STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
Response to
Portsmouth Water & Fire District's Data Requests
Set 3

PWFD 3-1: Please provide invoices for workers' compensation premiums billed to Newport Water for FY-07, FY-08 and FY-09.

Response: Workers compensation invoices are listed below**.** The City of Newport is billed in total for workers' compensation insurance and a portion is allocated to the Water Department. Invoice copies are attached.

	Invoice #	Date	Total Amount	Water Amount
FY 2007	7900	7/1/06	$296,531.00	$59,306.00
	8321	10/19/06	$ 487.20	$ 122.76
	8668	2/9/07	$ 1,030.02	$ 153.56
	8853	4/24/07	$ 1,629.63	$ 3.75
FY2008	9056	7/16/07	$283,364.00	$70,841.00
	9764	1/15/08	$ 48,231.00	$11,831.00
	10148	6/16/08	$ 5,844.05	$ 4,547.39
	10286	7/23/08	$ 4,352.24	$ 236.02
FY 2009	10362	8/29/08	$ 5,847.21	$ 193.13
	10480	9/23/08	$251,650.00	$62,912.50

Prepared by: R Esten

INVOICE

R.I. INTERLOCAL RISK MANAGEMENT TRUST
501 WAMPANOAG TRAIL, SUITE 301 (401) 438-6511
EAST PROVIDENCE, RI 02915

INVOICE NUMBER: **7900**

PAGE: 1

SOLD TO:

Laura Sitrin
City of Newport
Finance Director
City Hall - 43 Broadway
Newport, RI 02840

7-27-06
Julia Please voucher for full amt of $59,306 - due 9/1/06 (see attached sheet) spread. Thanks EJS

CUSTOMER ID	CUSTOMER PO	SALES REP ID
NEWPCIT		
PAYMENT TERMS	**INVOICE DATE**	**DUE DATE**
Net 75 Days	Jul 1, 2006	9/14/06

DESCRIPTION	AMOUNT
Workers' Compensation Insurance Premium Contribution PY06-07	$296,531.00

Premium contributions are payable in two installments: 50% within 30 days and 50% within 60 days from the date of the original invoice. Late payment interest accrues on any outstanding balance at a rate of 12% per annum, commencing 75 days after the original invoice date.

Subtotal	$296,531.00
Sales Tax	
Total Invoice Amount	$296,531.00
Payment Received	0.00
TOTAL DUE	$296,531.00

Please return yellow invoice copy with payment.

080805/11-94

City of Newport
FY 2007 - Invoice #7900
Payment Due in Full 09/01/06

	FY 2007 ADOPTED ALLOCATION			
011-170-08560-0105	231,750.00	233,724.80	**	
008-710-05101-0105	3,500.00	3,500.00		
015-500-02200-0105 WATER	50,129.00	59,306.20	1 **	Water Fund
	285,379.00	296,531.00		

TOTAL INVOICE AMOUNT DUE **296,531.00**

Total Budgeted Water Fund WC Ins.	50,129
Total WC Premium Due from Water Fund	59,306
Water Fund Shortage	**(9,177)**

1 = Percentage of Water Fund reduced from 25% to 20% due to retirement of higher paid employees
** Requires override

WC Premium increased 33.316% in FY 2006-2007

INVOICE

R.I. INTERLOCAL RISK MANAGEMENT TRUST
501 WAMPANOAG TRAIL, SUITE 301 (401) 438-6511
EAST PROVIDENCE, RI 02915

INVOICE NUMBER: 8321

PAGE: 1

SOLD TO:

Laura Sitrin
City of Newport
Finance Director
City Hall - 43 Broadway
Newport, RI 02840

CUSTOMER ID	CUSTOMER PO	SALES REP ID
NEWPCIT		
PAYMENT TERMS	**INVOICE DATE**	**DUE DATE**
Net 75 Days	Oct 19, 2006	1/2/07

DESCRIPTION	AMOUNT
Reimbursement for Trust payments for Workers' Compensation Claims for the period 7/1/06 to 9/30/06.	$487.20

Julia~
Please voucher for Water Funds share @ $122.76
Thanks,
Elizabeth

Subtotal	$487.20
Sales Tax	
Total Invoice Amount	$487.20
Payment Received	0.00
TOTAL DUE	$487.20

Late payment interest accrues on any outstanding balance at a rate of 12% per annum, commencing 75 days after the original invoice date.

Please return yellow invoice copy with payment.

080905/11-94

Rhode Island Interlocal Risk Management Trust
-ASO Program-
City of Newport
1st Quarter 2007

Claim Number	Payment Date	Claimant Name	Accident Date	Payee Name	Check Stub Message	$ Medical Payments	$ Expense Payments	
007875-WC-01	7/26/2006	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	Dos. 07/15/06 Invoice 11999-M2E408	182.22	0.00	B
007875-WC-01	9/12/2006	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	Dos. 09/06/06 Invoice 12920-M3079F	144.72	0.00	B
001424-WC-01	8/9/2006	Lama Allen J.	3/13/1989	St. Anne'S Hospital	Dos. 05/22/06 Acct Ahep7706 Amended Review	92.00	0.00	W
007875-WC-01	8/31/2006	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	Dos. 08/22/06 Invoice 12655-M2Feo5	37.50	0.00	B
001424-WC-01	7/19/2006	Lama Allen J.	3/13/1989	Rising Medical Solutions,Inc.	Invoice 214571 June,2006 Bill Review	0.00	30.76	W

Total :	$456.44	$30.76
Recovery:	N/A	
Total Paid 1st Quarter '07:	$487.20	

Total Net Payment Activity from Risk-Facs Report: $487.20

Difference: $0.00

INVOICE

R.I. INTERLOCAL RISK MANAGEMENT TRUST
501 WAMPANOAG TRAIL, SUITE 301 (401) 438-6511
EAST PROVIDENCE, RI 02915

INVOICE NUMBER: 8668

PAGE: 1

SOLD TO:

Laura Sitrin
City of Newport
Finance Director
City Hall - 43 Broadway
Newport, RI 02840

CUSTOMER ID	CUSTOMER PO	SALES REP ID
NEWPCIT		
PAYMENT TERMS	**INVOICE DATE**	**DUE DATE**
Net 75 Days	Feb 9, 2007	4/25/07

DESCRIPTION	AMOUNT
Reimbursement for Trust payments for Workers' Compensation Claims for the period 10/1/06 to 12/31/06.	$1,030.02

2-12-07
Julia ~ Please voucher for $153.56 (see attached)
Thanks!
Elizabeth

Premium contributions are payable in two installments: 50% within 30 days and 50% within 60 days from the date of the original invoice. Late payment interest accrues on any outstanding balance at a rate of 12% per annum, commencing 75 days after the original invoice date.

Subtotal	$1,030.02
Sales Tax	
Total Invoice Amount	$1,030.02
Payment Received	0.00
TOTAL DUE	$1,030.02

Please return yellow invoice copy with payment.

080805/11-94

Rhode Island Interlocal Risk Management Trust
-ASO Program-
City of Newport
2nd Quarter 2007

Claim Number	Payment Date	Claimant Name	Accident Date	Payee Name	Check Stub Message	$ Medical Payments	$ Expense Payments	
001424-WC-01	12/19/2006	Lama Allen J.	3/13/1989	St. Anne'S Hospital	Dos. 05/22/06 Acct 514131	$153.56		W
007875-WC-01	12/4/2006	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	Dos. 11/29/06 Invoice 14535-M34634	$182.22		G
009898-WC-01	10/30/2006	Borges Gary	9/15/1995	Lovett, Schefrin & Harnett Attn: Mr. John H	C/Fee Award 10/25/06 G.Borges Vs City Of Newport		$720.00	G

Total :	$335.78	$720.00
Less Recovery:	$25.76	
Total Paid 1st Quarter '07:	$1,030.02	

Total Net Payment Activity from Risk-Facs Report: $1,030.02

Difference: $0.00

INVOICE

R.I. INTERLOCAL RISK MANAGEMENT TRUST
501 WAMPANOAG TRAIL, SUITE 301 (401) 438-6511
EAST PROVIDENCE, RI 02915

INVOICE NUMBER: 8853

PAGE: 1

JUN - 6 2007

Julia ~ Please voucher for $3.25 (see attached) Thanks ~ Elizabeth

SOLD TO:

Laura Sitrin
City of Newport
Finance Director
City Hall - 43 Broadway
Newport, RI 02840

CUSTOMER ID	CUSTOMER PO	SALES REP ID
NEWPCIT		
PAYMENT TERMS	**INVOICE DATE**	**DUE DATE**
Net 75 Days	Apr 24, 2007	7/8/07

DESCRIPTION	AMOUNT
Reimbursement for Trust payments for Workers' Compensation Claims for the period 1/1/07 to 3/31/07	$1,629.63

Premium contributions are payable in two installments: 50% within 30 days and 50% within 60 days from the date of the original invoice. Late payment interest accrues on any outstanding balance at a rate of 12% per annum, commencing 75 days after the original invoice date.

Subtotal	$1,629.63
Sales Tax	
Total Invoice Amount	$1,629.63
Payment Received	0.00
TOTAL DUE	$1,629.63

Please return yellow invoice copy with payment.

080805/11-94

Rhode Island Interlocal Risk Management Trust
-ASO Program-
City of Newport
3rd Quarter 2007

Claim Number	Payment Date	Claimant Name	Accident Date	Payee Name	Check Stub Message	$ Medical Payments	$ Expense Payments
007875-WC-01	2/21/2007	PENNACHI, GEORGE	2/25/1994	MATRIX HEALTHCARE SERVICES INC.	DOS,12/26/06 INVOICE 15130-M35DD6	182.22	
007875-WC-01	1/18/2007	PENNACHI, GEORGE	2/25/1994	MATRIX HEALTHCARE SERVICES INC.	DOS. 11/01/06 INVOICE 13994-M331C8	182.22	
007875-WC-01	3/28/2007	PENNACHI, GEORGE	2/25/1994	MATRIX HEALTHCARE SERVICES INC.	DOS 03/16/07 INVOICE 17229-M3A90B	144.72	
007875-WC-01	2/21/2007	PENNACHI, GEORGE	2/25/1994	MATRIX HEALTHCARE SERVICES INC.	DOS. 02/14/07 INVOICE 16261-M38830	144.72	
009898-WC-01	1/3/2007	BORGES, GARY	9/15/1995	MICHAEL J. FEENEY	FILE # IL7122 INV. #100		972.00
001424-WC-01	1/8/2007	LAMA, ALLEN J..	3/13/1989	RISING MEDICAL SOLUTIONS,INC.	INVOICE 228013 DEC,2006 BILL REVIEW		3.75
					Total :	$653.88	$975.75
					Less Recovery:	$0.00	
					Total Paid 3rd Quarter '07:	$1,629.63	

Total Net Payment Activity from Risk-Facs Report: $1,629.63

Difference: $0.00

2200 -

4/23/2007

INVOICE

R.I. INTERLOCAL RISK MANAGEMENT TRUST
501 WAMPANOAG TRAIL, SUITE 301 (401) 438-6511
EAST PROVIDENCE, RI 02915

INVOICE NUMBER: 9056

PAGE: 1

7-26-07
Julia ~ Please invoice for $70,841.00 (see attached) Thanks, Elizabeth

SOLD TO:

Laura Sitrin
City of Newport
Finance Director
City Hall - 43 Broadway
Newport, RI 02840

CUSTOMER ID	CUSTOMER PO	SALES ~~REP ID~~
NEWPCIT		
PAYMENT TERMS	**INVOICE DATE**	**DUE DATE**
Net 75 Days	Jul 16, 2007	9/29/07

DESCRIPTION	AMOUNT
Workers' Compensation Insurance Premium Contribution PY07-08	$283,364.00

Premium contributions are payable in two installments: 50% within 30 days and 50% within 60 days from the date of the original invoice. Late payment interest accrues on any outstanding balance at a rate of 12% per annum, commencing 75 days after the original invoice date.

Subtotal	$283,364.00
Sales Tax	
Total Invoice Amount	$283,364.00
Payment Received	0.00
TOTAL DUE	$283,364.00

Please return yellow invoice copy with payment.

080805/11-94

City of Newport
FY 2008 - Invoice #9056
Payment Due in Full 09/29/07

	FY 2008 ADOPTED ALLOCATION		
011-170-08560-0105	357,982.00	208,148.00	
008-710-05101-0105	4,375.00	4,375.00	
015-500-02200-0105 WATER	74,286.00	70,841.00	25%
	436,643.00	283,364.00	

TOTAL INVOICE AMOUNT DUE **283,364.00**

Insurance/WC Premiums Paid FY08

INVOICE

R.I. INTERLOCAL RISK MANAGEMENT TRUST
501 WAMPANOAG TRAIL, SUITE 301 (401) 438-6511
EAST PROVIDENCE, RI 02915

INVOICE NUMBER: 9764

PAGE: 1

2-4-08 Dick
Please voucher for $11,831.00
(24.53% of Total Due). This will
require an override. With thanks,
Laura

SOLD TO:

Laura Sitrin
City of Newport
Finance Director
City Hall - 43 Broadway
Newport, RI 02840

CUSTOMER ID	CUSTOMER PO	SALES REP ID
NEWPCIT		
PAYMENT TERMS	**INVOICE DATE**	**DUE DATE**
Net 75 Days	Jan 15, 2008	3/30/08

DESCRIPTION	AMOUNT
Premium increase from Workers' Compensation Payroll Audit PY06-07	$48,231.00

Premium contributions are payable in two installments: 50% within 30 days and 50% within 60 days from the date of the original invoice. Late payment interest accrues on any outstanding balance at a rate of 12% per annum, commencing 75 days after the original invoice date.

Subtotal	$48,231.00
Sales Tax	
Total Invoice Amount	$48,231.00
Payment Received	0.00
TOTAL DUE	$48,231.00

Please return yellow invoice copy with payment.

080805/11-94

RHODE ISLAND INTERLOCAL RISK MANAGEMENT TRUST

Policy Year July 1, 2006 thru June 30, 2007

ENTITY: Newport, City

Code	Class	Policy Year 06/07 Total Audited Payroll	Rate	Manual Premium
0042	Landscape Gardening	-	0.1420	-
0106	Tree Pruning	-	0.2215	-
5022	Masonry	-	0.1443	
5506	Street/Road Repair	445,482	0.1133	50,473
6217	Landfill	-	0.1038	-
6836	Harbor	174,503	0.0547	9,545
7380	Drivers	-	0.0961	-
7382	Schoolbus Drivers	-	0.0469	-
7520	Waterworks	1,906,895	0.0412	78,564
7580	Sewage Treatment	-	0.0478	-
7605	Fire Alarm Installation	-	0.0711	-
7720	Police Officer (Special)	292,567	0.0372	10,883
8227	Heavy Equip. Main.	144,602	0.0584	8,445
8391	Mechanic	-	0.0687	-
8742	Outside Sales	-	0.0074	-
8810	Clerical/Office	3,738,078	0.0048	17,943
8820	Attorneys	151,010	0.0047	710
8831	Animal Shelters	62,628	0.0212	1,328
8841	Nursing Home Prof.	-	0.0576	-
8868	School Professionals	-	0.0058	-
9015	Bldg. Operation	323,894	0.0510	16,519
9033	Housing Authority	-	0.0401	-
9061	Club NOC & Clerical	-	0.0226	-
9083	Restaurant, Fast Food	-	0.0393	-
9101	School-Other	70,137	0.0499	3,500
9101	Library/Mus. Main.	-	0.0499	-
9102	Parks & Recreation	1,178,695	0.0538	63,414
9402	Street/Sewer Cleaning	-	0.1218	-
9403	Refuse Collection	-	0.2452	-
9410	Municipal NOC	1,360,671	0.0433	58,917

Water Fund 24.55%

	9,849,162	Manual Prem. 320,240
		Exp. Mod. 1.12
		Standard Prem. 358,669
		Applicable adjustment (13,907)
		Trust Adjusted Premium 344,762
		Premium Paid 2006-07 296,531
		Additional Premium (Credit) 48,231

W20-- 11,831.00

INVOICE

R.I. INTERLOCAL RISK MANAGEMENT TRUST
501 WAMPANOAG TRAIL, SUITE 301 (401) 438-6511
EAST PROVIDENCE, RI 02915

7-15-08 Order #1492 (Cert Rec #[illegible])

INVOICE NUMBER: 10148

PAGE: 1

SOLD TO:

Laura Sitrin
City of Newport
Finance Director
City Hall - 43 Broadway
Newport, RI 02840

RECEIVED
JUL 16 2008
Director of Utilities
City of Newport, RI

7-15-08
Julia Please voucher. Water fund to pay $4,547.39
Thanks, Elizabeth

CUSTOMER ID	CUSTOMER PO	SALES REP ID
NEWPCIT		
PAYMENT TERMS	INVOICE DATE	DUE DATE
Net 75 Days	Jun 16, 2008	8/30/08

DESCRIPTION	AMOUNT
Reimbursement for Trust payments for Workers' Compensation Claims for the period 9/1/07 to 12/31/07	$5,844.05

4547.39

Subtotal	$5,844.05
Sales Tax	
Total Invoice Amount	$5,844.05
Payment Received	0.00
TOTAL DUE	$5,844.05

Late payment interest accrues on any outstanding balance at a rate of 12% per annum, commencing 75 days after the original invoice date.

7/17/08

Please return yellow invoice copy with payment.

080805/11-84

LW DELUXE BUSINESS FORMS 1+800-328-0304 www.deluxeforms.com

Rhode Island Interlocal Risk Management Trust
-ASO Program-
City of Newport
2nd Quarter 2008

Claim Number	Payment Date	Claimant Name	Accident Date	Payee Name	Check Stub Message	$ Medical Payments	$ Expense Payments	
001424-WC-01	11/30/2007	Lama Allen J.	3/13/1989	Michael J. Feeney	Dos 04/27-11/16/07 File# IL4694 Inv.486	0.00	2360.00	W
000626-WC-01	11/7/2007	Botelho Manuel	11/9/1983	Neuroskeletal Imaging Insittuteof Winter Par	Dos. 10/10/07 Acct 001/620999	1666.66	0.00	W
007536-WC-01	12/24/2007	Matoes Mark	12/5/1993	University Orthopedics, Inc	Account: 40232, Ime Fee-Mark Matoes	0.00	750.00	E
000626-WC-01	11/7/2007	Botelho Manuel	11/9/1983	Michael J Broom Md Pa	Dos. 10/01/07 Acct 2229361	206.55	0.00	W
007875-WC-01	10/1/2007	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	Dos 09/25/07 Invoice 49371-M500B5	182.22	0.00	G
007875-WC-01	12/17/2007	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	Dos.12/08/07 Invoice 60443-M585Bb	144.72	0.00	G
007875-WC-01	11/6/2007	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	Dos.10/31/07 Invoice 53961-M53Db4	144.72	0.00	G
000626-WC-01	12/27/2007	Botelho Manuel	11/9/1983	Rising Medical Solutions,Inc.	Invoice 253846 Nov,2007 Bill Review	0.00	134.51	W
000626-WC-01	11/14/2007	Botelho Manuel	11/9/1983	Michael J Broom Md Pa	Dos.10/16/07 Acct 2249711	108.30	0.00	W
000626-WC-01	11/14/2007	Botelho Manuel	11/9/1983	Michael J Broom Md Pa	Dos.10/22/07 Acct 2240621	71.37	0.00	W
007875-WC-01	12/13/2007	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	Dos.12/04/07 Invoice 59469-M579FE	37.50	0.00	G
007875-WC-01	11/14/2007	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	Dos.10/31/07 Invoice 55169-M54A89	37.50	0.00	G

Total :	$2,599.54	$3,244.51
Less Recovery:	$0.00	
Total Paid 2nd Quarter '08:	$5,844.05	

Total Net Payment Activity from Risk-Facs Report:

Difference: $5,844.05

G= 1296.66
W= 4547.39
T= 5844.05

INVOICE

R.I. INTERLOCAL RISK MANAGEMENT TRUST
501 WAMPANOAG TRAIL, SUITE 301 (401) 438-6511
EAST PROVIDENCE, RI 02915

Vendor 1380

Dick

INVOICE NUMBER: 10286

PAGE: 1

8-12-08 Order 3187 @ $4,116.22 8-12-08 Please Issue Voucher $231.02 July Water to Pay

SOLD TO:

Laura Sitrin
City of Newport
Finance Director
City Hall - 43 Broadway
Newport, RI 02840

CUSTOMER ID	CUSTOMER PO	SALES REP ID
NEWPCIT		
PAYMENT TERMS	**INVOICE DATE**	**DUE DATE**
Net 75 Days	Jul 23, 2008	10/6/08

DESCRIPTION	AMOUNT
Reimbursement for Trust payments for Workers' Compensation Claims for the period 1/1/08 to 3/31/08	$4,352.24

Premium contributions are payable in two installments: 50% within 30 days and 50% within 60 days from the date of the original invoice. Late payment interest accrues on any outstanding balance at a rate of 12% per annum, commencing 75 days after the original invoice date.

Subtotal	$4,352.24
Sales Tax	
Total Invoice Amount	$4,352.24
Payment Received	0.00
TOTAL DUE	$4,352.24

Please return yellow invoice copy with payment.

080805/11-94

Rhode Island Interlocal Risk Management Trust
-ASO Program-
City of Newport
3rd Quarter 2008

police

City of Water

Claim Number	Payment Date	Claimant Name	Accident Date	Payee Name	Check Stub Message	$ Medical Payments	$ Expense Payments
007536-WC-01	1/2/2008	Matoes Mark	12/5/1993	Stephen Desio	DOS.08/16/07 ACCT 882280	$115.65	$0.00
007536-WC-01	1/2/2008	Matoes Mark	12/5/1993	Stephen Desio	DOS.08/30/07 ACCT 885380	$115.65	$0.00
007536-WC-01	1/2/2008	Matoes Mark	12/5/1993	Stephen Desio	DOS.08/23/07 ACCT 881150	$115.65	$0.00
007536-WC-01	1/2/2008	Matoes Mark	12/5/1993	Stephen Desio	DOS.06/25/07 ACCT 851000	$72.28	$0.00
007536-WC-01	1/2/2008	Matoes Mark	12/5/1993	Stephen Desio	DOS.12/07/07 ACCT 958480	$71.37	$0.00
000626-WC-01	1/15/2008	Botelho Manuel	11/9/1983	Matrix Healthcare Services Inc.	DOS 01/08/08 INVOICE 65285-M5B611	$118.01	$0.00
007875-WC-01	1/22/2008	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	DOS.01/10/08 INVOICE 68760-M5DODE	$144.72	$0.00
007875-WC-01	1/28/2008	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	DOS.01/22/08 INVOICE 71531-M5E7DD	$37.50	$0.00
007536-WC-01	1/31/2008	Matoes Mark	12/5/1993	Rising Medical Solutions,Inc.	INVOICE 256416 DEC,2007 BILL REVIEW	$0.00	$105.54
007536-WC-01	2/12/2008	Matoes Mark	12/5/1993	Stephen Desio	DOS.01/18/08 ACCT 989000	$1,700.00	$0.00
007536-WC-01	2/12/2008	Matoes Mark	12/5/1993	Stephen Desio	DOS.01/22/08 ACCT 983590	$43.06	$0.00
007536-WC-01	2/25/2008	Matoes Mark	12/5/1993	St Vincent Phys Anes Services	DOS.01/18/08 ACCT 262616V626	$255.00	$0.00
007875-WC-01	2/25/2008	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	DOS.02/13/08 INVOICE 81186-M62C60	$182.22	$0.00
007536-WC-01	3/3/2008	Matoes Mark	12/5/1993	South County Orthopedics & Physical Therapy Inc.	DOS.01/22-02/05/08 ACCT A820000DC	$519.53	$0.00
007536-WC-01	3/3/2008	Matoes Mark	12/5/1993	South County Orthopedics & Physical Therapy Inc.	DOS.02/07/08 ACCT A82000ST	$81.37	$0.00
000626-WC-01	3/11/2008	Botelho Manuel	11/9/1983	Matrix Healthcare Services Inc.	DOS.03/04/08 INVOICE 85218-M64AE4	$118.01	$0.00
007536-WC-01	3/14/2008	Matoes Mark	12/5/1993	Rising Medical Solutions,Inc.	INVOICE 261009 FEB,2008 BILL REVIEW	$0.00	$220.56
007875-WC-01	3/17/2008	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	DOS.03/05/08 INVOICE 88698-M6611D	$182.22	$0.00
007536-WC-01	3/19/2008	Matoes Mark	12/5/1993	South County Orthopedics & Physical Therapy Inc.	DOS.02/12/08 ACCT A8200174	$81.37	$0.00
007536-WC-01	3/19/2008	Matoes Mark	12/5/1993	Stephen Desio	DOS.02/19/08 ACCT 1001100	$53.83	$0.00
007536-WC-01	3/19/2008	Matoes Mark	12/5/1993	St. Vincent Radiological Assoc	DOS.12/07/07 ACCT 00400584041	$18.70	$0.00
					Total :	$4,026.14	$326.10
					Less Recovery:	$0.00	
					Total Paid 3rd Quarter '08:	$4,352.24	

Total Net Payment Activity from Risk-Facs Report: $4,352.24

General Fund 4,116.22
Water 236.02
4,352.24

INVOICE

R.I. INTERLOCAL RISK MANAGEMENT TRUST
501 WAMPANOAG TRAIL, SUITE 301 (401) 438-6511
EAST PROVIDENCE, RI 02915

INVOICE NUMBER: 10362

PAGE: 1

To: D. Este
9/4/08

SOLD TO:

Laura Sitrin
City of Newport
Finance Director
City Hall - 43 Broadway
Newport, RI 02840

CUSTOMER ID	CUSTOMER PO	SALES REP ID
NEWPCIT		
PAYMENT TERMS	**INVOICE DATE**	**DUE DATE**
Net 75 Days	Aug 29, 2008	11/12/08

DESCRIPTION	AMOUNT
Reimbursement for Trust payments for Workers' Compensation Claims for the period 4/1/08 to 6/30/08	$5,847.21

9-3-08
Julia – please voucher for $5,847.21. Thanks, Elizabeth

Subtotal	$5,847.21
Sales Tax	
Total Invoice Amount	$5,847.21
Payment Received	0.00
TOTAL DUE	$5,847.21

Late payment interest accrues on any outstanding balance at a rate of 12% per annum, commencing 75 days after the original invoice date.

Please return yellow invoice copy with payment.

080805/11-94

Rhode Island Interlocal Risk Management Trust
-ASO Program-
City of Newport
4th Quarter 2008

Claim Number	Payment Date	Claimant Name	Accident Date	Payee Name	Check Stub Message	$ Medical Payments	$ Expense Payments
007536-WC-01	4/2/2008	Matoes Mark	12/5/1993	Saint Vincent Hospital	Dos.01/18/08 Acct W001130965	5278.39	
007536-WC-01	4/14/2008	Matoes Mark	12/5/1993	Rising Medical Solutions,Inc.	Invoice 263503 Mar,2008 Bill Review		11.25
000626-WC-01	4/16/2008	Botelho Manuel	11/9/1983	Michael J Broom Md	Dos.03/24/08 Acct 2248831	71.37	
007875-WC-01	5/6/2008	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	Dos.04/28/08 Invoice 106229-M6E440	182.22	
000626-WC-01	5/22/2008	Botelho Manuel	11/9/1983	Rising Medical Solutions,Inc.	Invoice 265859 Apr,2008 Bill Review		3.75
000626-WC-01	5/30/2008	Botelho Manuel	11/9/1983	Matrix Healthcare Services Inc.	Dos.05/20/08 Invoice 111492-M71758	118.01	
007875-WC-01	6/2/2008	Pennachi George	2/25/1994	Matrix Healthcare Services Inc.	Dos.05/26/08 Invoice 113850-M72773	182.22	

Total :	$5,832.21	$15.00
Less Recovery:	$0.00	
Total Paid 4th Quarter '08:	$5,847.21	

Total Net Payment Activity from Risk-Facs Report: $5,847.21

5,832.21 + 15.00 = 5,847.21 Total

INVOICE

R.I. INTERLOCAL RISK MANAGEMENT TRUST
501 WAMPANOAG TRAIL, SUITE 301 (401) 438-6511
EAST PROVIDENCE, RI 02915

INVOICE NUMBER: 10480

PAGE: 1

SOLD TO:

Laura Sitrin
City of Newport
Finance Director
City Hall - 43 Broadway
Newport, RI 02840

CUSTOMER ID	CUSTOMER PO	SALES REP ID
NEWPCIT		
PAYMENT TERMS	**INVOICE DATE**	**DUE DATE**
Net 75 Days	Sep 23, 2008	12/7/08

DESCRIPTION	AMOUNT
Workers' Compensation Insurance Premium Contribution PY08-09	$251,650.00

Premium contributions are payable in two installments: 50% within 30 days and 50% within 60 days from the date of the original invoice. Late payment interest accrues on any outstanding balance at a rate of 12% per annum, commencing 75 days after the original invoice date.

Subtotal	$251,650.00
Sales Tax	
Total Invoice Amount	$251,650.00
Payment Received	0.00
TOTAL DUE	$251,650.00

Please return yellow invoice copy with payment.

080805/11-94

City of Newport
FY 2008 - Invoice #9056
Payment Due in Full 12/07/08

		FY 2009 ADOPTED ALLOCATION		
11-170-8560-50105		308,721.00	184,274.50	
08-800-5300-50105		4,463.00	4,463.00	
15-500-2200-50105	WATER	76,000.00	62,912.50	25%
		389,184.00	251,650.00	

TOTAL INVOICE AMOUNT DUE **251,650.00**

Insurance/WC Premiums Paid FY09

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
Response to
Portsmouth Water & Fire District's Data Requests
Set 3

PWFD 3-2: Please provide copies of the RIWWA Annual Assessment Fee for FY-05, FY-06, FY-07, FY-08 and FY-09.

Response: RIWWA Annual Assessment fee invoices listed below. The fiscal year 2009 invoice has not been received to date. For invoice copies see attached.

Invoice Date	Amount
7/11/2008	1,260.00
7/30/2006	630.00
9/12/2005	630.00
9/29/2004	630.00

Prepared by: R Esten

Rhode Island Water Works Association
P.O. Box 8553
Cranston, RI 02920

RECEIVED
JUL 15 2008

Invoice No. 4

Director of Utilities
City of Newport, RI

INVOICE

RIWWA Member

Name	City of Newport
Address	70 Halsey Street
City	Newport State RI ZIP 02840
Attention:	Ms. Julia Forgue, P.E.

Date	7/11/2008
Order No.	
Rep	
FOB	

	Description	Annual Fee	TOTAL
1	RIWWA Annual Assessment Fee 2007/2008	$1,260.00	$1,260.00
	Please remit payment to: Rhode Island Water Works Association P.O. Box 8553 Cranston, RI 02920 Attn: Jeanne Bondarevskis		
		SubTotal	$1,260.00
		TOTAL	$1,260.00

Payment Details

(Office Use Only)

Check # _____
Received _____

Office Use Only

OK
7/16/08

7200 - 50281
Acct
1391

Rhode Island Water Works Association
P.O. Box 8553
Cranston, RI 02920

Invoice No. 4

INVOICE

RIWWA Member

Name City of Newport
Address 70 Halsey Street
City Newport State RI ZIP 02840
Attention: Ms. Julia Forgue, P.E.

Date 7/30/2006
Order No.
Rep
FOB

	Description	Annual Fee	TOTAL
1	RIWWA Annual Assessment Fee	$630.00	$630.00
	Please remit payment to: Rhode Island Water Works Association P.O. Box 8553 Cranston, RI 02920 Attn: Jeanne Bondarevskis		
		SubTotal	$630.00
		TOTAL	$630.00

Payment Details

(Office Use Only)

Check #
Received

Office Use Only

OK
DMV
8/10/06

0291

Rhode Island Water Works Association
P.O. Box 8553
Cranston, RI 02920

Invoice No. 4

INVOICE

RIWWA Member

Name City of Newport
Address 70 Halsey Street
City Newport State RI ZIP 02840
Attention: Ms. Julia Forgue, P.E.

Date 9/12/2005
Order No.
Rep
FOB

	Description	Annual Fee	TOTAL
1	RIWWA Annual Assessment Fee	$630.00	$630.00
	Please remit payment to: Rhode Island Water Works Association P.O. Box 8553 Cranston, RI 02920 Attn: Jeanne Bondarevskis		
		SubTotal	$630.00
		TOTAL	$630.00

Payment Details

(Office Use Only)

Check #
Received

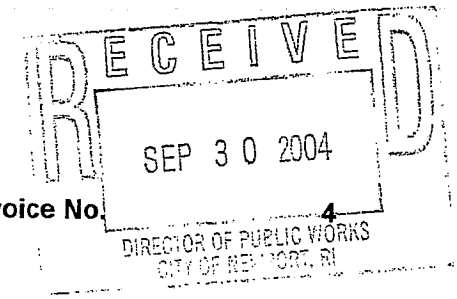
Office Use Only

OK-
DMF
9/20/05

2200-281 Acct

2220 291 ASSESSMENT FEES

Rhode Island Water Works Association
P.O. Box 8553
Cranston, RI 02920



Invoice No. 4

INVOICE

RIWWA Member

Name: Ms. Julia Forgue, PE
Address: City of Newport
City: 70 Halsey St. State RI ZIP 02840
Attention:

Date: 9/29/2004
Order No.
Rep
FOB

	Description	Annual Fee	TOTAL
1	RIWWA Annual Assessment Fee	$630.00	$630.00
	Please remit payment to: Rhode Island Water Works Association P.O. Box 8553 Cranston, RI 02920 Attn: Jeanne Bondarevskis		
		SubTotal	$630.00
		TOTAL	$630.00

Payment Details

(Office Use Only)

Check #
Received

Office Use Only

OK
DMF
9/30/04

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
Response to
Portsmouth Water & Fire District's Data Requests
Set 3

PWFD. 3-3: Please provide a copy of the Easton Pond Dam Improvements Study.

Response: The original study, The Easton Pond Dam and Moat Study, September 2007 is quite large and available in its entirety on the City's website at: www.cityofnewport.com/departments/utilities/water/projects.cfm.
The preliminary engineering report , Final Technical Easton Pond Dam Embankment Repairs and Modifications, December 2007 are attached.

Prepared by: J. Forgue

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
Response to
Portsmouth Water & Fire District's Data Requests
Set 3

PWFD 3-4: To the extent not already included in the study referenced in request 3 above, please provide the latest detailed cost estimates by work item for the proposed dam improvements.

Response: The current opinions of costs are provided in the report referenced in the response to PWFD 3-3. (See Appendix G and Section 4.3.2). The contract for the final design and permitting was recently awarded and the detailed fee schedule is attached. The cost estimate for construction will be refined during the final design.

Prepared by: J. Forgue

FUSS & O'NEILL

PROJECT BUDGET WORKSHEET

CLIENT	City of Newport	DATE PREPARED / UPDATED	8/14/2008	PREPARED BY	NSW	PROVED BY	PWM / DEA	DATE APPROVED
JOB NO	20060901.D30	PROJECT NAME / DESCRIPTION	Easton Pond Dam Final Design, Permitting and Construction					

MILESTONE DATE	TASK INFORMATION		LABOR													DIRECT COSTS																SUMMARY		
			Officer / Chief Scientist	Associate	Sr Eng/ Sci II	Sr Eng/ Sci II	Sr Eng/ Sci I	Eng/ Sci III	Eng/ Sci II	Eng/ Sci I	CADD Tech III	CADD Tech II	CADD Tech I	Clerical	TOTAL HOURS	LABOR COST	Company Mileage	Reprographics		Soil/Sed VOC	Soil/Sed SPLP/TCLP	Mobile Lab	PetroFLAG	GPR	GeoProbe	GeoPush	OVM	TOTAL DIRECT COSTS	Woods Hole Group	Laboratory	Geotechnical	Survey	Subcontractors Admin	TOTAL SUBCONTRACTORS	TOTAL DIRECT EXPENSES	TOTAL LABOR & DIRECT EXPENSES	TOTAL BUDGET COST
	Staff Initials →		DA/PM	SH	NW	CC	PB/JK	AL/AH	MP/AS	SH	SI			AP																					
	TASK #	TASK DESCRIPTION	157	157	137	137	126	100	88	83	75	70	65	55			0.505			2	10	#	26	#	#	#	65						10%				
																												0					0	0	0	0	$0
	1	Prepare 90% Design Documents																										0					0	0	0	0	0
		Client Kickoff Meeting and Design Criteria Summary Notes	4		7										11	1587	148											75					0	0	75	1662	1662
		Internal Kickoff Meeting	1		2	1	1	1	2						8	970												0					0	0	0	970	970
		Subsurface Measurements			2	4		20		16					42	4150	148											75					0	0	75	4225	4225
		Wave Modeling and Structural Analysis	1		3	1	4								9	1209												0	12240				1224	13464	13464	14673	14673
		Control of Water	4		6	2		14	8						34	3828												0					0	0	0	3828	3828
		Steel Sheeting Drawings		1			8	2	8		8				27	2669		25										25					0	0	25	2694	2694
		Steel Sheeting Specifications		1			12		8						21	2373		25										25					0	0	25	2398	2398
		Steel Sheeting Corrosion Design		1	1		8	4							14	1702												0					0	0	0	1702	1702
		Geotechnical Design	1		2	6	1								10	1379												0			1500		150	1650	1650	3029	3029
		Slope Protection Design	2		6			16	12		8				44	4392												0					0	0	0	4392	4392
		Plan Drawings (16)			4			12	32		18				66	5914		25										25					0	0	25	5939	5939
		Detail Drawings (4)	1		6			12	40		24				83	7499		25										25					0	0	25	7524	7524
		Cross-Section Drawings (18)			2			8	18		24				52	4458		25										25					0	0	25	4483	4483
		Technical Specifications	1		6		12	20	32					8	79	7747		15										15					0	0	15	7762	7762
		Bidding / Contract Documents	1		4		2	24	8					2	41	4171		15										15					0	0	15	4186	4186
		Draft Project Manual						2	6		4			6	18	1358												0					0	0	0	1358	1358
		QA / QC Review	8	2	8	2									20	2940												0					0	0	0	2940	2940
		Final Draft Project Manual			6		6	12	16		12			4	56	5306		100										100					0	0	100	5406	5406
		Meetings	12		16						8			2	38	4786	148	25										100					0	0	100	4886	4886
		TOTAL TASK 1	36	5	81	16	54	147	190	16	106	0	0	22	673	68438	444	280										504	12240	0	1500	0	1374	15114	15618	84056	84056
	2	Prepare Permit Applications																																			
		Pre-Application Site Meeting	4		6										10	1450	148											75					0	0	75	1525	1525
		Draft RIDEM Dam Safety Permit Application	1		4			12	10		4			4	35	3305		20										20					0	0	20	3325	3325
		Review / Finalize RIDEM Dam Safety Permit Application	4		4			8	16		2			2	36	3644		40										40					0	0	40	3684	3684
		Draft CRMC Category B Permit Application	2		10			48	12		12			4	88	8660		25										25					0	0	25	8685	8685
		Review / Finalize CRMC Category B Permit Application	4		8			16	16		4			2	50	5142		50										50					0	0	50	5192	5192
		Draft RIDEM Water Quality Certification Permit Application	2		6			18	10		6			2	44	4376		15										15		2000			200	2200	2215	6591	6591
		Review / Finalize RIDEM WQC Permit Application	4		4			8	4		2			1	23	2533		30										30					0	0	30	2563	2563
		Draft ACOE Individual Permit Application	4		6			18	12		4			4	48	4826		25										25					0	0	25	4851	4851
		Review / Finalize ACOE Individual Permit Application	2		4			8	10		4			2	30	2952		75										75					0	0	75	3027	3027
		CRMC Council Hearing	6		12						3			2	23	2921		50										50					0	0	50	2971	2971
		ACOE Public Hearing	6		8						3			1	18	2318		25										25					0	0	25	2343	2343
		CRMC / Dam Safety / ACOE PGP Public Notice	1		4			6	8					2	21	2119												0					0	0	0	2119	2119
		TOTAL TASK 2	40	0	76	0	0	142	98	0	44	0	0	26	426	44246	148	355										430					200	2200	2630	46876	46876
	3	Prepare Construction SWPPP																																			
		Draft SWPPP			4			12	16		4			2	38	3566		15										15					0	0	15	3581	3581
		Final SWPPP	2		4			8	8		2			1	25	2571		30										30					0	0	30	2601	2601
		TOTAL TASK 3	2	0	8	0	0	20	24	0	6	0	0	3	63	6137	0	45										45					0	0	45	6182	6182
	4	Respond to Permit Agency Comments																																			
		Meetings, Letters and Modifications	8	1	12	2	5	12	8		8			4	60	6685	148	150										225					0	0	225	6910	6910
		TOTAL TASK 4	8	1	12	2	5	12	8	0	8	0	0	4	60	6685	148	150										225					0	0	225	6910	6910
	5	Prepare Final Project Manual																																			
		Final Project Manual	2	1	6	1	1	10	16		8			6	51	4894		3000										3000					0	0	3000	7894	7894
		TOTAL TASK 5	2	1	6	1	1	10	16	0	8	0	0	6	51	4894	0	3000										3000					0	0	3000	7894	7894
	6	Update Opinion of Cost																																			
		90% Design Costs	1		2		2	6	8						19	1987												0					0	0	0	1987	1987
		Final Design Costs	1		2		1	4	8						16	1661												0					0	0	0	1661	1661
		TOTAL TASK 6	2	0	4	0	3	10	16	0	0	0	0	0	35	3648	0	0										0					0	0	0	3648	3648

MILESTONE DATE	TASK INFORMATION		LABOR														DIRECT COSTS																	SUMMARY		
			Officer / Chief Scientist	Associate	Sr Eng/ Sci II	Sr Eng/ Sci II	Sr Eng/ Sci I	Eng/ Sci III	Eng/ Sci II	Eng/ Sci I	CADD Tech III	CADD Tech II	CADD Tech I	Clerical	TOTAL HOURS	LABOR COST	Company Mileage	Reprographics		Soil/Sed VOC	Soil/Sed SPLP/TCLP	Mobile Lab	PetroFLAG	GPR	GeoProbe	GeoPush	OVM	TOTAL DIRECT COSTS	Woods Hole Group	Laboratory	Geotechnical	Survey	Subcontractors Admin	TOTAL SUBCONTRACTORS	TOTAL DIRECT EXPENSES	TOTAL LABOR & DIRECT EXPENSES	TOTAL BUDGET COST
	Staff Initials →		DA/PM	SH	NW	CC	PB/JK	AL/AH	MP/AS	SH	SI			AP																					
	TASK #	TASK DESCRIPTION	157	157	137	137	126	100	88	83	75	70	65	55			0.505			2	10	#	26	#	#	#	65					10%				
	7	Walking Path Design and Permitting																																		
		Preliminary Design			2			8	16		8			2	36	3192		25										25					0	0	25	3217	3217
		QA/QC Review	4		6										10	1450												0					0	0	0	1450	1450
		Final Design			2			4	8		4			2	20	1788		15										15					0	0	15	1803	1803
		Opinion of Cost			1			2	6						9	865												0					0	0	0	865	865
		Permitting	1		2			2	4					2	11	1093		25										25					0	0	25	1118	1118
		TOTAL TASK 8	5	0	13	0	0	16	34	0	12	0	0	6	86	8388	0	65										65					0	0	65	8453	8453
	8	Railing and Cap Design and Permitting																																		
		Preliminary Design		1	4		6	6	16		4			2	39	3879		25										25					0	0	25	3904	3904
		QA/QC Review	2	2	4										8	1176												0					0	0	0	1176	1176
		Final Design			2		4	4	12		4			2	28	2644		15										15					0	0	15	2659	2659
		Opinion of Cost			1		4	2	8						15	1545												0					0	0	0	1545	1545
		Permitting	1		2			2			2			2	9	891		25										25					0	0	25	916	916
		TOTAL TASK 9	3	3	13	0	14	14	36	0	10	0	0	6	99	10135	0	65										65					0	0	65	10200	10200
	9	Moat Channel Design and Permitting																																		
		Preliminary Design and Mapping	4		8			18	28		12			4	74	7108		50										50					0	0	50	7158	7158
		QA/QC Review	6		2										8	1216												0					0	0	0	1216	1216
		Final Design			8			16	20		8			2	54	5166		25										25					0	0	25	5191	5191
		Opinion of Cost			2			8	8						18	1778												0					0	0	0	1778	1778
		Permitting	12		24			40	48		12			4	140	14516		75										75					0	0	75	14591	14591
		TOTAL TASK 11	22	0	44	0	0	82	104	0	32	0	0	10	294	29784	0	150										150				0	0	0	150	29934	29934
	10	Provide Bidding Assistance																																		
		Pre-Bid Meeting	3		4			6							13	1619	74											37					0	0	37	1656	1656
		Addendum	1	1	4		2	10	6		4			6	34	3272		25										25					0	0	25	3297	3297
		Bid Review, City Meeting and Recommendation	4		6			8	6						24	2778	74											37					0	0	37	2815	2815
		TOTAL TASK 12	8	1	14	0	2	24	12	0	4	0	0	6	71	7669	148	25										100					0	0	100	7769	7769
	11	Provide Construction Administration Assistance																																		
		Pre-Construction Meeting	4		6			8						1	19	2305	74											37					0	0	37	2342	2342
		Submittals (Dam Reconstruction)	4	2	20	2	18	56	120					24	246	23704		75										75					0	0	75	23779	23779
		Walking Path Construction Support (Submittal Review Portion)			4			6	8					2	20	1962		25										25					0	0	25	1987	1987
		Railing and Cap Construction Support (Submittal Review Portion)			6		12		12					2	32	3500		25										25					0	0	25	3525	3525
		Moat Channel Stabilization Const. Support (Submittal Reviwe Portion)			6			14	18					2	40	3916		25										25					0	0	25	3941	3941
		TOTAL TASK 11	8	2	42	2	30	84	158	0	0	0	0	31	357	35387	74	150										187					0	0	187	35574	35574
	12	Project Management													0	0												0					0	0	0	0	0
		Project Management Plan	1		16										17	2349												0					0	0	0	2349	2349
		Progress Updates (20)	2		20										22	3054												0					0	0	0	3054	3054
		Invoicing (12)			8										8	1096												0					0	0	0	1096	1096
		TOTAL TASK 13	3	0	44	0	0	0	0	0	0	0	0	0	47	6499	0	0										0					0	0	0	6499	6499
		CHECK TOTALS	139	13	357	21	109	561	696	16	230	0	0	120	2262	231910	962	4285	0	0	0	0	0	0	0	0	0	4771	12240	0	1500	0	1574	17314	22085	253995	$253,995

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
Response to
Portsmouth Water & Fire District's Data Requests
Set 3

PWFD 3-5: RFC Schedule 5, *Capital Improvement Plan*, indicates rate funded spending for Chloramine Conversion Design of $168,798 at each of the two treatment plants for the period FY- 08 through FY-10. RFC Schedule 4 Final, Capital Improvement Plan, for prior Docket #3818, indicates rate funded spending for Chloramine Conversion Design of $78,095 for FY-08 and no spending for FY-09 and FY-10.

a. Please explain in detail the reason(s) for the increased spending for the chloramines conversion design project.
b. Are any of the rate funded engineering costs for the chloramines conversion design project included in the $7.1 million 2010 SRF A loan for CDM services?
c. Are there any engineering fees for chloramines conversion design in the $7.1 million 2010 SRF A loan for CDM services.

Response:

a. In November 2004 the City executed a contract with CDM (#05-0130) to proceed with the design and piloting of improvements, including pipe loop analysis, for both of the City's water treatment plants to address the regulatory needs for Federal Stage 1 and 2 Disinfectants/Disinfection Byproduct Rule (D/DBP) and Interim Enhanced Surface Water Treatment Rule (IESWTR). The improvements include pretreatment optimization for Total Organic Carbon (TOC) removal and the conversion to the use of chloramines as a secondary disinfectant to reduce DBP's (ex. TTHM's). The Rhode Island Department of Health required the City to look at how a change in treatment to address one regulation (TTHM) would affect compliance with all other regulations, and specifically with the regulations for lead in drinking water. The City uses pH to control lead solubility in the distribution system. For a conversion to the use of chloramines we know we would need to increase the current pH. Therefore, prior to any treatment change we need to know the effect a pH and/or disinfectant change will have on lead levels.

Because of the relationship between chloramines and lead levels in the water that became widely known following an incident in the District of Columbia, CDM on behalf of the City asked the US Environmental Protection Agency (USEPA) to provide assistance in analyzing the existing lead scale deposits on pipes in the City's distribution system in order to begin to analyze any affects due to a treatment change. This testing revealed that the pipe scales in the Newport distribution system consist predominately of tetravalent lead (PbIV).

Pb IV is very insoluble. Its presence in Newport's pipes has created highly protective pipe scales that have kept lead levels below the EPA Action Level. The one condition that is essential to keeping the tetravalent lead pipe scales intact is to maintain a high oxidation reduction potential (ORP) in the water. Newport does this by adding free chlorine to the water for disinfection. The change to chloramines would result in a substantial decrease in ORP. This decrease in ORP would destabilize the protective tetravalent lead scales and result in a major release of lead into the system.

There is little guidance in the literature on Pb IV, other than a well-documented case study of massive increases in lead levels as a result of chloramine conversion in the District of Columbia (DC) in 2002. As part of the contract with CDM, an Expert Panel consisting of USEPA and water industry experts was convened to review the data collected to date. Based on the wide-spread presence of Pb IV in Newport's distribution system, the Expert Panel confirmed that conversion to chloramines would result in a significant increase in lead levels throughout the system and a resulting public health problem.

Through this process, the USEPA came to understand the complications of Newport's situation in simultaneously dealing with both Pb IV conditions and elevated levels of TTHMs. The USEPA agreed to collaborate with Newport on a comprehensive study of treatment alternatives that may be viable to address both issues. Therefore, Newport and its consulting engineer, CDM, with assistance from USEPA experts from the Office of Research and Development developed a pipe loop study that was expanded from that which was originally proposed. The expanded study includes 11 pipe loops rather than the 2 that were included in the original contract in order to study a wider range of alternatives that may be viable for Newport.

The expanded study includes 11 combinations of conditions that : (1) Newport could implement at its treatment plants and (2) will shed light on how lead release from the pipe scales would be impacted by those particular treatment combinations. The work associated with the expanded pipe loop system resulted in an amendment to the CDM contract in October 2007 in the amount of $268,400. It should also be noted the actual costs for the pipe loop testing are much higher than the amount by which the CDM contract was amended. However, the USEPA committed funding for the expanded pipe loop testing in the amount of $703,000, which included the construction of the pipe loops and ongoing technical assistance and laboratory analysis services.

b. No.

c. The $7.1 Million FY 2010 SRF is for CDM's City Advisor Contract and Professional Services (Legal, etc) associated with the design build procurement for the treatment plant

improvements. The only engineering costs within the CDM contract associated in any way with the chloramines conversion design, are costs associated with the monitoring and operation for the pipe loop pilot testing. These costs are identified under Task 3.7 in Amendment #1 to CDM's contract which is provided in response to PWFD 3- 6. The results of the pipe loop testing will determine if the conversion to chloramines is viable. If the conversion to chloramines is determined to be a viable option, then the design for construction bidding will proceed as rate funded as shown on RFC Schedule 4 Capital Improvement Plan.

Prepared by: J. Forgue

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
Response to
Portsmouth Water & Fire District's Data Requests
Set 3

PWFD. 3-6: Please provide a copy of the contract for CDM Services for Phase 1 through Phase 5.

Response: Attached is the contract executed in March 2008 for Phase 1 and Amendment #1 executed in January 2009 for the identified tasks in Phases 2 through 4. This represents work under contract to date. Phase 5 has not been awarded at this time as it will cover CDM's work in providing "clerk of the works" duties for the oversight of the DB contractor. Thus, Phase 5 won't be awarded until the DB contractor is chosen.

Prepared by: J. Forgue

CITY OF NEWPORT, RHODE ISLAND
CONTRACT AND AGREEMENT

THIS AGREEMENT, made this 31st day of March in the year 2008, by and between the City of Newport, herein called the "City", party of the first part acting herein through its Mayor, and Camp Dresser & McKee Inc. hereinafter called the "Consultant", party of the second part;

WITNESSETH: That the parties to these presents each in consideration of the undertakings, promises and agreements on the part of the other herein contained, have undertaken, promised and agreed, and do hereby undertake, promise and agree, the party of the first part itself, its successors and assigns, and the party of the second part for itself and heirs, executors, administrators, successors and assigns as follows:

I. CONTRACT INCLUDES

The Consultant shall furnish all labor, materials, unless specifically excluded, equipment and services for providing Professional Services for City Advisor for Project Delivery of Water Treatment Plant Improvements and all appurtenant work as defined in the Request for Proposals #08-028, Exhibit "A" and the Scope of Services for Phase 1 submitted by the Consultant to the City, Exhibit "B". Consultant will provide services in a timely, thorough, workmanlike and substantial manner, in every respect to the reasonable satisfaction and approval of the Director of Utilities, in the manner and within the time hereinafter limited, and in accordance with the Notice to Bidders, **Request for Proposals Professional Services for City Advisor for Project Delivery of Water Treatment Plant Improvements #08-028**, and Proposal dated December, 2007 submitted to the City by the Consultant, which together constitute the Contract Documents and the Contract Documents are hereby made a part of this Agreement as fully as if the same were repeated at length herein. Change Orders issued hereafter, and any other amendments executed by the City and the Consultant, shall become and be a part of this Agreement.

II. RATE OF PROGRESS AND TIME OF COMPLETION

The Consultant shall commence work under this Contract promptly upon receipt of written notification from the City to do so. The Consultant shall complete the work to the reasonable satisfaction of the City. The Consultant is not responsible for delays caused by City review, beyond that incorporated in the Scope of Services, changes to the Scope of Services, or other delays beyond the Consultant's control. The Consultant shall provide services in accordance with the Project Schedule attached as Exhibit "C", unless the schedule is adjusted as mutually agreed between the City and the Consultant.

III. TERM OF AGREEMENT

Unless terminated earlier in accordance with the terms of this Agreement, this Agreement shall terminate on June 30, 2009. Throughout such time, all fees and work specifications as identified herein shall remain in effect.

IV. FURNISHING AND OWNERSHIP OF PLANS, DATA AND REPORTS

The tracing of all drawings, the copies of computations, other calculations and notes, together with all other data and reports completed and accepted under this Contract are instruments of service, shall bear the endorsement of the Consultant, and shall become the property of the City upon payment therefor, except for the seal or stamp of the Consultant. The City may use this material for the specific purpose contemplated under this Agreement. Any use or reuse of any of the foregoing materials for anything other than the specific purpose contemplated under this Agreement, or alteration of any of the foregoing materials, shall be at the City's sole risk and without legal liability to the Consultant. Notwithstanding the foregoing, it is understood and agreed that the Consultant's use of its proprietary computer software, methodology, procedures or other proprietary information in connection with an assignment shall not give the City or anyone else any rights with respect to such proprietary computer software, methodology, procedures or other proprietary information, and the City agrees to keep confidential and not disclose such proprietary information to any third parties.

The Consultant shall not use any of the original data or plans completed under this Contract for any purpose (excluding marketing of the firm) without first obtaining the permission of the City.

V. PAYMENT

The Consultant's fee for the professional services to be rendered under the "Scope of Services" shall consist of reimbursement of actual costs, expenses and profits directly attributable to this Agreement, as described herein.

The City agrees to pay the Consultant for work done for Phase 1 by the Consultant the not to exceed lump sum fee of **$ 116,200.00** in accordance with the Fee Schedule identified as "Exhibit D". Partial payments will be made on a monthly basis in proportion to the percentage of work completed and the balance of payment made when all work identified in the Scope of Services is completed. The lump sum fee includes actual out of pocket expenses such as mileage, parking, tolls, telephone, computer, printing, and other miscellaneous costs incurred specifically for this project.

VI. PROGRESS PAYMENTS

Payments for the work performed by the Consultant under the terms of this Contract shall be made as the work progresses, as follows:

1. Progress payments against the specified fee and/or fees as designated herein under Section V "Payment" may be made monthly in proportion to the value of the work performed in each calendar month; such work being documented by submission to the City by the Consultant of monthly progress reports for work covered by this contract

showing the amount of work performed, both percentage and dollar wise, duly attested, for each phase of the required services covered by this Contract.

2. Miscellaneous expenses will be invoiced monthly to reflect actual costs incurred.

3. Invoice vouchers submitted for progress payments shall be consistent with an agreed upon format.

4. Final payment shall be made within sixty (60) days after receipt, acceptance and approval by the Department of Public Works of the final invoice voucher and, when required or requested by the City, of all the engineering and related services enumerated herein under "SCOPE OF SERVICES", Exhibit "B".

5. The acceptance of final payment by the Consultant shall operate as a release and be a release to the City, and any agent, from all claim and liability to the Consultant for payment for anything done or furnished for or relating to the work under this Contract, or for any act or neglect of the City or any of its agents, insofar as the execution of this Contract is concerned. The foregoing release shall not apply to the Consultant's claims based on claims of third parties asserted after final payment for personal or bodily injury, including death, or damage to property, or both, nor shall it apply to the Consultant's counterclaims, cross claims, or affirmative defenses in any legal action.

6. In accordance with City Standards, all invoice vouchers shall be paid within thirty (30) days of receipt of any such invoice voucher, unless disputed.

VII. CONSULTANT'S PERFORMANCE

The following general conditions and stipulations shall apply to this Contract:

1. All the services rendered pursuant to this Contract shall conform to the standards prescribed by the City and its Director of Utilities.

2. The Consultant warrants that he/she has not employed or retained any company or person, other than a bona fide employee working solely for the Consultant, to solicit or secure this Contract and that he/she has not paid or agreed to pay any company or person other than a bona fide employee working solely for the Consultant, any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty the City shall have the right to annul this contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

3. The Consultant shall not engage, on a full or part-time or other basis during the period of this Contract, any professional or technical personnel who are or have been at any time during the period of this Contract in the employ of the City, except regularly retired employees, without the written consent of the public employer of such person.

4. The Consultant shall maintain a suitable and acceptable working office or offices within the State, or convenient thereto. The location and acceptability of said working office or offices shall be subject to determination by the City.

5. The Consultant shall not sublet any of the work contemplated by this Contract without approval of the City. Any employee of the Consultant who is declared undesirable to the City shall be removed from the project and shall not again be employed for any service under this Contract.

6. The Consultant shall comply with all State, Federal and local statutes, ordinances and regulations applicable to the execution and the performance of this Contract and shall procure all necessary licenses and permits.

7. The Consultant and his/her subcontractors are to maintain all project books, documents, papers accounting records and other evidence pertaining to cost incurred, and to make such material available at their respective offices at all reasonable times during the contract period and for three (3) years from the date of final payment under the Contract for inspection by the City or any authorized representatives of government, and copies' thereof shall be furnished if requested.

8. In developing surveys, plans and drawings for this project, the Consultant shall consult with the City with any phase involved in the proposed project, as noted in the Scope of Work.

VIII. LIABILITY

1. The Consultant agrees that his/her employees, sub-consultants, or agents possess the experience, knowledge, and character necessary to qualify them individually for the particular duties they perform.

2. The Consultant shall be liable for all damage caused by its negligent acts, or its errors or omissions in its services under this Contract or any supplements to this Contract, and shall indemnify and save harmless that City and all its officers, agents with written contracts with the City evidencing such status, and servants (each a City Indemnitee) against any claims, suits, actions, damages, liabilities, and direct costs resulting from any negligent acts, errors and omissions willful or reckless misconduct, or negligent' performance of the Consultant, except to the extent caused by the negligent acts, errors, omissions, willful or reckless misconduct of any City Indemnitee, in any forum, brought as a result of such negligent acts, errors, or omissions, willful or reckless misconduct or negligent performance, and shall carry liability insurance for that purpose, as specified by the City.

IX. INSURANCE

A. The Consultant shall procure and maintain, at its own expense during the life of the Contract, insurance liability for damages imposed by law, of the kinds and in the amounts specified, with insurance companies authorized to do business in the State. The insurance shall cover all work under this Contract, whether performed by the Consultant

or by subconsultant. Before commencing the work, the Consultant shall furnish certificates of insurance in the form satisfactory to the City certifying that the polices will not be changed or canceled until 30-day written notice has been given to the City. The types of insurance are as follows:

1. Statutory Workers Compensation and Employers' Liability Insurance for all of his/her employees to be engaged in work on the project under this Contract, and in case any such work is sublet, the Consultant shall require the sub-consultant similarly to provide.

2. Workers Compensation and Employers' Liability Insurance for all of his/her employees to be engaged in such work. The Consultant shall file certificates with the Department of Public Work's Contract Administrator showing this insurance on behalf of all employees of the Consultant has been purchased prior to award of this Contract.

B. The Consultant shall also carry full Professional Services Liability Insurance for errors and omissions, with a minimum aggregate amount of $1,000,000. This insurance shall be obtained by the Consultant at no direct cost to the City and shall remain in force from the date this Contract is executed to as long as liability may accrue under State Statute, Rhode Island General Laws (9-1-25 and 9-1-29).

C. The Consultant shall carry Liability and Property Damage Insurance with coverage in the following amounts:

   (a) Bodily injury liability: $500,000 each person $1,000,000 each occurrence.
   (b) Property damage liability: $500,000 each occurrence $1,000,000 aggregate.

D. No cancellation of said insurance, whether by the insurers or by the insured, shall be valid unless written notice thereof is given by the party proposing cancellation to the other party and to the City at least thirty (30) days prior to the intended effective date thereof which date shall be expressed in said notice. Notice of cancellation sent by the party proposing cancellation by registered mail, postage prepaid, with a return receipt of addressee requested, and executed shall constitute proof of submission of said certificate. An affidavit from any officer, employee or agent, duly authorized by the insured, shall be prima facie evidence that the notice was sent. This section shall apply to the legal representative, trustee, and the successor in interest of such Consultant.

E. The failure of the Consultant to maintain insurance coverage in accordance with the terms of this Contract shall constitute a violation of this Contract. Such failure may result in termination of the contract, at the option of the City.

F. The Consultant shall take notice that the cancellation of any insurance under this Contract shall not affect the obligation of the Consultant to maintain each coverage, or his/her obligations under Section IX ("Insurance") of this Contract, or his liability under Section VIII (Liability") of this Contract.

G. The Consultant shall also take notice that his/her insurer must be licensed to do business in the State of Rhode Island.

H. The Consultant shall file copies of all required insurance certificates with the City. All insurance certificates mentioned in this Article shall be attached to this Contract prior to award as Exhibit E.

X. SUPPLEMENTAL AGREEMENTS

No change in the character or extent of the work to be performed by the Consultant and affecting the completion date or fee schedule shall be made except by supplemental agreement in writing between the City and the Consultant. The supplemental agreement will set forth the proposed work, ant extension of time for completion, if required, and adjustment, if any, of the fee to be paid to the Consultant.

In any case where the Consultant believes extra compensation is due him/her for work and services not covered by this Contract or Supplement thereto, he/she shall notify the City in writing of his/her intention to seek such compensation before he/she begins the work. The request must be passed upon by the City. In the case where the request is determined to be justified, it shall be allowed and paid for as Extra Work/Additional Work in accordance with the terms of a supplemental agreement entered into before such work is started.

XI. SPECIAL REQUIREMENT

Rhode Island General Law, Title 5, Chapter 8, prohibits any person and/or firm from practicing and/or offering to practice engineering in the State of Rhode Island without first being registered with the Rhode Island Board of Registration for Professional Engineers.

In accordance with those requirements, the signatories hereto certify to the City that the firm and/or individual or an individual within the firm has a current valid registration and/or certificate of authorization (as appropriate) issued by the Rhode Island Board of Registration for Professional Engineers authorizing it or them to practice or offer to practice engineering within the State of Rhode Island. The signatories hereto further expressly agree that in the event that such registration and/or certification shall become invalid during any period of time in which this contract is in
force, the City may terminate this contract for cause upon written notice, said termination being without penalty to the City.

The firm and/or individual hereto further acknowledge that they are in possession of a current valid registration and/or certification issued by the Rhode Island Board of Registration for Professional Engineers which shall be at all times an essential requirement of this contract. This contract may be terminated at any time in which such registration or certification is not current and valid in accordance with the provisions of Title 5, Chapter 8, of the Rhode Island General Laws and the Rules and Registration for Professional Engineers.

XII. ADDITIONAL TERMS

1. The failure of either party to enforce at any time any of the provisions of the Contract, or to exercise any option which is herein provided, or to require at any time performance by the other party of any of the provisions hereof, shall in no way be construed to be a

waiver of such provisions, nor in any way to affect the validity of this Contract of any part thereof, or the right of the City or the Consultant to thereafter enforce each and every provision.

2. This Contract shall inure to the benefit of and be binding upon the heirs, executors, administrators, assignees, and the successors of the respective parties hereto.

3. Should any part, term, or provision of this Contract be by a court of competent jurisdiction declared invalid, illegal or in conflict with any law of the City, State or the United States, the validity of the remaining portions or provisions shall not be affected thereby.

XIII. INDEMNITY

The Consultant shall indemnify, defend and hold harmless the City, and its elected and appointed officers, directors, and employees (each a "City Indemnitee"), from and against (and pay the full amount of) any and all Loss-and-Expense incurred by a City Indemnitee to third parties arising from or in connection with: (1) any failure by the Consultant to perform its obligations under this Contract; or (2) the negligence or willful misconduct of the Consultant or any of its officers, directors, employees, representatives, agents or Subcontractors in connection with this Contract, except to the extent caused by the negligence or willful misconduct of any City Indemnitee. The Consultant's indemnity obligations hereunder shall not be limited by any coverage exclusions or other provisions in any insurance policy maintained by the Consultant which is intended to respond to such events. A City Indemnitee shall promptly notify the Consultant of the assertion of any claim against it for which it is entitled to be indemnified hereunder, and the Consultant shall have the right to assume the defense of the claim in any Legal Proceeding and to approve any settlement of the claim. These indemnification provisions are for the protection of the City Indemnitees only and shall not establish, of themselves, any liability to third parties. The provisions of this Section shall survive termination of this Consulting Contract.

XIV. TERMINATION BY THE CITY

The City reserves the right to abandon, suspend or terminate the services of this Contract, or any part thereof, at any time, by giving written notice to the Consultant. Upon receipt of such written notification from the City, the Consultant shall cease operations on the part of the work of the Contract stipulated. Any finished or unfinished work products prepared, developed, furnished, or obtained under the terms of this Contract on behalf of the City, shall become the property of the City, deliverable to them as directed upon payment to the Consultant.

The Consultant shall be entitled to payment, calculated in accordance with Articles V, VI and X for any uncompensated services satisfactorily performed and expenses incurred prior to the final date of the written notice to abandon, suspend or terminate the services under this Contract, and for authorization services performed and expenses and costs incurred in effectuating such abandonment, suspension or termination.

Abandonment, suspension or termination of the Contract shall in no way limit any legal rights of the City with respect to the Consultant's services performed before such abandonment, suspension, or termination.

XV. EXECUTION OF CONTRACT

IN WITNESS HEREOF, the said parties hereto have caused this instrument to be signed by their duly constituted officers, attested, and sealed pursuant to proper resolutions.

By: _____
Party of the First Part (Signature)

Witness

Stephen C. Waluk, Mayor, City of Newport, RI
(Printed Name and Title)

By: _____
Party of the Second Part (Signature)

Witness

CAROL A. REGO, VICE PRESIDENT
(Printed Name and Title)

Approved as to Form By:

Joseph J. Nicholson, Jr.
City Solicitor

EXHIBIT A

CITY OF NEWPORT, RHODE ISLAND
DEPARTMENT OF UTILITIES
WATER DIVISION

Request For Proposals
#08-028
Professional Services for City Advisor for
Project Delivery of Water Treatment Plant Improvements

Section I- Introduction

The City of Newport Department of Utilities is soliciting proposals from experienced, licensed , and qualified professionals with water treatment plant design, design/build, construction monitoring, and water utility financing experience to provide Owner Advisory services to the City for the procurement and construction of the identified long-term treatment alternatives at both the Lawton Valley and Station 1 Water Treatment Plants. The City's objective with this RFP is to provide sufficient information to enable qualified Consultants to submit written proposals.

Section II- Background

Newport Water owns and operates two (2) Water Treatment Facilities, Station 1 located in Newport and Lawton Valley Water Treatment Plant (LVWTP) located in Portsmouth, RI. Newport Water services Newport and Middletown, RI. Newport Water sells water wholesale to Naval Station Newport and the Portsmouth Water & Fire District. Newport Water is regulated by the Rhode Island Public Utilities Commission (RIPUC).

The Station No. 1 Plant was put into service on March 6, 1991. It is capable of producing treated water at an average rate of 6 MGD with minimum and maximum rates of 3 MGD and 9 MGD, respectively. The steps are pre-treatment with chlorine dioxide, followed by coagulation with liquid Alum and a Cationic polymer injected at rapid mix, upflow clarification through a suspended solids blanket clarifier (Infilco Degremont Inc. "Pulsator Clarifier"), deep bed (5 feet) granular activated carbon filtration, disinfection with chlorine gas, post pH adjustment with lime for corrosion control and fluoridation.

The LVWTP was constructed in 1942 and has gone through several upgrades since then. The current production capacity is 7MGD. This plant can be categorized as a conventional water treatment plant using Permutit's Precipitator Clarifier and settling basins. Liquid alum, the coagulant is added at the rapid mix along with pre-lime (when necessary) and chlorine dioxide. Water flows through three paddle flocculators, then into the three double deck settling tanks. Supernatant overflows into collection troughs, then to the six dual media filters. Post lime and fluoride are added to the combined filtered water as it flows to the clearwell. Post chlorine gas is then added to the filtered water for

final disinfection and additional CT credits at the suction of the 3 high service pumps as it is pumped from the clearwell to the finished water reservoir.

Newport Water obtains its raw water supply from a system of nine (9) surface reservoirs. Seven (7) of the supply reservoirs are located on Aquidneck Island. The remaining two (2) are located in Tiverton and Little Compton. The nine (9) reservoirs are interconnected through a complex system of pipelines and pumping stations. The source of raw water for the treatment plants at any time varies due to several factors such as quality, quantity, season, repairs/maintenance at plants, etc.

In 2004 Newport Water completed a comprehensive regulatory compliance evaluation of both of the water treatment facilities to evaluate existing processes ability to maintain regulatory compliance with current and future drinking water regulations. The final report recommended improvements at each facility for both the short term and the long term. In 2004 Newport Water awarded a contract to Camp Dresser and Mckee, Inc. to design the identified short term improvements at each facility. The short term improvements at Station 1 included pretreatment optimization for TOC removal and the conversion to the use of chloramines as a secondary disinfectant to reduce DBP levels. The short term improvements at Lawton Valley included pretreatment optimization for TOC removal, CT optimization, and the conversion to the use of chloramines as a secondary disinfectant to reduce DBP levels. In accordance with the May 24, 2004 directive from the RIDOH, Office of Drinking Water Quality, any proposed change to existing treatment or the installation of new treatment must review any potential effects on lead and copper levels in the distribution system including that of any wholesale customer. Piloting with the use of pipe loops is currently underway for the proposed conversion to the use of chloramines. The City is also in the process of converting the pH adjustment chemical at both facilities from lime to caustic which is anticipated to be completed in Spring 2008.

The long term treatment goals used for the compliance evaluation are plant specific:

Station 1 WTP- To achieve treatment reliability to provide the maximum day design capacity of 9 MGD with one treatment unit off-line.

Lawton Valley WTP- To achieve reliability in terms of treatment, structure, equipment, code compliance, and health and safety.

For Station 1, based on the recommendations from the compliance evaluation the City intends to install an additional pretreatment/clarification train. The results of a preliminary analysis recommended a high rate clarification process to be confirmed with pilot testing. Due to Newport Water's watershed areas and characteristics it is assumed that further *Cryptosporidium* inactivation will be required and UV disinfection has been recommended. It has also been recommend that if the results from the piloting for a high rate clarification process do not meet the required TOC removal, then a MIEX resin process upstream of the coagulant addition or nanofiltration downstream of the existing GAC filters be provided in the treatment process.

For the Lawton Valley facility construction of a new plant is the selected scenario from the compliance evaluation. The recommended treatment processes for a new LVWTP are the same as those recommended for the upgrade to Station 1 plant. This recommendation will assist with ease of operations and provide the ability for Newport Water Staff to work between the two facilities.

The schedule for the long-term improvements presented in Newport Water's Capital Improvement program projects the improvements at Station 1 being completed prior to the actual start of construction of the new LVWTP. This approach will give the City the reliability of the Station 1 plant providing treatment at the design capacity of 9 MGD. In accordance with pending Consent Agreements with the RIDOH and RIDEM, the goal is to have the new LVWTP on line by the end of 2014.

The City will be seeking assistance from the Drinking Water State Revolving Fund for all work associated with the long term improvements for the water treatment facilities

Section III- Scope of Services

The City is seeking the services of an experienced, licensed and qualified Consultant to serve as the City's advisor and provide services to complete the necessary phases and tasks for the long term improvements to the Station 1 and Lawton Valley Water Treatment Plants. The selected Consultant shall serve as a single point of contact for the City responsible for providing the diverse professional services required for the proposed water treatment plant improvements. The selected Consultant shall be a firm regularly engaged in the business of providing engineering services to Water Utilities for the design and construction of water treatment facilities and have experience in the management of alternative delivery projects on behalf of Owners. The selected Consultant shall provide professional services for the City that are necessary to fully develop the strategy for the delivery of the Plant improvements and to manage and oversee on behalf of the City the procurement, design and construction of these improvements. As the City's Advisor, the selected firm from this RFP shall be precluded from submitting proposals and being selected for additional professional services related to the final design and construction of the Plant improvements

All work under this request for proposals that is related to design of the water treatment facilities shall be under the direction and supervision of a professional engineer registered in the state of Rhode Island as of the date of the proposal submittal.

The initial task for the Consultant, or Phase 1 of the project, shall be to review the City's options for implementing the proposed long term improvements described in the Introduction Background Sections of this RFP. The Consultant shall provide detailed analysis of the pros and cons of each option/approach for the delivery of the project in order for the City to make an informed decision. The Consultant shall describe and support recommendations for the allocation and management of risks to the City for the options/approaches. The options/approaches would include but not be limited to the following:

- Traditional design, bid, and construction
- One procurement for design- build or design-build-operate
- Sale of elements of the Utility

Once the strategy for delivering the project is selected by the City, Phase 1 of the project will be completed. It is anticipated services under subsequent phases of the project included as part of this RFP and awarded by contract amendment may include, but not necessarily be limited to, the following task examples:

a. Review with the City the demand projections and supply analysis for Newport Water as it relates to the proposed improvements
b. Assist with site selection for the new Lawton Valley Plant and site acquisition if required.
c. Conduct pilot testing of new water treatment process as required for both plants for RIDOH approval for permitting
d. Assist the City throughout the project with compliance with all requirements associated with receiving funding from the Drinking Water State Revolving Fund.
e. Assist the City throughout the project with coordinating and obtaining all required regulatory approvals and/or permits for the long term improvements.
f. Assist the City in developing a preliminary design for the long term improvements at each facility including a construction phasing plan.
g. Provide an estimate of probable costs to construct the improvements based on the preliminary design
h. For a design/ build (D/B)or design/build /operate (D/B/O) project, develop a Request for Bids, review responses and costs proposed.
i. Assist City in development of a comprehensive agreement for the final design and construction of the long-term improvements.
j. Assist City with negotiations with designer/builder for a comprehensive agreement including guaranteed maximum price.
k. Assist City with monitoring of the final design
l. Perform an independent constructability review of the design
m. Prepare and develop Change Orders related to D/B or D/B/O work
n. Construction contract monitoring and administration including providing the services of a resident field inspector for the duration of the construction phase
o. Coordinate correspondence between City and designer/builder
p. Receive, review, approve and distribute shop drawings and/or similar documents
q. Participate in and evaluate equipment start up.
r. Submission of monthly progress reports
s. Financial advising including a review of Newport Water's financial records and provide assistance for securing funding through bonding including assistance at any hearings before the RIPUC related to the financing of the long-term improvements.

The February 16, 2004 " WTP Compliance Evaluation Final Report" presents a detailed analysis of the development of the proposed long term improvements. A copy of this

report will be provided to prospective Consultants upon request. A general map of the Newport water System will also be provided to prospective Consultants.

Consultants wishing to tour the Station 1 and LVWTP may make arrangements through Ms. Carol Bowman at 401-845-5600. Tours will be allotted two hours and will only be given between the hours of 9:00 am and 2:00pm, Tuesdays through Thursdays. The last day tours will be scheduled is Tuesday, December 18th.

Section IV- Response to RFP

Ten (10) copies of the written proposal from qualified consultants shall be submitted to the Purchasing Office, City Hall, 43 Broadway, Newport, RI 02840 by 2:00 p.m. on Thursday, December 20, 2007. Mark packages "Professional Services as City Advisor for Improvements to Water Treatment Facilities- #08- 028". Proposals shall be in 3-ring binders with tabs separating each section. Proposals shall be limited to no more than 100 pages including all charts and graphs.

It is the professional consultant's responsibility to ensure that the submission is delivered by the time and at the place described above. Submission received prior to the time of opening will be securely kept unopened. No responsibility will attach to any officer or person for the premature opening of a submission not properly addressed and identified. Any submission received after the time and date specified shall not be considered even if it is determined by the City that such non-arrival before the time set for opening was due solely to delay in the mails for which the submitter is not responsible. Conditional or qualified submission will not be accepted.

Proposals shall be separated into the following sections:

1. Cover letter executed by a person authorized to commit the Consultant to perform work

2. Table of Contents

3. Executive Summary

4. Qualifications and Experience
    a. Identify the legal structure of the firm making the proposal
    b. Brief firm history
    c. Provide detailed descriptions of representative projects that demonstrate the Consultant's experience in monitoring design/build projects with particular emphasis on projects similar in size or type of work as that described in this RFP. The following information should be provided for each project:
        - Project name, description, location and contract value
        - Team members involved

- Completion date
- Schedule and cost performance
- Type of contract and services performed
- Owner Contact
- Interaction with maintaining operating facilities while performing work

5. Description of any joint venture and subconsultant arrangements

6. Key Personnel Resumes
   a. Include resumes for the project manager and each of the team members. The resumes should focus on recent similar work or projects related to the scope of services contemplated within this RFP. Must demonstrate that the project manager and/or technical leads have experience working with the Rhode Island Department of health, Division of Drinking Water Quality.

   b. Include a statement of the availability and commitment of individuals proposed for the project. Include the proposed work location of each individual during the different phases of the project.

7. Project Understanding and Approach
   Provide a general discussion of the Consultant's approach to the work described as part of this request . Description of how the Consultant intends to provide design and construction services should be included.

8. Attachments

Section V- Proposal Evaluation and Selection Criteria

1. An Evaluation Committee consisting of City management and technical staff shall evaluate each proposal submitted based on all submittals received. The Evaluation Committee will evaluate the information provided in each proposal and will ask questions of a clarifying nature if deemed necessary.

2. The Proposals shall be ranked based on the selection criteria identified in this section.

3. The Evaluation Committee shall request individual presentations and discussions with three (3) Consultants that have been identified as fully qualified, responsible and suitable based on the information provided within the written proposal. Emphasis shall be given to Consultants demonstrating professional competence to provide the required services. The Consultants selected shall elaborate on their qualifications, performance data, and staff expertise pertinent to the City's proposed project. The Evaluation Committee may during the presentation stage discuss cost structure for the overall project with the Consultants. At the

conclusion of the presentations and discussions, the Evaluation Committee shall rank the interviewed Consultants based on the evaluation of the information provided in the written proposal and information provided during the discussion stage. The ranking of Consultants shall be in the order determined by the Evaluation Committee of providing the qualifications services deemed most meritorious for the City's project.

4. In order to provide a fair evaluation process of all proposals submitted, ex parte communication initiated by a Consultant is prohibited from the time the written proposals are opened until a final decision is made.

5. Negotiations shall be conducted with the Consultant ranked first. If a contract satisfactory and advantageous to the City can not be negotiated at a fair and equitable price, as determined at the sole discretion of the City, negotiations shall be formally terminated. Negotiations will then begin with the Consultant ranked second and so on until a contract satisfactory and advantageous to the City can be negotiated at a fair and equitable price as determined at the sole discretion of the City. The final negotiated contract shall be recommended to the City Council for award of a contract.

6. The City is not required to furnish an explanation of how a proposal rated, or a statement of reasons why a particular proposal was not selected as most meritorious.

7. The following criteria shall be considered in the evaluation and selection of the proposals:
    a. Qualifications and Experience
        - Leadership structure and experience
        - Project team's experience and credentials of key people assigned to the team
        - Commitment of the individuals on the project team
        - Management staff and capabilities
        - Experience with alternative project delivery approaches
        - Experience with serving as an Utility Owner's agent similar to that requested
        - Size of firm
    b. Project Understanding and Approach
        - Demonstration of the Consultant's understanding of the unique requirements, challenges and constraints the City faces in completing the project.
        - Presentation of the Consultant's proposed approach to providing services to the City for the project.
        - Proposed schedule
        - Project controls
    c. Past Performance

- Successful alternative project delivery experience with water treatment plants similar to City's
- Successful design/build monitoring experience
- Design and construction monitoring of modifications and expansions to existing water treatment facilities.
- Demonstrated commitment to customer objectives
- Schedule and budget performance on similar projects

Section VI- General Conditions

1. The City reserves the right to reject any and all proposals, to waive any informality, to request interviews of consultants prior to award and to select and negotiate the consultant services in the best interest of the City.

2. The Consultant shall guarantee to perform the services offered and the total price of the proposal for a period of not less than 60 days from the deadline for submission of proposals.

3. The City reserves the right to accept all or part of any proposal, and to negotiate a contract for services and cost with the selected Consultant.

4. The Consultant shall provide all necessary personnel, materials and equipment to perform and complete all work under this proposal.

5. All original documents and drawings shall become the property of the City after completion of the Consultant's work.

6. The City of Newport intends to recommend award of a contract to the City Council for the requested services within three (3) months of receipt of the proposals. The Consultant shall be prepared to commence work immediately upon execution of a contract with the City.

7. Awards will not be made to any person, firm or company in default of a contract with the City, the State of Rhode Island or the Federal Government.

8. The contractor/vendor hereby agrees that it will assign to the City of Newport all cause of action that it may acquire under the anti-trust laws of Rhode Island and the United States as the result of conspiracies, combination of contracts in restraint of trade which affect the price of goods or services obtained by the City under this contract if so requested by the City of Newport.

9. Unless otherwise stated, invoices are to be submitted in duplicate upon delivery of service to the user department or division. The invoice must include an itemization of all services provided, including unit list price, net price, extensions and total amount due.

10. Unless otherwise stated, payment will be made within thirty (30) days of the completion of the service, in an acceptable fashion, to the City and receipt of invoice, whichever is later.

11. City is exempt from all sales and Federal excise taxes. Our exemption number is 05-6000-260. Please bill less these taxes.

12. The City of Newport's obligations to pay any amount due under a contract are contingent upon availability and continuation of funds for the purpose. The City may terminate the contract, for non-appropriation of funds, and all payment obligations of the City cease on the date of termination.

13. None of the services covered by the contract shall be assigned in full or in part, or sub-contracted without the prior approval of the City.

14. This contract will be for the services described above; however, this agreement should not be considered exclusive. As deemed necessary, the City reserves the right to obtain these services from any other vendor.

15. Unless otherwise specified all costs listed are firm for the term of the contract.

16. Neither party shall be liable for any inability to perform its' obligations under any subsequent agreement due to war, riot, insurrection, civil commotion, fire, flood, earthquake, storm or other act of God.

17. Notification of the parties shall be considered to have been constructively received when it is mailed via the United State Postal Service or delivered in hand to the parties as stated in the contract.

18. If any of the GENERAL TERMS AND CONDITIONS is held to be invalid or unenforceable, it will be construed to have the broadest interpretation which would make it valid and enforceable under such holding. Invalidity or unenforceability of a term or condition will not affect any of the other GENERAL TERMS AND CONDITIONS.

19. Each and every provision and clause required by law to be inserted in any subsequent Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the Contract shall forthwith be physically amended to make such insertion or correction.

20. Proposal shall also mean quotation, bid, offer, qualification/experience statement, and services. Proposers shall also mean vendors, offerors, bidders, or any person or firm responding to a Request for Proposals.

21. All contracts entered into by the City of Newport shall be governed by the Laws of the State of Rhode Island. Any disputes shall be resolved within the venue of the State of Rhode Island and Newport County.

22. The Consultant selected for this project shall procure and maintain the following types of insurance:

- Statutory Workers Compensation and Employer's Liability Insurance
- Professional Services Liability Insurance for errors and omissions ($2,000,000.00 minimum)
- Liability and Property Damage Insurance (a) Bodily injury liability:$500,000 each person, $1,000,000 each occurrence ; (b) Property damage liability: $500,000 each occurrence, $1,000,000 aggregate.

Section VII- Technical Point of Contact

Any questions regarding the RFP may be directed to Julia A. Forgue, P.E., Director of Utilities at (401) 845-5600.

EXHIBIT B

City of Newport, Rhode Island
Professional Services as City Advisor for Water Utility Strategic Options and Delivery of Improvements to Water Treatment Facilities #08-028

Phase 1 - Scope of Work

February 28, 2008

The City's strategic objectives for this project are to: (a) maximize the value to ratepayers of existing city water system assets; (b) ensure high level of reliability for provision of water services; (c) minimize future increases in water rates.

CDM's Proposal dated December 20, 2007 presented five phases for the City Advisor project (as may be revised to reflect decisions made by the city during Phase 1):

- Phase 1 – Utility Ownership/Governance and Project Delivery Strategy
- Phase 2 – Utility Financing
- Phase 3 – Engineering Studies and Preliminary Design
- Phase 4 – Procurement Documents and Process
- Phase 5 – Monitoring of Contractor Performance

This Phase 1 scope of work does not include Phases 2 through 5. The scope of work for these subsequent phases will be determined by the City upon successful completion of Phase 1.

Phase 1 – Utility Ownership/Governance and Project Delivery Strategy

The objectives of Phase 1 are to provide the City with detailed information to support and allow decision-makers to select (a) a water utility ownership and governance structure that will promote the City's strategic objectives noted above and will help address the fundamental question as to what is the best long-term ownership, governance, financial and operation structure for the City's water utility, and (b) project delivery strategies and to prepare implementation plans for the long-term improvements to Station No. 1 Water Treatment Plant and a new Lawton Valley Water Treatment Plant that will (i) complete construction and testing within required schedule, including consent order dates; (ii) minimize life-cycle cost; (iii) optimize project delivery risk allocation; and (iv) achieve project quality standards and minimum requirements.

Given the different nature of the issues and concerns that must be addressed for the options available to the City relative to the decisions for ownership and governance strategy compared to the decisions for specific project delivery strategies, Phase 1 will be conducted in two steps:

- Phase 1A – Utility Ownership/Governance Strategy
- Phase 1B – WTP Improvements Project Delivery Strategies and Plans

Phase 1A – Utility Ownership/Governance Strategy

Task 1A.1 – Identify Objectives, Options and Criteria

In this task, we will identify all the strategic options available to the City for utility ownership and governance (including capital financing and system operation and maintenance), identify the key issues and questions related to the selection of a strategic option, and assess the pros and cons of these strategies in terms of relevant policy, risk, cost, technical, public acceptance, and service quality factors to support the city's decision-making process. As part of this task, CDM will reach out to and will interview key stakeholders, such as wholesale customers and the Rhode Island Public Utilities Commission, to obtain input for City consideration.

A preliminary list of the options that will be reviewed by CDM is listed in Table 1. This list will be revised during Task 1A. 1 as additional options may be identified or some options may be deleted by the City.

Table 1A. Strategic Ownership / Governance Options

1.0	**Continue City Ownership / Governance of Assets**	
1.1	**Operation and Maintenance by City**	
1.1.1	Continue Current Operations and Maintenance	
1.1.2	Apply Competitive Utility Operations Practices	
1.2	**Contract Operation and Maintenance**	
1.2.1	Entire System	
1.2.2	Water Treatment Plants	
1.2.3	Specialized Services (such as billing, maintenance, etc.)	
1.3	**Capital Financing**	
1.3.1	Revenue Bonds	

	1.3.2	State Revolving Loan Fund
	1.3.3	Municipal Lease Financing
2.0	**Create New Regional Authority / Governance**	
2.1	**Scope of asset transfer and services**	
	2.1.1	Transfer entire water system / retail services
	2.1.2	Transfer water supply and treatment / wholesale services
	2.1.3	Transfer water supply / wholesale services
	2.1.4	Transfer water treatment / wholesale services
	2.1.5	City retains ownership of assets
2.2	**Institutional framework and governance**	
	2.2.1	New regional entity with independent board
	2.2.2	Contractual arrangements for regional governance
3.0	**Transfer Assets to Private Company**	
3.1	Sell entire water system along with private retail service provision	
3.2	Sell entire water system, but retain City service provision via lease-back	
3.3	Sell water supply and treatment assets along with private wholesale supply and treatment service provision	
3.4	Sell water supply and treatment assets, but retain City supply and treatment service provision via lease-back	

CDM will attend a workshop with City Council to present the intended approach to Phase 1A to obtain feedback and input to guide the conduct of Phase 1A.

Following the Council workshop, CDM will prepare a memorandum (Utility Ownership/Governance) identifying the specific objectives and criteria against which the strategic options will be evaluated. In general, the following key criteria will be considered: capital, operating, and life-cycle costs; risk allocation; legal authority; quality of assets and services; implementation tasks and schedule; public acceptance; and policy issues. We will work with the City to gain an understanding of the City's priority ranking or relative weights of the objectives and evaluation criteria.

CDM will attend a meeting with the City's Project Steering Committee to review the proposed objectives, options and evaluation criteria contained in the memorandum.

Deliverable: Utility Ownership/Governance Objectives, Options and Criteria Memorandum

Task 1A.2 - Analyze Pros and Cons of Options

The objectives of Task 1.2 are to carefully analyze the trade-offs and the advantages/ disadvantages of the utility ownership/governance identified in Task 1A.1. The detailed objectives, constraints, preferences, requirements, and criteria documented under Task 1A.1 will serve as the foundation for this evaluation.

CDM will evaluate the options listed in Task 1A.1 to provide the City with a full understanding of the implications of each option in terms of relative advantages, disadvantages and trade-offs. Task 1A.2 will be conducted in parallel with Task 1A.3 (Financial Model) so that strategic decisions reflect the related financial considerations. Our analysis will involve coordination with the City's legal counsel and City's financial advisor.

We will prepare an analysis matrix to support the City's decision-making. The matrix will array the alternatives against the applicable decision criteria and factors as finalized in Task 1A.1. In some cases, the criteria will need to be balanced against one another and subjective descriptions (e.g., advantages and disadvantages) will be utilized. To the extent possible and where appropriate, objective measures will be applied to the criteria. CDM will attend a meeting with the City's Project Steering Committee and legal counsel to review analysis of each option as summarized in the analysis matrix.

CDM will then participate in a workshop with City Council to present the preliminary findings of Task 1A.2 to obtain feedback and input to guide the preparation of the Task 1A.2 memorandum.

Following these meetings and workshop, CDM will develop a memorandum (Analysis Matrix and Options Evaluation Memorandum) to summarize the work under Task 1A.2.

Deliverable: Analysis Matrix and Options Evaluation Memorandum

Task 1A.3 - Financial Review

In this task, we will review each of the Task 1A.1 utility ownership and governance options and point out differences and implications among the options that may be of concern to the City. The financial review will be focus on policy and rate-setting approaches that may vary for the strategic options. This will enable the City to understand how changes in the ownership/governance and capital financing structure may impact the approach that would be taken to the sensitive issue of rates. This task will take also review the various options available to the City for financing of future

improvements, with state revolving fund (SRF) loans as the preferred option and other options, such as revenue bonds, to the extent SRF funds may not be available.

Deliverable: Financial Review Results will be included in the Task 1A.2 pros and cons

Task 1A.4 - Meetings with City Council

We would prepare for and conduct the following meetings during Phase 1A with the City Council:

- One study workshop, as indicated in Task 1A.1 to present and discuss the intended approach to Phase 1A.
- One study workshop, as indicated in Task 1A.2, to present the preliminary findings for the advantages and disadvantages of the utility ownership/governance options.
- One action/decision-making meeting (following the second study workshop).

Deliverables: Workshop agenda, presentation materials and meeting notes/minutes

Phase 1B - WTP Improvements Delivery Strategy

Task 1B.1 - Identify Objectives, Options and Criteria

In this task, we will identify (based on the results of Phase 1A) all the project delivery options available for implementation of the long-term improvements to Station No. 1 and the new Lawton Valley Water Treatment Plan and will assess the pros and cons of these delivery strategies in terms of relevant policy, risk, cost, technical, public acceptance, and service quality factors to support the city's decision-making process. A preliminary list of the options that will be reviewed by CDM is listed in Table 1B. This list will be revised during Task 1B. 1 to reflect the decisions made by the City in Phase 1A and to add or delete delivery options may be identified by the City.

Table 1B. Delivery Options for Long-Term WTP Improvements
(a list of definitions/abbreviations associated with Table 1 are provided on page 9)

1.0	**Traditional design and construction (DBB)**	
	1.1	Traditional delivery of Station No. 1 WTP improvements
	1.2	Traditional delivery of new Lawton Valley WTP
2.0	**Design-build (DB) delivery**	
	2.1	Progressive DB for Station No. 1 WTP
	2.2	Performance-based DB for Station No. 1 WTP
	2.3	Prescriptive DB for Station No. 1 WTP
	2.4	Progressive DB for new Lawton Valley WTP
	2.5	Performance-based DB for new Lawton Valley WTP
	2.6	Prescriptive DB for new Lawton Valley WTP
3.0	**Design-build-operate (DBO) delivery**	
	3.1	DBO for Station No. 1 WTP
	3.2	DBO for new Lawton Valley WTP
4.0	**Operation and maintenance (O&M)**	
	4.1	Continue City O&M of entire water system
	4.2	Apply CUO to City O&M of entire water system
	4.3	Apply CUO to City O&M of Station No. 1 WTP
	4.4	Apply CUO to City O&M of new Lawton Valley WTP
	4.5	O&M contract for Station No. 1
	4.6	O&M contract for new Lawton Valley WTP

5.0	Design-build-operate-finance (DBOF) delivery	
	5.1	Sell Station No. 1 WTP along with service provision via DBOF
	5.2	DBOF for new Lawton Valley WTP

Task 1B.2 - Analyze Pros and Cons of Options

The objectives of Task 1B.2 are to carefully analyze the trade-offs and the advantages/ disadvantages of the project delivery options identified in Task 1B.1. The detailed objectives, constraints, preferences, requirements, and criteria documented under Task 1B.1 will serve as the foundation for this evaluation.

CDM will evaluate the options listed in Task 1B.1 to provide the City with a full understanding of the implications of each option in terms of relative advantages, disadvantages, risk and other trade-offs. Our analysis will involve coordination with the City's legal counsel and City's financial advisor.

We will prepare an analysis matrix to support the City's decision-making. The matrix will array the alternatives against the applicable decision criteria and factors as finalized in Task 1B.1. In some cases, the criteria will need to be balanced against one another and subjective descriptions (e.g., advantages and disadvantages) will be utilized. To the extent possible and where appropriate, objective measures will be applied to the criteria. CDM will attend a meeting with the City's Project Steering Committee and legal counsel to review analysis of each option as summarized in the analysis matrix.

After preparing the Task 1B.2 analysis matrix, CDM will participate in a workshop with the City Council to present the preliminary findings of Task 1B.2 to obtain feedback and input to guide the preparation of the Task 1B.2 memorandum.

Following this Council workshop, CDM will develop a memorandum (Analysis Matrix and Options Evaluation Memorandum) to summarize the work under Task 1B.2.

Deliverable: Analysis Matrix and Options Evaluation Memorandum

Task 1B.3 - Risk Allocation and Management

CDM will prepare a memorandum identifying the significant risks associated with project implementation. Included in the memorandum will be our recommendations as to how such risks should be allocated and managed under each of the project delivery options analyzed in Task 1B.2. Both the overall risks to project implementation and the specific risks that would be in the City's best interest to allocate to outside contractors under each option will be evaluated and described. By examining the risk profile of the overall project implementation, areas to reduce risk and uncertainty will be identified

early, thus reducing total costs and time to the City for project implementation. Recent trends in the contracting marketplace will be taken into account when evaluating risk allocation between the City and outside contractors.

CDM will also provide the outline of a risk management plan that should be executed after Phase 1 to support implementation of the option or options selected by the City Council. We will coordinate this effort with the City's legal counsel.

CDM will attend a meeting with the City's Project Steering Committee and legal counsel to review the risk allocation and management memorandum.

Deliverable: Risk Allocation and Management Memorandum

Task 1B.4 - Meetings with City Council

We would prepare for and conduct the following meetings with the City Council:

- One study workshop, as indicated in Task 1B.2, to present the preliminary findings concerning the project delivery options and to obtain feedback and guidance for preparation of the Task 1B.2 memorandum.
- One action/decision-making meeting (following the study workshop).

Deliverables: Workshop agenda, presentation materials and meeting notes/minutes

Task 1B.5 - Prepare Draft and Final Phase 1 Reports

After the workshop in Task 1B.2 and the Steering Committee meetings during Phase 1B, CDM will prepare draft and final Phase 1 reports that incorporate all of the work and documents developed under both Phases 1A and 1B as described in the previous tasks. The Phase 1 Report will document the City's decisions with regard to the selected utility ownership/governance option (Phase 1A) and also document the City's decisions with regard to the selected project delivery option(s) (Phase 1B). The Phase 1 report will include implementation plans for the long-term water treatment plant improvements based on the project delivery strategy selected for each plant.

Deliverables: Draft and Final Phase 1 Reports

Phase 1 Schedule

Phase 1 - Utility Ownership/Governance and Project Delivery Strategy - is anticipated to take 120 to 150 days.

Definitions/Abbreviations for Table 1B:

CUO	Competitive Utility Operations
DB	Design-build
DBB	Design-bid-build (traditional design and construction)
DBO	Design-build-operate
DBOF	Design-build-operate-finance
O&M	Operations & maintenance
Performance-based DB	DB proposers have maximum design flexibility to meet performance requirements in the Request for Proposals (RFP).
Prescriptive DB	DB proposers must follow preliminary design set forth in the RFP.
Progressive DB	DB contractor selected on basis of qualifications; then works with the city to prepare design and to negotiate guaranteed-max or lump sum DB price.
WTP	Water Treatment Plant

EXHIBIT C

City of Newport, Rhode Island
Professional Services as City Advisor for
Water Utility Strategic Options and Delivery of Improvements to Water Treatment Facilities #08-028

Phase 1 - Project Schedule

	Project Month							
	March 2008	April 2008	May 2008	June 2008	July 2008	August 2008	Sept. 2008	October 2008
Phase 1A Utility Ownership/Governance Strategy								
Task 1A.1 ***Identify Objectives, Options, and Criteria***								
City Council Workshop	▲							
Utility Ownership/Governance Strategy Objectives, Options and Criteria Memorandum		▲						
Steering Committee Meeting		▲						
Task 1A.2 ***Analyze Pros and Cons of Options***								
Pros and Cons Analysis Matrix			▲					
Steering Committee Meeting			▲					
City Council Workshop				▲				
Task 1A.3 ***Financial Review***			▲					
Task 1A.4 ***City Council Decision-Making Meeting***				▲				
Phase 1B WTP Improvements Delivery Strategy								
Task 1B.1 ***Identify Objectives, Options, and Criteria***								
Identify Objectives, Options, and Criteria					▲			
Task 1B.2 ***Analyze Pros and Cons of Options***								
Pros and Cons Analysis Matrix						▲		
Steering Committee Meeting						▲		
City Council Workshop						▲		
Task 1B.3 ***Risk Allocation and Management***						▲		
Risk Allocation and Management Memorandum								
Task 1B.4 ***City Council Decision-Making Meeting***							▲	
Task 1B.5 ***Phase I Report (Draft/Final)***								▲ ▲

Assumes start date of March 13, 2008.

Phase 1B dates asumes that City Council Phase 1A decisions are finalized by June 25, 2008.

EXHIBIT D

City of Newport, Rhode Island
Professional Services as City Advisor for
Water Utility Strategic Options and Delivery of Improvements to Water Treatment Facilities #08-028

Phase 1 - Fee Schedule

	Hours by Labor Category and Hourly Rate[1]						
Task	Project Manager $ 59	Management Consultant $ 82	Financial Specialist $ 73	Administrative Assistant $ 20	Total Hours	Expenses	Total Costs including Labor with Markup and Expenses[2]
Phase 1A Utility Ownership/Governance Strategy	30	176	76	8	290	$ 500	$ 66,500
Phase 1B WTP Improvements Delivery Strategy	30	172	0	24	226	$ 500	$ 49,700
Total	***60***	***348***	***76***	***32***	***516***	***$ 1,000***	***$ 116,200***

[1] Raw salary rate
[2] Markup is 3.0

Approved by:

Carol A. Rego, P.E.
Vice President

EXHIBIT E

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 02/28/2008

PRODUCER
Aon Risk Services, Inc. of Massachusetts
99 High Street
Boston MA 02110 USA

PHONE (866) 283-7122 FAX (847) 953-5390

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED
Camp Dresser & McKee Inc.
ONE CAMBRIDGE PLACE
50 HAMPSHIRE STREET
CAMBRIDGE MA 021390000 USA

INSURERS AFFORDING COVERAGE		NAIC #
INSURER A:	American Zurich Ins Co	40142
INSURER B:	Zurich American Ins Co	16535
INSURER C:	Lloyd's of London	0005FI
INSURER D:		
INSURER E:		

Holder Identifier :

Certificate No : 570027272538

COVERAGES

SIR May Apply

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE(MM\DD\YY)	POLICY EXPIRATION DATE(MM\DD\YY)	LIMITS	
B		GENERAL LIABILITY [X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC	GL0837663212	01/01/08	01/01/09	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$1,000,000 $100,000 $10,000 $1,000,000 $2,000,000 $2,000,000
B		AUTOMOBILE LIABILITY [X] ANY AUTO [ ] ALL OWNED AUTOS [ ] SCHEDULED AUTOS [X] HIRED AUTOS [X] NON OWNED AUTOS	BAP837663112	01/01/08	01/01/09	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$2,000,000
		GARAGE LIABILITY [ ] ANY AUTO				AUTO ONLY - EA ACCIDENT OTHER THAN AUTO ONLY : EA ACC AGG	
		EXCESS /UMBRELLA LIABILITY [ ] OCCUR [ ] CLAIMS MADE [ ] DEDUCTIBLE [ ] RETENTION				EACH OCCURRENCE AGGREGATE	
A		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below	WC837663313	01/01/08	01/01/09	[X] WC STATU-TORY LIMITS [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE-EA EMPLOYEE E.L. DISEASE-POLICY LIMIT	$1,000,000 $1,000,000 $1,000,000
C		OTHER Archit&Eng Prof	QK0801367	01/01/08	01/01/09	Per Claim USD Aggregate USD	$2,000,000 $2,000,000

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS
RE: City Advisor Phase 1 #08-028

CERTIFICATE HOLDER

City of Newport, Rhode Island
Attn: Julia A. Forgue, P.E.,
Director of Utilities
70 Halsey Street
Newport RI 02840 USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE *Aon Risk Services Inc. of Massachusetts*

CITY OF NEWPORT, RI
AMENDMENT NO. 1

This Amendment No. 1 is made and entered into this June 25th day of June 2009 to the Contract and Agreement between City of Newport ("City") and Camp Dresser & McKee, Inc. ("Consultant") dated March 31, 2008 ("the Agreement").

WHEREAS the City and the Consultant entered into the Agreement for Professional Services for City Advisor for Project Delivery of Water Treatment Plant Improvements; and

WHEREAS the Exhibit A, Paragraph III of the Agreement provides that after the strategy for delivering the project is selected by the City, it is anticipated that services under subsequent phases of the project will be awarded by contract amendment; and

WHEREAS the City and the Consultant desire to amend the scope of work, time periods of performance, and payment for defined portions of certain subsequent phases; and

WHEREAS the Agreement provides that any amendments shall be valid only when expressed in writing and signed by the parties,

NOW THEREFORE, in consideration of the mutual understandings and agreements herein, the parties agree to amend the Agreement as follows:

1. The Scope of Work under this Amendment No.1 includes certain portions of the services required under subsequent phases (but no portion of the services required for Phase 5: Monitoring of Design-Build Contractor) as follows:

   1.1. Phase 2: Utility Financing

   1.2. Phase 3: Engineering Studies and Technical Project Development Requirements

   1.3. Phase 4: Design-Build Procurement Documents and Process

   The detailed scope of work is provided in Exhibit A –Amendment No. 1 (attached).

   The specific portion of the scope of work authorized under Amendment No. 1 is limited to currently available funding and shall include only those tasks or portions thereof as itemized below:

   Phase 2: Utility Financing

   - Task 2.3: Develop Financing Plan (100% scope and funding)
   - Task 2.7: Support Financing Program (partial scope and funding)

- Task 2.8: Support New Water Purchase Agreement with the Portsmouth Fire and Water District and Navy (100% funding)

Phase 3: Engineering Studies and Technical Project Development Requirements

- Task 3.1 - Review Demands and Supply (100% scope and funding)
- Task 3.2 - Lawton Valley Water Treatment Plant Siting Study and Related Engineering Investigations (partial scope and funding)
- Task 3.5 – Pilot Testing (partial scope and funding)
- Task 3.7 - Pipe Loop Testing (partial scope and funding)
- Task 3.10 - Project Management and Schedule (partial scope and funding)

Phase 4: Design-Build Procurement Documents and Process

- Task 4.1— Request for Qualifications (100% scope and funding)
- Task 4.2—Conduct Step One RFQ Process (100% scope and funding)
- Task 4.3—Prepare Request for Proposals (RFP) Volume I (100% scope and funding)
- Task 4.4—Support City Preparation of Draft DB Contract (100% scope and funding)
- Task 4.7— Coordinate City's Procurement Team (partial scope and funding)
- Task 4.8— Prepare Risk Register (100% scope and funding)

2. The Schedule for the work referenced in Paragraph II shall be as follows:

   The work authorized under Amendment No. 1 shall be done in accordance with the schedule identified as Exhibit B – Amendment No. 1 (attached), unless the schedule is adjusted as mutually agreed between the City and the Consultant.

3. The Term of Agreement referenced in Paragraph III shall be amended as follows:

   In the first sentence, change June 30, 2009 to December 31, 2009.

4. The Payment referenced in Paragraph V shall be as follows:

   The City agrees to pay the Consultant for work authorized under Amendment No. 1 the not to exceed lump sum fee of $949,770 in accordance with the Fee Schedule identified as Exhibit C – Amendment No. 1 (attached).

IN WITNESS HEREOF, the parties hereto have caused this instrument to be signed by their duly constituted officers, attested, and sealed pursuant to proper resolutions.

By: Jeanne-Marie Napolitano
Party of the First Part (Signature)

Witness

Jeanne-Marie Napolitano, Mayor, City of Newport, RI
(Printed Name and Title)

By: Patrick D Hughes
Party of the Second Part (Signature)

Witness

Patrick D. Hughes, Senior Vice President
(Printed Name and Title)

Approved as to Form By:

Joseph J. Nicholson, Jr., City Solicitor

1-29-09
Date

Exhibit A
Scope of Work

Phase 2 - Utility Financing (4 pages)

Phase 3 - Engineering Studies and Technical Project Development Requirements (36 pages)

Phase 4 - Design-Build Procurement Documents and Process (11 pages)

Phase 2 – Utility Financing

Over the course of this contract, CDM will provide the City a range of financial consulting services to assist in the selection of the most advantageous design-build (DB) proposer and to obtain the financing necessary for design and construction of the facility as well for related services, such as the City Advisor. These are described in the following sections. It is anticipated that these services will be provided from the development of the request for proposals through the final financing transaction. Except for the services outlined in Task 2.5 with respect to PUC approval of new financing agreements, the Phase 2 services do not include financial, rate or other assistance with filings, hearing, or other PUC activities.

Task 2.1 – Compare Life-Cycle Costs of DB Proposals

We will develop a life cycle evaluation tool within Excel to evaluate the total life cycle costs of the Design-Build proposals. The model will enable us to test the sensitivity of the life cycle costs to various economic and financial assumptions including inflation, capital financing costs and terms, and schedule. We will develop a summary memo describing the life-cycle cost calculations and the results.

Assumptions

- Four proposers
- Proposals break out certain operating costs consistent with cost allocation

Deliverable

- Life cycle model and memo
- Ranking of proposers

Task 2.2 – Update Financial Projections

Preliminary financial projections for the project have been developed, which were intended to provide the City with ten year projections of the Water Utility's revenue requirements so that it can plan for the magnitude and timing of necessary rate increases. In this task we will update these projection based on the proposed fixed DB price of the City's selected DB proposer. Over the course of the contract, we will be

available to update these projections if the fixed DB price is anticipated to change materially from the original proposal.

Assumptions

- Vendor cost proposal details costs

Deliverable

- Financial projections showing impact on future revenue requirements of preferred vendor's cost proposal
- Memo summarizing results

Task 2.3 - Develop Financing Plan

Working with the City's Finance Director and in consultation with the City's financial advisor and bond counsel, we will develop an initial financing plan for the project. The focus will be to establish the general timing of necessary bond issues, the role and magnitude of state revolving loan fund loans, and to establish the role of bond anticipation notes. This will provide the framework for the city moving forward.

Assumptions:

- City Finance Director and Financial Advisor will be available to review
- City's rate consultant will be available on an as needed basis

Deliverables

- Memo summarizing the financing plan identifying the timing and magnitude of anticipated bond issues as well as the overall debt structure

Task 2.4 - Assist in Development of Necessary Master Loan Documents

CDM will assist the City develop and obtain approval of General Bond Indenture for market issued revenue bonds and a Master Loan agreement for State Revolving Loan Fund loans. Each of these master documents will impose requirements on the City in terms of reserves, debt service coverage, rate requirements and default provisions. The purpose of our involvement is to ensure that the requirements balance the needs for marketing the debt without placing an excess burden on the City's rate payers.

Assumptions

- City will convene financial working group including financial advisor and bond counsel
- There will be up to three drafts of an indenture/bond resolution

- Two drafts of a loan agreement with the SRF

Deliverables

- Appropriate financing documents

Task 2.5 - Support PUC Approval of Financing Agreements

The City will need to obtain PUC consent to the provisions of the master financing agreements, since they will likely require the funding and holding of reserves and meeting rate covenants. This structure is not typical for utilities regulated by the PUC and we anticipate that the PUC will require a hearing process prior to granting approval.

We will provide direct (written) testimony on the basis and need for the financing structure as members of the City's financing team. For budgetary purposes, we have included an allowance of 48 hours of a Senior Management Consultant to cover the PUC hearing process once direct testimony has been submitted to the PUC.

Assumptions

- PUC testimony time including preparation of testimony, direct testimony and the inquiry process will be limited to 48 hours of CDM staff time

Deliverable

- Direct testimony, appropriate rebuttals and responses to questions from staff and intervenors

Task 2.6 - Institutional Support

We will work with the City's staff to ensure that it has put in place the necessary funds and reporting requirements required by the master loan agreements. These requirements may necessitate structures and reports that are not currently used by the City. This may include but is not limited to: developing a trustee relationship to safeguard necessary reserves, establishing audit procedures to test compliance with revenue covenants, determining the necessary status reports and developing business procedures to ensure that the City is generating the information necessary on a timely basis to fulfill those reporting requirements.

We have included a budgetary allowance of 250 hours for this task.

Assumptions

- City will retain all responsibility for the vendor payment process and direct relationship with the Trustee and others

- City will remain responsible for actual accounting and transaction tracking

Task 2.7 - Support Financing Program

CDM will provide the necessary Engineer's Financial feasibility reports that will be required as part of each revenue bond issue or SRF loan. These reports will describe the City and its capacity to undertake the program, the water system, the City's capital improvement program and the rate program being implemented to finance the program. This task will also include annual disclosure reports that may be required. Similar documentation will likely be required for state revolving loan funds, and will also include the loan application documentation. This task also assumes a PUC hearing process to obtain each financing. (We are assuming that the City will not be required to develop and submit a Trustee a triennial condition and operations report or similar document during the course of this assignment.)

Assumptions

- One financing per year
- Total of four long-term transactions

Deliverables

- Engineer's financial feasibility report
- PUC hearing process to obtain approval
- Coverage and related indenture certificates

Task 2.8 - Support New Water Purchase Agreement with the Portsmouth Fire and Water District and Navy

We will assist the City develop appropriate agreements with the Portsmouth Fire and Water District and the Navy. These agreements will include requirements regarding the average day and peak day demand as well as the financial terms for water purchase. A key element of these contracts will be determining how Portsmouth and the Navy will pay for their respective share of capital costs.

Assumptions

- CDM will only provide support on technical issues related to cost sharing and pricing
- CDM will provide technical support for the PUC and other regulatory agency approval of the new agreements
- Negotiation support limited to 40 hours of senior staff

Phase 3—Engineering Studies and Technical Project Development Requirements

The objectives of Phase 3 are to provide the City with a detailed set of tasks that are required to address engineering issues and design needs for the long-term improvements to Station No. 1 Water Treatment Plant and a new Lawton Valley Water Treatment Plant (LVWTP). Major components that are critical to the development of clear and complete engineering evaluations and technical requirements include establishing water demand and supply (safe yield) for water treatment plant design capacity, site assessment and site selection for the new LVWTP, pilot testing at both water treatment plants to establish the process to treat water from the City's multi-reservoir source, geotechnical evaluations, permit planning and definition of technical project development (quality/performance) requirements.

Task 3.1—Review Demands and Supply

In this task, CDM will meet with the Director of Utilities to discuss system water demand projections and system supply capabilities. We will review available reports, (e.g., Water Supply Management Plans, etc.) and meet with the City of Newport and Middletown Planning departments to determine existing and projected land use and population/water demand projections for the project design year (2030). We will also meet with the Portsmouth Water and Fire District and Naval Station Newport to review existing and projected water demands. CDM will also meet with the Town of Portsmouth's planning department to discuss and determine land use and population/water demand projections.

We will evaluate the information and prepare a draft memorandum that summarizes our findings. CDM will meet with the Director of Utilities to review the data and to develop the average day and maximum day demands to establish the design capacity of the Water Treatment Plants. CDM will review the City's Safe Yield Study as it relates to the Water Treatment Plant capacity.

Assumptions

- Four meetings with Director of Utilities
- One meeting each with the City of Newport, Town of Middletown, and Town of Portsmouth Planning Departments and the Naval Station Newport

Deliverable

- Existing and future water demand requirement and WTP capacity memorandum.

Task 3.2— Lawton Valley Water Treatment Plant Siting Study and Related Engineering Investigations

This task is based on the premise that the existing LVWTP site can be used or made suitable for construction of the new replacement LVWTP. We will address this premise immediately following the completion of Task 3.1. A CDM water treatment plant design specialist will evaluate the site relative to the required plant capacity, unit operations, lay down needs, and site access. In this task, CDM will obtain site plans and available aerial photographs (RIGIS) of the LVWTP site. We will use the information to assess the feasibility of using the existing site for a new plant. CDM's Water Age Study revealed that the 2-MG standpipe and 4-MG reservoir do not need to be relied on for disinfection credit (CT). This work will include an evaluation to determine how to take the 4-MG reservoir off line and/or to provide alternative means of storage without impacting distribution demands and WTP operation to free up the 4-MG reservoir location as a potential site for the new plant.

This task will include an assessment of land use, availability and acquisition at the Lawton Valley site, site survey, environmental assessment, geotechnical assessment

and preliminary evaluation of a conservative plant footprint to evaluate the site availability.

Subtask 3.2.1—Evaluation of Existing Land Parcels

CDM will obtain information, from the Assessor's office, pertaining to parcels that comprise the existing LVWTP site as well as adjacent to the LVWTP. We will meet with the Director of Utilities to obtain pertinent site information and concerns. We will review the information and determine size, ownership, zoning, utilities, and availability. We will develop a site plan of the existing site and adjacent parcels, which will be used to assess whether the "available" land can accommodate the new water treatment plant, including evaluations of removing the 4 million gallon finished water storage tank from service as well as storage needs and existing water treatment plant operation. A hydraulic evaluation of wholesale users will also be conducted to establish maximum capacities that Newport can provide to them. We will meet with the Director of Utilities to discuss our findings and prepare a technical memorandum.

Assumptions

- Department of Utilities to provide record and property plans
- Water Department staff will assist in providing site utility information
- One meeting with the Director of Utilities

Deliverables

- Technical Memorandum of findings.

Subtask 3.2.2—Survey

Based on the premise that sufficient land is available at the LVWTP site, CDM will arrange for a surveyor to provide a survey of the site to develop a current site base plan with topographic mapping and property limits for incorporation into the procurement documents. Additional surveying will be completed to include utility as-built locations. Surveying activities will also support permitting activities outlined in Task 3.4

A full legal description for all facilities and temporary use areas will be prepared by the Surveyor. The survey will delineate the full legal description of land acquisition and temporary use areas for project. It is anticipated that the legal descriptions will be prepared mostly from existing data supplemented with field work. The survey work will be utilized to complete the permitting and any easement acquisition outlined in Task 3.4.

The Surveyor will perform the following:

- A reconnaissance to recover benchmarks in the vicinity of the site and select the location of a survey baseline. The termini of the baselines will be suitable for GPS observations.

- Establish the coordinates of the termini of each baseline using the KeyNetGPS Virtual Reference System (VRS) which shall be referenced to the North American Datum of 1983 (NAD 83). Perform levels runs to relate the survey to the same vertical datum that is being used currently at the facilities and establish temporary benchmarks at the facility.

- Perform field surveys to locate site improvements including, but not limited to, buildings, paved and unpaved areas, tanks, pumping stations, weirs, settling tanks, property monuments, fences, walls, walks, wetland flags, surface evidence of utility structures, borings, and isolated trees. In addition, invert elevations will be determined by direct field measurement for sewer and drainage structures. Sill elevations will be obtained for buildings within the project area and elevations will also be obtained on critical structures.

- Upon completion of the surveys, calculate coordinates and elevations for each point located during the field survey.

- Undertake research to obtain copies of record plans showing the location of underground utilities and other site improvements.

- Undertake research to obtain copies of property plans.

- Develop a digital terrain model (DTM) and generate 1-foot contours. Prepare plans at a scale of 1″=20′ for each site that will depict the details surveyed. The property lines shall be re-established based upon recovered monuments and record plans.

The Site Base Plan will be provided to the DB short listed proposers and selected DB Contractor for final design/construction of the Project.

The survey will be performed according to the standards published by the Rhode Island Board of Registered Engineers and Professional Surveyors.

Assumptions

- The existing LVWTP site can be used or made suitable to locate a new replacement WTP. Survey to only include existing LVWTP site and no alternate sites

- Department of Utilities to provide record and property plans

- Water Department staff will assist in providing site utility information

- Up to two meetings with the Director of Utilities

Deliverables

- Project survey including site base plan, land parcel boundaries, roadways, and existing facilities, roadway boundaries and legal descriptions for land acquisitions.

Subtask 3.2.3—Environmental Site Assessment

CDM will perform preliminary inspection and assessment activities to investigate the possible presence of soil and/or groundwater contamination at the site of the Lawton Valley WTP. The focus of the investigations will be to identify potential soil and/or groundwater conditions that may require special design or disposal considerations, or present a health or safety risk to construction workers or the general public during planned future construction. Potential areas of contamination will be investigated through field reconnaissance and environmental data records review (Phase I), and by subsurface soil and groundwater investigation performed in conjunction with a geotechnical assessment (Phase II). The collected information will be reviewed to evaluate the potential presence of contamination and be documented in Phase I and Phase II reports. The Site Assessments will be performed in substantial compliance with current ASTM standards. The approaches for each assessment phase are summarized separately below.

Phase I ESA

The following tasks will be performed in order to complete the Phase I Site Assessment:

Site Inspection
CDM will conduct a site inspection of the property to identify visible evidence of current and/or past:

- Storage and use of toxic or hazardous materials (in quantities exceeding normal household amounts) as well as non-hazardous lubricants, fuels, or other petroleum products
- On-site pits, ponds, landfills, or waste storage/disposal
- Visible water or soil contamination, including on-site spills or releases
- Above-ground or underground storage tanks
- Drums or other storage containers
- Storm drains, sewers, and septic tanks
- Vehicle and equipment fueling and maintenance areas
- The presence of PCBs in transformers, hydraulic fluids, or light fixture ballasts

- Readily observable evidence of distressed vegetation or subsurface anomalies, such as depressions or mounds

In addition, CDM's reconnaissance will include adjacent properties, with the intent of identifying evidence of current or historical off-site activities having a potential for impacting the property.

Records Review
CDM will conduct a records review for the property. As part of this task, CDM will utilize the services of Environmental Database Resources, Inc. to conduct an environmental records search. The review will include available government agency databases that identify known or suspected hazardous material/waste sites on or within a 1-mile radius of the property. In addition, state lists, which include sites with, underground storage tanks, water pollution incidents, and landfills, will be reviewed as available. To the extent that such sites are listed in the vicinity, CDM will attempt to obtain readily available information in order to assess the potential impact to the subject properties. Based upon available information, CDM will provide its professional opinion as to the potential for listed sites to impact the property.

CDM will also conduct interviews with plant staff, as well as review relevant available plant records; review local records including the Planning Department, Fire Department, and Health Department; review aerial photographs as available for the area; review available regional geology and hydrogeology maps; and review available Sanborn Fire Insurance Map(s).

The record reviews will provide the basis for an evaluation of past ownership, uses, or activities that have been conducted on or around the property at adjacent properties, which may have resulted in a release of hazardous materials to the environment. A title search is not included in this scope of work.

Phase 1 Site Assessment Report
A final Phase I Site Assessment Report will be prepared for the property. The interviews, reports, and materials gathered will be referenced and relevant information will be included in a series of attachments. The report will list the findings and conclusions of the Phase I Environmental Site Assessment and an evaluation of the potential impact to the property from known or suspect soil or groundwater contamination at nearby properties.

Phase II ESA

Environmental sampling of site soil and groundwater will be done in conjunction with the geotechnical investigations. If the Phase I reviews identify additional locations where sampling is needed beyond the locations covered under the geotechnical investigations, additional subsurface investigations will be proposed and the scope and budget revised accordingly. Soil and groundwater samples collected from the geotechnical investigation locations will be submitted for laboratory analyses for the following parameters:

- Total petroleum hydrocarbons (TPH)
- RCRA 8 metals
- Volatile organic compounds (VOC)
- Semi-volatile organic compounds (SVOC)
- PCB
- Cyanide
- Pesticides

In addition to the above analyses, toxicity characteristic leaching procedure (TCLP) testing will be performed on soil samples for any metals with total metal concentration exceeding the "20X rule." The budget includes TCLP analysis for up to 20% of the soil samples.

During the geotechnical drilling program, 24 soil borings will be installed on the Lawton Valley Plant property. Environmental soil samples will be collected at 5-ft intervals over the first 15 feet at each boring for a total of 72 soil samples. Three locations will be completed as monitoring wells. The wells will be developed and one groundwater sample will be collected from each well.

It is understood that the site of the new plant within the overall 30 acre property has not been set. The current plant occupies approximately 5 to 6 acres of the property. Therefore, the focus of the Phase II ESA will be on the portion of the property outside the footprint of the existing treatment facilities. It is assumed that any available property plans for the entire site will be provided by the Department of Utilities for use in positioning the soil borings and monitoring wells.

CDM will prepare and submit a Phase II letter report for the property presenting the findings of the Phase II ESA. The report will present the findings of the subsurface investigations, an evaluation of data collected, and a summary and conclusions section to allow a better understanding of the site and surrounding properties.

It is understood that the existing raw water pumping station (RWPS) may be renovated for use as part of the future plant. Therefore, the scope of work includes a preliminary environmental audit of the RWPS for asbestos-containing material (ACM) and lead-based paint (LBP) that may be of potential concern during renovation activities. Based on the findings of the preliminary audit, it will be determined if additional investigations may be needed under an expanded scope of work. The ACM and LBP findings for the RWPS will be presented in a separate letter report.

Pre-demolition Assessment for Items of Environmental Concern

CDM will perform a detailed walk-over of the building and the site to identify and quantify hazardous materials that will need to be removed and/or abated prior to actual demolition. The survey will focus on the following materials:

- PCB-containing equipment (transformers and ballasts)
- Mercury-containing equipment (gauges, switches, thermostats)
- Refrigerant-containing equipment (A/C units, refrigeration systems)
- Oil-containing equipment
- Aboveground storage tanks
- Underground storage tanks
- Lead-based paint
- Asbestos-containing materials
- Universal wastes

CDM will subcontract with a licensed asbestos consulting firm to perform the asbestos investigative survey as well as the lead-based paint survey. CDM will rely on the following sources for identifying and quantifying hazardous materials and conditions:

- Visual observations
- Field dimensions
- Manufacturer nameplate information
- As-built plans
- X-ray fluorescence (XRF) analysis (lead-based paint).
- Bulk sample analysis (ACM) by EPA Polarized Light Microscopy with Dispersion Staining (PLM/DS) method with visual estimation of any resulting asbestos concentrations.

CDM and the asbestos consulting firm will perform the surveys in accordance with the following general guidelines and regulations:

- OSHA 29 CFR 1910.120, Hazardous Waste Operations

- Recommended Management Practices for the Removal of Hazardous Materials from Buildings Prior to Demolition, National Association of Demolition Contractors, December 7, 1998.
- EPA Asbestos Hazard Emergency Response Act (AHERA) regulations.

The findings of the assessment will be provided in a letter report following completion of the site audit.

Assumptions

- Department of Utilities to provide any available property plan.
- Backhoe and operator for test pits to be provided by Department of Utilities.
- A title search is not included.
- Up to two meetings with the Director of Utilities.

Deliverables

- Phase I and Phase II Site Assessment Reports.
- Memorandum of Pre-demolition Assessment for Items of Environmental Concern

Subtask 3.2.4– Preliminary Water Treatment Plant Site Adaptability Assessment (Conceptual Layout)

CDM will use the Site Base Plan developed in Task 3.2.2 to evaluate the feasibility of using the existing Lawton Valley WTP Site for the construction of a new water treatment facility. We will perform our assessment based on the treatment facility needs as follows:

- Plant capacity of 7.0 MGD
- Conservative Plant Process Train (preoxidation, rapid mix/coagulation, flocculation, conventional sedimentation, intermediate ozonation, granular media filtration at 5 gpm/sf, clearwell for primary disinfection with chlorine, post treatment chemical addition for fluoride, pH adjustment, chlorine, ammonia)
- Required Area of 7 acres
- Residuals handling

CDM will first determine if the available land can accommodate the facility needs by preparing facility layouts with consideration to access, lay down area (s) and site construction activities. CDM will also evaluate staged construction of the new treatment facility should our initial layouts show potential site constraints. Consideration will be given to the expanded reliable capacity of Station No. 1 (9.0

MGD) and "modular" construction of new treatment facilities at the Lawton Valley site. We estimate that approximately a 5.0 mgd increment to meet system demand would enable the existing treatment plant to be decommissioned and demolished to make space available to complete the construction.

CDM will evaluate the raw water pump station capacity (TDH and flow) and establish required operating conditions for the new WTP, including criteria for replacement pumps if needed.

CDM will evaluate storage alternatives to maintain service to the Portsmouth Water and Fire District as well as backwash needs of the existing plant (e.g., temporary storage). We will meet with the Director of Utilities and staff to review layouts, options, and alternatives regarding the potential use of the site for the new water treatment facility.

Assumptions

- Department of Utilities will assist CDM in obtaining water use data for the Portsmouth Water & Fire District and for filter backwash needs for the existing LVWTP.
- Full assessment of the raw water pump station (for replacement or upgrade of the station) is not included.
- One meeting with the Director of Utilities

Deliverable

- Facility layouts and alternatives supported by a technical memorandum that addresses sequencing and scheduling of construction components and operational requirements between Station No. 1 plant and the Lawton Valley Plant.

Subtask 3.2.5—Geotechnical Evaluation

CDM's geotechnical engineers will review all existing data that is available for the LVWTP. Of particular interest are any available structural drawings for the plant, 2.0 MG storage tank (standpipe) and the 4.0 MG below ground water storage tank as well as any boring locations and logs for the entire site. A critique of this information will provide valuable insight into the site soil conditions. Knowing the type of structural foundations (i.e., plant, storage tanks) and soil profile, CDM geotechnical engineers will develop a field testing program to supplement the existing data and prepare a geotechnical report of findings. The report will be included in the DB Procurement document and used to highlight specific areas of concern that may warrant special needs during construction.

Staged construction of the new treatment facility (e.g., plant residuals handling, piping) will most likely be necessary to keep the existing plant operational; the possible use of the existing site will likely be necessary to complete the construction of the new treatment facilities. CDM has included a boring program that includes up to

16 borings, 25-feet deep and up to 8 borings at 15-feet deep throughout the site and 3 observation wells at 15-feet deep to document geotechnical conditions and to address environmental soil characteristics. The soil will be tested as described in Subtask 3.2.3 above.

CDM will prepare the boring program and locate the borings in the field. We will arrange for a boring contractor to perform the work and will use a CDM geotechnical engineer/technician to oversee the field work and to obtain the necessary soil samples for analysis. CDM will collect and analyze all soil data and will prepare a geotechnical report that discusses the field program, analyses of the data and issues/concerns that the DB proposers will need to address.

Assumptions

- Up to 16 borings, 25-feet deep; up to 8 borings at 15-feet deep; and 3 observation wells at 15-feet deep
- All boring locations are truck rig accessible.
- No tree clearing or other site work is required to provide drill rig access.
- Field work is not impacted by bad weather.
- Drilling can be accomplished in Level D safety protection.
- Two meetings with the Director of Utilities

Deliverable

- Assessment of existing data, preparation and execution of a soil test boring program, environmental soil assessment, and geotechnical report.

Task 3.3—Station No. 1 Improvements Engineering Investigations

In this task, CDM will obtain site plans and available aerial photographs (RIGIS) of the Station No. 1 WTP site. We will use the information to perform an assessment of how modifications to upgrade the plant pretreatment reliable capacity can best be accommodated. This task will include a site survey, environmental assessment, hydraulic/process assessment, geotechnical evaluation and an assessment of how the new treatment train may best be sited.

Subtask 3.3.1—Survey

CDM will arrange for a surveyor to provide a survey of the site to develop an up to date site base plan with topographic mapping and property limits for incorporation into procurement documents. Additional surveying will be completed to include utility as-built locations. Surveying activities will also support permitting activities outlined in Task 3.4

A full legal description for all facilities and temporary use areas will be prepared by the Surveyor. The survey will delineate the full legal description of land acquisition and temporary use areas for project. It is anticipated that the legal descriptions will be prepared mostly from existing data supplemented with field work. The survey work will be utilized to complete the permitting and any easement acquisition outlined in Task 3.4.

Utilities will be surveyed for preparation of site drawings showing the utilities and boundaries for the DB's final design/construction. The surveying will also be used to stake the Project area and locate other special project features.

The Surveyor will perform the following:

- A reconnaissance to recover benchmarks in the vicinity of the site and select the location of a survey baseline. The termini of the baselines will be suitable for GPS observations.
- Establish the coordinates of the termini of each baseline using the KeyNetGPS Virtual Reference System (VRS) which shall be referenced to the North American Datum of 1983 (NAD 83). Perform levels runs to relate the survey to the same vertical datum that is being used currently at the facilities and establish temporary benchmarks.
- Perform field surveys to locate site improvements including, but not limited to, buildings, paved and unpaved areas, tanks, pumping stations, weirs, settling tanks, property monuments, fences, walls, walks, wetland flags, surface evidence of utility structures, borings, and isolated trees. In addition, invert elevations will be determined by direct field measurement for sewer and drainage structures. Sill elevations will be obtained for buildings within the project area and elevations will also be obtained on critical structures.
- Locate the corners of the old demolished WTP that will be discovered via ground penetrating radar (GPR).
- Upon completion of the survey, calculate coordinates and elevations for each point located during the field survey.
- Undertake research to obtain copies of record plans showing the location of underground utilities and other site improvements.
- Undertake research to obtain copies of property plans.
- Develop a digital terrain model (DTM) and generate 1-foot contours. Prepare plans at a scale of 1"=20' for each site that will depict the details surveyed. The property lines shall be re-established based upon recovered monuments and record plans.

The Site Base Plan will be provided to the DB short listed proposers and selected DB Contractor for final design/construction of the Project.

The survey will be performed according to the standards published by the Rhode Island Board of Registered Engineers and Professional Surveyors.

Assumptions

- The corners of the demolished WTP can be detected by GPR and no excavation is required.
- Department of Utilities to provide record and property plans.
- Assist CDM in obtaining plans.
- One meeting with the Director of Utilities.

Deliverable

- Project survey including site base plan, land parcel boundaries, roadways, and existing facilities, and roadway boundaries

Subtask 3.3.2—Environmental Site Assessment

CDM will perform preliminary inspection and assessment activities to investigate the possible presence of soil and/or groundwater contamination at the site of the Station 1 Plant. The focus of the investigations will be to identify potential soil and/or groundwater conditions that may require special design or disposal considerations, or present a health or safety risk to construction workers or the general public during planned future construction. Potential areas of contamination will be investigated through field reconnaissance and environmental data records review (Phase I), and by subsurface soil and groundwater investigation performed in conjunction with a geotechnical assessment (Phase II). The collected information will be reviewed to evaluate the potential presence of contamination and be documented in Phase I and Phase II reports. The Site Assessments will be performed in substantial compliance with current ASTM standards. The approaches for each assessment phase are summarized separately below.

Phase I ESA

The following tasks will be performed in order to complete the Phase I Site Assessments:

Site Inspection

CDM will conduct a site inspection of the property to identify visible evidence of current and/or past:

- Storage and use of toxic or hazardous materials (in quantities exceeding normal household amounts) as well as non-hazardous lubricants, fuels, or other petroleum products

- On-site pits, ponds, landfills, or waste storage/disposal
- Visible water or soil contamination, including on-site spills or releases
- Above-ground or underground storage tanks
- Drums or other storage containers
- Storm drains, sewers, and septic tanks
- Vehicle and equipment fueling and maintenance areas
- The presence of PCBs in transformers, hydraulic fluids, or light fixture ballasts
- Readily observable evidence of distressed vegetation or subsurface anomalies, such as depressions or mounds

In addition, CDM's reconnaissance will include adjacent properties, with the intent of identifying evidence of current or historical off-site activities having a potential for impacting the property.

Records Review
CDM will conduct a records review for the property. As part of this task, CDM will utilize the services of Environmental Database Resources, Inc. to conduct an environmental records search. The review will include available government agency databases that identify known or suspected hazardous material/waste sites on or within a 1-mile radius of the property. In addition, state lists, which include sites with, underground storage tanks, water pollution incidents, and landfills, will be reviewed as available. To the extent that such sites are listed in the vicinity, CDM will attempt to obtain readily available information in order to assess the potential impact to the subject properties. Based upon available information, CDM will provide its professional opinion as to the potential for listed sites to impact the property.

CDM will also conduct interviews with plant staff, as well as review relevant available plant records; review local records including the Planning Department, Fire Department, and Health Department; review aerial photographs as available for the area; review available regional geology and hydrogeology maps; and review available Sanborn Fire Insurance Map(s).

The record reviews will provide the basis for an evaluation of past ownership, uses, or activities that have been conducted on or around the property at adjacent properties, which may have resulted in a release of hazardous materials to the environment. A title search is not included in this scope of work.

Phase 1 Site Assessment Report
A final Phase I Site Assessment Report will be prepared for the property. The interviews, reports, and materials gathered will be referenced and relevant

information will be included in a series of attachments. The report will list the findings and conclusions of the Phase I Environmental Site Assessment and an evaluation of the potential impact to the property from known or suspect soil or groundwater contamination at nearby properties.

Phase II ESA

Environmental sampling of site soil and groundwater will be done in conjunction with the geotechnical investigations. If the Phase I reviews identify additional locations where sampling is needed beyond the locations covered under the geotechnical investigations, additional subsurface investigations will be proposed and the scope and budget revised accordingly. Soil and groundwater samples collected from the geotechnical investigation locations will be submitted for laboratory analyses for the following parameters:

- Total petroleum hydrocarbons (TPH)
- RCRA 8 metals
- Volatile organic compounds (VOC)
- Semi-volatile organic compounds (SVOC)
- PCB
- Cyanide
- Pesticides

In addition to the above analyses, TCLP testing will be performed on soil samples for any metals with total metal concentration exceeding the "20X rule." The current budget includes TCLP analysis for up to 20% of the soil samples.

During the geotechnical drilling program, 6 soil borings will be installed on the Station 1 WTP property. Environmental soil samples will be collected at 5-ft intervals over the first 15-ft at each boring for a total of 18 soil samples. Three locations will be completed as monitoring wells. The wells will be developed and one groundwater sample will be collected from each well.

For the Station 1 WTP Plant, it is understood that the specific location for the proposed plant improvements has not been determined. As such, the portion of the property indicated on the record drawings as the site of the former water treatment plant may be considered for positioning of the future facility. The below-grade material present in the area of the former plant may include former building materials. To investigate this possibility, the scope of work includes observation of up to five test pit excavations by a certified asbestos inspector who will sample and submit for laboratory testing any suspect asbestos-containing materials (ACM) encountered. An analytical budget of 20 suspect ACM samples has been included.

The test pits to sample for ACM will only be done if it is determined that the location of the former plan will be needed for the new facilities. It is assumed that the backhoe excavator and operator would be provided by the Department of Utilities.

CDM will prepare and submit a Phase II letter report for the property presenting the findings of the Phase II ESA. The report will present the findings of the subsurface investigations, an evaluation of data collected, and a summary and conclusions section to allow a better understanding of the site and surrounding properties.

Assumptions

- Department of Utilities to provide property plan
- Backhoe and operator for test pits to be provided by Department of Utilities
- Up to two meeting with Director of Utilities
- A title search is not included.

Deliverables

- Phase I and Phase II Site Assessment Reports.

Subtask 3.3.3—Geotechnical Evaluation

CDM's geotechnical engineers will review all existing data that is available for the Station No.1 Water Treatment Plant. Of particular interest are any available structural drawings for the plant and boring locations and logs for the entire site. A critique of this information will provide valuable insight into the site soil conditions. Knowing the type of structural foundations (i.e., plant, pumping station) and soil profile, CDM geotechnical engineers will develop a field testing program to supplement the existing data and prepare a geotechnical report of findings. The report will be included in the DB Procurement document and used to highlight specific areas of concern that may warrant special needs during construction.

CDM has included a boring program that includes up to 6 borings, twenty-five feet deep around the site and 3 observation wells to document geotechnical conditions and to address environmental soil characteristics. The soil will be tested as described under Subtask 3.3.2.

CDM will prepare the boring program and locate the borings in the field. We will arrange for a boring contractor to perform the work and will use a CDM geotechnical engineer/technician to oversee the field work and to obtain the necessary soil samples for analysis. CDM will collect and analyze all soil data and will prepare a geotechnical report that discusses the field program, analyses of the data and issues/concerns that the DB proposers will need to address.

Assumptions

- Up to 6 borings, 25-feet deep; and 3 observation wells at 15-feet deep

- All boring locations are truck rig accessible.
- No tree clearing or other site work is required to provide drill rig access.
- Field work is not impacted by bad weather.
- Drilling can be accomplished in Level D safety protection.
- Two meetings with the Director of Utilities

Deliverable

- Assessment of existing data, preparation and execution of a soil test boring program, environmental soil assessment, and geotechnical report.

Subtask 3.3.4— Preliminary Site Assessment for Plant Modifications

CDM will use the Site Base Plan, developed in Task 3.3.1 to evaluate how modifications to the plant to increase the reliable capacity can be accommodated at the site. We will evaluate the possible addition of a separate pretreatment train that would be located on the site and hydraulically connected with the existing pretreatment facility to provide the increased capacity. The options for the location of new facility will be site limited due to the 100 year flood elevation of 14.00. CDM will identify any site modifications that may be necessary to accommodate the facility (e.g., site access, utility relocation, site regrading). An option that CDM believes has merit is to evaluate the possible retrofit of the existing pulsator clarifiers into new pretreatment basins. CDM will investigate this possibility and develop a suggested sequence of construction regarding the methodology to accomplish the work (e.g., during low demand period, plant piping modification to isolate a clarifier, temporary on-site treatment units to accommodate the removal of the clarifiers from service).

CDM will develop conceptual layouts for the proposed WTP modifications and site modifications as well as identify any facilities that need to be relocated. Conceptual layouts for relocated facilities will be provided.

In addition, CDM will evaluate the recommended improvements identified in the 2004 Compliance Evaluation based on findings from the plant audit, as well as some additional items identified by the Department of Utilities for consideration to be included within the DB contractor's work.

- Replace rapid mixers
- Replace sludge pumps to the pulsator clarifiers
- Replace VFDs on high service pumps Nos. 2 and 3.
- Replace chemical feed pumps for the aluminum sulfate and polymer systems.

- Replace remaining two filter effluent control valves and operators.
- Repair decorative coating on the concrete from the east wall, at the clarifiers, and the south wall, at the loading dock.
- Repair elastomeric coating/replace roof on top of the Chlorine Contact Tank and Clearwell.
- Repair cracks and spalls at seamless flooring (several locations throughout the plant).
- Investigate lab-testing requirements. Renovate lab completely including new casework, equipment (hood), and finishes (wall, flooring, ceiling).
- Renovate break room, including new unit kitchen and finishes (wall, floor, ceiling)
- Replace damaged door hardware. Use ADA compliant hardware.
- Upgrade/replace the fire alarm system and emergency battery units to meet current codes.
- Replace dampers, actuators, thermostats, and louver insect screens within the clarifier room, electrical room, and generator room.
- HVAC improvements within the clarifier room to reduce corrosion.
- Improvements to HVAC equipment within the clarifier room, electrical room, generator room, administrative areas, chemical areas, pipe gallery, and ozone building to bring up to code.
- Evaluate electrical room ventilation in terms of adequacy for the internal heat load generated by the electrical equipment. Upgrade as required.
- Replace Ozone Building roof exhaust fan dampers.
- Replace skylights.
- Evaluate condition of roof and replace if required.
- If pulsator clarifiers are kept in place, address hydraulic issues between raw water pumps, influent control valve and the pulsator clarifiers.
- Evaluation of the stainless steel piping, mainly finished water piping for cause of corrosion.
- Evaluate the diesel UST system at the plant, mainly the piping and the tank monitoring system for code and regulatory compliance.

- Evaluate the emergency generator for the raw water pumps in the ozone generator building, as well as the motor control centers for the entire system.
- Replace the roof over the clearwell.

Assumptions

- Assessment of the raw water pumping station is not included.
- One meeting with the Director of Utilities

Deliverable

- Layouts and alternatives supported by a memorandum that addresses sequencing and scheduling of construction components and operational requirements.

Task 3.4—Permitting

3.4.1 Site Investigations

CDM will conduct fieldwork to understand site conditions and environmental constraints, and will also identify the limit of state and federal jurisdictional wetland resources areas in the vicinity of the proposed facility improvements, if any. Boundaries will be located using handheld GPS equipment. CDM will identify the wetland resource boundaries pursuant to the U. S. Army Corps of Engineers Wetland Delineation Manual (T.R. Y-87-1).

3.4.2 Permitting Plan

CDM will identify environmental constraints on the sites based on evaluation of published information (e.g. FEMA Flood Maps, NRCS Soils Maps, CRMC boundary maps, etc.) and the site investigation. Using this information CDM will: 1) identify the needed environmental permits for facility improvements, 2) the permit requirements and 3) a permitting timeline for application and agency review. The plan will also identify which permits can be pursued by CDM with only a limit of work and limited design information, and which permits will become the responsibility of the DB contractor because more detailed design is required for a complete application package.

3.4.3 Preliminary Permits

At this time the definitive list of environmental permits for these facilities is unknown. Therefore, this subtask is an allowance for the following permitting activities:

a. Coordinating with the RI State Historic Preservation Officer (SHPO) to determine the presence / absence of cultural resources on both sites.

b. Review RI Fire Code and meet with the Portsmouth, RI Fire Marshall

c. Prepare two Stormwater Pollution Prevention Plans pursuant to the NPDES Construction General Permit. RI is a delegated state so this is administered by the RIDEM and commonly referred to as the RIPDES permit.

d. Prepare two applications (one for each) as Requests for Preliminary Determination and submit them to the RIDEM. This assumes work will occur in either a Perimeter Wetland, Riverbank Wetland or Floodplain Wetland, but will not occur in an ecological wetland (e.g. marsh, bog, swamp).

Should work occur in an ecological wetland and require a Permit to Alter Wetlands and/or and Army Corps of Engineers Permit those will become the responsibility of the DB contractor. Likewise any zoning, planning board, municipal board of health, RI Dept. of Public Health or site investigations regarding cultural resources (historic and archaeological) will become the responsibility of the DB contractor.

Assumptions

- CDM will attend up to two public meetings with the state or local officials in support of a permit application review. It is assumed that the two WTPs can be reviewed simultaneously, and do not require separate sets of meetings.
- Permit application filing fees are not included. The Department of Utilities will submit filing fees directly.
- Project will not require permanent alteration or loss of wetlands and therefore will not require a wetland restoration or replication plan.
- Local approvals beyond the RI fire code (which may include site plan review, special permits, etc.) are not included.
- The project will not alter an archaeological or historical resource and therefore no site investigations are included herein.
- This scope does not include preparation of any plans. It assume that the design plans will serve as permit drawings, and will include all necessary information for the permit granting agencies to make a permitting decision.
- It is assumed there will be no more than 10 abutters notifications mailed via Certified Return Receipt needed for this project. For any additional abutters, the cost is $10.00 per additional abutter mailing plus applicable administrative time for preparing additional mailing(s).
- This estimate does not include additional services related to assisting the client with appeals to permits or assistance to the BD contractor with securing additional environmental permits.
- Design plans will not be available for permitting efforts.
- Up to two meeting with the Director of Utilities.

Deliverables

- Field Completion Memorandum describing site investigation activities and results.
- Technical memorandum presenting the permitting plan.
- Two Stormwater Pollution Prevention Plans pursuant to the NPDES Construction General Permit
- Two applications (one for each WTP) as Requests for Preliminary Determination and submit them to the RIDEM. This assumes work will occur in either a Perimeter Wetland, Riverbank Wetland or Floodplain Wetland, but will not occur in an ecological wetland (e.g. marsh, bog, swamp).

Task 3.5 — Pilot Testing

The overall goal of the pilot testing is to develop water treatment criteria, benchmarks and data for the selection of a treatment process that will effectively treat the water from the City's multi-reservoir source with the anticipated wide variety of water quality characteristics. The criteria, benchmarks and data will be used in the DB's design. This task collects pilot-scale operational data for use in design of the new LVWTP and improvements to the Station No. 1 WTP. Additional bench-scale data will be collected for determining design and operating characteristics of alternative technologies. The testing program will be conducted to evaluate the effectiveness of a variety of treatment technologies based meeting USEPA and HEALTH requirements.

This task will be broken into three subtasks:

1. Compilation of water quality data needed to develop treatment alternatives
2. Desktop evaluation of treatment process alternatives
3. Pilot-scale testing

Subtask 3.5.1 - Compilation of Water Quality Data

CDM will compile existing source, intake, and finished water quality data and perform statistical analyses for characterization and trending. The data will be analyzed to identify the range of water quality that the WTPs could see from individual sources as well as that which the plants typically see from blended sources. We will also look at treatment effectiveness at the current plants to establish a baseline for treatment. This data will also be used to establish the water treatment goals of the new Lawton Valley WTP and upgraded Station 1 WTP.

Subtask 3.5.2 - Desktop Evaluation of Treatment Process Alternatives

CDM will review the raw water characteristics and finished water requirements and develop a list of alternative treatment processes that may be viable. We will also

revisit the recommendations made in the 2004 compliance evaluation. This list will be evaluated relative to Newport's specific requirements (e.g., treatability, operational, financial, manpower, etc.) and tailored to a realistic list of piloting options.

CDM will conduct a technical review committee (TRC) workshop jointly with the city to review the desktop evaluation and solicit guidance in completing the piloting program. TRC workshops are a standard part of CDM's standard quality assurance and quality control procedures and provide a forum for review, scrutiny, and debate of major project decisions by our most experienced staff. The end result of this workshop will be a comprehensive piloting protocol outlining the processes to be tested and detailed testing procedures. This scope of work for pilot testing will provide the necessary level of water quality testing and analysis for the development of criteria to be used in the DB's final design of the treatment facilities. A second TRC workshop will be held at the conclusion of piloting to review the results and finalize process recommendations.

Subtask 3.5.3 - Pilot Testing Program

HEALTH requires three seasons of piloting. Our knowledge of the City's raw water quality and evaluation of existing worst-case water quality (requiring the highest does of treatment chemicals) occurs during the summer and the spring and fall turnover events. Another period of concern is the cold water and its effect on clarification. The sources will be subject to variations in temperature, TOC, solids (turbidity), manganese, algae, and pH. Historical raw water quality data will be updated and reviewed to confirm the optimum periods for pilot testing to collect data that will define the extremes in water quality and thus treatment requirements variability. CDM's review of previous water quality data shows that the summer months are particularly difficult in terms of treatment due to simultaneous spikes in manganese, algae, and temperature. Managing the shallow ponds during high demand periods also proves to be challenging.

CDM's subconsultant's mobile trailer mounted pilot test equipment as well as vendor owned pilot units will be utilized to conduct the testing. All processes will be tested at one plant. After the testing at the first plant is complete for one season, the equipment will be mobilized and moved to the second plant. This will continue until the three seasons of piloting are complete.

Water needs for the pilot units may be as high as 400 gpm. At the Lawton Valley WTP, raw water will be conveyed to the pilot units via the 30-inch pipeline that brings water to the head of the full-scale WTP. According to NWD staff, it is possible to isolate flows to the pilot units without bringing them into the full-scale WTP. The Lawton Valley Reservoir has the highest and most consistent water quality of the five available sources. Water from each of the remaining four sources (St. Mary's, Sissons, Watson, and Nonquit ponds) can be isolated and conveyed to the pilot plants through the new 30-inch line from St. Mary's Pond without interrupting flow from the Lawton Valley Reservoir to the full-scale plant. Lawton Valley Reservoir water can also be

brought to the pilot units as it is being brought to the full-scale plant. CDM's scope includes making a wet tap on this 30-inch line. A separate connection must be made to bring water to the pilot units from Lawton Valley Reservoir in the event that the full-scale WTP is pulling water from another source. Water can be brought from the 24-inch line coming from Lawton Valley Reservoir or from the hydrant near the raw water pump station. The 24-inch will need to be tapped. At the Station 1 WTP, water coming into the pilot units can be isolated to a certain degree within the raw water wet wells located in the old ozone building. Water pumped from Gardiner and Paradise Ponds via the Paradise Pump Station is limited to 2.8 mgd based on hydraulic constraints within the distribution system. Therefore, this water must be supplemented with that from either North or South Pond. The water from Paradise pump station is conveyed to the 30-inch raw water line which also brings in water from South Pond. Therefore, if South Pond is being used to supplement, the water from the Paradise Pump Station cannot be isolated. The WTP will attempt to supplement with North Pond whenever possible, but they cannot guarantee it.

Discharge from the pilot units will consist of treated water that may or may not meet all SDWA requirements, and backwash water. Treated water will consist of the pilot plant finished water. Flows will range from about 250 gpm to 450 gpm. This relatively clean water will be sent to the head of the full-scale WTP to receive full treatment. Wastewater produced by the pilot processes (e.g., filter backwash, clarification residuals) are estimated to range between 10,000 - 12,000 gpd. At the Lawton Valley WTP, this waste will be conveyed to the city's residuals management tank located at the raw water pump station. At Station 1, this waste will be conveyed to the sewer. Of this wastewater, up to 50% may be able to be recovered. The wastewater can be held in storage tanks. The supernatant, which will essentially be raw water (no solids) can be sent to the head of the full-scale water treatment plant to receive full treatment. The solids will be conveyed to either the residuals management tank (Lawton Valley) or the sewer (Station 1). Pilot plant operation will be managed to limit the amount of wastewater produced (e.g., we will limit high loading rates to one process at a time whenever possible). In the event that wastewater flows exceed 25,000 gallons per day, permission from RIDEM to discharge to Lawton Brook will be required. CDM will facilitate this process with assistance from the city. This scope includes up to two meetings with RIDEM to discuss these terms.

CDM will be responsible for meeting the pilot power requirements and as such we have included a level of effort for power upgrades at the Lawton Valley and Station 1 WTPs as described below.

Lawton Valley WTP

- Install a 3-phase 480-volt 200 amp feeder from the stations' main service to the equipment site on the east end of the settling tanks.

- Install a 3-phase 480-volt 200 amp raintight distribution panel with breakers to supply three 480-volt receptacles as well as a 30KVA transformer.

- Install a 3-phase 220-volt raintight distribution panel with breakers to supply two 220-volt receptacles, plus up to 10 convenience receptacles at 20 amp 120 volts.

Station 1 WTP

- Install a 3-phase 480-volt 200 amp feeder from the stations' main service to the equipment site on the lawn adjacent to the ozone building.

- Install a 3-phase 480-volt 200 amp NEMA 1 distribution panel with breakers to supply three 480-volt receptacles as well as a 30KVA transformer. Equipment to be located inside the ozone building.

- Install a 3-phase 220-volt NEMA distribution panel with breakers to supply two 220-volt receptacles, plus up to 10 convenience receptacles at 20 amp 120 volts. Equipment to be located inside the ozone building.

All equipment will be disconnected and removed at the conclusion of the pilot work.

The water quality and operational goals proposed for the pilot study will be developed under Task 3.5.1.

The pilot study results will be evaluated by the ability to meet or exceed the minimum requirements. These minimum requirements will generally be based on current regulations or levels of treatment achieved at similar plants. However, the study will strive to achieve the goals to meet anticipated regulations, additional health concerns, and to provide a robust process in meeting periodic raw water extremes.

The quality and characteristics of the water sources will fluctuate during the year. Water characteristics such as temperature, turbidity, manganese, and organics also vary greatly, impacting treatment requirements. The pilot testing will evaluate the treatment requirements to comply with all current and anticipated proposed regulations considering the wide variation in raw water quality.

The pilot testing will involve numerous tests and the specific criteria which will be utilized to develop a range of suitable process alternatives:

- **Raw and Finished Water Testing** —Raw and finished water samples will be taken and sent to laboratories for analysis of all primary and secondary water quality standards routinely and following significant raw water events and high turbidity episodes. An allowance for laboratory analysis has been included in the project fee schedule.

- **Coagulant Dose Optimization for Turbidity Removal** — The coagulant chemical doses of aluminum salts including sulfate (alum), aluminum chlorohydrate (ACH), and polyaluminum chloride (PACl), and ferric salts and will be tested to select doses of each that result in a low filtered water turbidity (<0.1 NTU) and settled water turbidity (<2 NTU), good and fast floc formation, effective sedimentation, unit filter run volumes (UFRVs) of 10,000 gal/sf or greater and positive visual

observations. The initial optimizations will be completed with bench-scale tests and then refined by pilot testing. The doses will be adjusted and refined during each testing period.

- **Coagulant Dose Optimization for TOC Removal**— The coagulant chemical doses of alum, ferric and PACl will be tested to select doses of each that result in an optimized TOC reduction, lower filtered water and settled water turbidity, good and fast floc formation, effective sedimentation, and positive visual observations. Sulfuric acid will be added to adjust the pH, as needed. The initial optimizations will be completed with bench-scale tests and then refined by pilot testing. The doses will be adjusted and refined during each testing period.

- **Preoxidant Demand and Decay Testing** – preoxidant (e.g., potassium permanganate, chlorine dioxide, ozone) demand and decay will be determined for both raw and settled water. The dose and residual will be measured at different locations to determine the demand and decay rates for both the raw and settled waters.

- **Chemical Optimization** – The doses of other water treatment chemicals including coagulant aid, flocculant aid and filter aid polymers and preoxidants (e.g., potassium permanganate, chlorine dioxide, ozone) will be evaluated to determine their effectiveness. The polymers typically assist in improving the finished water quality at lower doses of coagulant chemicals. The filter aid polymers are used to accelerate the filter ripening time and increase filter production (UFRVs). The preoxidants oxidize dissolved constituents allowing their removal but some can lead to high concentrations of DBPs if fed at too high of concentrations. The initial testing will be based upon operating conditions only. DBP testing will be completed later in the testing program.

- **MIEX Efficiency for TOC Removal and Coagulant Dose Reduction**
  Manufacturer data indicates MIEX can reduce TOC and then subsequently reduce necessary coagulant doses. Bench-scale testing of the raw water for treatment with MIEX will be performed by the Orica Watercare /WesTech prior to pilot testing to determine MIEX resin dose, coagulation dose, combined MIEX resin and coagulant dose. Orica Watercare /WesTech will also conduct simulated distribution system (SDS) testing on each of the optimized bench-scale tests by analyzing for DOC, THMs and HAAs. Completing the bench-scale testing will reduce the time required for pilot testing of the MIEX and allow for confirmation of the bench-scale results through pilot testing.

- **Chemical coagulant doses will be optimized in tandem with the MIEX operation.** Settled water and filtered water TOC, low filtered water turbidity, and settled water turbidity, good and fast floc formation, effective sedimentation, acceptable unit filter run volumes (UFRVs), and positive visual observations will all be used to assess the test results. The bench-scale testing (discussed above) will be verified through the pilot testing.

- **Nanofiltration treatment** characteristics can be assessed by operating a self-contained, trailer-mounted, multi-stage pilot plant. With a full-scale pilot, the testing is conducted over four months when the DBP formation potential is highest. Analytical testing would include turbidity, in addition to the same parameters for MIEX testing.

- **Filtration Media and Rates** — Filter columns will be used to conduct a side-by-side comparison of different granular media configurations, types and rates. Various depths of anthracite, sand coarse sand, and GAC will be installed within the filters. Additionally, the filters can be operated at varying filtration rates. The finished water turbidity, filter ripening time, and UFRV will be compared to assess the most effective media configuration and filtration rates. In addition, ultrafiltration membranes will be tested at the LVWTP if identified as suitable in Task 3.5.2.

- **GAC Removal Efficiency and Regeneration Requirements** — The removal of TOC through GAC filters will be assessed by calculating the mass of TOC added to the filters and removed by the filters by monitoring the settled water and filtered water TOC. As the filter water TOC increases during a test run, the GAC bed will be deemed exhausted. A small amount of GAC will be used in order to have the bed exhaust in one test run. Several test runs will be completed to verify results. Alternatively, Rapid Small Scale Column Tests could be completed to collect the data.

- **Disinfection and Simulated Distribution System (SDS) Testing** — SDS testing will be completed for various combinations of preoxidants and disinfectants or combined disinfectants to determine disinfection requirements and resultant DBP formation. Demand and decay testing will be completed (other than ozone, which will be tested separately). Additionally, finished water will be collected and samples will be sent for laboratory analysis for ultraviolet light transmittance characteristics for determination of UV system preliminary design criteria.

- **Corrosion Testing** — This will be addressed in the pipe loop testing program as described in Task 3.7.

- **Residuals Handling/Treatment** — Samples of clarifier residuals and spent (waste) filter backwash water will be taken and analyzed on site as well as sent to outside laboratories and equipment manufacturers to develop treatment criteria. Visual observation of solids generation and characteristics (depth, floc size and formation speed, density) will be recorded and compared. Samples of settled sludge will be sent to outside equipment manufacturers for recommendations and design criteria for solids handling facility design.

CDM's piloting subconsultant be on site throughout the piloting testing program, excluding weekends, to operate and maintain testing equipment, prepare and dose chemicals, collect water quality data, observe test operation and collect test data, and collect samples for laboratory analysis. A field engineer/technician will be available

to assist in collecting water samples for laboratory analyses. CDM's Project Engineer will assist and oversee the engineer/technician during bench-scale testing and approximately one day per week throughout the seven months of pilot testing. CDM's Project Engineer and Senior Water Treatment Process Specialist will both be available to assist the subconsultant and engineer/technician with troubleshooting or assessment of test results by telephone or email as needed during the pilot testing. The Senior Process Specialist will be available on site up to eight days for testing assistance or meetings and workshops. During operational periods of the pilot-plant, CDM's subconsultant will be on-call to conduct testing during significant raw water quality events.

Seven meetings will be held during the piloting task. CDM's Project Manager, Senior Process Specialist, and Project Engineer will attend all client meetings. One meeting per month (7 total) will be held to discuss the progress and findings of the piloting. The scope also includes an additional four meetings that will be held on an as-needed basis.

In addition to the meetings, a second TRC workshop will be held to review the piloting conclusions and finalize recommendations for acceptable process alternatives. The workshops will be attended by the City, CDM's project manager, project engineer, senior specialist, and up to four technical review committee members. Material will be distributed prior to the workshops by CDM. We will then present material at the review session and facilitate discussions. The technical review committee members will develop review comments, to which CDM will provide a response after the workshop.

Assumptions

- CDM will provide mobile pilot testing equipment, pipe, electrical conduit and wiring.
- City will assist CDM in connecting electrical equipment.
- City will assist in obtaining pilot-scale discharge approvals from the state.
- Bench-scale testing will be conducted at the WTP laboratories.
- The City will provide sufficient access to the WTP for the mobile equipment and CDM staff.
- CDM scope includes making a wet tap on the 30-inch influent line to the Lawton Valley WTP. Tapping the 24-inch line is not included in this scope.
- The brine waste from the MIEX process will be taken in 30 gallon containers to the wastewater treatment plant for disposal at no cost.
- City will pay for the electricity usage to power the pilot equipment.

- One continuous testing period will be completed and the approximately pilot testing dates are February 15 to September 15. Up to 10 pilot testing memoranda will be prepared. It is anticipated they will cover the following subjects: raw water testing; coagulant dose optimization for turbidity removal; coagulant dose optimization for TOC removal; oxidant demand and decay testing; chemical optimization; filtration media and rates; MIEX efficiency for TOC removal and coagulant dose reduction; GAC removal efficiency and regeneration requirements; disinfection/DBP and SDS testing; and residuals handling/treatment.

- CDM will hold one progress meeting per month during the testing period, and two TRC workshops.

- If appropriate, residuals from clarification processes will be sent to sludge dewatering equipment manufacturers for testing to evaluate feasible technologies for sludge reduction.

- The city shall include the pilot plant equipment trailers within their WTP rounds and visually inspect the area for signs of vandalism/break-ins.

- The pilot testing report will include results of all testing, process recommendations, residuals treatment recommendations, water regulation compliance issues, evaluation of process to meeting existing and anticipated future requirements, among other items.

- CDM and the City will coordinate and review the pilot testing program with the Rhode Island Department of Health.

Deliverables

- Testing plan; 10 pilot testing memoranda; minutes from 2 workshop sessions and meetings; copies of any equipment manufacturers test reports and recommendations; draft and final report.

Task 3.6—Project Definition, Quality and Performance

The objective of this task is to develop clear and concise performance and design requirements (termed the Project Development Requirements) for the DB's design, construction and acceptance testing of the Water Treatment Facilities. CDM will prepare Project Development Requirements for operability, maintainability, life cycle costs, staffing requirements, and other important project features, through the use of performance and design requirements.

These project requirements and constraints will be used in the development of the Phase 4 Procurement Documents and process (for DB Procurement) and in the DB contractual requirements for the implementation of the Project. The objective is that the completion of this task will provide all of the technical performance requirements

required for the preparation of the DB RFP Volume III. These requirements and constraints will be used in CDM's preparation of the procurement documents.

CDM will prepare the Project Development Requirements covering all aspects of the Project facilities including, but not limited to:

- Summary of water quality information and pilot-and-bench-scale testing results for inclusion into the DB procurement documents (provided through the pilot testing Task 3.5)
- Civil and site requirements, including acoustical limitation and requirements (both operational and during construction).
- The manner in which the CDM will develop and apply performance and design requirements in Phases 4 and 5 to provide a Project that meets the City's quality and lifecycle cost minimization objectives. These objectives include, but are not limited to, operability and maintainability of facilities and equipment, equipment quality, life-cycle cost minimization (requirements for capital costs that will reduce operating costs), degree of equipment and process units' redundancy, and similar quality attributes that unless they are addressed explicitly in performance requirements will not be an enforceable DB requirement.
- Process and process equipment requirements including, but not limited to the following: water quality regulations, both existing and foreseeable near-term regulations; process design criteria; equipment and treatment train redundancy requirements; quality of equipment; degree of automation; chemical storage and feed system requirements; residuals (solids) handling requirements; blending water quality requirements; and materials requirements or limitations. Also, plant hydraulics criteria such as requirements for overflows, no re-pumping within plant, etc., will be covered.
- Structural requirements.
- Architectural requirements, including materials and aesthetics, and minimum space requirements, rooms, features, etc. Requirements will also include City, State, and Federal standards and codes.
- Architectural single line drawing of the floor plan(s), elevation, a building section, and wall section
- Security systems and features for the plant and other facilities.
- Heating, ventilation, and air conditioning (HVAC); plumbing and fire protection requirements, including design requirements and codes.

- Electrical and instrumentation/control requirements including the level of automation of facilities, standby power, UPS, and design requirements necessary instrumentation for water quality control and monitoring.
- Control System Architecture Block Diagram
- O&M performance requirements and requirements for a computerized O&M Information System and Facilities Maintenance Management System.
- SCADA and telemetry of new facilities and communication with existing facilities. This will include requirements for SCADA security features.
- Landscaping and re-vegetation requirements.
- Corrosion control requirements for pipelines, equipment and basins if required.
- Construction and implementation requirements.
- Project documentation to be produced by the DB.
- Data on existing utility locations, agency ROW stipulations, constraints for pipeline alignments, and other known permitting constraints.
- Criteria and methodology for preparing life cycle costs.
- All other technical aspects of the Project, for which performance specifications are required, or for which general design requirements are required.
- Answer questions from proposers during the bidding process. Evaluation of Bids is included in Phase 4.

The design and performance requirements developed as part of the Project Development Requirements will provide a basis for the technical requirements in the DB procurement and contract documents.

The performance and design requirements are defined as:

> *"Performance Requirements"*- includes items such as finished water quality standards and raw water quality parameters; level of automation; and peak and average flow capacities. These are requirements on how the project elements are to perform once placed in operation and will be mostly objective in nature.
>
> *"Design Requirements"*-includes standards and requirements the DB's design must meet. These requirements will reflect preferences of the City in some areas and minimum requirements in other areas. Examples would include: redundancy of equipment (duty plus standby equipment), and codes that are

to be used in design (such as ACI-350). These requirements will also include the envelope of process design criteria. These requirements will not include any level of preliminary design or any plans or specifications. Such design items will be determined and provided either in DB's design based on performance and design requirements developed under this task and subsequently by the DB based on these requirements.

CDM will prepare draft memoranda with recommended requirements on the above items and submit them to the City, prior to meetings with the City and any specific stakeholders appropriate to the topic. CDM will prepare meeting handouts and minutes documenting the decisions reached and follow-up action items necessary. At each of the meetings, we will provide a forum for discussion and additional input into the design requirements and performance requirements to meet the project objectives. CDM will provide direct feedback on the ramifications of Owner input and "needs" on the schedule, cost quality and associated risk.

As appropriate, individual stakeholders can be invited to meetings to provide input and to promote a sense of "ownership" in the Project. For example, HEALTH could be invited to a meeting on the treatment plant process requirements. Following each meeting, CDM will develop a final technical memorandum with detailed design and performance requirements.

The Project Development Requirements will be a compilation of the above mentioned technical memoranda. This, and other documents, will then be used in the procurement of the DB and in the development of contractual requirements between the DB and the Owner.

Assumptions

- **Six** individual half-day meetings will be held to discuss CDM's recommendations on the following topics.
    - Civil site, roadways, landscaping and site restoration work
    - The manner in which CDM will develop and apply performance and design requirements in Phases 4 and 5 to provide a Project that meets the City's quality and life-cycle cost minimization objectives. These objectives include, but are not limited to, operability and maintainability of facilities and equipment, equipment quality, life-cycle cost minimization (requirements for capital costs that will reduce operating costs), degree of equipment and process unit's redundancy, and similar quality attributes.
    - Treatment plant features, facilities' operations and maintenance requirements and performance requirements. Including discussion of plant layout and architecture.

  - Electrical, instrumentation, control and automation, telemetry and SCADA requirements.
  - Construction and implementation requirements.
  - Interconnection Plan for connection of finished water transmission lines to the existing potable water transmission/distribution system.
  - All other systems (e.g., piping, HVAC, etc.) that need to be connected with existing systems.
  - Project environmental requirements and constraints.

- Draft and final versions of each technical memorandum will be prepared and the final version of the memorandum will be presented in the RFP Volume III.
- Permitting requirements will be provided under Task 3.4.
- Record drawings are available and will be provided.
- Confined space entry not required.
- Analysis, modification, or reinforcement of existing structures for conformance to code seismic provisions not included.
- No structural drawings will be developed.
- It is assumed the structures are soil supported (e.g. mat foundations, spread footings, or slab on grade as applicable).
- No HVAC or plumbing conceptual schematics or report figures.
- No Process and Instrumentation Diagrams (P&IDs).
- Electrical floor plans and electrical room layout by DB contractor.
- Electrical code related issues are the responsibility of the DB contractor.
- Electrical building related services are the responsibility of the DB contractor.

Deliverables

- Meeting handout materials, including an agenda for each session.
- Minutes from the meetings used to develop and review the technical memoranda.
- Draft technical memoranda:
  - Civil site, roadways, landscaping and site restoration work.

- Treatment plant features, facilities' operations and maintenance requirements and performance requirements. Including discussion of plant layout and architecture.
- Electrical, instrumentation, telemetry and SCADA requirements including SCADA security features.
- Construction and implementation requirements.
- Interconnection Plan for all systems (piping, HVAC, etc.) that need to be connected with existing systems or facilities.
- Project environmental requirements and constraints.

- Response to City's comments on the draft technical memoranda.
- Technical memoranda setting forth acceptance standards and acceptance testing procedures.
- RFP Volume III that will include the final technical memoranda.

Task 3.7 - Pipe Loop Testing

- Conduct sampling program for up to 7 months (expected program duration - February through August 2009). CDM shall collect samples, conduct field analyses, and coordinate outside laboratory analyses.
- Newport will be responsible for daily inspections of the pipe loop racks including overall system operation, and recording of flows
- Attend up to four progress meetings with the Rhode Island Department of Health (HEALTH)

Due to the complexity of the ongoing pipe loop evaluation (short-term improvements) relative to the Pb(IV) scale, its scope and schedule are now converging with the process upgrades at the Station1 WTP and replacement of the Lawton Valley WTP. The pipe loop testing is very broad in that it addresses the possible short-term solution of chloramines as well as long term solutions in the event that chloramine application is not viable. Of the eleven pipe loop racks, three will evaluate the short-term solution of chloramines, and eight will evaluate alternative options that will require long-term solutions (e.g., modifying system-wide ORP levels).

Task 3.8 -Conceptual Cost Estimate

For the purposes of supporting the City's future PUC rate filings, CDM will develop an opinion of probable construction cost based on the Project Development Requirements developed in Task 3.6. The cost estimate will include the modifications to the Station No. 1 treatment facility and the new Lawton Valley Treatment Facility.

We will draw upon the expertise of our Discipline Group Specialists (e.g., Site, Architectural, Structural, and Geotechnical) to develop costs based on their assessment of the project given the level of engineering evaluations conducted. In addition, CDM will also use our construction arm (CDM Constructors) as a source of knowledge to evaluate our Project Development Requirements to develop the construction cost estimate, which will include a level of contingency that reflects the preliminary nature of the engineering conducted.

Deliverable

- Updated opinion of probable construction cost for Station No.1 and LVWTP projects.

Task 3.9 - Prepare QA/QC Program

The QA/QC Program will be two-fold— develop requirements for the DB's QA/QC Program for project implementation and for the QA/QC procedures required for implementation by CDM to carry out monitoring of the DB's work. Both of these sets of requirements will be further divided into two parts, QC— the procedures put into place to provide quality, and QA— the control activities that are performed to make sure that the QC process is carried out and quality is obtained.

Formal requirements for the DB's QA/QC Program will include general specification requirements for controlling the quality of the Project, as well as assuring that the controls are carried out. CDM will develop the QA/QC Program document that will be used as part of the RFP as well as the contractual requirements. The program will include specific requirements for the DB's program including, but not limited to the following:

- Design Phase QA/QC — ensuring DB's design meets contractual requirements, technical requirements, codes and standards.
- Environmental QA/QC — quality control and monitoring of DB's construction in and around environmental areas and ROW and land use stipulations.
- Construction QA/QC — quality control, testing, and monitoring of DB's construction in meeting specified requirements, as well as, codes and regulations.
- Traffic Control and Management Plan QA/QC — quality control and monitoring of the DB's construction traffic control.
- Health and Safety Plan QA/QC — quality control and monitoring of the DB's health and safety plan.
- Testing and Startup Plan QA/QC — procedures and monitoring of DB's factory and field testing, and startup, of all systems and equipment.

- O&M Information Plan QA/QC — procedures and monitoring of DB's O&M information documentation, including as-built, shop drawings, labeling, and other items for all facilities and equipment.

- Maintenance QA/QC Plan — quality control and monitoring of the DB's maintenance of the facilities

- O&M Tools QA/QC Plan — procedures to ensure that DB's Standard Operating Procedures and tools (Computerized Information System and Maintenance Management Program) are developed, implemented, and meet contractual requirements.

- O&M Transition QA/QC Plan — procedures for ensuring that the DB's transition plan is carried out including adequate training of the City's staff in the operation and maintenance of the facilities.

- Quality Assurance Plan Resource Commitments — roles and responsibilities of individuals for ensuring that quality controls of the various plans are carried out.

For each of the above QA/QC Program sites to be required of the DB Contractor, the documents to be provided to the Owner by the DB Contractor will be generally identified. Such QA/QC document lists will be refined in Phase 4.

The QA/QC Program that CDM will follow in monitoring of the DB's work will be developed based on CDM's standard Quality Management Process (QMP) Manuals that CDM will tailor to the Project. Three manuals will be used as a basis for our QA/QC program: QMP1—QA/QC for Planning, Design and Construction Projects; QMP2—QA/QC for Construction Services; and QMP4—QA/QC for DB Projects.

CDM will develop the QA/QC Program draft document for the City's review and comment. After receipt of the City's comments, the final version of the document will be incorporated into the Procurement documents.

Task 3.10 - Project Management, Schedule and SRF Funding Assistance/Coordination

CDM realizes the importance of meeting the City's schedule and the need for coordination among all parties and ongoing communication. Within the project management task we have included a project kick-off meeting, and monthly progress meetings during the work required under Phases 2, 3 and 4. CDM's project manager will implement several formal procedures to ensure effective project communication. These include monthly progress meetings between members of the Department of Utilities Water Division staff and CDM Team during the project. The meetings will review status of key issues, progress on the previous month's activities, discuss decisions required of the City and plan activities for the upcoming month, and detailed billing summary reports and work plans.

CDM's project manager will prepare the agenda for each meeting and provide meeting minutes describing actions taken and required.

CDM will develop a project schedule that will be used to evaluate impacts of decisions and project changes, and provide updates to the schedule to assess project progress.

We will work with the Director of Utilities, stakeholders, and agencies to identify drivers and constraints (e.g., piloting, land acquisition). Other milestones and schedule requirements that will be included are permitting, site studies and financing and procurements phases.

CDM uses comprehensive, reliable, and flexible industry-standard, vendor-purchased packages and systems for project controls. Scheduling packages used by CDM include Primavera, Suretrak, Timeline, and Microsoft Project.

CDM's first step in planning the project will be to break the project down into logical components (Work Breakdown Structure or WBS), assign responsibility for component completion, and authorize commencement of work. The WBS provides a framework for planning, data accumulation, and performance measurement. During the project, CDM will use the project control system to schedule and commit required resources and identify critical work components.

The schedule will include all major tasks necessary to execute the work. We will include periods within the schedule for the Director of Utilities, review of deliverables before a key milestone.

CDM will provide assistance to the City in order to obtain DWSRF approval, including consistency with the local Comprehensive Plan. As work proceeds under Phase 3, CDM will meet periodically with HEALTH staff to review the various project components and status to date to confirm that SRF needs and requirements have been addressed. We will establish on-going dialogue with the SRF point of contact to keep this individual apprised of the engineering work that is complete (e.g., survey, borings, ESA) and the work in progress (e.g., pilot testing). We will also meet with HEALTH to provide an overview of the project procurement documents and schedule at the 30% and 75% completion milestone

Phase 4 — Design-Build Procurement Documents and Process

The objectives of Phase 4 are to provide the City with a detailed set of tasks to assist the City with a single design-build (DB) procurement process for the long-term improvements to Station No. 1 Water Treatment Plant and a new Lawton Valley Water Treatment Plant (LVWTP), including the preparation of Request for Qualifications and Request for Proposal Volume I documents, support to City legal counsel in preparation of the draft DB contract, and assistance in conducting the procurement process and negotiation of the final DB contract to be presented for approval by City Council. Subject to confirmation by City legal counsel, it is assumed for the purpose of defining the scope of services for Phase 4 that the DB procurement will be conducted in accordance with City Ordinance Chapter 2.114 Use of Competitive Negotiation in Award of Contracts.

Task 4.1—Request for Qualifications

CDM will prepare the Request for Qualifications (RFQ) to initiate a competitive proposal process for a single design-build (DB) contract for the long-term improvements to Station No. 1 Water Treatment Plant and a new Lawton Valley Water Treatment Plant (LVWTP). To initiate this task, a draft RFQ document will be prepared by CDM and submitted to the City for review and comment including City legal counsel to ensure that the final RFQ will be prepared to be in conformance with applicable law as directed by City legal counsel. The RFQ will be kept brief as possible but at the same time detailed enough to ensure that all relevant information is requested and all evaluation criteria are sufficiently defined.

A preliminary listing of the major sections of the RFQ includes:

- Introduction

- Project Description
- Procurement Process and Schedule
- Submittal Instructions and Requirements
- Evaluation Criteria and Selection Process

Key evaluation criteria for the Statements of Qualifications (SOQ) submitted in response to the RFQ are expected to include financial condition (including bonding and insurance capacity), relevant project experience (including DB projects, design of similar facilities, and construction projects), experience and capabilities of firms and key personnel, past performance, DB organization and management, and approach to project delivery. Minimum criteria may be recommended by CDM for relevant project experience.

The City's financial advisory firm will review and provide input to the draft RFQ with respect to the information required to assess financial condition and the criteria and process to perform the assessment.

The RFQ will be reviewed in detail by CDM with the City. Upon the completion of such review and receipt of all City comments, the final "for-issuance" RFQ will be prepared by CDM.

A methodology (draft and final) that incorporates the evaluation process and criteria set forth in the RFQ will be prepared by CDM for the use of the City's Evaluation in evaluating the SOQs received by the City. This methodology will include two basic components: (1) review responsiveness based on the RFQ requirements, and (2) ranking based on the comparative evaluation criteria. The final methodology will be prepared by CDM upon completion of the City's review and comment on the draft methodology.

Assumptions

- One meeting with the City to review contents of draft RFQ
- One meeting with the City to review the draft evaluation methodology

Deliverables

- Draft RFQ document
- Draft and final evaluation methodology
- Final "for issuance" RFQ document

Task 4.2—Conduct Step One RFQ Process

CDM will support the City and perform activities in this Task 4.2 necessary to complete step one of the procurement process to result in a pre-qualified short list of potential DB Contractors that will be invited to submit detailed technical and cost proposals in response to the City's step two Request for Proposals (RFP).

Subtask 4.2.1—Announcement and Official Recipients

A draft of the proposed Project announcement or public notification along with suggested trade periodicals for publication will be prepared by CDM and submitted to the City for review and approval. Upon receipt of the City's approval and/or requested changes, the final Project announcement will be prepared by CDM. The City will be responsible for placement of the announcement (including costs) in the selected trade periodicals and the local newspaper and other publications as may be required by applicable law or City policy. The announcement will be limited to essential information about the Project and the procurement process (and should be less than one-half page). CDM, based on our familiarity with the municipal water DB industry, will also prepare a list of potential DB proposers.

An official list or registration of the RFQ recipients will be compiled by the City and updated as necessary.

Subtask 4.2.2—RFQ Addenda

All necessary addenda to the step one RFQ will be prepared by CDM, including responses to questions and comments submitted by potential respondents. Each addendum will be provided to the City in draft form within five business days, and upon the City's review and approval, the final addendum will be prepared by CDM and issued to the registered recipients of the RFQ. Addenda will be issued not later than ten business days after a registered recipient's submission of written questions or comments, unless a longer time frame is required for approval by the City or CDM recommends that a longer period should be allowed due to the complexity of questions or to aggregate questions from several sources.

Subtask 4.2.3—Support City Evaluation of RFQ Submittals

Each step one submittal will be thoroughly reviewed by CDM for responsiveness (to identify submittals which may be unacceptable and acceptable based on the requirements of the RFQ). The City's Evaluation Committee will determine whether or not each submittal is responsive and subject to further evaluation. The comparative evaluation and ranking of responsive submittals to develop the short list will be also be done by the City's Evaluation Committee with assistance of CDM.

Support will be provided by CDM to the City's Evaluation Committee in the deliberative process of developing the short list of potential DB Contractors, including attendance at meetings of the Evaluation Committee and interviews/meeting with

respondents (if any), preparation of memoranda addressing particular questions or areas of concern raised by the Evaluation Committee, contacts with references, and preparation of minutes of Evaluation Committee meetings. The evaluation process will be conducted in accordance with the final step one evaluation methodology developed in Task 4.1.

The City's financial advisory consultant will provide a review of the step one proposers' financial information, including an independent evaluation of available credit reports for the proposed short listed DB firms.

A step one RFQ evaluation report will be prepared by CDM summarizing the results of the Evaluation Committee's deliberations, including the list of firms (short list) that will be invited to submit step two proposals in response to the RFP prepared under Task 4.3 and the conclusions of the responsiveness and comparative evaluations.

Assumptions

- Up to six step one RFQ submittals will be reviewed by CDM
- Two meetings with the City's Evaluation Committee will be attended by CDM
- The City will publish the Project announcement and distribute the step one RFQs and addenda
- The City will organize and manage the Evaluation Committee

Deliverables

- Draft and final Project Announcements
- 25 copies of step one RFQ for the City's distribution
- Copies of Addenda for the City's distribution
- Memorandum on CDM's responsiveness review
- Responses to requests by the Evaluation Committee for clarification and additional information
- Step one RFQ Evaluation Report

Task 4.3—Prepare Request for Proposals (RFP) Volume I

CDM will prepare the second major procurement document (step two Request for Proposals or "RFP") to continue the competitive proposal process initiated by issuance of the step one RFQ. The step two RFP will be based on the City Advisor Phase 1B recommendations, as adopted by the Newport City Council and will take into account the City's objectives, the content and results of the step one RFQ as well

as prevailing standards and best practices in the municipal water DB industry. The RFP, where appropriate, will summarize certain documents prepared under Phase 3 and Task 4.4 (Draft DB Contract) as well as relevant work completed under Phase 2.

Given the extensive scope of the step two RFP document, it will be divided into three volumes:

- Volume I - Project Description and Proposal Instructions
- Volume II - Draft DB Contract (prepared by City legal counsel)
- Volume III - Performance Requirements and Project Quality Standards (Phase 3)

RFP Volume I will be prepared by CDM under this Task 4.3 and RFP Volume III will be prepared by CDM under Phase 3. Upon receipt of comments from the City, each of these two volumes will be revised by CDM and incorporated into the final "for issuance" step two RFP.

CDM will prepare a proposed outline of the step two RFP Volume I for the City's review and comment. A preliminary listing (subject to revision by CDM) of the major sections and subsections of RFP Volume I include:

Introduction

- Background
- City Objectives
- Defined Terms

Proposal Process and Requirements

- Communications Protocol
- Proposal Schedule
- Information Sharing
- Site Access
- City Rights
- Required Format and Content

Project Scope and Requirements

- Project Definition
- Performance Requirements

- Project Quality Standards
- Operation and Maintenance Requirements
- Permits and Approvals
- Existing Conditions
- Performance Security Forms (by City legal counsel)
- Funding Sources and Conditions
- QA/QC Program
- Performance and Reliability Testing
- Insurance Requirements (by City insurance advisor)
- Monitoring and Reporting

Evaluation Criteria and Selection Process

- Technical Proposal Evaluation Criteria
- Business Proposal Evaluation Criteria
- Best and Final Offer Proposals (if required)
- Rating and Selection Process

A methodology (draft and final) will be prepared by CDM for the City's Evaluation Committee's use to apply the requirements and evaluation criteria set forth in the step two RFP to the proposal submittals. The methodology will include four basic components: (1) responsiveness review, (2) Technical Proposal evaluation, (3) Business Proposal evaluation, and (4) selection process (i.e., overall combination of technical and business criteria). The final methodology will be prepared upon completion of the City's review and comment on the draft methodology.

Assumptions

- Three meetings with the City to review the contents of the step two RFP Volume I.
- The applicable procurement policies or rules for RFP Volume I will be specified by City legal counsel.

Deliverables

- Proposed outline of step two RFP Volume I

- One complete draft of the RFP Volume I document
- Draft and final evaluation methodology for step two proposals
- 25 "for issuance" step two RFP Volume I document and CD with PDF

Task 4.4—Support City Preparation of Draft DB Contract

CDM will work with and provide support to City legal counsel in its preparation of the draft DB contract that will be included as Volume II of the step two RFP, including the coordination and incorporation of CDM activities and deliverables under City Advisor Phase 2 and 3 tasks. Such support will include the review and comment of interim draft DB contracts prepared by City legal counsel and the attendance at meetings with the City and City legal counsel to review and discuss such interim drafts and attendance at pre-RFP issuance meetings with short-listed proposers.

Assumptions

- Six meetings with the City and City legal counsel
- Four pre-RFP meetings with short-listed proposers

Deliverables

- None

Task 4.5—Conduct Step Two RFP Process

CDM will support the City and perform activities described in this Task 4.5 necessary to complete step two of the procurement process to result in the selection of a proposed DB Contractor to enter into contract negotiations with the City.

Subtask 4.5.1—Step Two RFP Volumes I and III Addenda

It is anticipated that CDM will receive written questions from the short-listed DB proposers and CDM will provide copies of the questions to the City. All necessary addenda to the step two RFP Volumes I and III will be prepared by CDM, including responses to questions and comments submitted by potential respondents. Each addendum will be provided by CDM to the City in draft form. Upon the City's review and approval, the final addendum will be prepared by CDM and issued to the short listed firms by the City (or by CDM on behalf of the City as authorized by the City). Most addenda will be issued not later than 15 business days after a short listed firm's submission of written questions or comments, unless a longer time frame is required for approval by the City, to aggregate questions from more than one proposer, or to prepare responses to relatively complex questions or comments.

Subtask 4.5.2- Interim Technical Proposals

CDM will review and provide comments regarding the interim technical proposal submitted by each short-listed DB proposer and will attend one meeting or workshop with each proposer.

Subtask 4.5.3—Support City Evaluation of Step Two Proposals

Each step two proposal will be reviewed by CDM, first for overall responsiveness and then CDM's separate teams will review the Technical Proposals and the Business Proposals, respectively. An assessment of the responsiveness of each step two proposal will be completed by CDM within 30 business days of receipt of the proposals, unless clarifications are necessary. Such assessment will be documented in a memorandum and will also identify specific areas or points in each submittal where additional clarification or additional information may be required from the respondent. Upon review and approval by the City, requests for clarification and additional information will be sent to each respondent (as necessary).

Support will be provided by CDM to the City's Evaluation Committee in the deliberative process of evaluating the Technical and Business Proposals and selecting the preferred respondent(s) for contract negotiations, including attendance at meetings of the Evaluation Committee and any interviews/meeting with respondents, preparation of memoranda addressing particular questions or areas of concern raised by the Evaluation Committee, contacts with references, and preparation of minutes of Evaluation Committee meetings. Such process will be conducted in accordance with the final step two proposal evaluation methodology developed under Task 4.3.

The City's financial advisory consultant will reassess the financial condition of the short-listed firms and the selected DB prior to award.

CDM will prepare a step two proposal evaluation report that summarizes the results of the Evaluation Committee's evaluation and selection of the most advantageous proposal.

Subtask 4.5.4—Support Best and Final Offers

If the City elects to request best and final offers (BAFO), CDM will support this activity by preparing, for City review, initial drafts of the Request for BAFO (which most likely will be unique to each proposer). Upon receipt of City comments, CDM will prepare the final "for-issuance" Request for BAFO.

CDM will prepare drafts of proposed response to questions submitted by proposers, and upon receipt of comments from the City, will prepare final responses for distribution by the City.

CDM will review the BAFOs submitted by the proposers and will support the Evaluation Committee in its evaluation of the BAFOs and the selection of the most advantageous proposal.

Assumptions

- Distribution of the RFP and addenda will be performed by the City
- Up to four step two proposals will be evaluated by the City
- Three meetings with the City Evaluation Committee
- City will organize and manage the Evaluation Committee
- Engineering support will not require more than 248 hours to review and evaluate Technical Proposals, 56 hours to assess the responsiveness of Technical Proposals, 152 hours for the BAFO request and submittal evaluation, and 184 hours to support the Evaluation Committee.

Deliverables

- Memorandum on the responsiveness review
- Requests to the proposers for clarification and additional information
- Memoranda addressing specific questions or areas of concern raised by the Evaluation Committee
- Draft and final RFP Volume I and III addenda
- Step Two RFP Evaluation Report

Task 4.6—Support DB Contract Negotiation

CDM will participate in the DB contract negotiations process with the City, City legal counsel and the selected DB proposer and will provide recommendations to the City (as may be requested by the City) during such negotiations. All activities under this Task 4.6 will be performed in close coordination with, and subject to the approval of, City legal counsel. It is anticipated that the extent of contract negotiation required will be minimized since a detailed draft of the City's desired DB Contract will be included in the step two Request for Proposals (RFP) and pre-RFP meetings will be held with the short-listed proposers to obtain comments on the draft DB Contract. The City's legal counsel will be responsible for drafting the DB Contract and for determining the City's ability to enforce its terms and for conformance with applicable law, including the laws of the State of Rhode Island and the laws applied through various funding sources utilized by the City for the Project.

Meetings and telephone conference communications will be conducted with the City, City legal counsel, and the selected DB proposer to resolve all outstanding contractual issues and concerns between the parties. An agenda and related materials (such as revised draft contract language) will be prepared and distributed prior to negotiation meetings and communications. At the conclusion of each negotiating session, a summary memorandum will be prepared by the Engineer to document the discussions, and identify the issues that have been resolved and outstanding issues between the parties.

The final DB Contract, including all technical and other schedules, will be prepared by City legal counsel in the final form for signature by the parties. Where appropriate, the selected DB Contractor will be requested to prepare updated drafts of technical schedules for review and approval by the City and CDM for inclusion in the final DB Contract. Support will be provided by CDM to facilitate the authorization by the Newport City Council of the final DB contract.

Assumptions

- Contract negotiation sessions with the selected DB proposer will not require more than 40 hours of participation by CDM's Senior Management Consultant or more than 24 hours by CDM's Senior Engineer.

- Negotiations are limited to the selected DB proposer (i.e., does not include simultaneous negotiations with more than one selected DB, nor a subsequent process of negotiations with a second selected DB proposer)

Deliverables

- Technical materials to support contract negotiating and final DB contract

- Materials needed to support City Council authorization of DB Contract

Task 4.7—Coordinate City's Procurement Team

CDM will coordinate the provision of input by City staff and by outside firms (including City legal counsel, financial advisor, and insurance advisor) throughout the entire procurement process, including the preparation of the RFQ and RFP documents, the conduct of pre-RFP and other meetings with the short-listed proposers, the proposal evaluation process, and the final DB contract negotiation process. This will include discussions with City staff and with outside firms, scheduling of meetings and conference calls, preparation of agendas for key meetings, participation in meetings and conference calls, and documentation of follow-up assignments.

Assumptions

- Up to ten meetings and fifteen conference calls in addition to the meetings called for under Tasks 4.1 through 4.6.

Deliverables

- Agendas for key meetings and lists of meeting action items and assignments.

Task 4.8—Prepare Risk Register

CDM will prepare a draft "risk register" outlining the risks associated with procurement, design, construction and operation of the Project. Upon review and comment by the City, CDM will prepare the final risk register. The risk register will be utilized in the development of the RFP Volumes I and III documents by CDM and will be provided to City legal counsel for use in preparing the draft DB contract (RFP Volume II).

Assumptions

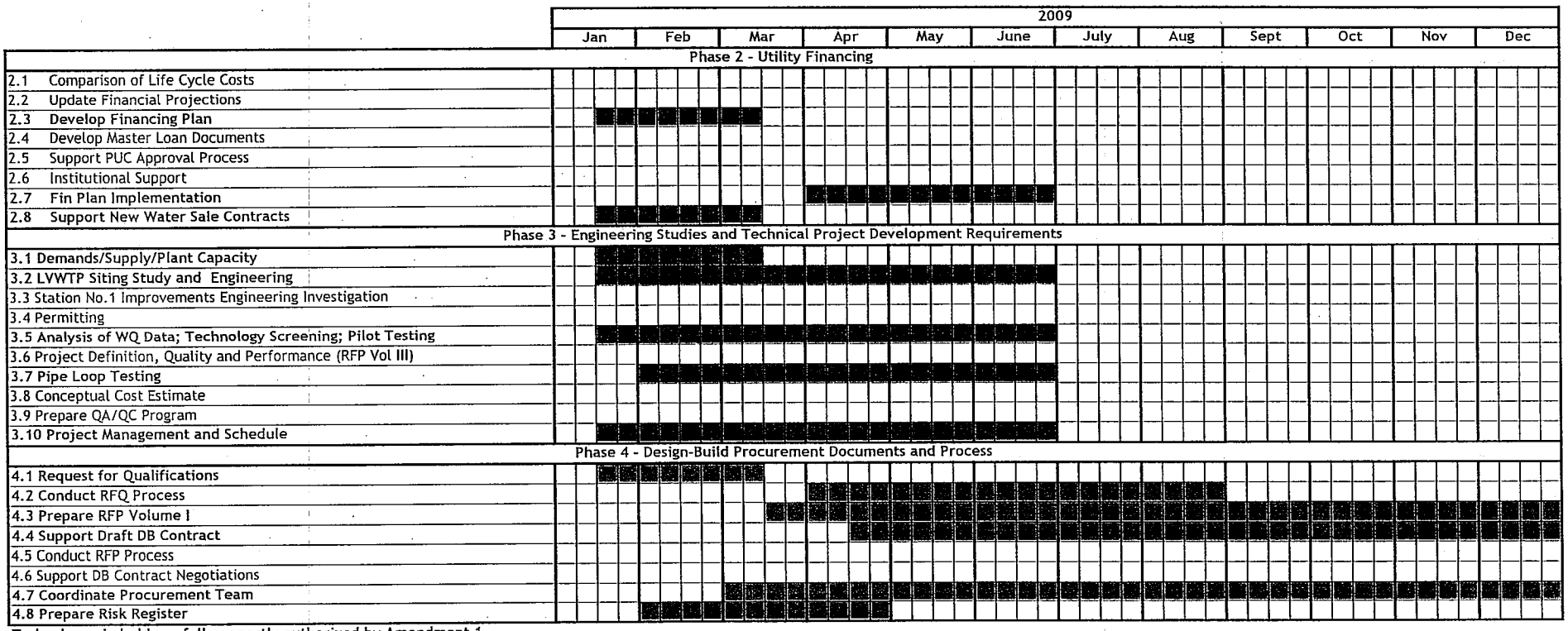
- Up to two meetings with City to review the risk register.

Deliverables

- Draft and final risk register for the Project.

Exhibit B
Amendment No. 1
Professional Services as City Advisor for Water Utility Strategic Options and Delivery of Water Treatment Facilities, Project 08-028

Project Schedule



Tasks shown in bold are fully or partly authorized by Amendment 1.
Schedule is based on January 16, 2009 start date.

Exhibit C
Amendment No. 1
Professional Services as City Advisor for Water Utility Strategic Options and Delivery of Water Treatment Facilities, Project 08-028

Fee Schedule

	Labor Category and Hourly Rate[1]															
Task	Project Director and Technical Specialists $78.28	Project Manager $61.80	Senior Engineer $45.32	Project Engineer $36.05	Staff Engineer $25.64	CADD Designer $45.32	Discipline Engineers $43.22	Admin. Support $30.00	Senior Mgmt Consultant $ 87.25	Mgmt Consultant $ 57.75	Senior Financial $ 74.00	MidLevel Financial $ 51.00	Junior Financial $ 25.00	Total Hours	Expenses	Total Costs including Labor with Markup and Expenses[2]
Phase 2 - Utility Financing																
2.1 Comparison of Life Cycle Costs																
2.2 Update Financial Projections																
2.3 Develop Financing Plan											50	50		100	$ 220	$ 19,595
2.4 Develop Master Loan Documents																
2.5 Support PUC Approval Process																
2.6 Institutional Support																
2.7 Fin Plan Implementation											60	128	91	280	$ 591	$ 41,837
2.8 Support New Water Sale Contracts											56	120	80	256	$ 550	$ 38,568
TOTAL	0	0	0	0	0	0	0	0	0	0	166	298	171	636	$ 1,361	$ 100,000

Exhibit C
Amendment No. 1
Professional Services as City Advisor for Water Utility Strategic Options and Delivery of Water Treatment Facilities, Project 08-028

Fee Schedule

Task	Labor Category and Hourly Rate[1]: Project Director and Technical Specialists $78.28	Project Manager $61.80	Senior Engineer $45.32	Project Engineer $36.05	Staff Engineer $25.64	CADD Designer $45.32	Discipline Engineers $43.22	Admin. Support $30.00	Senior Mgmt Consultant $87.25	Mgmt Consultant $57.75	Senior Financial $74.00	MidLevel Financial $51.00	Junior Financial $25.00	Total Hours	Expenses	Total Costs including Labor with Markup and Expenses[2]
Phase 3 - Engineering Studies and Technical Project Development Requirements																
3.1 Demands/Supply/Plant Capacity	25	9	72	120	0	8	0	0						235	$288	$32,900
3.2 LVWTP Siting Study and Engineering	24	69	106	140	30	34	218	0						620	$24,923	$152,016
3.3 Station No.1 Improvements Engineering Investigation																
3.4 Permitting																
3.5 Analysis of WQ Data; Technology Screening; Pilot Testing	27	29	87	2	100	0	0	0						245	$1,150	$32,810
3.6 Project Definition, Quality and Performance (RFP Vol III)																
3.7 Pipe Loop Testing	0	0	62	469	0	0	0	0						531	$91,600	$131,600
3.8 Conceptual Cost Estimate																
3.9 Prepare QA/QC Program																
3.10 Project Management and Schedule	16	80	55	6	4	0	0	19						179	$323	$28,674
Subtotal	92	187	382	737	133	42	218	19						1809	$118,284	$378,000
3.5 Pilot Testing - Allowances																
a. Pilot Setup including electrical/water connections (2 WTPs)															$99,260	
Electrical	*$20,000*															
Excavate for Tie in at Lawton Valley	*$15,000*															
Supply and Install 30"x6" Tap at Lawton Valley	*$15,000*															
Connections, piping, submersible pump (Sta 1), labor	*$49,260*															
b. Pilot testing and reporting (labor, mobilization/demobilization to move between each plant, each season, 3 seasons)															$34,445	
c. Vendor equipment rental fees															$116,966	
Actiflo Pilot Trailer																
IDI High Rate DAF Pilot																
Siemens Trident HS																
Ozone Generator																
UF Membrane Pilot																
MIEX Pilot																
d. Blueleaf Lab/Pilot trailer rental, including standard pilot filter columns, disposables, lab equipment, haz/lab waste disposal															$5,564	
e. Lab Analysis															$9,565	
f. Chemicals (sodium hydroxide, sodium hypochlorite, alum)															$6,200	
g. Allowances total															$272,000	
Total including Allowances															$390,284	$ 650,000

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Fee Schedule

	Labor Category and Hourly Rate[1]															
Task	Project Director and Technical Specialists $78.28	Project Manager $61.80	Senior Engineer $45.32	Project Engineer $36.05	Staff Engineer $25.64	CADD Designer $45.32	Discipline Engineers $43.22	Admin. Support $30.00	Senior Mgmt Consultant $ 87.25	Mgmt Consultant $ 57.75	Senior Financial $ 74.00	MidLevel Financial $ 51.00	Junior Financial $ 25.00	Total Hours	Expenses	Total Costs including Labor with Markup and Expenses[2]
Phase 4 - Design-Build Procurement Documents and Process																
4.1 Request for Qualifications								40	80	32				152	$ 350	$ 30,321
4.2 Conduct RFQ Process								56	72	68				196	$ 450	$ 35,744
4.3 Prepare RFP Volume I								50	136	96				282	$ 600	$ 57,826
4.4 Support Draft DB Contract	60								88	12				160	$ 300	$ 41,130
4.5 Conduct RFP Process																
4.6 Support DB Contract Negotiations																
4.7 Coordinate Procurement Team									51					51	$ 92	$ 13,976
4.8 Prepare Risk Register	30	20							28	8				86	$ 300	$ 20,774
TOTAL	90	20	0	0	0	0	0	146	455	216	0	0	0	927	$ 2,092	$ 199,770

Exhibit C
Amendment No. 1
Professional Services as City Advisor for Water Utility Strategic Options and Delivery of Water Treatment Facilities, Project 08-028

Fee Schedule

	Labor Category and Hourly Rate[1]															
Task	Project Director and Technical Specialists $78.28	Project Manager $61.80	Senior Engineer $45.32	Project Engineer $36.05	Staff Engineer $25.64	CADD Designer $45.32	Discipline Engineers $43.22	Admin. Support $30.00	Senior Mgmt Consultant $ 87.25	Mgmt Consultant $ 57.75	Senior Financial $ 74.00	MidLevel Financial $ 51.00	Junior Financial $ 25.00	Total Hours	Expenses	Total Costs including Labor with Markup and Expenses[2]
Phase 2 - Utility Financing																
Phase2 Total	0	0	0	0	0	0	0	0	0	0	166	298	171	636	$ 1,361	$ 100,000
Phase 3 - Engineering Studies and Technical Project Development Requirements																
Subtotal	92	187	382	737	133	42	218	19						1809	$ 118,284	$ 378,000
Allowances															$ 272,000	
Phase 3 Total including Allowances															$ 390,284	$ 650,000
Phase 4 - Design-Build Procurement Documents and Process																
Phase 4 Total	90	20	0	0	0	0	0	146	455	216	0	0	0	927	$ 2,092	$ 199,770
AMENDMENT NO. 1 TOTAL		40	0	0	0	0	0	196	759	332	0	0	0	3372	$ 393,737	$ 949,770

[1] Raw salary rate
[2] Markup is 3.10

Approved by:

Carol A. Rego, P.E.
Vice President

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
Response to
Portsmouth Water & Fire District's Data Requests
Set 3

PWFD. 3-7: If not explicitly included in the CDM contract referenced in request 6 above, please provide a detailed breakdown of the work tasks for each Phase including estimated man-hours, hourly rates, charges, expenses and total cast for each.

Response: The requested detailed breakdown for the work awarded is included in the contract and amendment which are provided in response to request 3-6.

Prepared by: J. Forgue

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
Response to
Portsmouth Water & Fire District's Data Requests
Set 3

PWFD. 3-8: Please provide a copy of the mixing system feasibility study referred to on Page 4 Line 3 of Ms. Forgue's Direct Testimony.

Response: A copy of the study is attached.

Prepared by: J. Forgue

Five Centennial Drive
Peabody, MA 01960-7985
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Newport, RI
WSE Job No. 2080214.A

November 18, 2008

Ms. Julia Forgue, P.E., Director of Utilities
City of Newport
70 Halsey Street
Newport, RI 02840

Re: ***Lawton Valley 4.0-MG Reservoir***
Mixing System – Implementation Plan

Dear Ms. Forgue:

This letter report presents the implementation plan developed as part of the design of the mixing system for the 4.0-million gallon (MG) reservoir at the Lawton Valley Water Treatment Plant (LVWTP). The Tideflex mixing system (TMS) was recommended in the Lawton Valley Water Treatment Plant Water Age Analysis (Water Age Analysis) report completed by CDM in November 2007 as a way to decrease water age and improve water quality. The report concluded that an inlet distribution system manifold in the 4.0-MG reservoir would improve mixing and reduce short circuiting and detention times. A preliminary layout of the TMS in the reservoir and a plan of the reservoir are attached.

It should be noted that the LVWTP is scheduled to undergo significant modifications as part of the City's Infrastructure Replacement Plan updated by CDM in January 2005; these modifications are scheduled to be complete by 2014. Also, the Station 1 Water Treatment Plan capacity will be upgraded from 6.0 million gallons per day (MGD) to 9.0 MGD under the City's Infrastructure Replacement Plan. The City may want to consider scheduling the construction of the TMS with these other improvements to the LVWTP after the capacity of the Station 1 facility is increased and when the LVWTP is scheduled to be offline.

The 4.0-MG reservoir is an integral part of the treatment process at the LVWTP that provides water to meet maximum day demands, fire flow demands and filter backwash. The reservoir also provides a portion of the contact time required to meet the CT requirements of the Surface Water Treatment Rule.

Treated water from the LVWTP is supplied to the 4.0-MG reservoir through a 24-inch diameter common inlet/outlet pipe. Water within the reservoir is used to provide finished water to the LVWTP for filter backwashing and to the 2.0-MG standpipe through this common inlet/outlet pipe. A booster pump is used to boost the water from the 4.0-MG reservoir to the 2.0-MG standpipe which provides water to customers in Newport, Middleton and the Naval Station in Newport. When the 6.0-MGD constant speed booster pump requires more water than the LVWTP is producing, water is booster pumped from the 4.0-MG reservoir's common inlet/outlet pipe to make up the difference. The reservoir has a second outlet pipe (16-inch diameter) used to supply water by gravity to the Portsmouth Water and Fire District (PWFD).

During the kick-off meeting for this project, we discussed several concerns with City personnel regarding to the construction of a mixing system in the 4.0-MG reservoir including:

- Meeting maximum day and fire flow demands
- Inability to isolate the reservoir from service
- Providing water for backwashing filters
- Meeting CT disinfection requirements
- Fitting mixing system equipment in through existing openings in the reservoir
- Water quality concerns
- Size of inlet/outlet piping

The following construction options were considered as part of this implementation plan:

- Do nothing
- Install the TMS in the dry – isolate and drain the reservoir
- Install the TMS in the wet – leave the reservoir in operation
- Wait until LVWTP is upgraded in 2014

Weston & Sampson recommends that if this work is to be done prior to the capital improvement project already schedule for the LVWTP that the mixing system be installed by divers during the low-demand period (late fall to early spring) to address many of the concerns with regards to construction. The reservoir has remained in service in the past while divers have cleaned and inspected the tank. Therefore, with some assumed risk the reservoir can remain in service for the majority of the construction of the mixing system. Installing the system under these conditions will minimize the adverse impacts to system operations by addressing the constraints listed previously.

Maximum Day Water Demands

With seasonal water demands significantly greater in the summer than the winter, we recommend avoiding the summer season to install the reservoir TMS and plan for the work to occur in months with lower demands during or closer to the winter months. During the summer months, the LVWTP operates 24 hours per day to keep up with the high seasonal demands, and the water levels in the storage tanks and reservoir fluctuate based on peak daily demands.

Unlike the summer when the LVWTP is required to operate 24 hours per day to meet water demands, the LVWTP is operated 8 to 12 hours per day in the late fall, winter and early spring. When the LVWTP is in operation during these low-demand periods, system demands are met and the system storage tanks remain filled. When the LVWTP shuts down each day, the treated water already in the distribution system and in the storage tanks and reservoir is used to meet the water demands until the LVWTP is started up again.

Low-Demand Period Operations

Treatment plant operators have reported that routine maintenance on the reservoir has been conducted in the winter, during low demand periods including tank inspection and cleaning. The most recent tank inspection and cleaning was performed by Underwater Solutions utilizing divers. This work is typically done after the treatment plant is shut down for the day, and operators reported that the cleaning of the tank occurred over several weeks. During the winter

months the Station 1 WTP can typically meet system demands. However, the hydraulics of the system should be evaluated before Station 1 is utilized as the sole source for meeting demands during low demand periods.

The optimal time for the construction to be done in the reservoir is when the LVWTP is shut down. At this time hourly demands are low and the storage tanks are full, thereby enabling the water in the distribution system and storage tanks to meet water demands. The operators can run the LVWTP during the day to fill the storage tanks before the LVWTP is shut down. When the storage tanks are full and the hourly demands are low, work can be done in the reservoir. Based on data from the booster pump chart recorder in December 2007, the booster pump that supplies water to the 2.0-MG standpipe usually turns on between 6 p.m. and 8 p.m. during the winter. Therefore the City will either need to limit the Contractors hours of construction to hours of 8 pm and plant start up in the morning or modify system operations so that water can be supplied from other storage tanks in the distribution system.

Fire Flow Demands

Flow from the 4.0-MG reservoir may be required in the event of a fire in Newport, Portsmouth, the Naval Station or Middleton. As water levels in the storage tanks start to drop, the 4.0-MG reservoir typically provides water to the distribution system. To address this issue Weston & Sampson recommends that restrictions be placed in the construction specifications that require the Contractor to remove loose equipment and divers without any disruptions to normal reservoir operations within one hour of being notified. With the system storage tanks full and prepared for taking the reservoir offline, this one-hour limit will be sufficient to prevent water supply shortages due to fire flow demands. Coordination with the fire departments in Newport, PWFD, the Naval Station and Middleton will need to be done prior to the start of construction. Emergency connections with neighboring water suppliers should be tested prior to construction and made available if an emergency does occur during construction. Due to the fire flow demands, isolating and draining the reservoir is not feasible for this project.

Inability to Isolate Reservoir from System

The reservoir will not be able to be taken off line during construction. The City is concerned that the 24-inch gate valve on the common inlet/outlet pipe may not fully close and is very difficult to operate. The best available information is that this valve is the original valve installed in 1942. The valve is located 24 feet below the gate house and operator. Due to the age and location of the valve, the City is concerned that in order to achieve a reliable shut down on this line, a new gate valve and operator would need to be installed, which would require significant expense and down time for the reservoir. Based on this information, the construction specifications will prohibit dry shut downs.

Filter Backwash Water

Another concern associated with installing the TMS in the 4.0-MG reservoir is interrupting the filter backwash sequence. The filters are setup to backwash after 48 hours of operation. During the summer when the LVWTP operates 24 hours per day, the filters in use will be backwashed

every two days. In low-demand periods, when the LVWTP is operated less at approximately 8 to12 hours per day, the filters are backwashed no more than every fourth day.

The filter backwash duration is typically 15 to 20 minutes as reported in the Water Age Analysis report completed in November 2007. If the TMS is installed during a low-demand period when the LVWTP is operated 12 hours per day or less, filter backwashing will not be a major constraint to the work. The backwashing sequence will require that the 4.0-MG reservoir be online for approximately two hours (depending on the number of filters in operation) every fourth day, a minor time constraint that can be avoided by coordination between the LVWTP Operators and the Contractor.

According to the TMS manufacturer, water in the reservoir will be drawn through outlet check valves when water from the reservoir is needed for filter backwashing or to meet the required demands of the 6.0-MGD booster pump to the 2.0-MG standpipe. At a flow of 8.0-MGD, the proposed check valves will cause a headloss of approximately 1.5 feet. Filter backwashes are performed by opening a valve and using the head pressure of the reservoir as the flow regulator.

CT Disinfection Requirements

Primary disinfection is presently achieved by the addition of chlorine dioxide near the inlet to the rapid mix basin and chlorine downstream of the clearwell before the water is pumped to the 4.0-MG reservoir and 2.0-MG standpipe. The 4.0-MG reservoir provides a portion of the contact time for disinfection CT requirements for water provided to the PWFD, and the 2.0-MG standpipe provides a portion of the contact time for CT requirements for water provided to Newport. Due to the high level of organics in the water and the chlorine demands in the system, a high dose of chlorine is needed to maintain the proper residual in the distribution system.

According to the CT Determination for Filtered Systems Reports in 2007, the ratio of the actual CT calculated for the system (CT calc) to the required CT for 99.9 percent inactivation (CT 99.9) was greater than 1.0 every day throughout the year. The daily CT Calc/CT 99.9 ranged from 2.91 to 52.8 with a ratio below 5.0 measured only four days throughout the year. With the installation of the TMS in the reservoir, mixing will improve and the contact time will decrease. Excluding the four days with a CT Calc/CT 99.9 ratio below 5.0, as this ratio can be increased by increasing the free chlorine dose, the contact time in the reservoir can be reduced by up to 80 percent and still maintain the required CT Calc/CT 99.9 ratio of 1.0 or greater. Although the TMS will significantly improve mixing, an 80 percent reduction in contact time is not likely.

Future plans at the LVWTP include relocating the chlorine injection point from downstream of the clearwell to the line entering the clearwell. This relocation could make use of the contact time in the clearwell for meeting CT requirements. Based on the Water Age Analysis, the clearwell is capable of providing all of the LVWTP's CT requirements during the summer and 50 to 98 percent of the CT requirements in the winter. The analysis also indicates that if a chlorine dioxide residual of 0.10 mg/L is maintained throughout the pretreatment basins, the additional 50 percent of the required CT in the winter can be provided in these pretreatment basins. This means that, with the relocation of the chlorine injection point to the line entering the

clearwell, the contact time in the 4.0-MG reservoir will not be needed to meet CT requirements, and the reduction in contact time through the reservoir will not be a problem.

Equipment Access

Access to the reservoir for construction purposes can be made through one of six 36-inch square manways located on the surface of the reservoir. A plan view of the reservoir showing these six 36-inch manways is attached. The TMS piping will connect to the existing 24-inch common inlet/outlet pipe. Due to the size of the piping, ductile iron pipe will not fit through the manways and, therefore, high density polyethylene (HDPE) pipe has been proposed by the manufacturer. According to the manufacturer, using HDPE pipe makes the installation easier than if ductile iron pipe is used, and the submerged HDPE pipe does not require any additional corrosion-protection coatings as the ductile iron pipe would to be submerged. The integrity of the TMS will not be compromised with the use of HDPE instead of ductile iron pipe.

The inlet/outlet pipe is flush with the concrete of the tank based on the photos contained in the Underwater Solutions Inspection Report from January 2005. Therefore a mounting bracket and flanged adapter piece will need to be included in the design. The bracket will need to be designed to be mounted on the little exposed concrete around the pipe, based on the location of the pipe to the reservoir floor and the outside wall.

Water Quality Concerns During Construction

When constructed in an active finished water reservoir there are certain concerns that need to be addressed including possible spikes in turbidity from stirring up sediment in the tank and contamination of the water from equipment and workers. In order to prevent stirring up sediment in the tank it is recommended that the Contractor be required to clean the tank prior to beginning installation of the TMS. The tank was last cleaned in 1999 as part of the tank inspection. Based on information provided by Newport during the 1999 cleaning, the cleaning residuals were discharged to one of the sedimentation basins in the treatment facility which taken off-line and used as a storage tank. The contractor set up a centrifuge to separate the water and solids. Solids were disposed off-site and water was wasted to Lawton Valley Brook. It took approximately 2 weeks to complete at a cost of approximately $40,000.

It is estimated that there is approximately one to two inches of sediment based on the 2005 Inspection Report prepared by Underwater Solutions. Disposing of the water and sediment from the tank will need to be further evaluated. Newport will not able to discharge the decanted water to Lawton Valley Brook based on the current discharge permit requirements. It is anticipated that there will be a significant added cost to remove and dispose of the sediment- laden water.

To prevent contamination of the water from the workers and equipment, work would need to be done in accordance with AWWA C652. This standard includes requirements for fully encapsulated diving suits, disinfecting all equipment and personnel with a minimum 200 ppm chlorine solution. These requirements would be included in the contract specifications along with requirements for monitoring water quality within the reservoir.

Size of Inlet/Outlet Piping

There is conflicting information regarding the size of the inlet/outlet piping. The 1967 Malcolm Pirnie contract documents for the construction of the reservoir cover, the yard piping plan provided by Newport and CDM's 2005 Water Age Analysis report all report the inlet/outlet pipe diameter as 24-inch. The Underwater Solutions Inspection Report from January 2005 reports the inlet/outlet pipe diameter as 16-inch. This pipe size will need to be confirmed prior to bidding the design. The more conservative pipe diameter, 24-inch, has been used for preliminary design and cost estimate.

Summary

The table on the next page summarizes the constraints and risks that have been identified, how they can be minimized during construction of the TMS, and necessary coordination steps.

Of the four construction options identified previously, the two options that pose the least amount of risk and address most of the constraints are installing the TMS in the wet and constructing the TMS as part of the LVWTP upgrades scheduled for 2014.

Constraint	Risks	Solution
Maximum Day Demands	▪ Unable to provide quantity of water required	▪ Reservoir shall remain in service. ▪ Construction to occur during periods of low demand, late winter to early spring. ▪ Construction to occur during periods when LVWTP is not operating, and storage tanks are full.
Fire Flow	▪ Unable to provide quantity of water required	▪ Reservoir shall remain in service. ▪ Newport, Middleton, and PWFD Fire Departments and the Naval Station should be notified prior to any construction. ▪ Contractor will be required to remove all personnel and equipment within 1 hour or less of being notified in the event of an emergency ▪ Contractor will be required to install temporary grates on piping during construction.
Inability to isolate reservoir from service	▪ Unable to supply water from reservoir if valve is stuck closed	▪ Leave reservoir active (full) and construct during periods of low demand, late winter to early spring. Or ▪ Install the TMS as part of major renovations to LVWTP scheduled to be complete by 2014. Include replacement of 24-inch gate valve.

Constraint	Risks	Solution
Water for Filter Backwashing	▪ Water quality concerns if backwash is not completed ▪ Impact on treatment equipment	▪ Contractor to coordinate construction with LVWTP operations so reservoir is available when backwashes will occur. ▪ During the winter, the filters are backwashed approximately once every four days.
CT Requirements	▪ Water quality and regulatory concerns if CT requirements are not met	▪ Reservoir to remain full during construction. Contact time will not be changed. ▪ Relocation of free chlorine injection to upstream of clearwell will increase CT disinfection. ▪ Reduced contact time in reservoir with the TMS is not expected to cause CT non-compliance.
Equipment Access	▪ Damage to reservoir or new equipment	▪ Manufacturer has proposed using HDPE pipe to assure that bends, elbows and tees will fit through the 36-inch square manways.
Water Quality Concerns	Public health and perception	▪ Require the sediment to be cleaned from the tank prior to the installation of the TMS. ▪ Work to be done in accordance with AWWA C652, all equipment, personnel will be disinfected prior to entering the tank. Install the TMS when the reservoir is empty as part of major renovations to LVWTP scheduled 2014. Include replacement of 24-inch gate valve.
Size of Inlet/Outlet Piping	▪ Costs associated with construction Equipment access	▪ Confirm pipe sizing prior to bidding the design. ▪ Design based on 24-inch pipe size HDPE pipe recommended to fit in 36-inch manway.

Recommendations

Weston & Sampson recommends that if this work is to occur prior to the planned Capital Improvements to the LVWTP that it be done by contractors specializing in underwater construction. Significant coordination will be necessary on a day to day basis during the TMS construction between plant operators and the contractor. The storage tanks should be filled prior to the start of daily construction activity. Newport can also rely on water from Station 1 to meet the demands in Newport and Middleton. Coordination between Portsmouth and the Naval Station will need to occur prior to construction so that they can make provisions to utilize water from other sources, on an emergency basis.

The specifications for the work will need to include specific construction hours, coordination requirements and disinfectant procedures. Allowable construction hours can be listed in the

specifications, for example between 6 p.m. and 6 a.m. If the Station 1 WTP can be utilized to supply, for example one week in March, this should be included in the specifications. If there is a combination of construction periods that the Contractor can utilize in creating a construction plan, the labor costs associated with reduced work shifts and night differential will be minimized. The specifications will require that the Contractor submit for approval a detailed daily construction plan, which is in line with the specific construction periods outlined in the bid documents. To minimize potential water quality concerns, we recommend that sediment be removed from the tank as part of this construction. The installation of the TMS should occur in the colder months when demands are lower.

This project will need to be approved by the Department of Health (DOH). Based on phone conversations with staff, this type of project, consisting of working in an active water storage tank, has not been approved by their office previously. This will require an application for formal approval of the project.

Based on the work necessary to construct the TMS, we estimate the contract duration will be approximately three to four months. Assuming the TMS in the 4.0-MG reservoir is scheduled for construction in February and March 2010, the estimated equipment and installation costs (including the crane rental) are shown in the table below. The costs for disposal of the residuals from the reservoir assume that the City will truck all waste off-site. The opinion of total probable construction cost for the 4.0-MG reservoir TMS including cleaning of the tank, equipment and installation, and construction oversight is approximately $856,700. Due to the complexity of constructing the TMS, we would recommend full time inspection. The estimated cost includes costs for water quality monitoring and coordination that will be required.

Estimated Costs

Cleaning of Reservoir	$60,000
Disposal of Reservoir Residuals	$290,000
Equipment Cost	$205,000
Installation Cost	$152,000
Subtotal	*$707,000*
Contingencies (10%)	*$70,700*
Construction Administration	$79,000
TOTAL	**$856,700**

The following is a proposed schedule for this project providing that work is not done as part of the larger Capital Improvement Project at Lawton Valley scheduled to be completed in 2014. The schedule assumes that construction will begin during Fiscal Year 2010.

- Finalize Design – December 2008
- Submit Contract Documents to DOH for Review – February 2009
- Receive DOH approval – April 2009 (2 months)
- Bid project – August 2009 (assuming project is funded for FY 2010)
- Bids Due – September 2009 (4 weeks from advertising)
- Award Contract – November 2009 (8 weeks from bid due date)

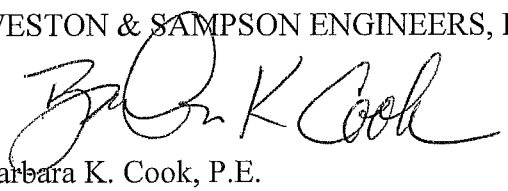
- Shop Drawing Review – December 2009
- Cleaning of Tank – February 2010
- Installation of Mixing System –February/March 2010

There are risks that are associated with this type of construction including contamination of the reservoir, water emergency, or an emergency with contractor's personnel while in the tank. The fact that the 24-inch valve can not be closed reliably in order to isolate the tank in the event of contamination or emergency with the contractor's personnel increases this risk. A contingency plan will need to be developed to maintain water service to Newport, Middleton, PWFD, and the Naval Station in the event of an emergency. This will include having all emergency connections on standby and coordination with all parties impacted by the work.

With the completion of the Implementation Plan the next step is to finalize the design. Upon your approval of the Implementation Plan we will finalize the design. Please contact me if you have any questions.

Very truly yours,

WESTON & SAMPSON ENGINEERS, INC.

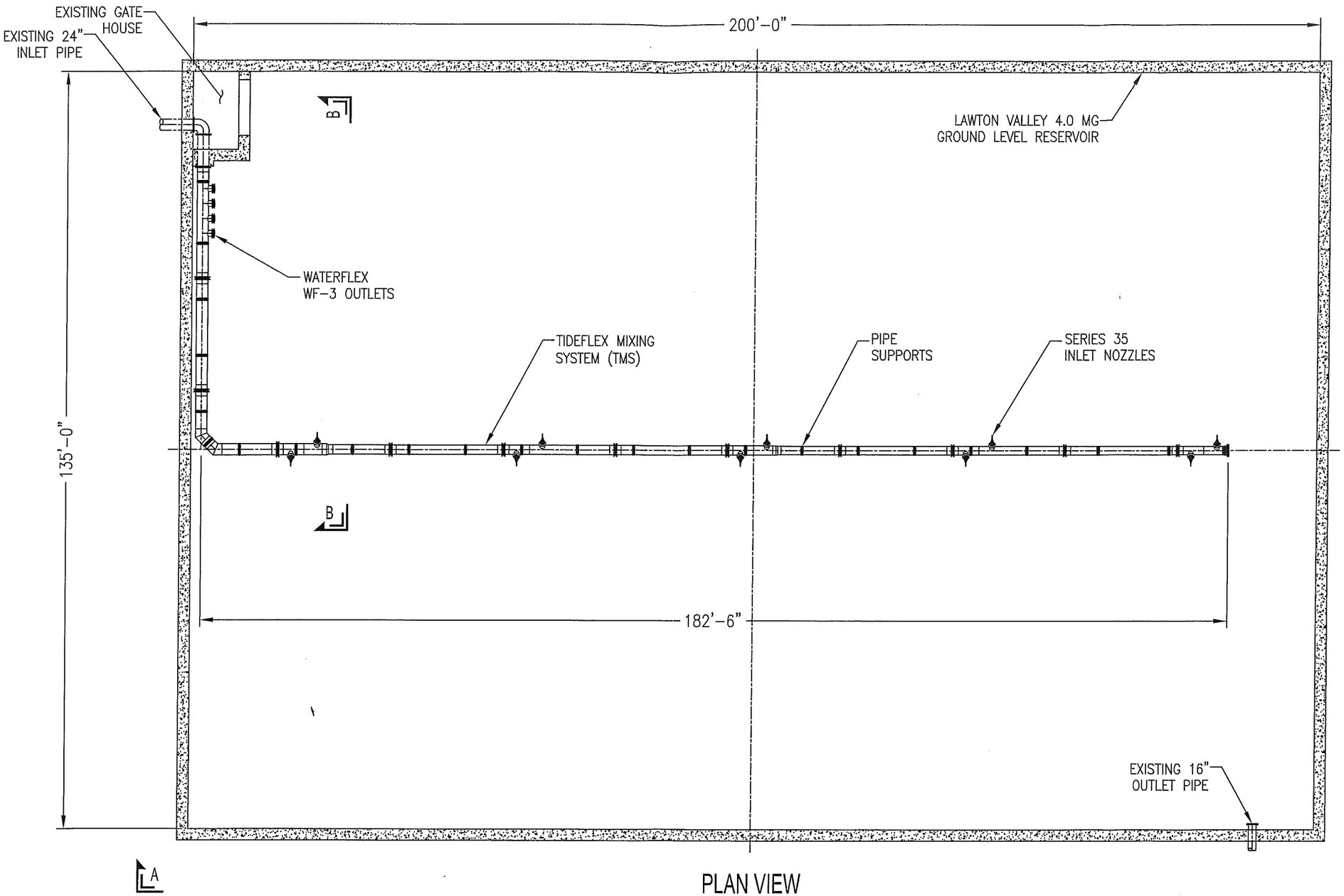


Barbara K. Cook, P.E.
Associate

Attached figures

rpn/mam

o:\newport ri\2080214 lawton valley reservoir mixing\correspondence\final implementation plan.doc



PLAN VIEW

PRELIMINARY

REV	BY	DATE	ECO#	CHK'D	DESCRIPTION
-	DJJ	6-3-08			ISSUE FOR APPROVAL

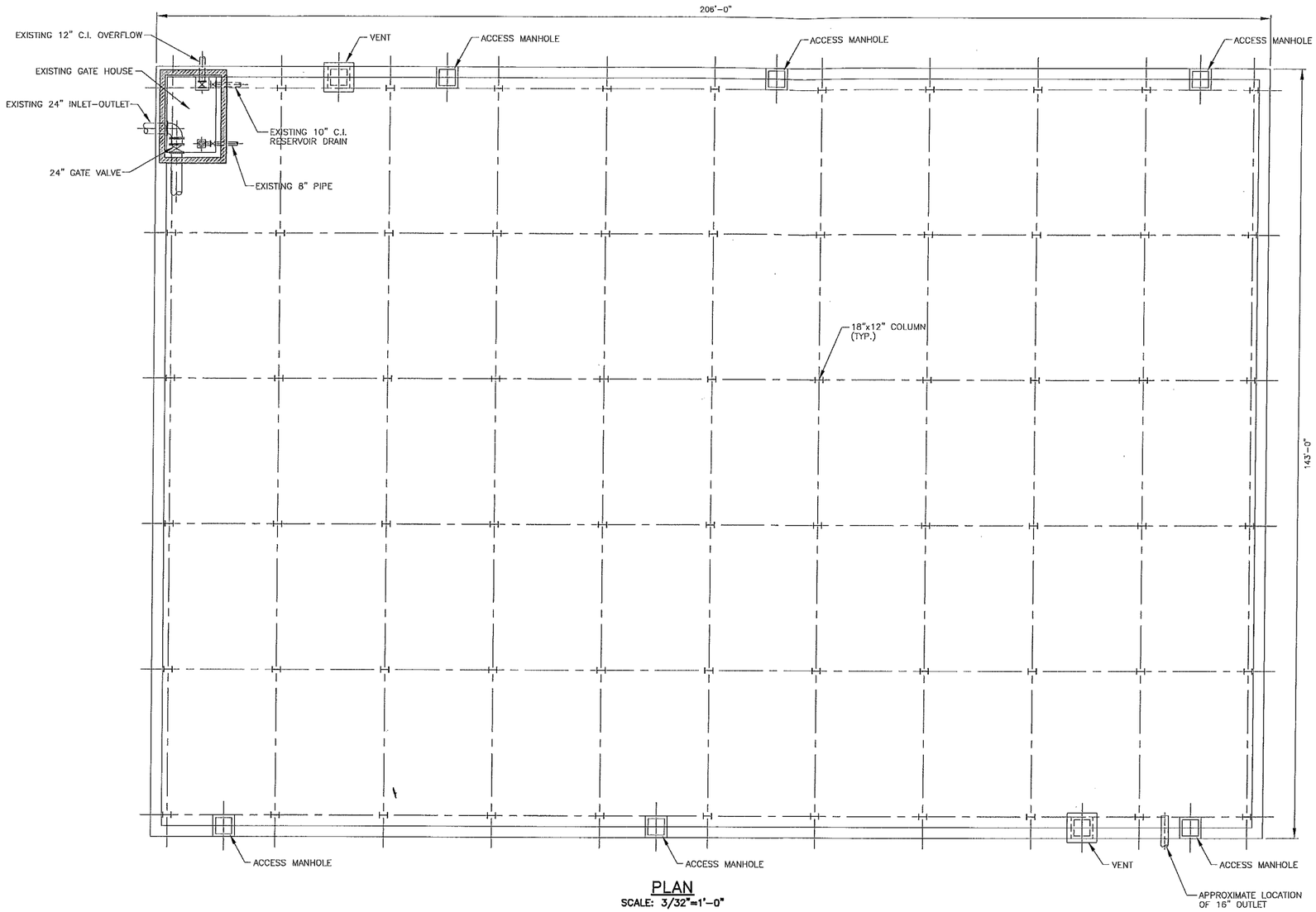
S.O.#: T08-XXXX | QUOTE #: XXXXXHQ

DWG. NOTES:

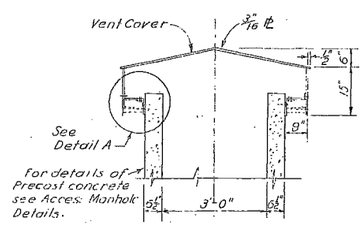
Tideflex® Technologies
A Division of Red Valve Company, Inc.,
TIDEFLEX TECHNOLOGIES
TIDEFLEX MIXING SYSTEM
700 North Bell Ave.
Carnegie, PA 15106 USA
Phone: 412-279-0044
Fax: 412-279-5410
Website: WWW.TIDEFLEX.COM
Email: INFO@TIDEFLEX.COM

LAWTON VALLEY 4.0 MG GROUND LEVEL RESERVOIR
CITY OF NEWPORT, RI
GENERAL ARRANGEMENT - PLAN -

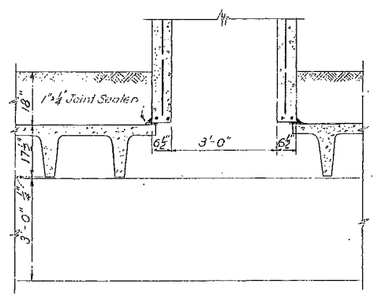
CONSULTANT: WESTON & SAMPSON
APPLICATION: (TMS) TIDEFLEX MIXING SYSTEM
CAD SCALE: FULL | PLOT SCALE: N.T.S.
DWG. BY: DJJ | DATE: 6-3-08
DWG. NO. TMS08XXXX
SHEET 2 OF 4



PLAN
SCALE: 3/32"=1'-0"



VENT DETAIL SECTION
SCALE: 1/2"=1'-0"



ACCESS MANHOLE SECTION
SCALE: 1/2"=1'-0"

0 10 20 30
SCALE: 3/32"=1'-0"

0 2 4 6
SCALE: 1/2"=1'-0"

DRAFT

Weston&Sampson®
Five Centennial Drive, Peabody, MA 01960
(978) 532-1900 (800) SAMPSON
www.westonandsampson.com

No.	Date	Description	Dr.By	Ck.By	App.By
		APPROVED			

REGISTERED PROFESSIONAL ENGINEER _____ DATE

CITY OF NEWPORT, RHODE ISLAND
WATER DIVISION

LAWTON VALLEY WATER TREATMENT PLANT 4.0 MG RESERVOIR MIXING SYSTEM

PLAN AND DETAILS

CADD NO.	SCALE:	CONTRACT:	JOB NO.	DR.BY	DSN.BY	CHK.BY	APP.BY
GATEHOUSE	AS SHOWN		2080214	PJS	RPN	BKC	PJC

M-1

FILE NO.

SHEET OF

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
Response to
Portsmouth Water & Fire District's Data Requests
Set 3

PWFD 3-9: If not explicitly included in the study referenced in request 8 above, please provide the latest design and construction schedule and the latest design and construction cost estimates for this project.

Response: The study provided in response to PWFD 3-8 contains cost estimates. However, the completion of the design is presently on hold and there are no additional cost estimates that have been developed. CDM's work on Phase 3 of the City Advisor Contract, included an evaluation of the siting of the new plant to replace the Lawton Valley Water Treatment Plant (LVWTP). The primary efforts made were to determine if the new plant could be sited on the existing property of the LVWTP without jeopardizing the operation of the existing plant during construction. In order to use the existing property, the 4 million gallon reservoir tank will have to be demolished. At this time, sufficient work has been conducted by CDM to indicate the existing property will be used for the new plant to avoid additional project costs and delays associated with locating and purchasing property for an alternative site. Conceptual plans involve the demolition of the 4 million gallon tank and the construction of a new storage tank (prior to such demolition) to replace all of the functions/purposes of the existing 4 million gallon tank. PWFD will be serviced from the new tank, which will be sized and constructed in a manner that will provide PWFD with the same service that is currently provided. In addition, steps will be taken to improve water age as the new tank will be smaller and will contain mixing equipment.

Newport Water will be recommending that the Mixing System for the 4 million gallon tank be deleted from the rate funded CIP due to the developing plans for construction of the new plant.

Prepared by: J. Forgue

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
Response to
Portsmouth Water & Fire District's Data Requests
Set 3

PWFD 3-10: Regarding RFC Schedule 10, Revenue Proof, please provide a breakdown, by month, gallons sold and amount billed for the months that make up the Actual FY-08 sales to PWFD in the amount of $1,007,523.

Response: The breakdown is as follows**:**

Invoice Date	**Consumption**	**Cust Charge**	**Water Charge**	**Total**
7/1/2007	47,810,000	$ 13.25	$ 95,620.00	$ 95,633.25
8/1/2007	57,100,000	$ 13.25	$ 114,200.00	$ 114,213.25
9/1/2007	54,620,000	$ 13.25	$ 109,240.00	$ 109,253.25
10/1/2007	52,416,885	$ 13.25	$ 113,967.02	$ 113,980.27
10/17/2007	158,400		$ 352.76	$ 352.76
11/1/2007	42,470,000	$ 13.25	$ 94,580.69	$ 94,593.94
12/1/2007	27,660,000	$ 13.25	$ 61,598.82	$ 61,612.07
1/1/2008	29,730,000	$ 13.25	$ 66,208.71	$ 66,221.96
2/1/2008	34,720,000	$ 13.25	$ 77,321.44	$ 77,334.69
3/1/2008	30,130,000	$ 13.25	$ 67,099.51	$ 67,112.76
4/1/2008	28,360,000	$ 13.25	$ 63,157.72	$ 63,170.97
5/1/2008	33,050,000	$ 13.25	$ 73,602.35	$ 73,615.60
6/1/2008	31,690,000	$ 13.25	$ 70,573.63	$ 70,586.88
Total	469,915,285	$159.00	$1,007,522.65	$1,007,681.65

Prepared by: R Esten

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
Response to
Portsmouth Water & Fire District's Data Requests
Set 3

PWFD 3-11: Please provide the history of the GAC replacement at Station 1 for FY-05 through FY-09, including identification of filter, dates of replacement and cost.

Response: GAC replacement history is as follows:

Filter ID	FY	Date	Cost
Filter # 1	FY04	June 2004	$35,943.00
Filter # 2	FY05	July 2004	$35,943.00
Filter # 3	FY06	June 2006	$35,943.00
Filter # 4	FY07	July 2006	$35,943.00
Filter # 1	FY08	June 2008	$35,943.00
Filter # 2	FY09	July 2008	$35,943.00

Costs for GAC replacement is based upon a three year contract (Bid #04-0086) signed with Calgon Carbon in April 2004 which covered replacement of carbon through calendar year 2006. The City exercised its option to extend the contract at the same unit price for an additional two years in February 2007, to cover through calendar year 2008.

There are no further contract extensions available, and the next filter change outs will be in June 2010 and July 2010. As such, this contract will be advertised for bid in April 2010.

Prepared by: K. Mason

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
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Set 3

PWFD 3-12: Regarding RFC Schedule B-6, Lawton Valley, please explain the nature of Pulsator Repairs & Modification for $5,000 in FY-10.

Response: Incorrect terminology was used in this line item as it should have stated repairs to the Clari-Flocculator basins which are at Lawton Valley, not the Pulsator Clarifiers which are at Station 1. The Clari-Flocculator basins at Lawton Valley have flocculation paddle wheels at the bottom of the basins which run off a single shaft, centered and running the length of each basin. These paddle wheels in all three basins as well as the main shaft in basin number two are currently in need of repairs

Prepared by: K. Mason

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
Response to
Portsmouth Water & Fire District's Data Requests
Set 3

CERTIFICATION

I hereby certify that I sent by electronic mail a copy of the within to all parties set forth on the attached Service List on March 27, 2009, and one original to Luly Massaro, Clerk, Rhode Island Public Utilities Commission.

Parties/Address	E-mail Distribution	Phone/Fax
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STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
DOCKET NO. 4025
City Of Newport - Utilities Division - Water Department
Response to
Portsmouth Water & Fire District's Data Requests
Set 3

Dr. Kay Davoodi, P.E. Utility Rates and Studies Office NAVFACHQ- Building 33 1322 Patterson Ave SE Washington Navy Yard, D.C. 20374-5065	Khojasteh.davoodi@navy.mil Larry.r.allen@navy.mil	202-685-3319 202-433-7159
Maurice Brubaker Brubaker and Associates, Inc. PO Box 412000 St.Louis, MO 63141-2000	mbrubaker@consultbai.com	401-724-3600 401-724-9909
Thomas S. Catlin Exeter Associates, Inc. 5565 Sterrett Place, Suite 310 Columbia, MD 21044	tcatlin@exeterassociates.com	410-992-7500 410-992-3445
Christopher Woodcock Woodcock & Associates, Inc. 18 Increase Ward Drive Northborough, MA 01532	Woodcock@w-a.com	508-393-3337 508-393-9078
File an original and nine (9) copies w/: Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Blvd. Warwick, RI 02888	lmassaro@puc.state.ri.us cwilson@puc.state.ri.us anault@puc.state.ri.us	401-780-2107 401-941-1691

/s/_____
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Pawtucket, RI 02860
(401) 724-3600