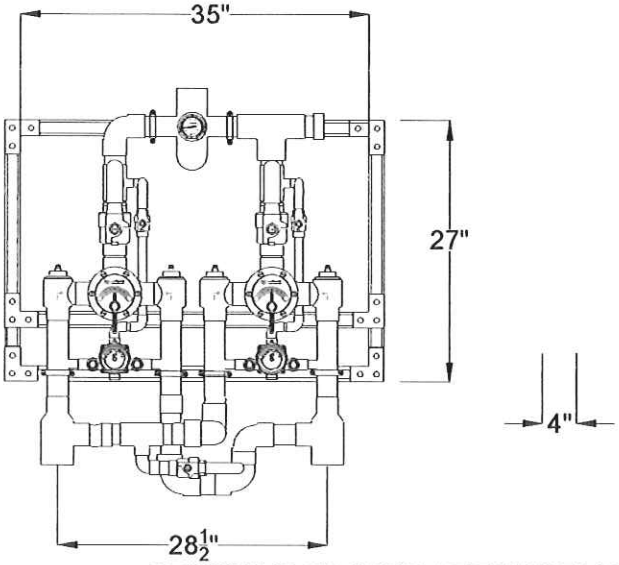
DETAILED BY:	APP. BY:	SHEET
MKM 7/28/09		1 OF 1

REF. NO.

PART NO. HCE-DUPLEX

Submittal Data Sheet S-1232WS
February 2012

HIGH LOW MANIFOLD SYSTEM



TM-2020B-2PS-_____

PARALLEL INSTALLATION WITH STRUT

- Large Type TM Thermostatic water mixing valve, adjustable high temperature limit stop*, inlet checkstops, wall support, outlet ball valve
- Small Type TM Thermostatic water mixing valve, adjustable high temperature limit stop*, integral checkstops, outlet ball valve
- 3" inlets, 3" outlet (76mm X 76mm)
- Locking temperature regulators
- 2 GPM (7.6 l/min) minimum flow capacity
- Inlet/Outlet manifold piping
- Mounted on galvanized strut
- Factory assembled and tested

Valve assemblies are ASSE 1017 listed

Valve assemblies are CUPC listed

____**SUFFIX TC**- Test connection

See page #2 for piping diagram

Note: Leonard Valve Company reserves the right of product, or design modifications without notice or obligation.

DOUBLE FLOWRATE WHEN BOTH VALVES ARE OPERATING

SINGLE VALVE ASSEMBLY FLOWRATES SHOWN
(MINIMUM FLOW RATE HAS BEEN DOUBLED TO 2 GPM)

MINIMUM FLOW (GPM)	SYSTEM PRESSURE DROP (PSIG)										
	5	(10)	(15)	(20)	25	30	35	40	45	50	PSI
(l/min)	.3	.7	.97	1.4	1.7	2.1	2.4	2.8	3.1	3.4	BAR
2.0	78	113	129	145	163	172	188	197	214	226	GPM
7.6	295	428	488	549	617	651	712	746	810	856	l/min

NOTE: Flowrates will vary depending on existing field conditions. Leonard Valve Company always recommends using CASPAK® sizing software for proper valve sizing and model number applications.

CAUTION! All thermostatic water mixing valves have limitations. They will NOT provide the desired accuracy outside of their flow capacity range. Consult the Flow Capacity Chart and DO NOT OVERSIZE. Minimum flow must be no less than as indicated.

*NOTE: A limit stop, set for 120°F (49°C), is simply a mechanical setting to prevent excessive handle rotation. If incoming water is hotter than 150°F (65.5°C), the temperature of the factory test, the valve when turned to full HOT may deliver water in excess of 120°F and the limit stop MUST BE RESET BY THE INSTALLER

Engineer's Approval

Job # _____

Arch/Eng. _____

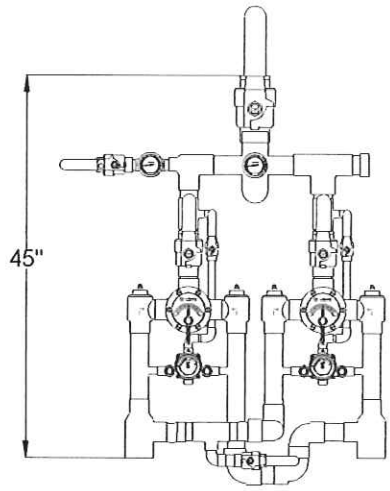
Contractor _____

Note: The models shown represent Leonard Products which are believed to be equivalent in type and function to items specified. Leonard Valve Company is not responsible for errors or omissions due to differences in interpretations of information provided.

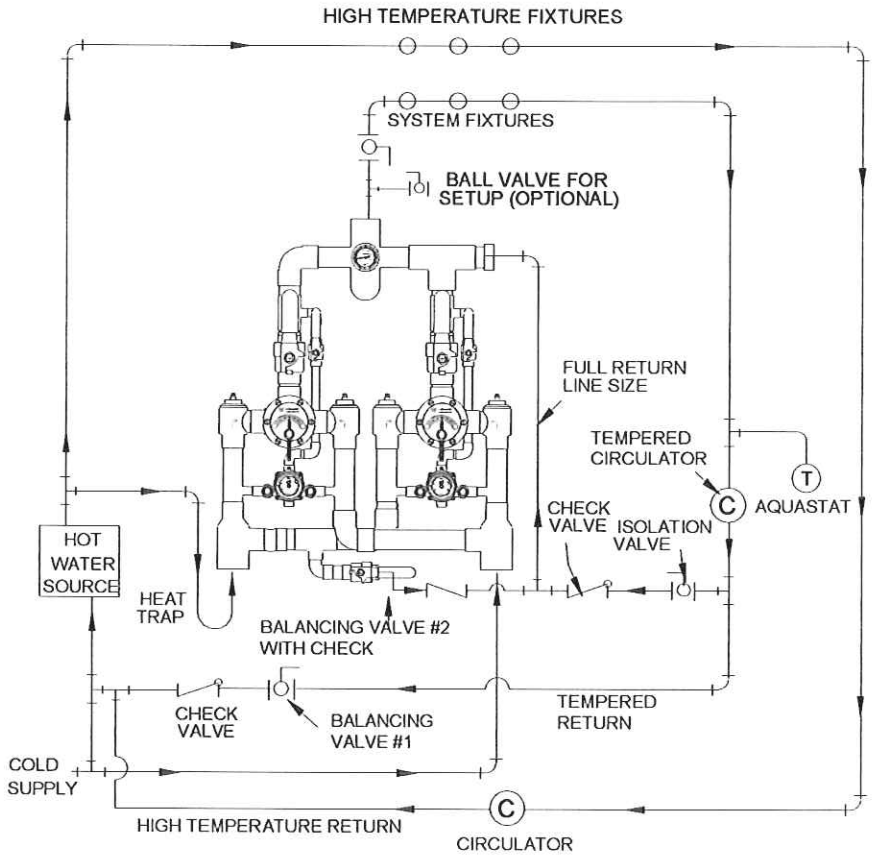
LEONARD®
WATER TEMPERATURE CONTROLS

1360 Elmwood Avenue, Cranston, RI 02910 USA
Phone: 401.461.1200 Fax: 401.941.5310
Email:
Web Site: http://www.leonardvalve.com

TM2020B-2P-TC OPTION



REQUIRED PIPING METHOD #5



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