

Louviers Water and Sanitation District

None

Minutes of the Regular Meeting – March 12th, 2019

Board Members

Audience:

Ron Beane Becca Connet Joe Neu Matt Collitt Andy Dunn

Regular Board Meeting

I. Call to Order – The meeting was called to order at 18:30.

II. Radium Treatment Options – TST presented Radium Treatment Options. See Neil Spreadsheet Info.

III. New Business and Open Items -

A. Approve Minutes from the December 11, 2018 Regular Board Meeting. Tabled.

B. Disbursements – The Board reviewed the Check Detail report presented by Director Connet in the amount of \$11,843.86 which includes check numbers 2799 to 2813, and two debit card transactions in the amount of \$116.56. Disbursements Approved.

C. Financial Report – Approved.

D. Approval of Agreement for Single Household – Tabled February 2019 – 1 abstain (Secretary Collitt) and 4 yes. Approved.

E. Sewer Project update -

a. Waiting for 2019 Loan Cycle (#140930W-H) – Planning is wrapping up. Project to be let out for construction in April. Project to state June start with a projected wrap up in December.

F. Funding - Rural Development (RUS) -

IV. Audience Participation – Zero.

IV. Operations – See Report.

XI. Board Discussion – Meter Pits now have GPS coordinates. Board discussed the three treatment options. Interconnect may be best option. Ron to contact Roxborough Water & Sanitation District. Ron also to pursue funding through CDPHE and RUS.

XII. Adjourn Meeting – 19:49.

President: _____

Attest:

Louviers Water and Sanitation District Well No. 2 Radium Treatment Conceptual Cost Estimate March 5, 2019

Option to Add Ion Exchange System

Description	Quantity	Units	Unit Price	Su	btotal Cost
General	15	%	\$720,000	\$	108,000
Sitework					
GESC Materials and Maintenance	3	MO	\$ 4,000	\$	12,000
Site Restoration	2,000	SF	\$ 3	\$	6,000
Access Drive	50	SY	\$ 20	\$	1,000
Yard Pipe	50	LF	\$ 80	\$	4,000
•					
Ion Exchange System Treatment Unit Column	1	LS	\$160,000	\$	160,000
	1	LS	\$ 15,000	\$	15,000
Online Startup	1	LS	\$ 10,000	\$	10,000
Piping - Materials	1	LS	\$ 15,000	\$	15,000
Piping - Installation	2	ĒĀ	\$ 10,000	\$	20,000
Connections to Ex Piping Systems	2	EA	\$ 25,000	\$	50,000
Booster Pump	1	LS	\$ 75,000	\$	75,000
Electrical	· · · · · · · · · · · · · · · · · · ·		÷1		
New Building	500	SF	\$ 130	\$	65,000
Building Construction (~ 25' x 20')	25	CY	\$ 750	\$	18,750
Building Slab on Grade	1	LS	\$ 15,000	\$	15,000
Mechanical		LU	φ 10,000	¥	10,000
Modifications to Existing Structure	•	EA	\$ 1,500	\$	4,500
Wall Penetrations for Piping	3	EA	φ 1,500	Ψ	4,000
Construction Subtotal (nearest \$1,000)				\$	575,000
Contingency (25%, nearest \$1,000)				\$	144,000
Construction Total				\$	719,000
Engineering Design and Construction	20	%	\$719,000	\$	143,800
Approvals	5	%	\$719,000	\$	35,950
Survey	1	LS	\$ 7,000	\$	7,000
Utilities Investigation	3	DAYS	\$ 3,000		9,000
Materials Testing	2	%	\$144,000		2,880
Legal	1	LS	\$ 10,000		10,000
Administration	1	LS	\$ 5,000		5,000
CDPHE Financial Assurance for Waste Disposal	1	LS	\$ 30,000		30,000
Project Total (nearest \$1,000)				\$	933,000
ורוטובטג וטגמו (וופמופטג שו,שטט)					

Annual O & M, Power, and Resin Disposal

Description	Quantity	Units	U	nit Price	Sub	ototal Cost
Ion Exchange System						
Operation & Maintenance, Resin Disposal/Replacement, and Licensing for Treated Water < 11 MGY	1	LS	\$	17,000	\$	17,000
Operation & Maintenance, Resin Disposal/Replacement,	5,000	KGAL	\$	1.50	\$	7,500
and Licensing for Treated Water > 11 MGY Power	6,000	kWh	\$	0.1200	\$	700
Annual O & M, Power, and Resin Disposal (nearest \$1,000)					\$	25,000

Louviers Water and Sanitation District Well No. 2 Radium Treatment Conceptual Cost Estimate March 5, 2019

Option to Add Pressure Greensand Filtration

Description	Quantity	Units		Unit Price	Su	ubtotal Cost
General	15	%	\$	1,130,000	\$	169,500
Sitework						
GESC Materials and Maintenance	3	MO	\$	4,000	\$	12,000
Site Restoration	2,000	SF	\$	3	\$	6,000
Access Drive	50	SY	\$	20	\$	1,000
Yard Pipe	500	LF	\$	80	\$	40,000
Greensand Pressure Filter System						
Treatment Unit - Materials	1	LS	\$	120,000	\$	120,000
Treatment Unit - Installation, Programming	1	LS	\$	60,000	\$	60,000
Chemical Feed System and Storage	1	LS	\$	30,000	\$	30,000
Piping - Materials	1	LS	\$	20,000	\$	20,000
Piping - Installation	1	LS	\$	15,000	\$	15,000
Connections to Ex Piping Systems	2	EA	\$	10,000	\$	20,000
Backwash Tank	2	LS	\$	75,000	\$	150,000
Booster Pump	2	EA	\$	25,000	\$	50,000
Electrical	1	LS	\$	90,000	\$	90,000
New Building						
Building Construction (~ 40' x 20')	800	SF	\$	110	\$	88,000
Building Slab on Grade	25	CY	\$	750	\$	18,750
Mechanical	1	LS	\$	15,000	\$	15,000
Modifications to Existing Structure						
Wall Penetrations for Piping	3	EA	\$	1,500	\$	4,500
Construction Subtotal (nearest \$1,000)					\$	910,000
Contingency (25%, nearest \$1,000)					\$	228,000
Construction Total					\$	1,138,000
Engineering Design and Construction	20	%	\$	1,138,000	\$	227,600
Approvals	5	%	\$	1,138,000	\$	56,900
Geotechnical Investigation	1	LS	\$	7,000	\$	7,000
Survey	1	LS	\$	7,000	\$	7,000
Utilities Investigation	3	DAYS	\$	3,000	\$	9,000
Materials Testing	2	%	\$	1,138,000	\$	22,760
Legal	1	LS	\$	10,000	\$	10,000
Administration	1	LS	\$	5,000	\$	5,000
CDPHE Financial Assurance for Waste Disposal	1	LS	\$	30,000	\$	30,000
NRC Permit	1	LS	Ŝ	15,000	s	15,000
Project Total (nearest \$1,000)			-		\$	1,483,000
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Annual Greensand Filter O & M, Power, and Disposal Costs

Description	Quantity	Units	U	nit Price	Sub	ototal Cost
Pressure Filter				arian aka da yang da kara		
Media and Support Gravel Replacement - 15 Yr	1	LS	\$	4,133	\$	4,133
Complete Underdrain Replacement - 30 Yr	1	LS	\$	10,933	\$	10,933
Annual Steel Repair	1	LS	\$	1,000	\$	1,000
Backwash Tank Cleaning and Disposal	1	LS	\$	25,000	\$	25,000
Power	6,000	kWh	\$	0.1200	\$	700
Pressure Filter O & M, Power, and Disposal (nearest \$1,000)					\$	42,000

Louviers Water and Sanitation District Well No. 2 Radium Treatment Conceptual Cost Estimate Updated March 11, 2019

	Option for Water Service	from Roxborough Wate	r and Sanitation District
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Description	Quantity	Units		Unit Price		Subtotal Cost
Tranmission Main From Plum Valley Heights to LWSD 1	ank					
General	15	%	\$	1,000,000	\$	150,00
Pipeline				.,,	Ψ	100,00
4" Direction Drill HDPE	7.000	LF	\$	80	\$	560.00
PRV Vault	1	LS	\$	30,000	\$	30.00
Meter Manhole	1	LS	\$	10,000	-	10,00
Air Vacuum Valves	4	EA	\$	5,000		20,00
Connection to RWSD	1	LS	\$	10,000		10,00
Connection to LWSD Tank	1	LS	\$	10,000		10,00
GESC Materials and Maintenance	3	MO	\$	4,000		12,00
Site Restoration	3	AC	\$	3,000		9,00
Construction Subtotal (nearest \$1,000)					\$	811,00
Contingency (25%, nearest \$1,000)					\$	203,00
Construction Total					\$	1,014,00
Engineering Design and Construction	20	%	\$	1,014,000	\$	202,80
Approvals	5	%	\$	1,014,000	Ф \$	202,80
Geotechnical Investigation	1	LS	\$	7,000	\$	7,00
Survey	1	LS	\$	7,000	\$	7,00
Utilities Investigation	3	DAYS	\$	3,000	\$	9,00
Materials Testing	2	%	\$	1,014,000	\$	20,28
Legal/ROW Acquisition	1	LS	\$	20,000	\$	20,28
Administration	1	LS	\$		\$ \$	
Construction Project Total (nearest \$1,000)		20	Ψ	3,000	\$	5,00 1,336,00
RWSD Inclusion Fees (Estimated - No Discussion with F						
Inclusion Fee (RWSD)	112	EQR	\$	3,200	\$	358,400
RWSD System Development Charge	112	EQR	\$	10,000		1,120,000
Permit Fee	112	EQR	\$	1,650	\$	184,800
				Total	\$	1,663,200
RWSD Water Supply Costs (Estimated - No Discussion w Water Supply						
react oupping	112	EQR	\$	7,000		784,00
				Total	\$	784,000
Project Grand Total					\$	3,783,200.00

Type	Num	Date	Check Detail ^{Mar} 6 ^h 12 ^d ²⁰¹⁹		Account	Paid	Paid Amount
Check	Debit Card	02/05/2019	T Mobile	1-1001 -	1-1001 · 1stBank Checking	⇔	(34.56)
				1-5070 · 2-5570 ·	1-5070 · Utilities - Telephone 2-5570 · Utilities - Telephone	မ မ မ	17.28 17.28 34.56
Check	Debit CArd	02/04/2019	Strategic Storage Op Partnership II, 1-1001 · 1stBank Checking	, 1-1001 -	1stBank Checking	⇔	(82.00)
				1-5060 · 2-5560 ·	1-5060 · Office Supplies/Expenses 2-5560 · Office Supplies/Expense	မမ	41.00 41.00 82.00
Bill Pmt -Check 2799	ck 2799	03/12/2019	Collins Cockrel & Cole	1-1001 -	1-1001 · 1stBank Checking	÷	(630.00)
Bill	Inv 1/31/2019	03/12/2019		1-5040 · 2-5540 ·	1-5040 · Legal Fees 2-5540 · Legal fees		108.75 521.25 630.00
Bill Pmt -Check 2800	:k 2800	03/12/2019	DM Small Systems, LLC	1-1001 -	1-1001 • 1stBank Checking) \$	(1,462.53)
Bill Bill	Reimb 3/5/19 Amazc 03/12/2019 Inv 02-19-001 03/12/2019	zc 03/12/2019 03/12/2019		1-6030 · 1-6010 · 2-6510 ·	1-6030 · Tank Evaluation and Maint 1-6010 · Operations 2-6510 · Operations	ა ა ა ა	9.53 794.50 658.50 1,462.53
Bill Pmt -Check 2801	:k 2801	03/12/2019	Intermountain Rural Electric Associ 1-1001 · 1stBank Checking	i 1-1001 -	1stBank Checking	\$	(832.12)
Bill Bill Bill Bill	Acct 21154900 Acct 21893200 Acct 83513501 Acct 95451766	03/12/2019 03/12/2019 03/12/2019 03/12/2019		2-6590 · 2-6590 · 1-6090 · 1-6090 ·	2-6590 · Utilities - Infrastructure 2-6590 · Utilities - Infrastructure 1-6090 · Utilities - Infrastructure 1-6090 · Utilities - Infrastructure	တ တ တ တ တ	21.00 118.44 185.02 507.66 832.12

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Louviers Water and Sanitation District Check Detail

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Type	Num	Date	Check Detail Margh 12, 2019		Account	Paid	Paid Amount
Bill Pmt -Check 2802	sk 2802	03/12/2019	Professional Answering Service, In 1-1001 · 1stBank Checking	- 1001-1 v	1stBank Checking	φ	(56.50)
Bill	Inv 119103012019	03/12/2019		1-5070 · 2-5570 ·	1-5070 · Utilities - Telephone 2-5570 · Utilities - Telephone	ფფ	28.25 28.25 56.50
Bill Pmt -Check 2803	:k 2803	03/12/2019	Red Comet	1-1001 -	1-1001 · 1stBank Checking	\$	(20.00)
Bill	Inv RC24834	03/12/2019		1-6075	1-6075 · Miscellanoues Rep. & Main \$	မမ	59.00 59.00
Bill Pmt -Check 2804	:k 2804	03/12/2019	Schilling & Company, Inc.	1-1001 -	1-1001 · 1stBank Checking	\$	(835.50)
Bill	Inv 12240	03/12/2019		1-5005 · 2-5505 · 1-5061 · 2-5561 ·	1-5005 · Accounting and Billing 2-5505 · Accounting and Billing 1-5061 · Postage 2-5561 · Postage		415.00 415.00 2.75 2.75 835.50
Bill Pmt-Check 2805	k 2805	03/12/2019	Semocor, Inc.	1-1001 -	1-1001 · 1stBank Checking	⇔	(426.00)
Bill	Inv 4258	03/12/2019		1-6085 · 2-6585 ·	1-6085 · Testing - Water 2-6585 · Testing - Sewer	აფა	93.60 332.40 426.00
Bill Pmt-Check 2806	k 2806	03/12/2019	TST Infrastructure, LLC	1-1001 -	1-1001 · 1stBank Checking	\$ (6	(6,594.70)
Bill Bill Bill	Inv 8170 Inv 8171 Inv 8172	03/12/2019 03/12/2019 03/12/2019		2-7502 · 1-5025 · 1-5025 ·	2-7502 · WW Collection System Imp 1-5025 · Consultants 1-5025 · Consultants	0 70 10 10 10 10	2,973.70 266.00 3,355.00 6,594.70
Bill Pmt-Check 2807	k 2807	03/12/2019	Utility Notification Center of Colora(1-1001 · 1stBank Checking	· 1-1001 ·	1stBank Checking	\$	(14.20)

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District	
Sanitation	Detail
Water and S	Check [
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F		Ĺ	Check Detail March 12. 2019			
Bill	Inv 219020611	03/12/2019	Name	Account 1-6080 · Utility Locates 2-6580 · Utility Locates	Paid ୫ ୫	Paid Amount \$ 7.10 \$ 7.10 \$ 7.10
Bill Pmt -Check 2808	ck 2808	03/12/2019	Wayne Oblander	1-1001 · 1stBank Checking	\$	(355.00)
Bill	Jan/Feb 2019 2018 Final Reads	03/12/2019 03/12/2019		1-6015 · Meter reading 1-6015 · Meter reading	မမ	310.00 45.00 355.00
Paycheck	2809	03/12/2019	Anderson R Dunn IV	1-1001 · 1stBank Checking	⇔	(92.35)
				 1-5001 · Director wages & payroll tax 66000 · Payroll Expenses 24000 · Payroll Liabilities 24000 · Payroll Liabilities 1-5001 · Director wages & payroll tax 24000 · Payroll Liabilities 24000 · Payroll Liabilities 	ଡ଼ଡ଼ଡ଼ଡ଼ଡ଼ଡ଼ଡ଼	100.00 6.20 (6.20) (6.20) (1.45 (1.45) (1.45) (1.45) (1.45)
Paycheck	2810	03/12/2019	Joseph Neu {Director}	1-1001 · 1stBank Checking	¢	(92.35)
				 1-5001 · Director wages & payroll tax 66000 · Payroll Expenses 24000 · Payroll Liabilities 24000 · Payroll Liabilities 1-5001 · Director wages & payroll tax 24000 · Payroll Liabilities 24000 · Payroll Liabilities 		100.00 6.20 (6.20) (6.20) (1.45) (1.45) (1.45) (1.45) (1.45)
Paycheck	2811	03/12/2019	Matthew J Collitt	1-1001 · 1stBank Checking	\$	(92.35)

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Louviers Water and Sanitation District Check Detail

(1.45) 92.35 (6.20) 1.45 **Paid Amount** (6.20) (1.45) (92.35)(6.20) (6.20) 1.45 100.00 (1.45)(92.35)(6.20) (6.20) 6.20 6.20 (1.45)(1.45)100.00 92.35 100.00 6.20 1.45 (1.45)92.35 ର ର ର \$ \$ θ θ θ θ \$ θ \$ θ \$ θ € \$ \$ θ Э θ \$ -5001 · Director wages & payroll ta: 1-5001 · Director wages & payroll ta: 1-1001 · 1stBank Checking 1-1001 · 1stBank Checking 56000 · Payroll Expenses 66000 · Payroll Expenses 66000 · Payroll Expenses 24000 · Payroll Liabilities Account Mar6h 12, 2019 Rebecca A Connet **Ronald D Beane** 03/12/2019 03/12/2019 Date Num 2812 2813 Paycheck Paycheck Type

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\$ 11,843.86

TOTAL DISBURSEMENTS

Louviers Water and Sanitation District Cash Position Summary January 31, 2019

Checking, Savings & Investment Accounts			Balance		
1st Bank Checking COLOTRUST Plus - General Account COLOTRUST Plus - Sewer Debt Service Reserve Total			\$ 40,316.81 239,831.01 35,486.47 \$ 315,634.29	_	<u>Excess</u> \$ 614.47
Balance From Last Month			\$ 322,601.28	, =]	
Increase (Decrease)			\$ (6,966.99)	-	
COLOTRUST Plus - Sewer Debt Service Reserve_	1/1/2019 <u>Year To Date</u> \$ - <u>-</u> \$ -	Current <u>Month</u> \$ 526.4 77.8 \$ 604.3	7 77.87	-	
Interest and Investment Rates COLOTRUST Plus - General Account COLOTRUST Plus - Sewer Debt Service Reserve	<u>1/1/2019</u> 2.54% 2.54%	<u>Change</u> 0.08 ⁴ 0.08			

Louviers Water and Sanitation District Cash Position Summary February 28, 2019

Checking, Savings & Investment Accounts			Balance		
1st Bank Checking COLOTRUST Plus - General Account COLOTRUST Plus - Sewer Debt Service Reserve Total) ´		\$ 49,938.98 240,310.62 35,557.43 \$ 325,807.03		<u>Excess</u> \$ 685.43
Balance From Last Month			\$ 315,634.29	=	
Increase (Decrease)			\$ 10,172.74	=	
Interest & Investment Earnings COLOTRUST Plus - General Account COLOTRUST Plus - Sewer Debt Service Reserve	1/31/2019 Year To Date \$ 526.43 77.87 \$ 604.30	\$ 479.61 70.96	148.83		
Interest and Investment Rates COLOTRUST Plus - General Account COLOTRUST Plus - Sewer Debt Service Reserve	<u>1/31/2019</u> 2.62% 2.62%				

Louviers Water & Sanitation Aged Accounts Receivable

Account#	Current	30 Day	60 Day	90 Day+	Total
0000002	\$278.61	\$0.00	\$0.00	\$0.00	\$278.61
00000005	(\$334.53)	\$0.00	\$0.00	\$0.00	(\$334.53)
00000010	\$132.26	\$131.26	\$135.35	\$4,421.83	\$4,820.70
00000014	\$274.52	\$0.00	\$0.00	\$0.00	\$274.52
00000015	\$370.32	\$365.48	\$217.53	\$1.77	\$955.10
00000024	(\$15.00)	\$0.00	\$0.00	\$0.00	(\$15.00)
0000032	\$295.66	\$86.96	\$0.00	\$0.00	\$382.62
0000033	(\$21.00)	\$0.00	\$0.00	\$0.00	(\$21.00)
0000038	\$260.52	\$260.52	\$263.61	(\$1,959.81)	(\$1,175.16)
00000045	\$271.52	(\$153.83)	\$0.00	\$0.00	\$117.69
00000048	(\$15.00)	\$0.00	\$0.00	\$0.00	(\$15.00)
0000053	(\$15.00)	\$0.00	\$0.00	\$0.00	(\$15.00)
0000060	\$15.00	\$0.00	\$0.00	\$0.00	\$15.00
0000078	\$271.52	(\$15.00)	\$0.00	\$0.00	\$256.52
00000084	(\$13.30)	\$0.00	\$0.00	\$0.00	(\$13.30)
00000093	\$578.38	\$460.96	\$485.68	\$85.68	\$1,610.70
00000094	(\$15.00)	\$0.00	\$0.00	\$0.00	(\$15.00)
00000098	\$256.52	\$187.80	\$0.00	\$0.00	\$444.32
00000117	(\$100.00)	\$0.00	\$0.00	\$0.00	(\$100.00)
00000119	(\$350.67)	\$0.00	\$0.00	\$0.00	(\$350.67)
00000126	\$300.24	\$0.00	\$0.00	\$0.00	\$300.24
00000134	(\$448.06)	\$0.00	\$0.00	\$0.00	(\$448.06)
00000140	(\$128.21)	\$0.00	\$0.00	\$0.00	(\$128.21)
00000150	\$15.00	\$0.00	\$0.00	\$0.00	\$15.00
00000153	\$15.00	\$0.00	\$0.00	\$0.00	\$15.00
00000158	(\$15.00)	\$0.00	\$0.00	\$0.00	(\$15.00)
00000167	\$274.52	\$284.79	\$284.79	\$586.58	\$1,430.68
00000173	\$290.97	\$304.88	\$454.78	(\$15.00)	\$1,035.63
00000175	\$309.52	\$374.44	\$111.00	\$2.28	\$797.24
00000180	(\$2.83)	\$0.00	\$0.00	\$0.00	(\$2.83)
00000183	(\$8.82)	\$0.00	\$0.00	\$0.00	(\$8.82)
00000187	\$255.90	\$256.52	\$7.71	\$7.29	\$527.42
99000120	\$136.61	\$306.72	\$292.82	\$0.00	\$736.15

Account#	Current	30 Day	60 Day	90 Day+	Total
	\$3,120.17	\$2,851.50	\$2,253.27	\$3,130.62	\$11,355.56

Louviers Water and Sanitation District Radium Treatement Options Analysis

water customers. Also for the RWSD, the water usage on an annual basis is not included, so it is not determinable at this time what the annual charges, but these are estimates without discussion with RWSD. The engineer's estimate also is based on 108 EQR when the District has 112 the loan and the annual operating costs would be covered by a rate increase. It also assumes no inflationary increase in the annual operating NOTE: The analysis below assumes that the District could obtain a 0.00%, 30 year interest loan to cover the initial costs. The debt service on costs. Also, the engineer's estimate for the RWSD includes the inclusion fees, system development charge, permit fees, and water supply rate increases would be for water service.

	Cost per Engineer's <u>Estimate</u>	Annual Debt Service <u>and O&M Cost</u>	Number of Water <u>Customers</u>	001	Annual Cost Per <u>Customer</u>	Rate Per B	Rate Increase Per Bi-Monthly <u>Billing Cycle</u>
Equipment, Construction & Installation Costs Annual O&M/Disposal Costs	<pre>\$ 933,000.00 25,000.00 \$ 958,000.00</pre>	\$ 31,100.00 25,000.00 \$ 56,100.00	112.00	φ φ	278.00 223.00 501.00	су су	46.33 37.17 83.50
<i>Pressure Greensand Filtration</i> Equipment, Construction & Installation Costs Annual O&M/Disposal Costs	<pre>\$ 1,483,000.00 42,000.00 \$ 1,525,000.00</pre>	\$ 49,433.00 42,000.00 \$ 91,433.00	112.00	မာ	441.00 375.00 816.00	မ မ	73.50 62.50 136.00
Water Service from Roxborough WSD Equipment, Construction & Installation Costs Annual Water Charges	\$ 3,783,200.00 Unknown \$ 3,783,200.00	 \$ 126,107.00 Unknown \$ 126,107.00 	112.00	မ မ	1,126.00 Unknown 1,126.00	မာမာ	187.67 Unknown 187.67

Louviers Water and Sanitation District Well No. 2 Radium Treatment Conceptual Cost Estimate March 5, 2019

Option to Add Ion Exchange System

Description	Quantity	Units	Unit Price	S	ubtotal Cost
General	15	%	\$720,000	\$	108,000
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GESC Materials and Maintenance	3	МО	\$ 4,000	\$	12,000
Site Restoration	2,000	SF	\$ -,000	\$	
Access Drive	50	SY		ֆ \$	6,000
Yard Pipe	50		\$ 20	Ŧ	1,000
Ion Exchange System	50	LF	\$ 80	\$	4,000
Treatment Unit Column	1	10	¢100.000	•	100.000
Online Startup	1	LS LS	\$160,000	\$	160,000
Piping - Materials	1	LS	\$ 15,000	\$	15,000
Piping - Installation	- 1	LS	\$ 10,000	\$	10,000
Connections to Ex Piping Systems	2	EA	\$ 15,000 \$ 10,000	\$	15,000
Booster Pump	2	EA		\$	20,000
Electrical	1	LS	\$ 25,000 \$ 75,000	\$	50,000
New Building		10	\$ 75,000	\$	75,000
Building Construction (~ 25' x 20')	500	SF	¢ 100	•	05 000
Building Slab on Grade	25	CY	\$ 130 \$ 750	\$	65,000
Mechanical	25			\$	18,750
Modifications to Existing Structure	1	LS	\$ 15,000	\$	15,000
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Survey	1	LS	\$ 7,000	\$	7,000
Utilities Investigation	3	DAYS	\$ 3,000	\$	9,000
Materials Testing	2	%	\$144,000	\$	2,880
Legal	1	LS	\$ 10,000	\$	10,000
Administration	1	LS	\$ 5,000	\$	5,000
CDPHE Financial Assurance for Waste Disposal	1	LS	\$ 30,000	\$	30,000
Project Total (nearest \$1,000)			2 00,000	\$	933,000

Annual O & M, Power, and Resin Disposal

Description	Quantity	Units	Unit Price	Subtotal Cos
Ion Exchange System				
Operation & Maintenance, Resin Disposal/Replacement, and Licensing for Treated Water < 11 MGY	1	LS	\$ 17,000	\$ 17,00
Operation & Maintenance, Resin Disposal/Replacement, and Licensing for Treated Water > 11 MGY	5,000	KGAL	\$ 1.50	\$ 7,50
Power	6,000	kWh	\$ 0.1200	\$ 70
Annual O & M, Power, and Resin Disposal (nearest \$1,000)				\$ 25,00

Louviers Water and Sanitation District Well No. 2 Radium Treatment Conceptual Cost Estimate March 5, 2019

Option to Add Pressure Greensand Filtration

Description	Quantity	Units		Unit Price	S	ubtotal Cost
General	15	%	\$	1,130,000	\$	169,500
Sitework				1,100,000	Ψ	100,000
GESC Materials and Maintenance	3	МО	\$	4,000	\$	12,000
Site Restoration	2,000	SF	\$		\$	6.000
Access Drive	50	SY	\$	20	э \$	1,000
Yard Pipe	500	LF	\$	80	э \$	40.000
Greensand Pressure Filter System	000	LI	φ	80	φ	40,000
Treatment Unit - Materials	1	LS	\$	120,000	¢	120.000
Treatment Unit - Installation, Programming	1	LS	\$	60,000	\$ \$	120,000
Chemical Feed System and Storage	1	LS	\$	30,000	э \$	60,000 30,000
Piping - Materials	1	LS	\$	20,000		20,000
Piping - Installation	1	LS	\$	15,000		
Connections to Ex Piping Systems	2	EA	\$	10,000	э \$	15,000
Backwash Tank	2	LS	\$	75,000		20,000
Booster Pump	2	EA	\$		\$	150,000
Electrical	1	LA	э \$	25,000	\$	50,000
New Building		LS	¢	90,000	\$	90,000
Building Construction (~ 40' x 20')	800	05				
Building Slab on Grade	25	SF	\$	110	\$	88,000
Mechanical		CY	\$	750	\$	18,750
Modifications to Existing Structure	1	LS	\$	15,000	\$	15,000
Wall Penetrations for Piping						
viai reneutations for riping	3	EA	\$	1,500	\$	4,500
Construction Subtotal (nearest \$1,000)					\$	910,000
Contingency (25%, nearest \$1,000)					\$	
Construction Total					φ \$	228,000
Engineering Design and Construction	20	%	\$	1,138,000		1,138,000
Approvals	5	%	φ \$	1,138,000	\$	227,600
Geotechnical Investigation	1	LS	ֆ Տ		\$	56,900
Survey	1	LS	ֆ Տ	7,000	\$	7,000
Utilities Investigation	3	DAYS		7,000	\$	7,000
Materials Testing	2	WATS	\$	3,000	\$	9,000
Legal	2	% LS	\$	1,138,000	\$	22,760
Administration	1	LS	\$ ¢	10,000	\$	10,000
CDPHE Financial Assurance for Waste Disposal	1	LS	\$	5,000	\$	5,000
NRC Permit	1	LS	\$	30,000	\$	30,000
Project Total (nearest \$1,000)	1	LO	\$	15,000	\$	15,000
,					\$	1,483,000

Annual Greensand Filter O & M, Power, and Disposal Costs

Description	Quantity	Units	Unit Price		Subtotal Cost	
Pressure Filter Media and Support Gravel Replacement - 15 Yr	1	10				
Complete Underdrain Replacement - 30 Yr	1	LS LS	\$ \$	4,133 10,933	\$ \$	4,133 10,933
Annual Steel Repair Backwash Tank Cleaning and Disposal	1	LS LS	\$ \$	1,000	\$	1,000
Power	6,000	kWh	ф \$	25,000 0.1200	Դ \$	25,000 700
Pressure Filter O & M, Power, and Disposal (nearest \$1,000)					\$	42,000

Louviers Water and Sanitation District Well No. 2 Radium Treatment Conceptual Cost Estimate Updated March 11, 2019

Option for Water Service from Roxborough Water and Sanitation Distric	Option for Wa	ter Service from	Roxborough	Water and S	Sanitation District
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Description	Quantity	Units		Unit Price		Subtotal Cost
Tranmission Main From Plum Valley Heights to LWSD	Tank		- 19			
General	15	%	\$	1,000,000	\$	150,000
Pipeline				, ,,	Ţ	,
4" Direction Drill HDPE	7,000	LF	\$	80	\$	560,000
PRV Vault	1	LS	\$	30,000	\$	30,000
Meter Manhole	1	LS	\$	10,000	\$	10,000
Air Vacuum Valves	4	EA	\$	5,000	\$	20,00
Connection to RWSD	1	LS	\$	10,000	\$	10,00
Connection to LWSD Tank	1	LS	\$	10,000	\$	10,000
GESC Materials and Maintenance	3	MO	\$	4,000	\$	12,000
Site Restoration	3	AC	\$	3,000	\$	9,000
Construction Subtotal (nearest \$1,000)					\$	811,000
Contingency (25%, nearest \$1,000)					э \$	203.000
Construction Total					э \$	1,014,000
Engineering Design and Construction	20	%	¢	1.014.000	Տ	
Approvals	5	%	\$ \$			202,80
Geotechnical Investigation	1	LS	ф \$	1,014,000	\$	50,700
Survey	1	LS	э \$	7,000	\$	7,000
Utilities Investigation	3	DAYS		7,000	\$	7,000
Materials Testing	2	%	\$ \$	3,000	\$	9,000
Legal/ROW Acquisition	1	LS		1,014,000	\$	20,280
Administration	1	LS	\$ \$	20,000	\$	20,000
Construction Project Total (nearest \$1,000)		LO	Φ	5,000	\$	5,000
					\$	1,336,000
RWSD Inclusion Fees (Estimated - No Discussion with Inclusion Fee (RWSD)			er source			
RWSD System Development Charge	112	EQR	\$	3,200	\$	358,400
Permit Fee	112	EQR	\$	10,000	\$	1,120,000
Permit Fee	112	EQR	\$	1,650	\$	184,800
				Total	\$	1,663,200
RWSD Water Supply Costs (Estimated - No Discussion	with RWSD)				-	
Water Supply	112	EQR	\$	7.000	\$	784,000
				Total		784,000
Project Grand Total					\$	3,783,200.00



March 5, 2019

Michael Gerstner TST Infrastructure, Inc. 61 Inverness Drive East, Suite 100 Englewood, CO 80112

RE: Revised Budget Proposal for Z-88[®] Radium Removal System for Louviers Water Service District, CO.

Dear Michael:

Thank you for the opportunity to provide this revised preliminary proposal for WRT's Z-88[®] Radium Removal Modular Component System for the Louviers Water Service District.

Introduction

WRT proposes to remove the radium from the flow produced using a single train WRT Modular Component System (MCS), composed of two 48" dia. by 72" tall vessels, each containing WRT's Z-88[®] media and operating in sequence.

Z-8[®] Radium Removal Modular Component System

WRT provides a complete system for removal of radium from drinking water, including the process equipment, treatment media, and the safe disposal of used media.

WRT's Z-88[®] Radium Removal Modular Component System is designed to be added to any new or existing potable water system. Water passes through treatment columns where radium is removed and gross alpha is reduced. When the media is loaded with radium, it is removed from the vessels onsite and replaced with new media. This complete process is handled by WRT, who is responsible for the safe, long term disposal of the media.

Advantages of the WRT Z-88[®] Radium Removal Modular Component System includes:

- Nothing is added to the water. No chemicals are added in the treatment process, and nothing is imparted into the water during the treatment process.
- No liquid waste stream is generated by this process; this is a zero-liquid-discharge system.
- Disposition of spent media by WRT.
- Minimal Maintenance and Operation required.
- No handling of radioactive materials, media or chemicals by Utility personnel.
- Z-88[®] Media is NSF, Standard 61 certified for use in drinking water applications.
- Guaranteed compliance for uranium.

CLEAN WATER. CLEAN EARTH. THAT'S OUR PROMISE®

Water Remediation Technology LLC, 901 W. 116th Avenue, Suite 400, Westminster, Colorado 80234 tel: 303.424.5355 · email: info@wrtnet.com · web: www.wrtnet.com



Scope of Supply

WRT will provide a complete WRT Z-88[®] Radium Removal Modular Component System for this application. This system will include treatment equipment, media, and optional start-up assistance and optional proper handling and disposition of used media.

This proposal is based upon WRT providing a complete WRT Z-88[®] Radium Removal System under a long term contract, including equipment, media, exchange of media when required and proper handling and disposition of spent media.

The equipment is provided to the treatment site by WRT and installed by the Utility. WRT delivers and installs media as required directly into the treatment vessel at the treatment site. WRT removes used media directly out of the treatment vessels at the site. All handling of media is done by WRT.

WRT provides treatment on a guaranteed cost per gallon treated basis, assuming the risk for media performance, and therefore utilizes the most reliable, cost effective treatment media available.

Used treatment media remains the property and liability of WRT. WRT is licensed and permitted to dispose of used media in an approved facility.

WRT will provide the following Equipment:

- One WRTSTD-MCS-UF48x72-1x2, Z-88[®] Radium Removal System.
- Installation instructions.
- Operation and Maintenance Manuals.
- One year equipment warranty.

WRT will provide the following services for On Site Start-up:

- Inspection of system following assembly and installation by contractor.
- Place system in operation and testing of system.
- On-site operator training.
- Disinfection of system prior to placing on line.
- Collection of samples for analysis following disinfection.

WRT will provide the following services under the Long Term Service Agreement:

- WRT Z-88[®] Radium Removal Media as required for the term of the contract
- Media exchange services as required
- Proper disposition of spent treatment media as required
- Radioactive Material Licensing and services as required
- WRT provided equipment maintenance

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The Utility will provide the following:

- Provide water at current water quality and specified pressure
- Secure site and building to house treatment system
- Installation and operation of equipment at treatment site
- Site access for media exchange operations
- All licensing, permitting and approvals, except Radioactive Material License
- Maintenance of site and equipment, excluding WRT treatment system
- Provide utilities to operate system
- All taxes and use fees
- Compliance monitoring and sampling
- Daily monitoring of system and operation
- Compliance analytical fees (analysis of samples required for regulatory compliance).
- Financial assurance if required

Pricing

This proposal is based upon the project information and water quality information provided.

Louviers Water Service District, Colora	ado
Hydraulic capacity of WRT system	50-113 GPM
Radium level in the water to be treated	5.7 pCi/L
Required radium level of treated water	5 pCi/L (MCL)
Minimum annual usage for this site:	11 MGY (million gallons per year)
Equipment & Onsite Startup Price*	
1 - WRTSTD-MCS-UF63x8-1x2, Z-88 [®] Radium Removal Modular Component System, including freight to site.	\$153,400.00, plus applicable taxes
1 - Onsite startup as detailed above.	\$11,200.00, plus applicable taxes
Long Term Service Agreement Price*	
Long Term Service Agreement including, operating media, exchange and proper disposal of media as required, equipment maintenance, Radioactive Materials Licensing and services on a guaranteed cost per gallon treated basis.	\$16,500.00/year for base gallons, plus \$1.50/1,000 for additional gallons treated, plus applicable taxes

* This proposal is based upon today's costs, and is valid for a period of 90 days. This price is based upon the water quality information provided, and is subject to verification which may include a field pilot study. This pricing is based on a minimum annual usage of 11,000,000 gallons per year. The Utility will be required to provide a site and housing for the equipment as required for weather and security protection, installation, electrical service and power, connection piping into and out of the system, and any site engineering, bonding and permitting. <u>Note that taxes are not included</u>. Freight costs will be prepaid and added to invoice. WRT strongly recommends secondary spill containment.



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Payment Terms

Treatment equipment payment terms are as follows:

- 15% upon delivery of WRT submittal drawings to customer;
- 35% upon customer approval of WRT submittal drawings, in order to release for fabrication;
- 40% upon equipment delivery to customer site or 30 days after the equipment is ready for shipment, whichever is earlier; and
- 10% upon the earliest of:
 - o satisfactory system functioning; or
 - o 90 days from vessel and ancillary equipment delivery to site.

Payment of invoices is due in full within 30 days of the date of the invoice.

Any amounts not paid when due will be subject to a finance charge of 11/2% per month.

Long Term Service Agreement – Contract Terms

- Term of contract is 5 years.
- Monthly charge, based on agreed minimum usage amount.
- Additional usage will be billed on a cost per 1,000 gallons treated basis.
- Charge will be adjusted annually, based upon the Consumer Price Index (CPI).

Delivery

Submittal drawings will be provided approximately 4-6 weeks after signed contract. Equipment delivery will be approximately 8-12 weeks after approved drawings and release for fabrication.

NSF Certification

WRT Z-88[®] Radium Removal Media is certified to NSF Standard 61, for use in potable water treatment.

Radioactive Materials License and Financial Assurance

PLEASE NOTE: A Radioactive Materials License may be required for the installation and operation of this system. This proposal assumes that a Radioactive Materials License will be required for the operation of this equipment. WRT has been issued Radioactive Materials Licenses from numerous states (including Colorado) and from the Nuclear Regulatory Commission (NRC).

Financial Assurance may be required for this project by the state licensing authority, or the NRC. The cost for providing Financial Assurance is not included in this proposal, and would be the responsibility of the customer.

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Conclusion

Thank you for your interest in our company, we look forward to the opportunity to discuss this proposal with you in detail.

Please feel free to contact me with any questions or comments.

Best Regards,

Ron Dollar, VP Sales & Marketing Water Remediation Technology LLC

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WRT Standard Terms and Conditions

- 1. <u>Payment.</u> Unless otherwise agreed by the parties in writing, payment for all products purchased pursuant to this Agreement shall be made within 30 day of Seller's invoice. Any amount not paid as agreed shall be subject to an interest charge of 1% per month, compounded monthly. Buyer will be liable for all of Buyer's costs to collect amounts due under this agreement, including reasonable attorney's fess, whether or not any collection action is commenced.
- 2. <u>Limited Warranty.</u> Seller warrants the products sold to the Buyer to be free of defects in materials and workmanship for a period of one year after the products are delivered to Buyer. In the event of any such defect in the products during the warranty period, Seller will provide all parts and labor necessary to correct such defect.
- 3. <u>Disclaimer Of Implied Warranties; Limitation Of Remedies.</u> THE BUYER'S SOLE AND EXCLUSIVE REMEDY UNDER THE LIMITED WARRANTY PROVIDED HEREIN SHALL BE THE PARTS AND LABOR AS PROVIDED IN THIS AGREEEMENT. ALL IMPLIED WARRANTIES, INCLUDING THOSE OF **MERCHANTABILITY** AND OF **FITNESS FOR A PARTICULAR PURPOSE** ARE EXCLUDED. SELLER SHALL NOT BE RESPONSIBLE OR LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM THE BREACH OF ANY WARRANTIES WITH RESPECT TO THE PRODUCTS PURCHASED PURSUANT TO THIS AGREEMENT.
- 4. <u>Waiver of and Indemnification for Claims.</u> BUYER HEREBY AGREES TO WAIVE, RELEASE, DISCHARGE, INDEMNIFY AND HOLD SELLER HARMLESS FOR ANY AND ALL CLAIMS FOR DAMAGES FOR DEATH, PERSONAL INJURY OR PROPERTY DAMAGE WHICH IT OR THIRD PARTIES MAY HAVE OR WHICH MAY HEREAFTER ACCRUE AS A RESULT OF THE BUYERS' USE OF THE PRODUCTS SOLD PURSUANT TO THIS AGREEMENT.
- 5. <u>Intellectual Property.</u> To the extent the products sold pursuant to this Agreement contain, reflect or consist of the Seller's intellectual property, the sale does not include a sale of such intellectual property or of a license to use such intellectual property beyond the use by the Buyer of the products sold.
- 6. <u>Assignment.</u> In the event that Buyer assigns its rights and obligations under this Agreement any assignment of its payment obligation will be ineffective and Seller will remain jointly and severally liable, with its assignee, to pay all amounts due pursuant to this Agreement.
- 7. <u>Non-Reliance on Written or Oral Statements</u>. Buyer has relied on its own investigation about the qualities and performance of the products purchased pursuant to this Agreement and has not relied upon the written or oral statements of Seller or its representatives in entering into this Agreement.
- 8. <u>Only Agreement.</u> This is the only Agreement between the Buyer and Seller relating to the products purchased pursuant to this Agreement, and no oral or other statements, not contained herein, shall be binding on either the Buyer or the Seller.
- 9. <u>Modification</u>. The terms of this Agreement may not be modified, except in a writing signed by the party to be bound.
- 10. <u>Non-Waiver; Severability.</u> Waiver by either party hereto of non-performance of any term, provision, covenant, obligation or condition of this Agreement shall not be considered a waiver of any subsequent non-performance, nor as waiver of the term, provision, covenant, obligation or condition itself. If any provision of this Agreement is found to be prohibited, invalid or unenforceable, such finding will not invalidate or render unenforceable any remaining provisions of this Agreement.

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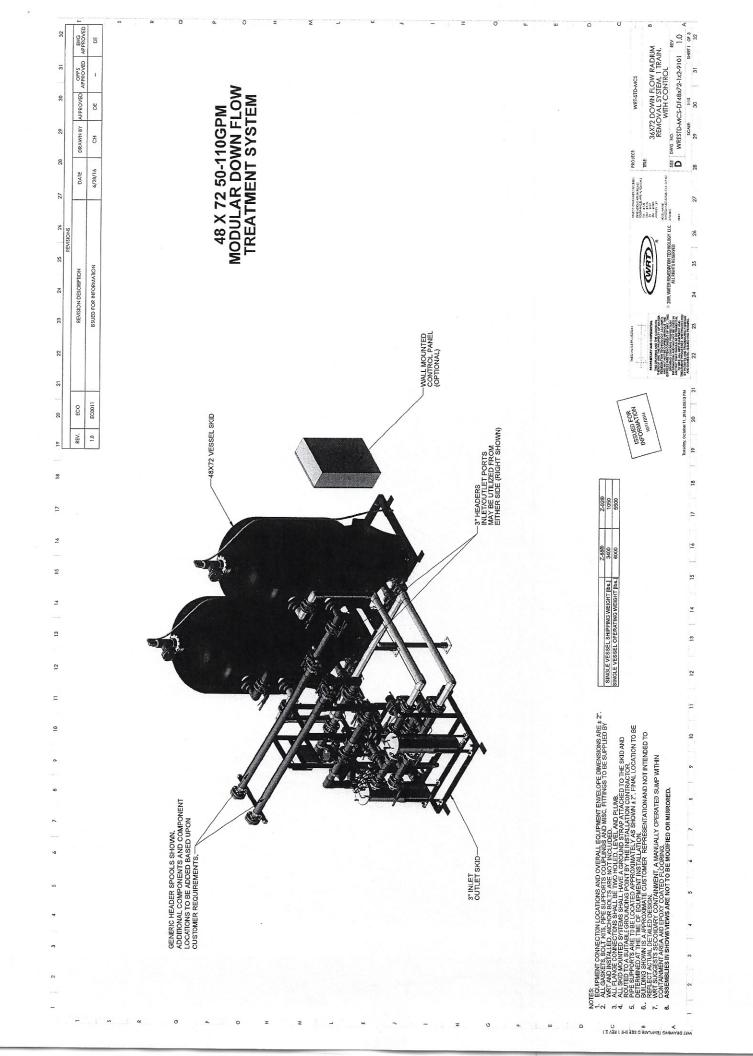
Water Remediation Technology LLC 901 W. 116th Avenue, Suite 400, Westminster, Colorado 80234 Tel: 303.424.5355 • email: info@wrtnet.com • web: www.wrtnet.com

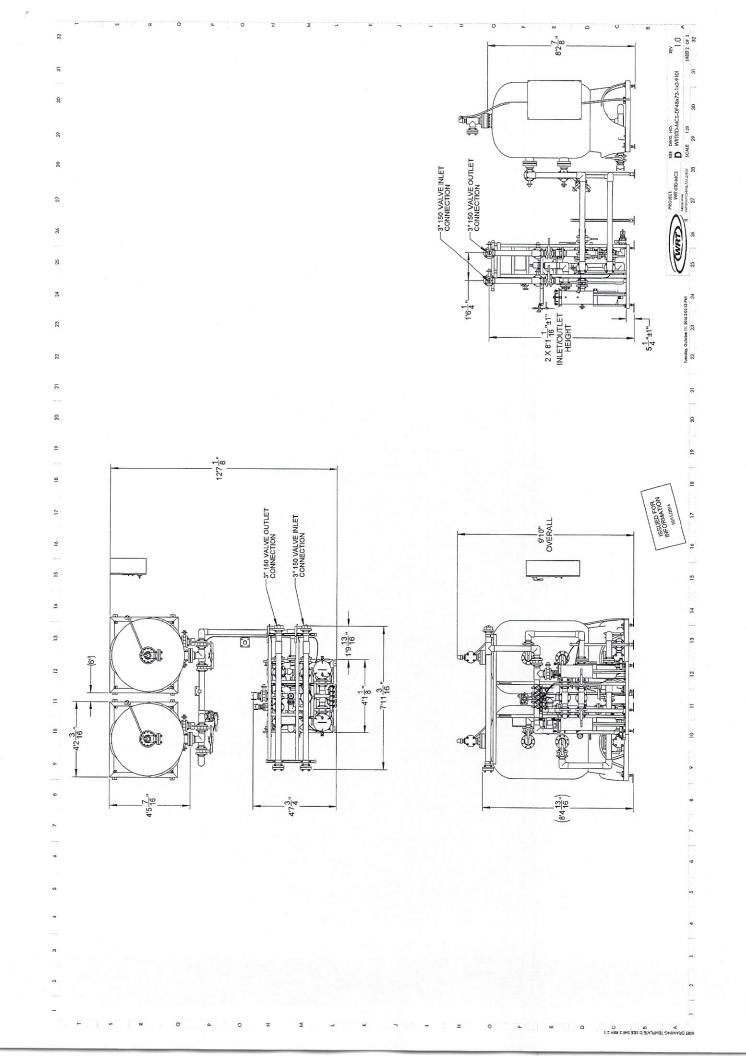


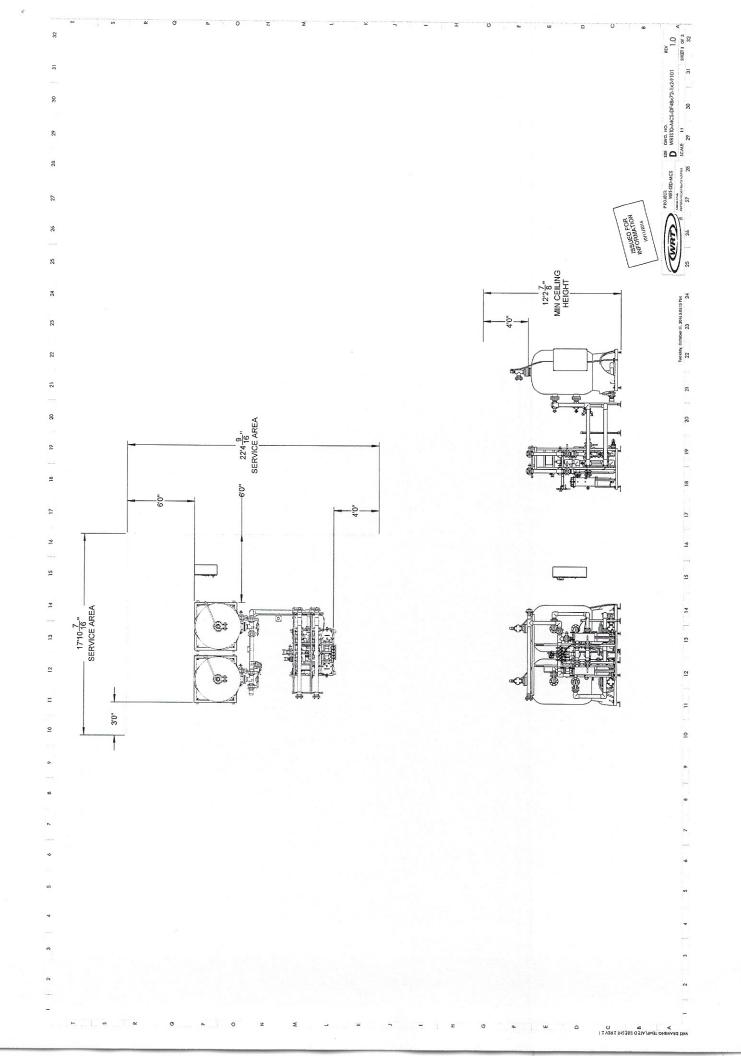
- 11. <u>Arbitration</u>. Any disputes arising in any way in connection with this Agreement or the products sold by the Seller shall be resolved by binding arbitration under the Colorado Uniform Arbitration Act (C.R.S. § 13-22-201 *et seq.*) (the "Act"). The parties agree that the District Court of Jefferson County, Colorado shall have jurisdiction over them for the purposes of applying the provisions of the Act. All arbitration proceedings shall take place within the greater metropolitan area of Denver, Colorado. Buyer will reimburse Seller for all attorney's fees incurred by Seller in any arbitration (for collection or otherwise) in which Seller prevails.
- 12. <u>Governing Law.</u> This Agreement and any disputes or claims arising from it shall be governed by and construed according to the laws of the State of Colorado.

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Louviers Water and Sanitation District – System Status Report February 2019

Prepared by: DM Small Systems, LLC

Water:

E

Gallons Produced: Gallons Produced per Tap (111):	382,480 3,446
January Water Produced: February Water Produced:	414,954 382,480
Total:	797,434
January-February Revenue Water: Construction Water:	TBD N/A
Non-Revenue Water:	TBD
Unaccounted for Water %:	TBD

Wastewater:

Gallons Metered:	202,640
30 Day Average: Max Day:	6,755
	8,010

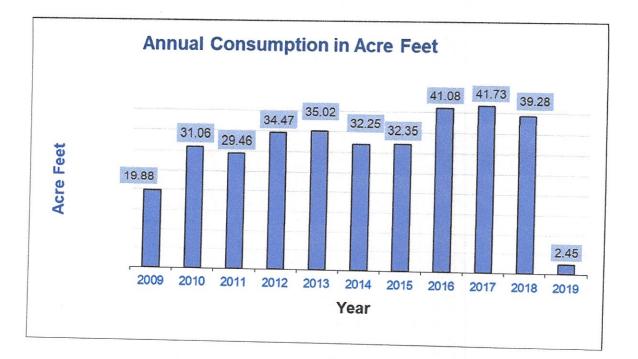
% Water Produced into Wastewater System: 54.98%

Gallons Discharged: None.

Additional Information:

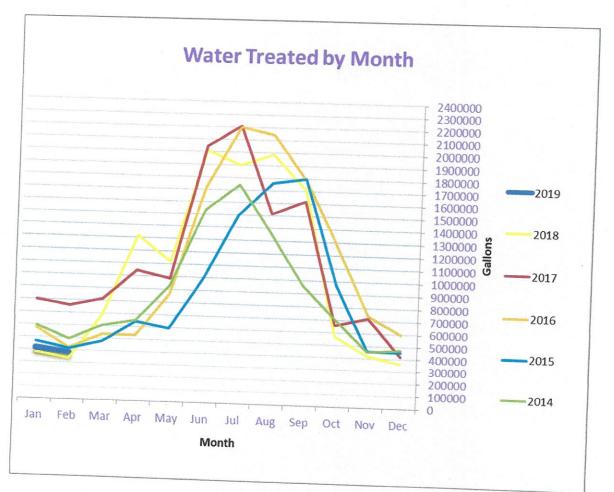
There is none.

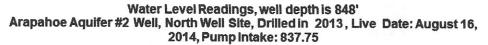




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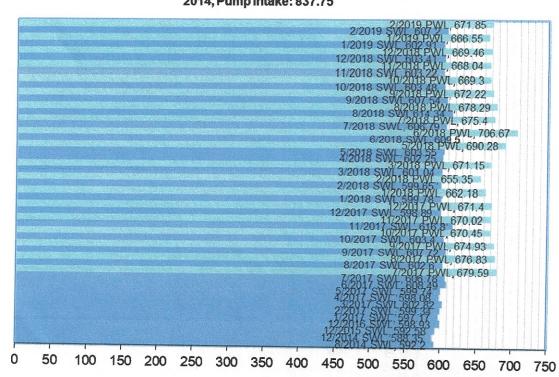
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Water Level Readings Arapahoe Aquifer #1 Well - South Site - Drilled in 1975, Began using North well on August 16, 2014

