Town of Milford D.P.U. 18-60 Report of John J. Reed Exhibit TOWN-JJR-2, Schedule 1 January 25, 2019 H.O. Kevin Crane

# The Milford Water Company Historical Earned Return on Equity

Year	Net Income	Total Debt	Par Value of Common Stock	Profit and Loss Balance	Book Value of Equity	Earned Return On Equity
(a)	(b)	(c)	(d)	(e)	(f) = (d) + (e)	(g) = (b) / (f)
2008 2009 2010	\$652,910 \$43,973 \$74,799	\$2,181,789 \$2,076,283 \$1,971,067	\$400,000 \$400,000 \$400,000	\$9,366,656 \$8,961,721 \$9,046,600	\$9,766,656 \$9,361,721 \$9,446,600	6.69% 0.47% 0.79%
2011	\$437,250	\$3,441,667	\$400,000	\$9,526,221	\$9,926,221	4.40%
2012	\$462,106	\$11,855,132	\$400,000	\$9,832,121	\$10,232,121	4.52%
2013	\$514,311	\$22,929,862	\$400,000	\$10,583,546	\$10,983,546	4.68%
2014	\$395,301	\$22,449,223	\$400,000	\$10,614,776	\$11,014,776	3.59%
2015	\$892,482	\$21,154,456	\$400,000	\$11,384,110	\$11,784,110	7.57%
2016	\$643,745	\$19,857,083	\$400,000	\$11,938,722	\$12,338,722	5.22%
2017	\$371,422	\$18,563,083	\$400,000	\$12,084,467	\$12,484,467	2.98%
					Mean	4.09%
Authorize	10.00%					
2017 Boo	\$1,248,447					

# <u>Notes</u>

- (b) Annual Return, Page 301, Line 25
- (c) Annual Return, Page 201, Line 14
- (d) Annual Return, Page 204, Line 1
- (e) Annual Return, Page 301, Line 40

Scenario:

## The Milford Water Company Comparison Group Approach Valuation Results

Line No.	Description	Source	2016/17 Value	2017/18 Value	2018 P/E Ratio with Adjusted Net Income
NO.	•				
	(a)	(b)	(c) See Footnote	(d) See Footnote	(e)
	Comparison Group Price-Earn	nings Ratio			
1	P/E Ratio - Minimum	Sch. JJR-3	25.1	25.3	25.3
2	P/E Ratio - 1st Quartile	Sch. JJR-3	26.7	27.4	27.4
3	P/E Ratio - Median	Sch. JJR-3	29.0	29.0	29.0
4	P/E Ratio - 3rd Quartile	Sch. JJR-3	30.4	31.0	31.0
5	P/E Ratio - Maximum	Sch. JJR-3	37.4	35.4	35.4
	Milford Water Financial Inform	nation			
6	Net Income	Sch. JJR-1	\$643,745	\$371,422	\$1,248,447
7	Total Debt	Sch. JJR-1	\$19,857,083	\$18,563,083	\$18,563,083
	Calculated Valuation - Price-E	arnings Ratio (\$)			
8	Minimum	L1 x L6 + L7	\$36,046,590	\$27,953,612	\$50,127,142
9	1st Quartile	L2 x L6 + L7	\$37,037,613	\$28,731,822	\$52,742,913
10	Median	L3 x L6 + L7	\$38,502,792	\$29,349,950	\$54,820,605
11	3rd Quartile	L4 x L6 + L7	\$39,439,371	\$30,095,485	\$57,326,545
12	Maximum	L5 x L6 + L7	\$43,937,944	\$31,716,379	\$62,774,799
	Comparison Group Market-Bo	ook Ratio			
13	M/B Ratio - Minimum	Sch. JJR-3	2.5	2.6	
14	M/B Ratio - 1st Quartile	Sch. JJR-3	2.6	2.7	
15	M/B Ratio - Median	Sch. JJR-3	2.8	2.9	
16	M/B Ratio - 3rd Quartile	Sch. JJR-3	3.2	3.2	
17	M/B Ratio - Maximum	Sch. JJR-3	3.9	4.0	
	Milford Water Financial Inform	nation			
18	Book Value of Equity	Sch. JJR-1	\$12,338,722	\$12,484,467	
19	Total Debt	Sch. JJR-1	\$19,857,083	\$18,563,083	
	Calculated Valuation - Market	-Book Ratio (\$)			
20	Minimum	L13 x L18 + L19	\$50,929,406	\$51,466,810	
21	1st Quartile	L14 x L18 + L19	\$52,494,875	\$52,524,304	
22	Median	L15 x L18 + L19	\$54,424,681	\$55,162,373	
23	3rd Quartile	L16 x L18 + L19	\$59,637,408	\$58,352,545	
24	Maximum	L17 x L18 + L19	\$67,966,138	\$68,290,223	

#### Notes:

- (c) The values in this column reflect the 2016 financial results of Milford Water from Schedule JJR-1 applied to the 2017 market metrics from Schedule JJR-3.
- (d) The values in this column reflect the 2017 financial results of Milford Water from Schedule JJR-1 applied to the 2018 market metrics from Schedule JJR-3.

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# The Milford Water Company Comparison Group Approach Market Data

Company	Ticker	2017 Average P/E Ratio	2017 Average M/B Ratio	2018 Average P/E Ratio	2018 Average M/B Ratio
(a)	(b)	(c)	(d)	(e)	(f)
American States Water Company	AWR	29.7	3.5	35.4	4.0
American Water Works Company, Inc.	AWK	28.4	2.7	28.0	2.7
Aqua American, Inc.	WTR	25.5	3.1	25.3	3.1
California Water Service Group	CWT	32.4	2.7	32.0	2.8
Connecticut Water Service Inc.	CTWS	27.1	2.5	30.0	2.6
Middlesex Water Company	MSEX	29.6	2.9	28.1	3.0
SJW Corporation	SJW	25.1	2.5	25.4	2.6
York Water Company	YORW	37.4	3.9	30.7	3.3
Minimum		25.1	2.5	25.3	2.6
1st Quartile		26.7	2.6	27.4	2.7
Median		29.0	2.8	29.0	2.9
3rd Quartile		30.4	3.2	31.0	3.2
Maximum		37.4	3.9	35.4	4.0

Source: Bloomberg Finance. Company results reflect the average ratios of every trading day in the calendar year.

# Size Premium Calculation Industry Group Market Capitalization and Market-to-Book Ratio

		[1]	[2]
		Market	
		Capitalization	Market-to-
Company	Ticker	(\$ billions)	Book Ratio
American States Water Company	AWR	2.15	4.0
American Water Works Company, Inc.	AWK	15.41	2.7
Aqua American, Inc.	WTR	6.26	3.1
California Water Service Group	CWT	1.98	2.8
Connecticut Water Service Inc.	CTWS	0.77	2.6
Middlesex Water Company	MSEX	0.71	3.0
SJW Corporation	SJW	1.26	2.6
York Water Company	YORW	0.41	3.3
Mean		3.6	3.0

The Milford Water Company

Common Equity (\$ millions) [3] 12.5

Implied Market Capitalization [4] 38.0

As a percent of Comparison Group Mean Market Capitalization 1.05%

### **Duff & Phelps 2017 Valuation Hand Book -- Size Premium**

	[5]	[6]
	Market	
	Capitalization	
	of Largest	
	Company	Size
Breakdown of Deciles 1-10	(\$ millions)	Premium
1-Largest	609,163.498	-0.35%
2	24,233.747	0.61%
3	10,711.194	0.89%
4	5,676.716	0.98%
5	3,512.913	1.51%
6	2,390.899	1.66%
7	1,569.984	1.72%
8	1,030.426	2.08%
9	567.843	2.68%
10-Smallest	262.891	5.59%
Milford Water - Implied Market Capitalization	37.991	5.59%
Comparison Group Mean Market Capitalization	3,617.373	0.98%
Companson Group Mean Market Capitalization	0,017.070	0.5070
Size Premium [7]		4.61%

### Notes:

<sup>[1]</sup> Source: Bloomberg Professional; equals 2018 calendar year average

<sup>[2]</sup> Source: Bloomberg Professional; equals 2018 calendar year average

<sup>[3]</sup> Milford Water's 2017 Annual Return to the Department

<sup>[4]</sup> Equals [3] x comparison group mean market-to-book ratio

<sup>[5]</sup> Duff & Phelps 2017 Valuation Hand Book – U.S. Guide to Cost of Capital Exhibit 7.2.

<sup>[6]</sup> Duff & Phelps 2017 Valuation Hand Book – U.S. Guide to Cost of Capital Exhibit 7.3.

<sup>[7]</sup> Equals 5.59% - 0.98%