

**DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
PERMANENT RATES
REVENUE REQUIREMENT**

Proforma Rate Base (Sch 3; Col 9)	\$ 594,422
Rate of Return (Sch 2)	x <u>7.56%</u>
Operating Income Requirement	44,938
Less: Proforma Operating Income (Sch 4; Col 9)	<u>(2,429)</u>
Revenue Deficiency / (Surplus) Before Income Tax Effect	47,367
Divided by Income Tax Divisor (Sch 5)	+ <u>60.59%</u>
Tax Effected Revenue Deficiency / (Surplus)	78,179
Add: Proforma Annual Water Revenues (Sch 4; Col 9)	+ <u>276,335</u>
Total Proposed Operating Revenue Requirement after Permanent Rates	<u>\$ 354,514</u>

Revenue Deficiency Adjusted for 2018 Tax Change:

Tax Effected Revenue Deficiency / (Surplus)	\$ 78,179
Tax Rate Change Revenue Adjustment (Sch 4d)	(12,909)
Amortization of Excess Deferred Income Taxes	(534)
Amortization of Excess Deferred Tax Liability (Company Schedule)	<u>-</u>
Adjusted Revenue Deficiency / (Surplus)	\$ 64,736
Add: Proforma Annual Water Revenues (Sch 4; Col 9)	+ <u>276,335</u>
Total Proposed Tax Effected Operating Revenue Requirement after Permanent Rates	\$ 341,071

Percentage Increase/Decrease in Annual Water Revenues after Permanent Rates 23.43%

	Proposed Revenue Requirement	Increase	Increase %
Tax Effected Revenue Requirement after Permanent Rates	\$ 341,071	\$ 64,736	23.43%
Step Increase I Revenue Requirement	<u>15,043</u>	<u>15,043</u>	<u>5.44%</u>
Totals for Initial Revenue Requirement	356,114	79,779	28.87%
Subsequent Step Increase II Revenue Requirement	9,986	9,986	3.61%
Totals after Subsequent Step II Adjustment	<u>\$ 366,100</u>	<u>\$ 89,765</u>	<u>32.48%</u>
Proforma Annual Water Revenues	÷ \$ 276,335		
Percentage Increase in Annual Water Revenues		32.48%	

DW 17-165
ABENAKI WATER COMPANY, INC.
ALL DIVISIONS INCLUDED
PERMANENT RATES
WEIGHTED AVERAGE COST OF CAPITAL

	Capital Structure		Cost of Debt				Cost Rate	Weighted Average Cost
	Per Test Year	Percent	Interest Rate @ 09/30/17	Annual Interest*	Annual Amortization **	Total Annual Cost of Debt		
Debt								
2014 CoBank Loan, \$300,000	\$ 205,080	0.00%	3.68%	\$ 7,547	\$ 2,163	\$ 9,710	0.00%	0.00%
2016 CoBank Loan, \$400,000	387,201	0.00%	3.55%	13,746	128	13,874	0.00%	0.00%
Total Debt	<u>592,281</u>	<u>40.00%</u>		<u>\$ 21,293</u>	<u>\$ 2,291</u>	<u>\$ 23,584</u>	<u>3.98%</u>	<u>1.59%</u>
Common Equity								
Common Stock	-	0.00%						
Additional Paid in Capital	589,521	0.00%						
Retained Earnings	47,234	0.00%						
Total Common Equity	<u>636,755</u>	<u>60.00%</u>					<u>9.95%</u>	<u>5.97%</u>
Total Capitalization	<u>\$ 1,229,036</u>	<u>100.00%</u>						<u>7.56%</u>

* Annual Interest calculation: Test Year balance x Interest Rate at 9/30/17

** Per response to Data Request: Tech 1-6

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
PERMANENT RATES
PRO-FORMA RATE BASE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Original Permanent Rate Filing			Revised Permanent Rate Filing			Permanent Rates		
	4-Qtr Average	Company Proforma Adjust's	Proforma Rate Base	Revised Filed 4/30/18 5-Qtr Average	Original Company Proforma Adjust's	Proforma Rate Base	Staff Proforma Adjust's (Sch 3a)	Staff Adj # (Sch 3a)	Proforma Rate Base
Net Utility Plant in Rate Base									
Utility Plant in Service	\$ 1,446,627	\$ 159,074	\$ 1,605,701	\$ 1,432,497	\$ 159,074	\$ 1,591,571	\$ 18,555	1-3	\$ 1,610,126
Less: Accumulated Depreciation	(663,712)	(18,039)	(681,751)	(661,288)	(18,039)	(679,327)	(1,033)	4-6	(680,360)
Net Utility Plant in Service	782,915	141,035	923,950	771,209	141,035	912,244	17,522		929,766
Utility Plant Acquisition Adjustment	36,234	-	36,234	36,234	-	36,234	(36,234)	7	-
Less: Accum Amortization of Utility Plant Acq Adj	-	(2,265)	(2,265)	-	(2,265)	(2,265)	2,265	8	-
Less: Contributions in Aid of Construction (CIAC)	(448,114)	1,783	(446,331)	(448,233)	1,783	(446,450)	(2,258)	9-11	(448,708)
Add: Accumulated Amortization - CIAC	172,080	4,457	176,537	170,251	4,457	174,708	4,206	12-14	178,914
Net Utility Plant in Rate Base	543,115	145,010	688,125	529,461	145,010	674,471	(14,499)		659,972
Net Working Capital in Rate Base									
Cash Working Capital	26,210	165	26,375	26,210	165	26,375	909	15-16	27,284
Materials and Supplies	4,952	(152)	4,800	5,043	(152)	4,891	152	17	5,043
Prepayments - Other	3,651	503	4,154	4,453	503	4,956	(4,956)	18-19	-
Prepayments - Taxes	-	-	-	-	-	-	-	-	-
Accumulated Deferred Income Taxes	(89,814)	(8,063)	(97,877)	(88,201)	(8,063)	(96,264)	(1,613)	20-21	(97,877)
Rounding	-	-	-	-	-	-	-	-	-
Net Working Capital in Rate Base	(55,001)	(7,547)	(62,548)	(52,495)	(7,547)	(60,042)	(5,508)		(65,550)
TOTAL RATE BASE	\$ 488,114	\$ 137,463	\$ 625,577	\$ 476,966	\$ 137,463	\$ 614,429	\$ (20,007)		\$ 594,422

DW 17-165
 ABENAKI WATER COMPANY, INC.
 ROSEBROOK DIVISION
 PERMANENT RATES
 PRO-FORMA ADJUSTMENTS TO RATE BASE

Adl #

Proforma Adjustments to Utility Plant in Service:		
1	To reverse Company proforma for Utility Plant in Service.	(159,074)
2	To record Staff proforma adjusting Utility Plant in Service to year-end balance. (See Schedule 3b)	125,698
3	To record Organization Costs associated with the acquisition of Rosebrook by Abenaki	51,931
	Total Adjustments - Utility Plant in Service	18,555
Proforma Adjustments to Accumulated Depreciation		
4	To reverse Company proforma for Accumulated Depreciation.	18,039
5	To record Staff proforma adjusting Accumulated Depreciation to year-end balance. (See Schedule 3b)	(17,217)
6	To record Accumulated Depreciation for Organization Costs (\$51,931 / 14 yrs) / 2	(1,855)
	Total Adjustments - Accumulated Depreciation	(1,033)
Proforma Adjustments to Utility Plant Acquisition Adjustment:		
7	To remove Utility Plant Acquisition Adjustment from Plant as an unallowable recovery amount. (See Schedule 3b)	(36,234)
Proforma Adjustments to Accumulated Amortization of Utility Plant Acq Adjustment		
8	To remove Accumulated Amortization of Utility Plant Acq Adjustment as an unallowable recovery amount.	2,265
Proforma Adjustments to Contributions in Aid of Construction (CIAC)		
9	To reverse Company proforma for Contributions in Aid of Construction (CIAC)	(1,783)
10	To record Staff proforma adjusting Contributions in Aid of Construction to year-end balance. (See Schedule 3b)	1,902
11	To correct misposted amortization per <u>Audit Issue #5</u>	(2,377)
	Total Proforma Adjustments to Contributions in Aid of Construction (CIAC)	(2,258)
Proforma Adjustments to Accumulated Amortization - CIAC		
12	To reverse Company proforma for Accumulated Amortization - CIAC	(4,457)
13	To record Staff proforma adjusting Accumulated Amortization - CIAC to year-end balance. (See Schedule 3b)	6,286
14	To correct misposted amortization per <u>Audit Issue #5</u>	2,377
	Total Proforma Adjustments to Accumulated Amortization - CIAC	4,206

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
PERMANENT RATES
PRO-FORMA ADJUSTMENTS TO RATE BASE

Adj #

Working Capital:

Cash Working Capital

15	To reverse Company proforma for Cash Working Capital		(165)
16	To adjust Cash Working Capital to reflect adjusted year end O & M balances reported on the Income Statement, Schedule 4, column 9. (See Schedule 3b)		
	Working Capital per Staff based on Proforma Test Year	27,284	
	less Working Capital per the Company based on Actual Test Year	<u>(26,210)</u>	1,074

Total Adjustments - Cash Working Capital

909

Proforma Adjustments to Materials and Supplies

17	To reverse Company proforma for Material and Supplies.		152
	Total Proforma Adjustments to Materials and Supplies		<u>152</u>

Prepayments - Other

18	To reverse Company proforma adjustment for Prepayments - Other.		(503)
19	To adjust Prepaid expenses to include only those prepaids not included in Cash Working Capital. (See Schedule 3b)		(4,453)
	Total Adjustments - Prepayments - Other		<u>(4,956)</u>

Proforma Adjustments to Accumulated Deferred Income Taxes

20	To reverse Company proforma adjustment to Accumulated Deferred Income Taxes		8,063
21	To record Staff proforma adjust ing Accumulated Deferred Inocme Taxes to year-end balance. (See Schedule 3b)		(9,676)
			<u>(1,613)</u>
	Total Pro Forma Adjustments to Rate Base		<u><u>(20,007)</u></u>

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
PERMANENT RATES
CALCULATION OF 5-QUARTER AVERAGE RATE BASE

	For the Quarter Ended					Staff 5-Quarter Average	Staff Proforma Adjustments	Adj #	Proforma Rate Base
	09/30/15	12/31/16	03/31/17	06/30/17	09/30/17				
Net Utility Plant in Rate Base									
Total Utility Plant	\$ 1,362,703	\$ 1,382,473	\$ 1,403,009	\$ 1,456,106	\$ 1,558,195	\$ 1,432,497	\$ 125,698	2	\$ 1,558,195
Less: Accumulated Depreciation	(651,590)	(651,169)	(660,169)	(665,005)	(678,505)	(661,288)	(17,217)	5	(878,505)
Net Utility Plant in Service	711,113	731,304	742,840	791,101	879,690	771,209	108,481		879,690
Utility Plant Acquisition Adjustment	36,234	36,234	36,234	36,234	36,234	36,234	(36,234)	7	-
Less: Accum Amortization of Utility Plant Acq Adj	-	-	-	-	-	-	-		-
Less: Contributions in Aid of Construction	(448,708)	(448,708)	(448,708)	(448,708)	(446,331)	(448,233)	1,902	10	(446,331)
Add: Accumulated Amortization - CIAC	162,938	168,217	168,217	175,348	178,537	170,251	6,286	13	178,537
Net Utility Plant in Rate Base	\$ 461,577	\$ 487,047	\$ 498,583	\$ 553,975	\$ 646,130	\$ 529,481	\$ 80,435		\$ 609,896
Net Working Capital in Rate Base									
Cash Working Capital (b)					26,210 (b)	27,284	1,074	16	27,284
Materials and Supplies	5,408	5,408	4,800	4,800	4,800	5,043	-		5,043
Prepayments - Other	7,660	851	4,788	4,811	4,154	4,453	(4,453)	19	-
Accumulated Deferred Income Taxes - Liabilities	(81,751)	(81,751)	(81,751)	(97,877)	(97,877)	(88,201)	(9,676)	21	(97,877)
Net Working Capital in Rate Base	\$ (68,683)	\$ (75,492)	\$ (72,163)	\$ (88,266)	\$ (62,713)	\$ (51,421)	\$ (13,055)		\$ (65,550)
TOTAL RATE BASE	\$ 392,894	\$ 411,555	\$ 426,420	\$ 465,709	\$ 583,417	\$ 478,040	\$ 67,380		\$ 544,346

	Original Actual Test Year (Sch 4, Col 1)	Proforma Test Year (Sch 4, Col 9)
(b) Staff's Calculation of Cash Working Capital:		
Adjusted Total O & M Expenses (Sch 4)	212,574	221,279
Cash Working Capital % (45 days / 365 days)	x 12.33%	x 12.33%
Cash Working Capital	26,210	27,284

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
PERMANENT RATES
PRO-FORMA OPERATING INCOME STATEMENT

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Original Permanent Rate Filing			Revised Permanent Rate Filing			Permanent Rates				
	Actual Test Year	Company Proforma Adjust's	Proforma Test Year	Revised Test Year Filed 4/23/18	Original Company Proforma Adjust's	Revised Proforma Test Year	Staff Proforma Adjust's (Sch 4a)	Adj # (Sch 4a)	Proforma Operating Income	Revenue Deficiency (Surplus) (Sch 1)	Operating Income Requirement (Sch 1)
Operating Revenue:											
Sales of Water	\$ 270,092	\$ 102,232	\$ 372,324	\$ 276,335	\$ 102,232	\$ 378,567	\$ (102,232)	22	\$ 276,335	\$ 78,179	\$ 354,514
Other Operating Revenue	-	-	-	-	-	-	-	-	-	-	-
Total Operating Revenues	270,092	102,232	372,324	276,335	102,232	378,567	(102,232)		276,335	78,179	354,514
Operating Expenses:											
Operation & Maintenance Expenses:											
Source of Supply	212,574	1,342	213,916	-	-	-	-	-	-	-	-
Pumping Expenses	-	-	-	69,265	-	69,265	-	-	69,265	-	69,265
Water Treatment Expenses	-	-	-	34,871	-	34,871	-	-	34,871	-	34,871
Transmission & Distribution Expenses	-	-	-	18,287	-	18,287	-	-	18,287	-	18,287
Customer Accounts Expenses	-	-	-	11,255	-	11,255	-	-	11,255	-	11,255
Administrative & General Expenses	-	-	-	83,356	1,342	84,698	2,903	23-24	87,601	-	87,601
Total Operation & Maintenance Expenses	212,574	1,342	213,916	217,034	1,342	218,376	2,903		221,279	-	221,279
Depreciation Expense	57,272	6,491	63,763	57,272	6,491	63,763	(2,782)	25	60,981	-	60,981
Amortization Expense - CIAC	(15,975)	-	(15,975)	(15,975)	-	(15,975)	-	-	(15,975)	-	(15,975)
Amortization Expense - Other	(1,124)	4,529	3,405	(1,124)	4,529	3,405	(4,529)	26	(1,124)	-	(1,124)
Taxes Other Than Income	22,704	-	22,704	22,704	-	22,704	(8,704)	27	14,000	-	14,000
Total Operating Expenses	275,451	12,362	287,813	279,911	12,362	292,273	(13,112)		279,161	-	279,161
Net Operating Income before Income Taxes	(5,359)	89,870	84,511	(3,576)	89,870	86,294	(89,120)		(2,826)	78,179	75,353
Less: Income Taxes	10,626	25,211	35,837	10,626	25,211	35,837	(36,234)	28-29	(397)	30,812	30,415
NET OPERATING INCOME	\$ (15,985)	\$ 64,659	\$ 48,674	\$ (14,202)	\$ 64,659	\$ 50,457	\$ (52,886)		\$ (2,429)	\$ 47,367	\$ 44,938

**DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
PERMANENT RATES
PRO-FORMA ADJUSTMENTS TO NET OPERATING INCOME**

Adj #

Proforma Adjustments to Sales of Water

22	To reverse Company proforma.		(102,232)
	Total adjustments to Sales of Water		(102,232)

Proforma Adjustments to Administrative & General Expenses

23	To adjust Company proforma for PUC Audit to be recovered over a three year period.		
	Audit costs allowable per Staff	\$ 6,000 / 3	\$ 2,000
	Deduct Company proforma for audit costs	(3,000) / 3	(1,000)
	Staff proforma adjustment	3,000 / 3	1,000
24	To adjust Company proforma for lease agreement costs.		
	Actual lease expense incurred during Test Year:		
	Laconia: 10 months @ \$1,000/mo	10,000	
	Connecticut: 3 mos @ \$257.50, 9 mos @ 273.25	3,232	
		13,232	
	Proformed lease expense:		
	Laconia: 3 mos @ \$1,000, 9 mos @ 1,022	12,198	
	Connecticut: 12 mos @ \$273.25	3,279	
		15,477	
	Staff proformed lease expense:		15,477
	Less: Staff actual lease expense:		(13,232)
	Staff proforma adjustment		2,245
	Less: Company proforma adjustment		(342)
			1,903
	Total Adjustments to Administrative & General Expenses		2,903

Proforma Adjustments to Depreciation Expense

25	To adjust Company proforma for depreciation expense related to Organizational Costs.		
	Acquisition Costs: 51,931 / 14 years	3,709	
	Less: Company proforma adjustment	(6,491)	(2,782)
	Total Proforma Adjustments to Depreciation Expense		(2,782)

Proforma Adjustments to Amortization Expense - Other

26	To remove Amortization Expense for Utility Plant Acq Adjustment as an unallowable recovery amo		(4,529)
	Total Proforma Adjustments to Amortization Expense - Other		(4,529)

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
PERMANENT RATES
PRO-FORMA ADJUSTMENTS TO NET OPERATING INCOME

Adj #

Proforma Adjustments to Taxes Other Than Income

27	To adjust Taxes Other than Income to reflect actual property taxes. (See Schedule 4b)		
	Taxes Other than Income per Income Statement (Schedule 4)	22,704	
	Actual Taxes Other than Income per Staff (Schedule 4b)	<u>(14,000)</u>	(8,704)
	Total Proforma Adjustments to Taxes Other Than Income		<u>(8,704)</u>
	Total Proforma Adjustments to Net Operating Income before Income Taxes		<u><u>(89,120)</u></u>

Income Tax

28	To adjust Income Tax Expense per Schedule 4c		(35,124)
29	To adjust Income Tax Expense per Schedule 4d		(1,110)
	Total Adjustments - Income Taxes		<u>(36,234)</u>

**DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
PERMANENT RATES
ANALYSIS OF MUNICIPAL AND STATE REAL ESTATE TAX
AND CALCULATION OF PROFORMA PROPERTY TAX EXPENSE**

Invoice Date	Taxing Entity	Identification	Valuation	Actual Billing		Payment	
				Total Rate	Tax		
12/19/2016	Carroll	999-UTL-WAT-000	Bretton Woods Pump Station	\$ 558,506	\$ 16.65	\$ 9,299	\$ 4,406
7/6/2017	Carroll	999-UTL-WAT-000	Bretton Woods Pump Station	\$ 625,907	16.65	\$ 10,421	\$ 5,211
12/21/2017	Carroll	999-UTL-WAT-000	Bretton Woods Pump Station	\$ 357,700	17.40	\$ 6,224	\$ 1,013
6/8/2018	Carroll	999-UTL-WAT-000	Bretton Woods Pump Station	\$ 357,700	17.40	\$ 6,224	\$ 3,116
12/20/2016	Bethlehem	422-006-011-000	B/O Land of Bretton Wds (Water Tank)	\$ 128,981	26.24	\$ 3,384	\$ 1,712
7/7/2017	Bethlehem	422-006-011-000	B/O Land of Bretton Wds (Water Tank)	\$ 132,315	26.24	\$ 3,472	\$ 1,894
12/20/2017	Bethlehem	422-006-011-000	B/O Land of Bretton Wds (Water Tank)	\$ 73,300	29.66	\$ 2,174	\$ 445
7/2/2018	Bethlehem	422-006-011-000	B/O Land of Bretton Wds (Water Tank)	\$ 73,300	29.66	\$ 2,174	\$ 1,087
12/15/2016	State of NH		04/01/16 - 03/31/17	\$ 750,200	6.60	\$ 4,951	\$ 4,951
12/15/2017	State of NH		04/01/17 - 03/31/18	\$ 848,200	6.60	\$ 5,598	\$ 5,598

	Test Year: October 1, 2016 - September 30, 2017		Proforma: October 1, 2017 - September 30, 2018	
Carroll	1/2 of 12/19/16 Billing (Oct - Mar)	\$ 4,650	1/2 of 12/21/17 Billing (Oct - Mar)	\$ 3,112
	1/2 of 12/21/17 Billing (Apr - Sept)	3,112	All of 6/8/18 Payment (Apr - Sept)	3,116
		<u>\$ 7,762</u>		<u>\$ 6,228</u>
Bethlehem	1/2 of 12/20/16 Billing (Oct - Mar)	\$ 1,692	1/2 of 12/20/17 Billing (Oct - Mar)	\$ 1,087
	1/2 of 12/20/17 Billing (Apr - Sept)	1,087	All of 7/2/18 Payment (Apr - Sept)	1,087
		<u>\$ 2,779</u>		<u>\$ 2,174</u>
State of NH	1/2 of 12/15/16 Billing (Oct - Mar)	\$ 2,476	1/2 of 12/15/17 Billing (Oct - Mar)	\$ 2,799
	1/2 of 12/15/17 Billing (Apr - Sept)	2,799	1/2 of 12/15/17 Billing as EST (Apr - Sept)	2,799
		<u>\$ 5,275</u>		<u>\$ 5,598</u>
	Total Tax for Test Year	<u><u>\$ 15,816</u></u>	Total Tax for Proforma	<u><u>\$ 14,000</u></u>

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
PROFORMA ADJUSTMENTS TO INCOME TAXES

INCOME TAXES

To reflect the income tax effect of proforma adjustments to revenue and expenses:

Total proforma adjustments to Water Revenue	\$ (102,232)
Total proforma adjustments to Administrative & General Expenses	(2,903)
Total proforma adjustments to Depreciation Expense	2,782
Total proforma adjustments to Amortization Expense - Other	4,529
Total proforma adjustments to Taxes Other than Income	<u>8,704</u>
Additional Revenue/(Expense) Subject to New Hampshire Business Profits Tax	(89,120)
New Hampshire Business Profits Tax @ 8.2%	<u>7,308</u>
Additional Revenue/(Expense) Subject to Federal Income Tax	(81,812)
Federal income Tax @ 34%	<u>27,816</u>
Staff Proforma Adjustments Net of Income Taxes	<u>\$ (53,996)</u>

**DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
PERMANENT RATES
INCOME TAX COMPUTATION**

Interest Expense Synchronization :

Rate Base (Schedule 3; column 9)	\$ 594,422
Debt Portion (Schedule 2)	40.00%
Debt Component	<u>\$ 237,769</u>
Debt Cost (Schedule 2)	3.98%
Synchronized Interest Expense	<u>\$ 9,468</u>
Less: Test Year Interest Expense	\$ (12,285)
Income Tax Expense Interest Adjustment	\$ (2,817)
Composite Income Tax Rate (Schedule 5)	39.41%
Income Tax Expense - Normalized	<u>\$ (1,110)</u>

Tax Change Effect - FERC Methodology:

Income Tax Expense prior to Gross-up	\$ (397)
Income Tax Gross-up	30,812
Composite Income Tax Expense	<u>30,415</u>
2018 Tax Rate Factor	0.37440
2017 Tax Rate Factor	+ 0.65049
2018 Tax Rate Factor + 2017 Tax Rate Factor	<u>0.57557</u>
Adjusted Composite Income Tax Expense	<u>17,506</u>
Revenue Adjustment	<u>\$ (12,909)</u>

Amortization of Excess Deferred Income Taxes

Excess Tax Reserve: \$14,900 / 27.92 years	<u>\$ (534)</u>
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**DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
PERMANENT RATES
EFFECTIVE TAX FACTOR**

	<u>Effective 2017</u>	<u>Effective 2018</u>
Taxable Income	100.00%	100.00%
Less: NH Busines Profits Tax	<u>-8.20%</u>	<u>-7.90%</u>
Federal Taxable Income	91.80%	92.10%
Federal Income Tax Rate	<u>34.00%</u>	<u>21.00%</u>
Effective Federal Income Tax Rate	31.21%	19.34%
Add: NH Business Profits Tax	<u>8.20%</u>	<u>7.90%</u>
Effective Tax Rate	<u><u>39.41%</u></u>	<u><u>27.24%</u></u>
Percent of Income Available if No Tax	100.00%	100.00%
Effective Tax Rate	<u>-39.41%</u>	<u>-27.24%</u>
Percent Used as a Divisor to Determine Revenue Requirement	<u>60.59%</u>	<u>72.76%</u>
Tax Multiplier (Effective Tax Rate ÷ Percent Used as a Divisor)	<u><u>0.65049</u></u>	<u><u>0.37440</u></u>

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
PERMANENT RATES
CALCULATION OF RATES

Total Annual Water Revenues Proposed per Settlement (Sch 1) \$ 341,071

Less: Fire Protection Revenues
Municipal \$ -
Private -

Revenues from General Metered Customers \$ 341,071

Customer Charge Revenues:

Meter Size	Present Rate	Percent Increase	Proposed Rate	Proforma # of Meters	Annual Revenues	
5/8" Meter	\$ 9.91	51.36%	\$ 15.00	107	\$ 19,260	
5/8"X3/4" Meter	9.91	51.36%	15.00	254	45,720	
1" Meter	32.69	51.36%	49.48	46	27,313	
2" Meter	106.00	90.00%	201.40	2	4,834	
3" Meter	230.83	90.00%	438.58	3	15,789	
6" Meter	924.29	90.00%	1,756.15	1	21,074	
			(a)	<u>413</u>	<u>\$ 133,990</u>	(133,990) 39.29%

Consumption Charge Revenues: \$ 207,081 60.71%

Consumption Charge Revenues \$ 207,081
 Total Proforma Annual Consumption (1,000 gals) (b) + 35,244
 Consumption Rate per Customer (per 1,000 gals) \$ 5.88

Total Proforma Annual Consumption (per 1,000 gals) x 35,244 (207,081)

Unallocated Water Revenues \$ -

(b) Pro-forma Consumption: 2017 Actual Water Sales:
 Gallons 35,243,804
 Conversion to Cubic Feet + 7.48
 Cubic Feet 4,711,411
 Conversion to CCF + 100 47,114

NEW RATE:
 Average usage for a Residential Customer per month: 1.31 x 5.88 = 7.70 x 12 = \$ 92.40
 Meter charge 15.00 x 12 = 180.00
\$ 22.70 \$ 272.40

OLD RATE:
 Average usage for a Residential Customer per month: 1.31 x 5.33 = 6.98 x 12 = 83.76
 Meter charge 9.91 x 12 = 118.92
\$ 16.89 \$ 202.68

AVERAGE MONTHLY INCREASE PER RESIDENTIAL CUSTOMER: \$ 5.81 \$ 69.72

AVERAGE YEARLY INCREASE PER RESIDENTIAL CUSTOMER: \$ 69.72

**DW 17-165
ABENAKI WATER COMPANY INC
ROSEBROOK DIVISION
STEP I INCREASE - UNAUDITED
REVENUE REQUIREMENT**

Increase in Net Income Requirement:

2018 Plant Additions (Att B; Sch 3)	\$ 72,243	
Less: Accumulated Depreciation (Att B; Sch 3)	(3,474)	
Net 2018 Plant in Service	<u>68,769</u>	
 Net 2018 Plant in Rate Base	 \$ 68,769	
Rate of Return (Att B; Sch 2)	x <u>7.56%</u>	
Increase in Operating Income Requirement	<u>\$ 5,199</u>	
 Net Increase in Operating Expenses:		
Annual Depreciation Expense for 2018 Plant Additions (Att B; Sch 3)	\$ 6,943	
Annual Income Tax Expense (Rate Base x 1.75%)	1,540	
Property Tax Expense for 2018 Plant Additions (Att B; Sch 3)	<u>1,361</u>	
Step Increase in Revenue Requirement	\$ 15,043	
Adjusted Test Year Water Sales (Att A; Sch 1)	<u>\$ 341,071</u>	
Percent Increase / (Decrease) in Revenue Requirement from Water Sales	<u><u>4.41%</u></u>	

**DW 17-165
ABENAKI WATER COMPANY INC
ROSEBROOK DIVISION
STEP I INCREASE - UNAUDITED
WEIGHTED AVERAGE COST OF CAPITAL**

	Capital Structure		Cost of Debt				Cost Rate	Weighted Average Cost
	Per Test Year	Percent	Interest Rate @ 09/30/17	Annual Interest*	Annual Amortization **	Total Annual Cost of Debt		
Debt								
2014 CoBank Loan, \$300,000	\$ 205,080	0.00%	3.68%	\$ 7,547	\$ 2,163	\$ 9,710	0.00%	0.00%
2016 CoBank Loan, \$400,000	387,201	0.00%	3.55%	13,746	128	13,874	0.00%	0.00%
Total Debt	<u>592,281</u>	<u>40.00%</u>		<u>\$ 21,293</u>	<u>\$ 2,291</u>	<u>\$ 23,584</u>	<u>3.98%</u>	<u>1.59%</u>
Common Equity								
Common Stock	-	0.00%						
Additional Paid in Capital	589,521	0.00%						
Retained Earnings	47,234	0.00%						
Total Common Equity	<u>636,755</u>	<u>60.00%</u>					<u>9.95%</u>	<u>5.97%</u>
Total Capitalization	<u>\$ 1,229,036</u>	<u>100.00%</u>						<u>7.56%</u>

* Annual Interest calculation: Test Year balance x Interest Rate at 9/30/17

** Per response to Data Request: Tech 1-6

	Weighted Tax Effect Due to Use of Internal Cash			
	Weighted Cost	Tax Multiplier	Pre-Tax Cost	Tax Gross-up
Debt:	1.59%	1.0000	1.59%	0.00%
Equity:	5.97%	1.3744	8.21%	2.24%
	<u>7.56%</u>		<u>9.80%</u>	<u>2.24%</u>

**DW 17-165
ABENAKI WATER COMPANY INC
ROSEBROOK DIVISION
STEP I INCREASE - UNAUDITED
COST ADDITIONS AND RETIREMENTS**

2018 Plant Additions:

<u>Account</u>	<u>Estimated Amount *</u>	<u>Depreciation Rate</u>	<u>Estimated Annual Depreciation</u>	<u>Estimated Accumulated Depreciation 12 mos 9/30/18</u>	<u>Estimated Net Plant in Service</u>	<u>Estimated State Property Taxes</u>	<u>Estimated Town Property Taxes</u>
311: Well 1 Pump Replacement	\$ 34,768	10.00%	\$ 3,477	\$ (1,739)	\$ 33,029	\$ 229	\$ 605
333: Services & Renewals (2017)	506	2.50%	13	(7)	499	3	9
333: Services & Renewals (2018)	13,116	2.50%	328	(164)	12,952	87	228
335: Hydrant & Hydrant Install	8,355	1.90%	159	(80)	8,275	55	145
343: Tools, Shop & Garage Equipment	909	5.30%	48	(24)	885	-	-
347: SCADA System Estimate	10,735	20.00%	2,147	(1,074)	9,661	-	-
347: Purchase & Install SCADA Extended	2,098	20.00%	420	(210)	1,888	-	-
347: Website Design	1,067	20.00%	213	(107)	960	-	-
347: NH Server	689	20.00%	138	(69)	620	-	-
	<u>\$ 72,243</u>		<u>\$ 6,943</u>	<u>\$ (3,474)</u>	<u>\$ 68,769</u>	<u>\$ 374</u>	<u>\$ 987</u>

* Estimate: Final invoices pending as of 9/27/18

DW 17-165
ABENAKI WATER COMPANY INC
ROSEBROOK DIVISION
STEP I INCREASE - UNAUDITED
CALCULATION OF RATES

Total Annual Water Revenues Proposed per Settlement (Sch 1) \$ 356,114

Less: Fire Protection Revenues
Municipal \$ -
Private -

Revenues from General Metered Customers \$ 356,114

Meter Size	Att A, Sch 6 Adjusted Rate	Percent Increase	Proposed Rate	Pro-forma # of Meters	Annual Revenues	
5/8" Meter	\$ 15.00	0.00%	\$ 15.00	107	\$ 19,260	
5/8"X3/4" Meter	15.00	0.00%	15.00	254	45,720	
1" Meter	49.48	0.00%	49.48	46	27,313	
2" Meter	201.40	0.00%	201.40	2	4,834	
3" Meter	438.58	0.00%	438.58	3	15,789	
6" Meter	1,756.15	0.00%	1,756.15	1	21,074	
			(a)	413	\$ 133,990	(133,990) 37.63%

Consumption Charge Revenues: \$ 222,124 62.37%

Consumption Charge Revenues	\$ 222,124	
Total Proforma Annual Consumption (1,000 gals)	(b) + 35,244	
Consumption Rate per Customer (per 1,000 gals)	\$ 6.30	
Total Proforma Annual Consumption (per 1,000 gals)	x 35,244	(222,124)

Unallocated Water Revenues \$ -

(b) Pro-forma Consumption:	2017 Actual Water Sales:		
Gallons		35,243,804	
Conversion to Cubic Feet		+ 7.48	
Cubic Feet		4,711,411	
Conversion to CCF		+ 100	47,114

NEW RATE:
Average usage for a Residential Customer per month: $1.31 \times 6.30 = 8.26 \times 12 = \$ 99.12$
Meter charge $15.00 \times 12 = 180.00$
 $\$ 23.26$ \$ 279.12

OLD RATE:
Average usage for a Residential Customer per month: $1.31 \times 5.33 = 6.98 \times 12 = 83.76$
Meter charge $9.91 \times 12 = 118.92$
 $\$ 16.89$ \$ 202.68

AVERAGE MONTHLY INCREASE PER RESIDENTIAL CUSTOMER: \$ 6.37 \$ 76.44

AVERAGE YEARLY INCREASE PER RESIDENTIAL CUSTOMER: \$ 76.44

**DW 17-165
ABENAKI WATER COMPANY INC
ROSEBROOK DIVISION
STEP II INCREASE - UNAUDITED
REVENUE REQUIREMENT**

Increase in Net Income Requirement:

2018 Plant Additions (Att C; Sch 3)	\$ 100,000
Less: Accumulated Depreciation (Att C; Sch 3)	<u>(1,250)</u>
Net 2018 Plant in Service	<u>98,750</u>
 Net 2018 Plant in Rate Base	 \$ 98,750
 Rate of Return (Att C; Sch 2)	 x <u>5.15%</u>
 Increase in Operating Income Requirement	 <u>\$ 5,086</u>
 Net Increase in Operating Expenses:	
Annual Depreciation Expense for 2018 Plant Additions (Att C; Sch 3)	\$ 2,500
Property Tax Expense for 2018 Plant Additions (Att C; Sch 3)	<u>2,400</u>
 Step Increase in Revenue Requirement	 <u>\$ 9,986</u>
 Adjusted Test Year Water Sales (Att A; Sch 1 + Att B; Sch 1)	 <u>\$ 356,114</u>
 Percent Increase / (Decrease) in Revenue Requirement from Water Sales	 <u><u>2.80%</u></u>

**DW 17-165
ABENAKI WATER COMPANY INC
ROSEBROOK DIVISION
STEP II INCREASE - UNAUDITED
WEIGHTED AVERAGE COST OF CAPITAL**

	<u>Per Test Year</u>	<u>Percent</u>	<u>Annual Interest*</u>	<u>Annual Amortization **</u>	<u>Total Annual Cost of Debt</u>	<u>Cost Rate</u>
Debt Financing	\$ 100,000	5.00%	\$ 5,000	\$ 150	\$ 5,150	5.15%

* Based on estimate interest rate as of 9/27/18

** Calculation of projected amortization of finance costs:

Estimated 2019 Financing Costs:	Bank Fees	\$ 500
	Consultant Fees	2,500
	Other Fees	-
	Total	\$ 3,000
Loan Term in Years		20
Annual Amortization of Finance Costs		\$ 150

**DW 17-165
ABENAKI WATER COMPANY INC
ROSEBROOK DIVISION
STEP II INCREASE - UNAUDITED
COST ADDITIONS AND RETIREMENTS**

2019 Plant Additions:

<u>Account</u>	<u>Estimated Amount *</u>	<u>Depreciation Rate</u>	<u>Estimated Annual Depreciation</u>	<u>Estimated Accumulated Depreciation 12 mos 9/30/19</u>	<u>Estimated Net Plant in Service</u>	<u>Estimated State Property Taxes</u>	<u>Estimated Town Property Taxes</u>
304: Pressure Reduction Design	\$ 100,000	2.50%	\$ 2,500	\$ (1,250)	\$ 98,750	\$ 660	\$ 1,740
	<u>\$ 100,000</u>		<u>\$ 2,500</u>	<u>\$ (1,250)</u>	<u>\$ 98,750</u>	<u>\$ 660</u>	<u>\$ 1,740</u>

* Estimate: Final invoices pending as of 9/27/18

DW 17-165
ABENAKI WATER COMPANY INC
ROSEBROOK DIVISION
STEP II INCREASE - UNAUDITED
CALCULATION OF RATES

Total Annual Water Revenues Proposed per Settlement (Sch 1) \$ 366,100

Less: Fire Protection Revenues

Municipal
Private

\$ -
-

Revenues from General Metered Customers \$ 366,100

Customer Charge Revenues:

Meter Size	Att B, Sch 4 Adjusted Rate	Percent Increase	Proposed Rate	Pro-forma # of Meters	Annual Revenues	
5/8" Meter	\$ 15.00	2.80%	\$ 15.42	107	\$ 19,799	
5/8"X3/4" Meter	15.00	2.80%	15.42	254	47,000	
1" Meter	49.48	2.80%	50.87	46	28,080	
2" Meter	201.40	2.80%	207.05	2	4,969	
3" Meter	438.58	2.80%	450.88	3	16,232	
6" Meter	1,756.15	2.80%	1,805.39	1	21,665	
			(a)	413	\$ 137,745	(137,745) 37.62%

Consumption Charge Revenues:

\$ 228,355 62.38%

Consumption Charge Revenues		\$ 228,355
Total Proforma Annual Consumption (1,000 gals)	(b) +	35,244
Consumption Rate per Customer (per 1,000 gals)		\$ 6.48
Total Proforma Annual Consumption (per 1,000 gals)	x	35,244

(228,355)

Unallocated Water Revenues

\$ -

(b) Pro-forma Consumption:

2017 Actual Water Sales:			
Gallons		35,243,804	
Conversion to Cubic Feet	+	7.48	
Cubic Feet		4,711,411	
Conversion to CCF	+	100	47,114

NEW RATE:

Average usage for a Residential Customer per month: $1.31 \times 6.48 = 8.49 \times 12 = \$ 101.88$
 Meter charge $15.42 \times 12 = 185.04$
\$ 23.91 \$ 286.92

OLD RATE:

Average usage for a Residential Customer per month: $1.31 \times 5.33 = 6.98 \times 12 = 83.76$
 Meter charge $9.91 \times 12 = 118.92$
\$ 16.89 \$ 202.68

AVERAGE MONTHLY INCREASE PER RESIDENTIAL CUSTOMER:

\$ 7.02 \$ 84.24

AVERAGE YEARLY INCREASE PER RESIDENTIAL CUSTOMER:

\$ 84.24



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Proposal No. 16291R2
September 18, 2018

AGREEMENT FOR ENGINEERING SERVICES

1. CLIENT

This Agreement is between the New England Service Company, 37 Northwest Drive, Plainville, CT 06062, attn.: Mr. Donald Vaughan (Client), and Horizons Engineering, Inc. (Engineer), of Littleton, New Hampshire.

2. PROJECT UNDERSTANDING

The Client intends to implement reconfiguration of the Rosebrook Water System to reduce operating pressures in the system. This effort is being undertaken to address recurring pressure surge issues throughout the water system, as well as to reduce operational issues associated with high system-wide pressures. To facilitate the pressure reduction the Client intends on ultimately constructing a new atmospheric storage tank at an elevation of approximately 1,810, which will reduce operating pressures in the system from approximately 185 psi to approximately 100 psi at the well field pump station. In the interim, a new booster station will be used to boost water to the existing atmospheric tank, and a pressure reducing valve will allow flow from the tank to bypass the booster pump and flow back into the system during higher demand periods.

In order to serve existing customers and new development at elevations above approximately 1,700 three new booster pump stations will be required. Additional system modifications to facilitate the pressure reductions will include reconfiguration of the existing well pumps (2) to operate at lower pressures without over pumping the wells, and additional valving to isolate high pressure zones.

3. SCOPE OF SERVICES

Horizons Engineering, Inc. proposes to provide the following engineering services associated with the Rosebrook Water Company, Bretton Woods, New Hampshire in accordance with currently accepted engineering practices:

1) Basis of Design Report

Horizons will prepare a basis of design for the proposed improvements. This basis of design will be submitted to the State of New Hampshire



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Department of Environmental Services (NHDES) for review and approval prior to proceeding with final design of the individual system components. Horizons will also coordinate with the Town of Carroll to determine permitting requirements for the pump stations and atmospheric storage tank. Landowner coordination has not been included in this scope, but can be provided.

- 2) Pump Station Designs – Horizons will complete design and permitting for three booster pump stations to supply both potable demand and fire flows to service connections above the ~1,700 grade line. Designs will include field survey, electrical, mechanical, site, building, and water system interconnection. Design effort will also include coordination with the local power utility to provide electrical service to the stations. Scope assumes that Horizons will coordinate with Blake Equipment for pumping equipment specification, and pump skid specifications and electrical/mechanical/control design will be provided by Blake for incorporation into the project plan set. Wetlands delineations are assumed to be unnecessary, but can be provided as an additional service if required. Scope assumes Horizons will prepare building, mechanical, electrical, and site design plans for each station.
- 3) Well Yield Assessment and Well Pump Design - Horizons will complete an analysis of current pumping water levels in the two system supply wells. Horizons will install data loggers in the two wells for a period of approximately 5 days and will monitor pumping water levels in the wells. Scope assumes the system operator can coordinate collection of corresponding pumping rate information. Using data collected during the monitoring period, Horizons will complete an assessment of current well yield and prepare recommendations for an appropriate pumping rate. Horizons will then work with the Client to identify if pumping rate adjustments can be completed using variable frequency drive adjustment of the well pumps. If new pumps are required, Horizons will prepare design specifications for the new pumps. Scope assumes the Client will install stilling tubes in each of the two wells to allow installation of 1” diameter data loggers if such tubes are not already present. Scope assumes Client will provide make and model number of the existing well pumps and details on their installation including pump depth, drop pipe size, etc.
- 4) Water Main and PRV Valve Design - Horizons will prepare a design for approximately 350 linear feet of water main to complete a water main loop at the end of Mt. Adams Lane. Design will include field survey, water main design plans and specifications include water main connection. Scope assumes wetlands delineation will not be required. In addition to the Mt. Adams Lane water main, Horizons will also identify locations and prepare plans and details as required for additional system bypass and PRV valves as required.



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- 5) Atmospheric Storage Tank Design and Permitting – We will complete a wetlands delineation and field survey including survey of the wetlands and soils delineation of the atmospheric storage tank site and pipe alignment, and, using a subcontractor, will complete a geotechnical analysis of the tank site. Using this information we will prepare a grading plan and specification package suitable for forwarding to tank manufactures for pricing. Horizons will coordinate with the Client to review and select a tank vendor and incorporate tank design plans and specifications into a design plan set. The set will include design of the tank site, yard piping and connecting water main and electrical service to the tank site (if desired). Scope assumes that total earth disturbance (including the tank site and access road) may exceed 100,000 square feet and therefore a land conversion Alteration of Terrain permit may be required. As such, scope includes completion of pre- and post-construction stormwater modeling for the proposed tank site if needed. Scope assumes one day of geotechnical exploration observed by a qualified geotechnical contractor, and a geotechnical report that will specify foundation design requirements for the tank vendor.

Foundation design is excluded from this scope and assumed to be part of the vendor storage tank pricing. The Client will be responsible for providing an excavator and operator for one day of test pits at the tank location.

If an Alteration of Terrain Permit is determined to be required we will submit site design plans, stormwater calculations, and associated application package to NHDES for review and approval.

- 6) NHDES Permit Submittals - Horizons will prepare the following final design submittals for the State of New Hampshire Department of Environmental Services:
- a. NHDES Drinking Water and Groundwater Bureau: We will submit design plans and specifications for the three proposed pump stations, Dartmouth Ridge water main extension, atmospheric storage tank design, and well pump/pump station upgrades.
 - b. NHDES Wetlands Bureau: If wetlands impacts are required, we will submit a wetlands application package to NHDES for review and approval.
- 7) Local Permitting: If required, Horizons will prepare and submit a Carroll Planning Board Site Plan Review application and attend Planning Board and associated meetings as required.



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- 8) **Contract Document Preparation** Horizons will prepare contract documents for the portions of the proposed project that will be formally bid based on the EJCDC Construction Contract. Contract documents will include contract front ends, design plans, and project specifications. Separate bid and contract documents will be prepared for the following:
- a. Contract 1 - Three pump stations, Mt. Adams Lane water main extension, well pump upgrade, and additional valves/hydrants. Scope assumes owner will furnish pump skids for each of the stations.
 - b. Contract 2 – Atmospheric storage tank site work and access road. Scope assumes tank will construction and connection to yard piping will be excluded from the contract
 - c. Contract 3 - Construction of the atmospheric storage tank and connection to the yard piping provided under Contract 2.
- 9) **Bidding**: Horizons will coordinate bidding of the contracts and proposal solicitation, coordinate invitations to bid/requests for proposal, attend up to three pre-bid meetings, answer contractor and vendor questions during the bidding/proposal process, and attend bid openings. Horizons will then review bids, prepare bid tabulations, and submit bid results to the Client for review.

3. **SCHEDULE**

Horizons proposes the following approximate schedule:

Within 65 days – Completion of Scope Item 1: Basis of Design Report

Within 140 days - Completion of Scope Items 2 –9 (and Alternate Items if included) including final design and permit submittals for the pump stations, water main, valving, well pump upgrades, SCADA and atmospheric storage tank. Schedule may be able to be accelerated if the Client has specific deadline needs.

It is anticipated that NHDES and local approvals will require approximately 60 days once permit applications have been submitted. Horizons proposes to bid the project while design plans and specifications are under review. Bid submittal due dates can be timed to correspond to after the anticipated receipt of regulatory comments, and therefore any design changes that result from NHDES review can be incorporated.



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4. ADDITIONAL SERVICES

Horizons has not included the following scope items in this proposal:

- Construction administration
- Construction observation
- Stormwater Pollution Prevention Plan preparation
- Easement and/or boundary surveys
- As built utility location and as-built drawings
- Other scope items outside the proposed scope of services

These additional services can be provided for an additional fee as requested.

4. FEE

As changes to the final scope are likely, Horizons proposes to complete the project on a time and materials basis. We anticipate the following estimated fees:

Item 1 Preliminary Engineering and Property Coordination	\$4,500
Item 2. Pump Station Survey and Designs	\$27,100
Item 3 Well Testing and Well Pump Design	\$8,500
Item 4. Water Main Survey and Design	\$7,900
Item 5. Atmospheric Storage Tank Design	\$30,500
Item 7 State of NH Permitting	\$5,600
Item 8 Local Permitting	\$3,500
Item 9 Contract Document Preparation	\$5,400
Item 10 Bidding and Contract Negotiation	\$6,700

ESTIMATED PROJECT TOTAL **\$99,700**

In addition to engineering fees, the Client will also be responsible for State and Local application fees directly, and will be responsible for providing an excavator and operator for one day of test pits at the atmospheric storage tank Site. Horizons can arrange a suitable contractor and ask that they bill the Client directly.



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Horizons hourly rates are as follows:

Principal Engineer	\$176
Construction Manager	\$176
Principal	\$145
Senior Project Manager	\$131
Project Manager II	\$116
Project Manager I	\$97
Survey Manager	\$100
Survey Crew Rate	\$120
Engineer III	\$92
Engineer II	\$82
Engineer I	\$65
Technician	\$78
Survey Technician	\$60
Administrative Assistant	\$55
Mileage	\$0.57/mile
Full Size (24"x36" prints)	\$4.00/sheet

5. CONDITIONS FOR ENGAGEMENT

The attached Standard Conditions for Engagement are considered to be part of this Agreement.

ACCEPTED AND AUTHORIZED TO PROCEED

	CEO	9/18/2018
_____ Horizons Engineering, Inc.	_____ Title	_____ Date
_____ CLIENT	_____ Title	_____ Date



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HORIZONS ENGINEERING, INC. STANDARD CONDITIONS FOR ENGAGEMENT

These Conditions are considered a part of the Agreement between the Client (Client) and Horizons Engineering, Inc. (HE).

LIMITATION OF LIABILITY – To the fullest extent permitted by law, the Client agrees to limit the liability of HE and its officers in connection with this agreement to the Client and to all contractors and subcontractors associated with the project, to the total compensation paid to HE under this agreement. This limitation will apply regardless of legal theory and will include but not be limited to claims alleging negligence, errors, omissions, or breach of contract. Any claim shall be deemed waived unless received by HE within three years of substantial completion of the project.

INDEMNIFICATION – To the fullest extent permitted by law, HE agrees to indemnify and hold the Client harmless from any liability associated with the performance of work under this agreement to the extent caused by the negligence or willful misconduct of HE. The Client agrees to indemnify and hold HE harmless from any liability associated with the performance of work under this agreement unless the liability is caused by negligence or willful misconduct by HE.

ENVIRONMENTAL LIABILITY – The Client agrees that HE has not contributed to the presence of hazardous materials, waste, or pollutants at the site. HE assumes no liability or responsibility for the known or unknown presence of such materials. The Client agrees to indemnify and hold HE harmless from all claims associated with the discovery, handling, transportation, and/or disposal of such materials. Further, HE cannot guarantee that a site is clean of contamination or advise the Client to purchase, use, or occupy the site.

LESS THAN CUSTOMARY ENGINEERING SERVICE – The Client agrees that it is customary for the engineer who is responsible for the design of a project to be retained to provide services during the construction phase of a project to interpret the design intent, to ensure that the work is completed in substantial conformance with the plans and specifications, and to render appropriate guidance with respect to inconsistencies with the design. Should HE not be retained to provide services during construction, the Client agrees to defend, indemnify, and hold harmless HE from any claims arising out of interpretation of the design by the Client or others. This paragraph shall not release HE from its duty to provide services in accordance with professional standards. The Client further acknowledges and agrees that HE has no control over the actions of the Contractor or others on the site and shall not be responsible for means and methods of construction, supervision of personnel, and safety in, on, or around the site.

COST ESTIMATES – The Client agrees that HE has no control over the cost of labor, materials, and construction and therefore cannot and does not warrant that costs to the Client will not vary from estimates prepared by HE.

RIGHT OF ENTRY – The Client agrees to allow, or obtain permission from the owner to allow, HE access to the site to complete the contracted services. HE will take reasonable precautions to prevent damage to the site but will not be responsible for damages caused through normal and customary execution of the work or damages caused by others.

STANDARD OF CARE – HE will perform services with the degree of care generally exercised by engineers providing similar services at the same time. These services are provided with no other warranty expressed or implied.

COMPENSATION AND PAYMENT TERMS – The Client agrees that payment is due and payable within fifteen (15) days of the date of invoice. Lump sum portions of the contract will be invoiced based on an estimate of percent complete as determined by HE. Hourly portions of contracts will be invoiced on a time, materials, and expense basis. A 1 ½% per month interest rate will be applied to all unpaid amounts after thirty (30) days. HE shall also be entitled to legal fees necessary for collection efforts.

OWNERSHIP OF WORK PRODUCT – All work product including drawings, specifications, calculations, reports, electronic files, and all other documents and information produced in connection with this agreement shall be considered instruments of service and shall be and remain the property of HE. Reuse or modification of these instruments of service without the expressed written permission of HE is not allowed.

USE OF ELECTRONIC MEDIA – Work product that may be relied upon by the Client is limited to printed copies that are signed and sealed by HE. Any conclusion or information obtained or derived from electronic files will be at the user's sole risk.

SUSPENSION OF WORK – The Client may at any time by a seven day written notice suspend work. The Client shall be responsible for and promptly pay HE all amounts due for services rendered to the date of termination plus additional costs related to terminating work. HE may suspend work for cause, including non-payment, by providing a seven day written notice to the Client. The Client shall indemnify and hold harmless HE from any claim associated with suspension of work for cause.

FORCE MAJEURE – Neither party shall be deemed at fault to the extent that delay or damages result from any cause beyond its reasonable control and without its negligence.



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DISPUTE RESOLUTION – At HE's option the Client agrees to submit any claims rising out of this Contract, except claims by HE for non-payment for services, to non-binding mediation in New Hampshire in accordance with the Rules for Commercial Mediation of the American Arbitration Association before any other form of dispute resolution. Claims or disputes not resolved by mediation shall be decided by arbitration in New Hampshire in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. In no event shall a demand for dispute resolution be made after the date legal proceedings would be barred by statute.

(SCE – liability limited to fee amount (rev. 11/10))