

# **Abenaki Water Company: Rosebrook System Pressure Reduction Project**



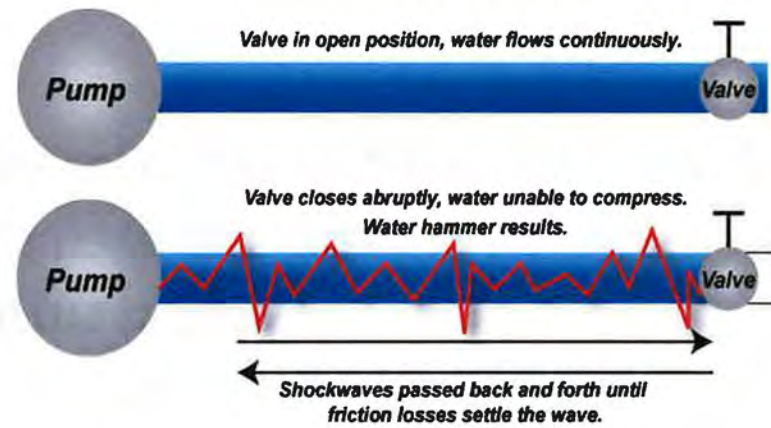
# Pressure Issues

- Pressures are dangerously high as recognized by Abenaki, Twin Mountain FD and NHDES
- System maintenance is problematic because of dangerous conditions (valve exercising, flushing, flow testing, etc.)
- Excessive power consumption
- Potential for high water loss
- Pressures exceed building codes/state regulations of 80-100 psi
- Customers incur extra costs for pressure reducing valves (PRVs) and maintenance

## Pressure Issues (Cont.)

- Genuine risk of catastrophic failure in the system (FX Lyons experienced a serious incident at pump station in 2011 resulting in TV coverage)
- Severe pressure surges/waves up to 250 psi have occurred in the past at the Omni Resort and Bretton Arms hotels
- Other significant failures/incidents have occurred
- Past non-renewal of insurance coverage due to significant damage claims in 2016

# Water Hammer





# Water Hammer

- Photo of a dramatic water hammer effect. This is a booster pump station that was destroyed by a pressure surge
- Water hammer is also responsible for pipeline failures



# Goals

- Establish lower pressure gradients for the system
- Maintain high level of domestic service
- Improve system safety, reliability and operation
- Maintain adequate fire flows per ISO recommendations
- Reduce lost water (UAW)
- Reduce power consumption
- Upgrade the system and reduce operating and maintenance costs over time
- Improve monitoring and treatment process

# Pressure Reduction Project Cost and Phasing

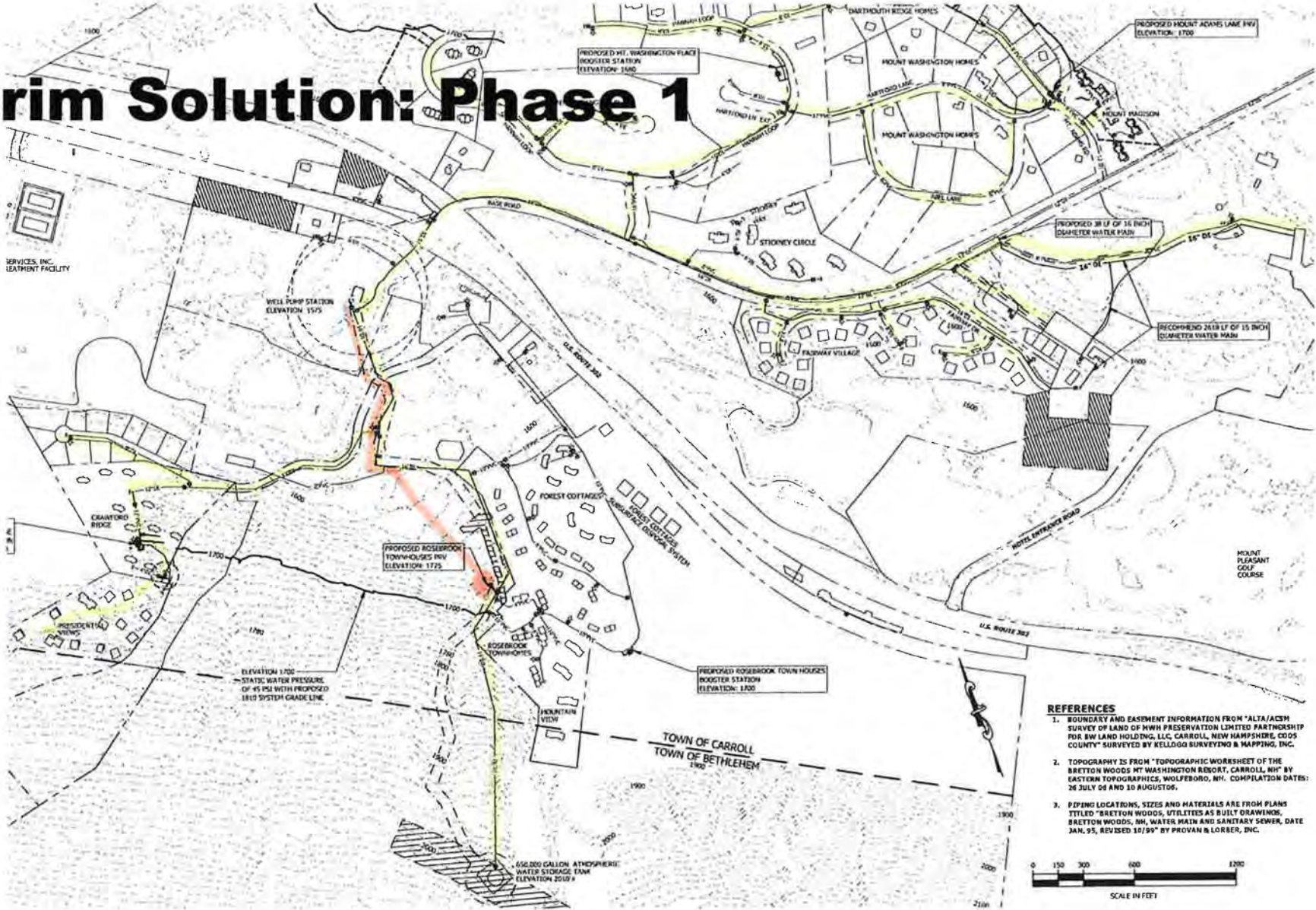
- Total project cost approximately \$2.3 M
  - Construction and testing of three booster stations
  - Water main extensions new well pumps and motors
  - New water storage tank
- Phase 1: Reduce pressure at well # 1 and well #2
- Phase 2: Replace water storage tank
- Phase 3: Reduce overall system pressure to 100 psi max

# Phase 1

- Phase 1 project cost approximately \$940,000
  - Reduce pressure at pump house (wells) to approximately 100 psi
  - Construct one new booster station (BPS)
  - Construct a direct transmission main from wells to new BPS
  - Maximum system pressure at OMNI and at low elevations will remain at 200 psi until next phases are implemented
  - All components installed in easements obtained from OMNI



## Interim Solution: Phase 1



# Benefits of Phase 1

- Postpone other improvements and associated costs while achieving the goal of reducing pressure at well
- Gets closer to final project outcome
- Phase 1 improvements can stand alone and integrate into overall project while becoming immediately used and useful.
- Immediate reduction in pump house pressure
- Reduced water hammer and high pressure concerns (at well but not in total system)
- No change in OMNI pressure or fire flow
- Allows for phased in costs (mitigate amount of rate increases)

## Total Project Cost and Phasing

- Phase 1 - Interim system improvements \$940,000 (12 months). Reduction in well house pressure.
- Phase 2 – New water storage tank \$500,000 (year 2). This will replace the existing tank.
- Phase 3 – Construction of two booster stations and other system improvements \$900,000 (years 3 and 4). Lowers system pressure to 100 psi, max. Ensures adequate fire protection pressure and flows.

# Phased Rate Increases

- Phase 1 Rate Increase 28%
- Phase 2 - TBD
- Phase 3 - TBD

## Next Steps – Phase 1

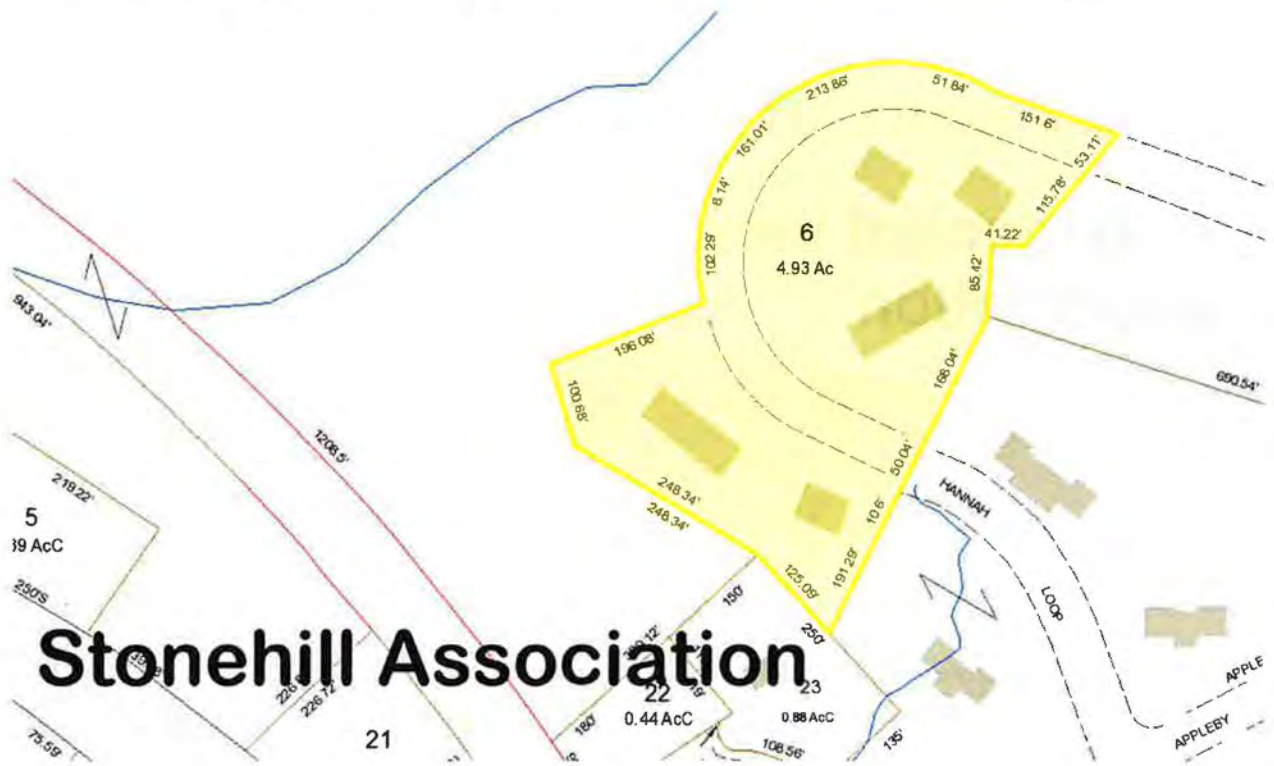
- Obtain easements
- Design Phase 1
- PUC approval
- Phase 1 improvements over 1 construction season



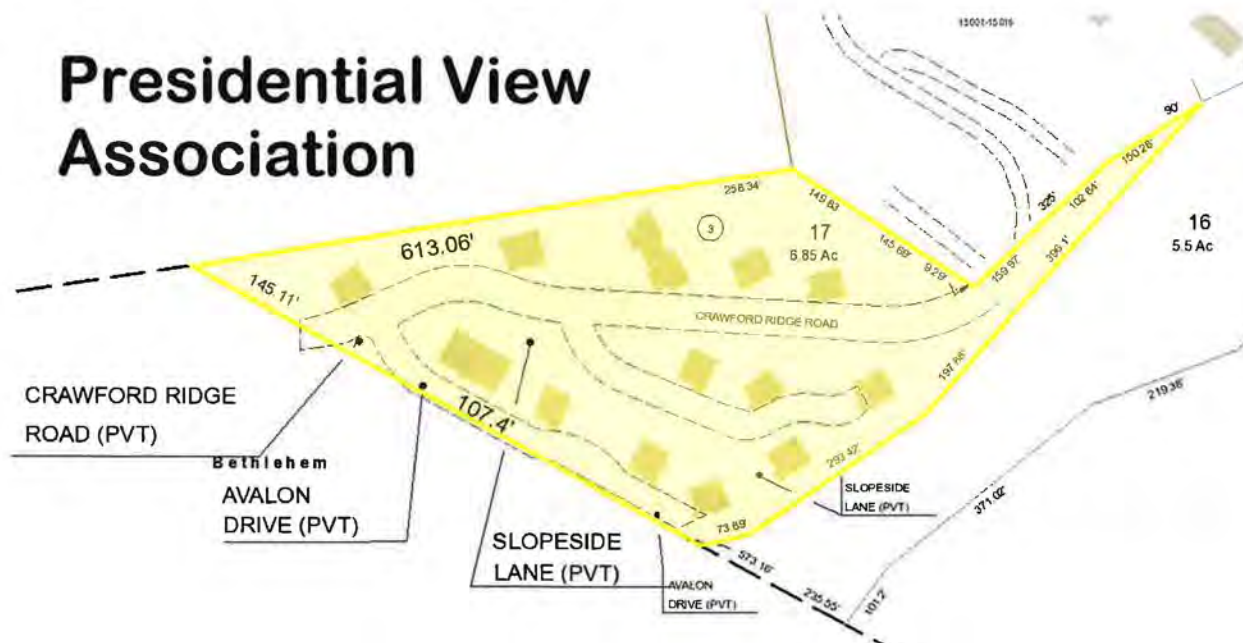
Attachment B – Common Areas Defined



**Fairway Village Association**



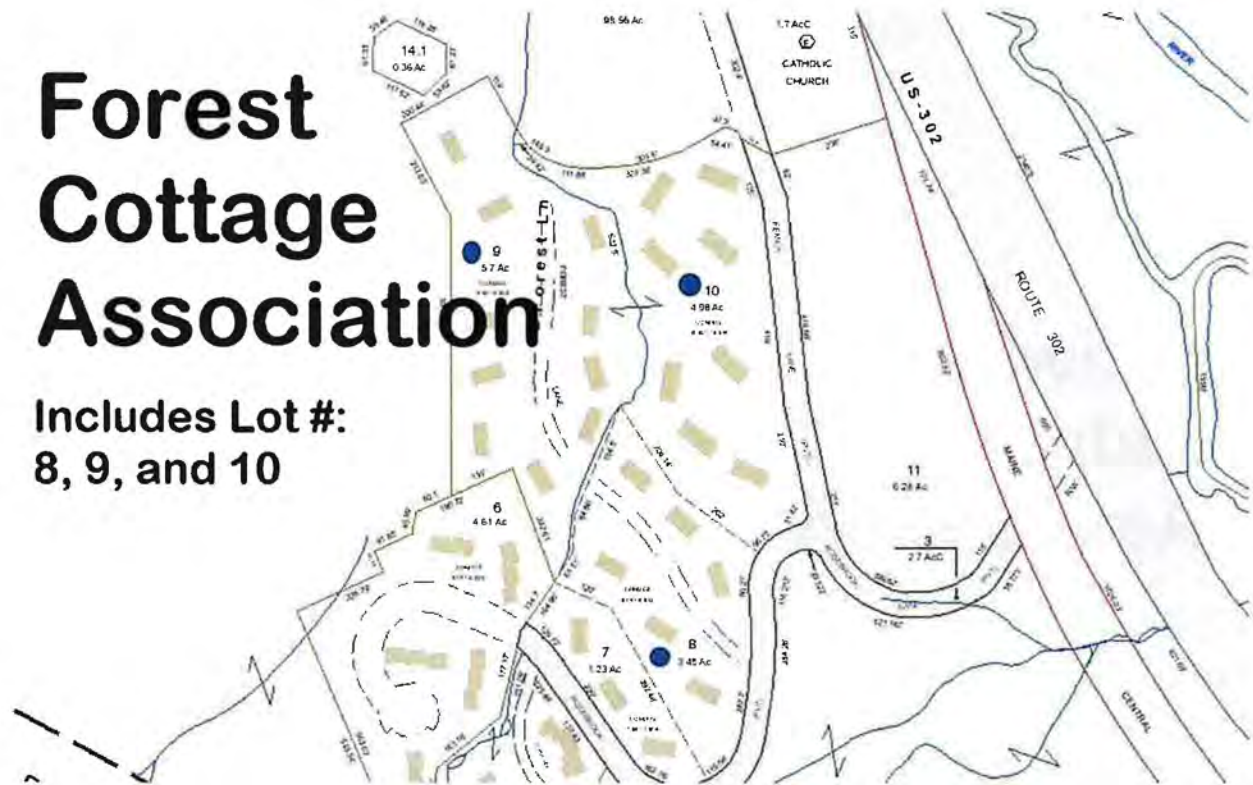
**Stonehill Association**



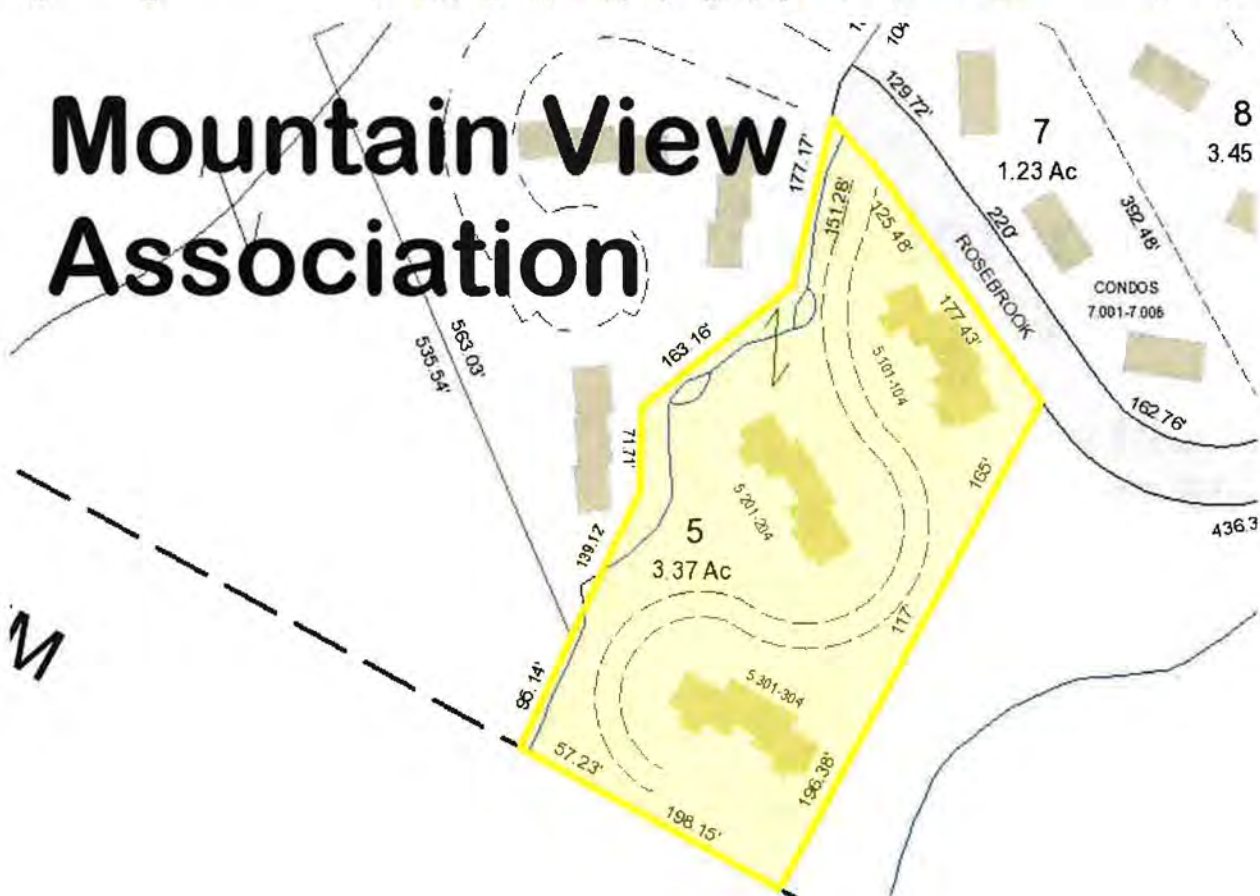




**Includes Lot #:  
8, 9, and 10**

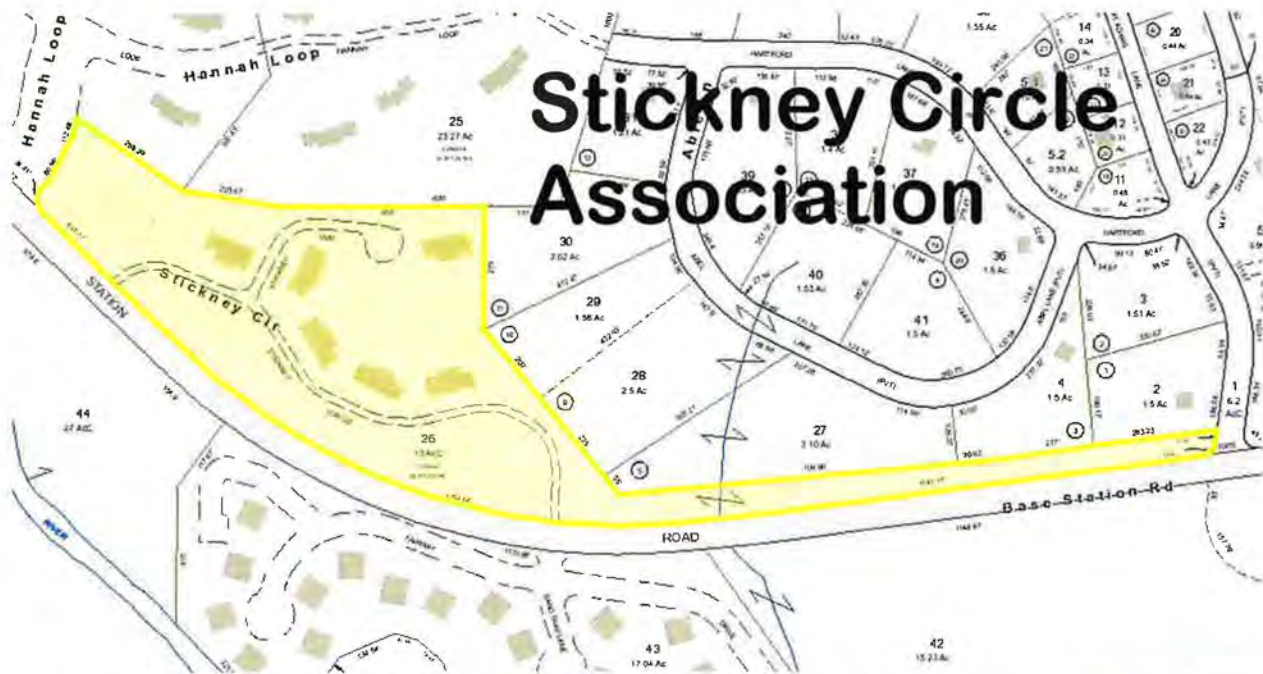


# Mountain View Association



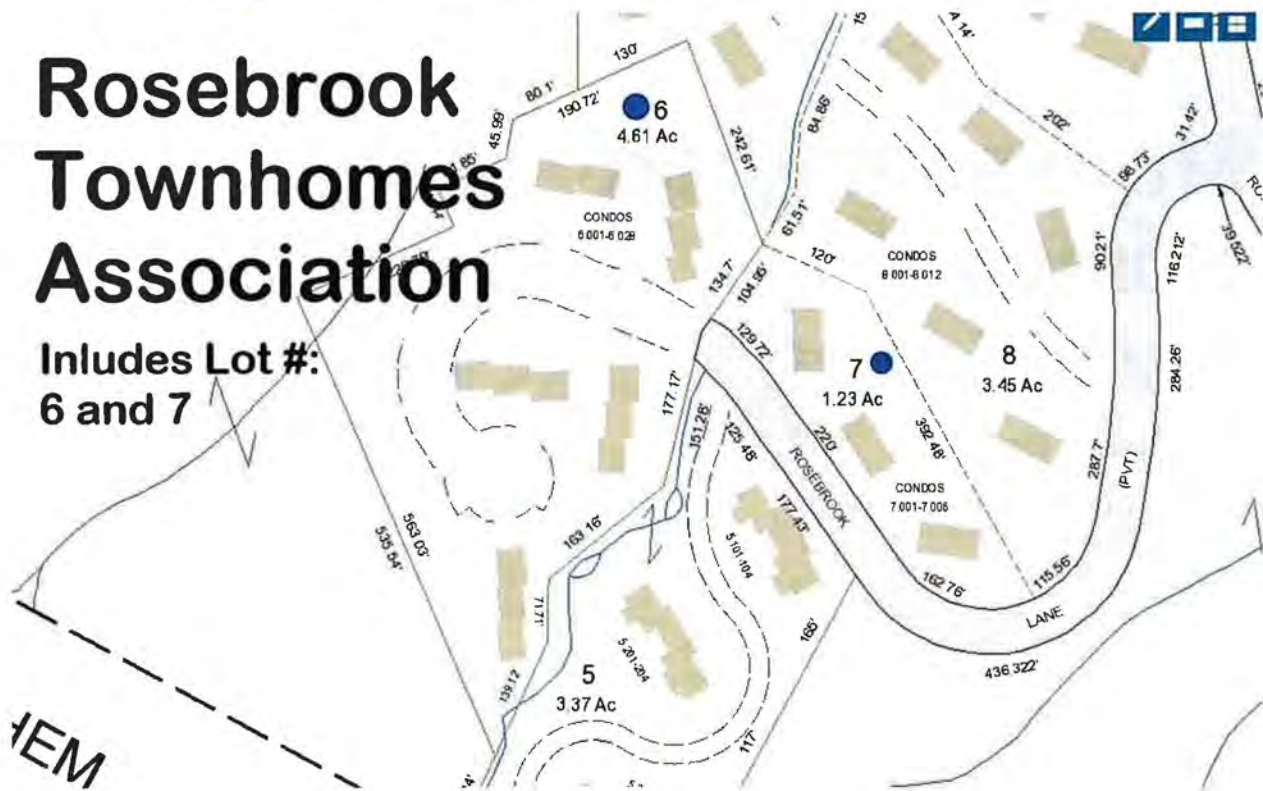


Attachment B – Common Areas Defined



# Rosebrook Townhomes Association

Includes Lot #:  
6 and 7

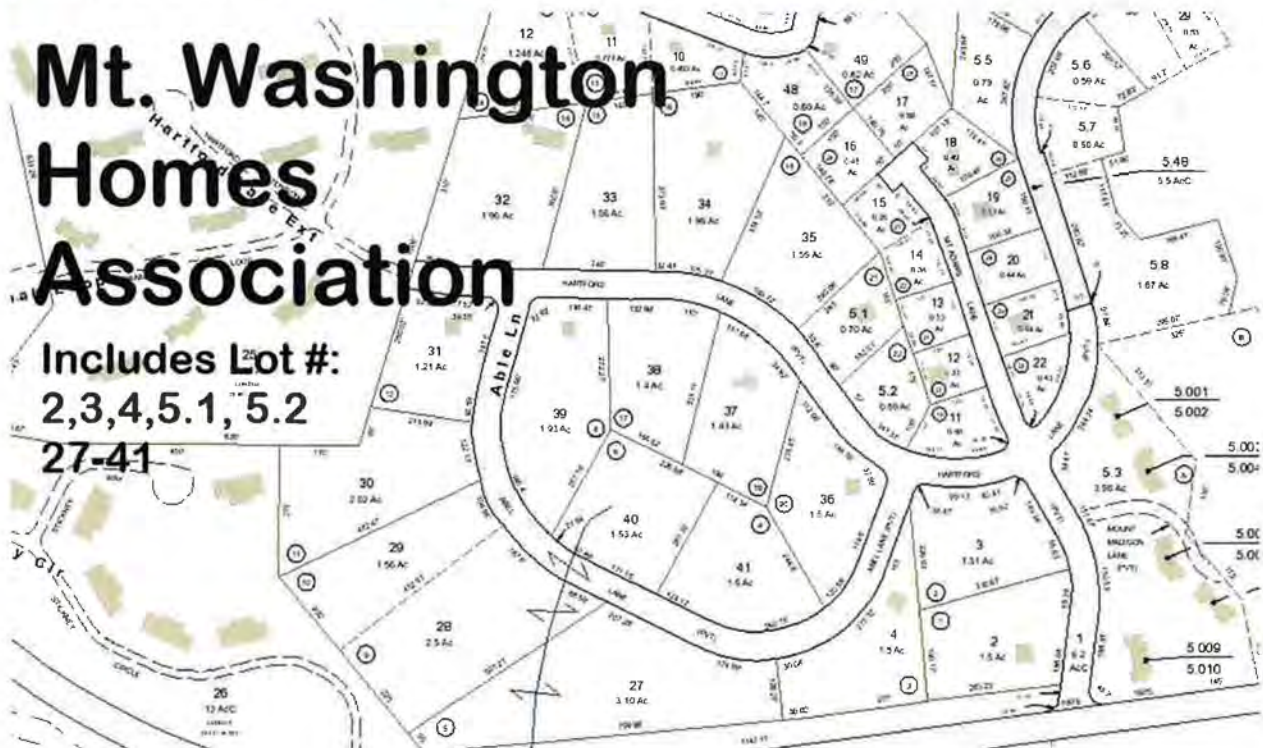




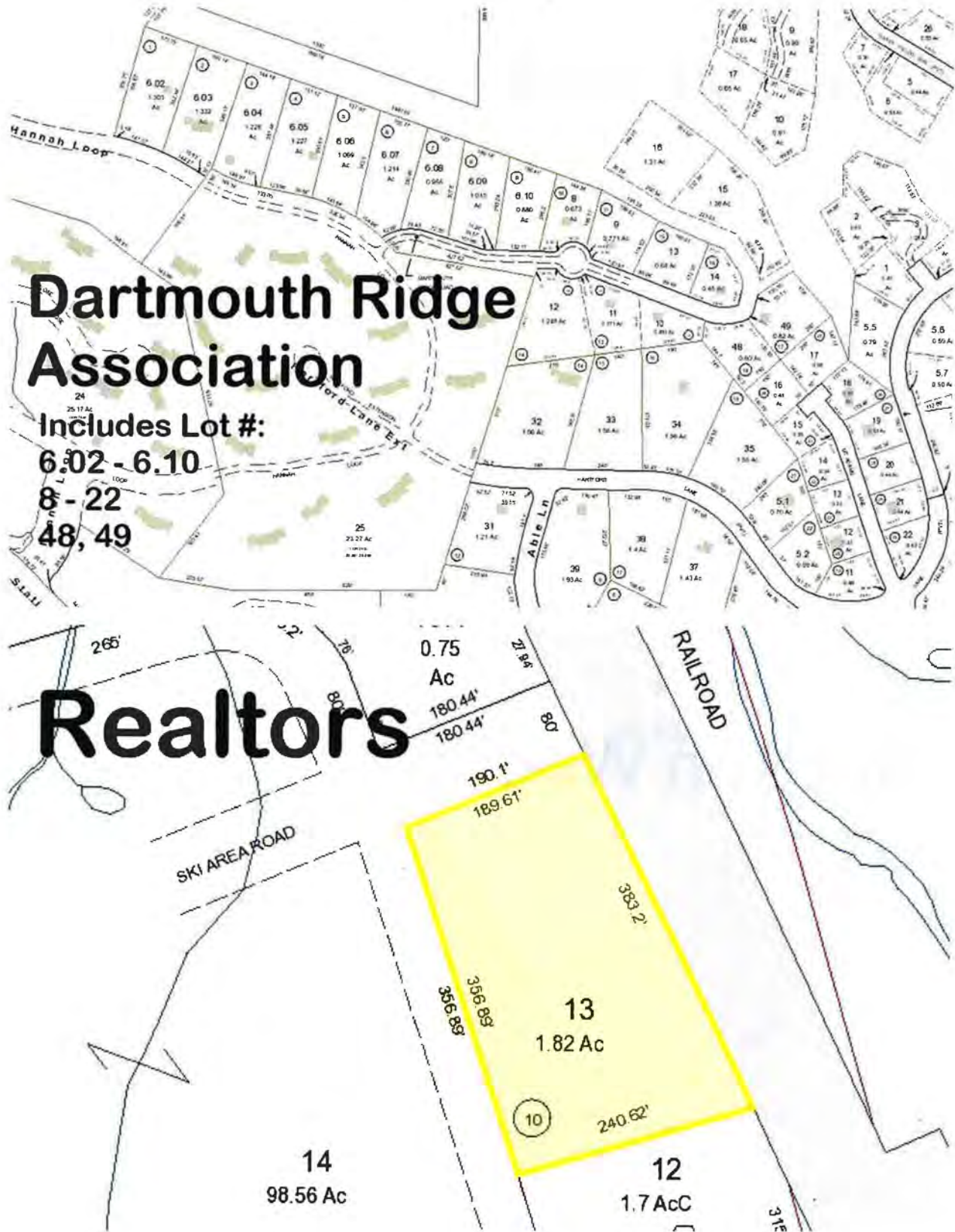
**Includes Lot #:  
24 and 25**



**Includes Lot #:**  
2,3,4,5.1, 5.2  
~~27-41~~



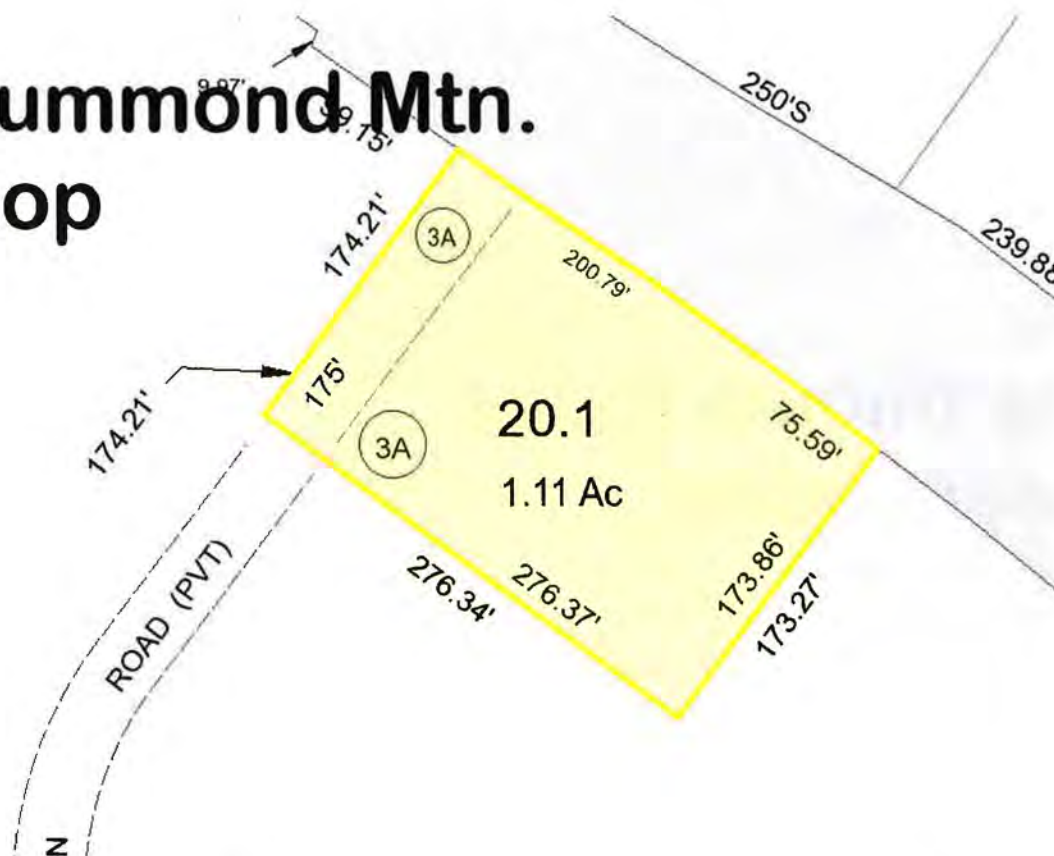
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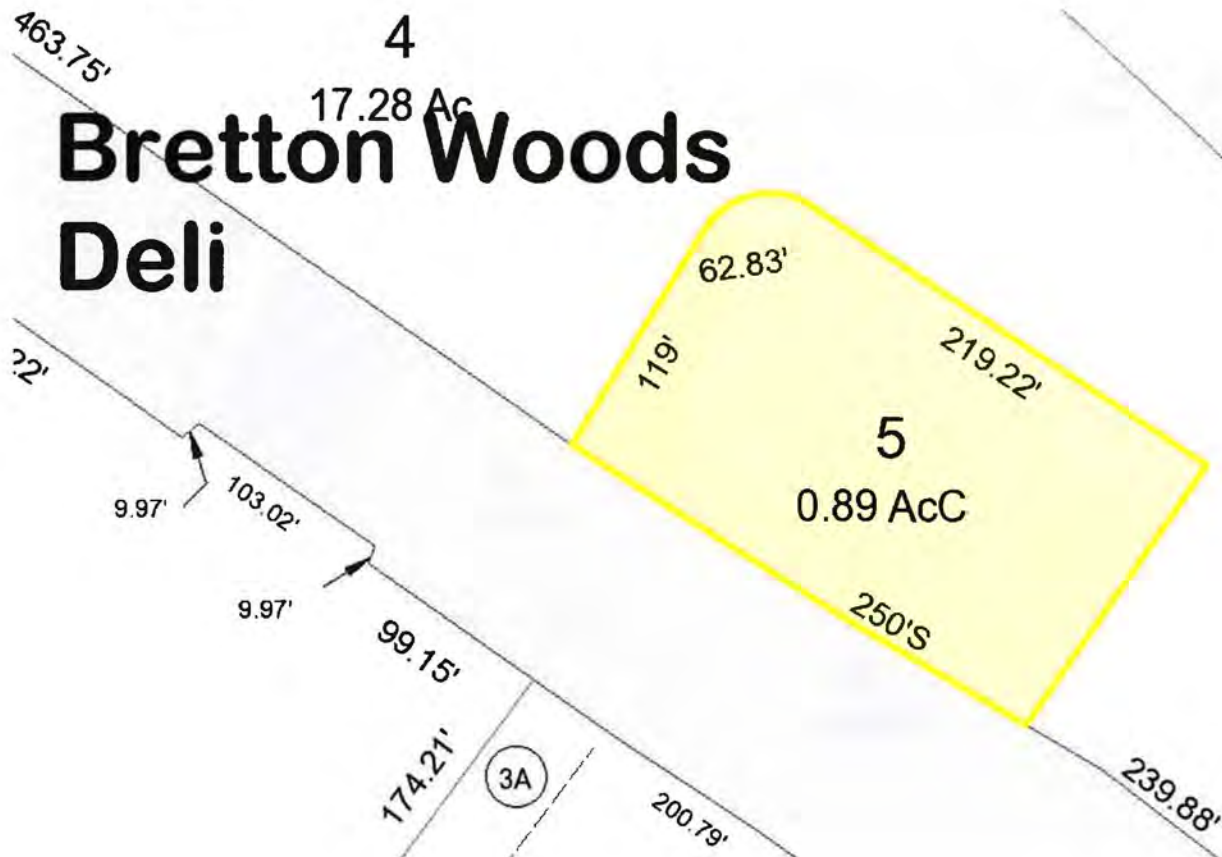


Attachment B – Common Areas Defined

**Drummond Mtn.  
Shop**



**Bretton Woods  
Deli**



## Abenaki Water Company

SPS 5

### 2018 Financing with CoBank - Rosebrook Pressure Reduction Project

#### Preliminary Calculation of Revenue Requirement

Total Plant Additions	\$ 940,000
Less: 1/2 Year Depreciation	<u>(9,275)</u>
Net Plant Additions	\$ 930,725
Rate of Return	<u>5.05%</u>
Increase in Net Operating Income Requirement	\$ 47,031
Add: Annual Depreciation Expense	18,549
Annual Property Taxes	<u>11,516</u>
Increase in Revenue Requirement	\$ <u>77,097</u>
2017 Operating Revenues	\$ <u>276,888</u>
% Increase in Annual Water Revenues	<u>27.84%</u>

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## Abenaki Water Company

SPS 6

### 2018 Financing with CoBank - Rosebrook Pressure Reduction Project

#### Weighted Average Cost of Capital for Rosebrook Pressure Reduction Project

<u>Financing</u>	<u>Amount</u>	<u>Percent</u>	<u>Interest Rate</u>	<u>Interest Expense</u>	<u>Amortization of Fin Costs</u>	<u>Total Interest</u>	<u>Cost Rate</u>	<u>Weighted Average Cost of Capital</u>
CoBank	\$940,000	100.00%	5.00%	\$47,000	\$500	\$47,500	5.05%	5.05%

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# Abenaki Water Company

SPS 7

## 2018 Financing with CoBank - Rosebrook Pressure Reduction Project

### Plant / Accumulated Depreciation / Depreciation Expense

PUC Account	Item	Total Estimated Costs	Depr Rate	Annual Depr Exp	One-Half Year Depr	Tax Value as Percent Net Util Plant	Combined Property Tax Rate	Annual Prop Tax Expense
307	Well Pump Replacement							
307	Well #1 Vertical Turbine Pump							
304	Well #2 Submersible Pump							
304	Electrical / Controls							
304	Mechanical / Piping							
<hr/>								
	Storage Tank Booster Station							
304	Building (16 Ft. x 18 Ft.)	106,490	2.50%	2,662	1,331	55.32%	36.26	2,110
304	Site Work / Grading	51,766	2.50%	1,294	647	55.32%	36.26	1,025
304	Driveway / Access	29,581	2.50%	740	370	55.32%	36.26	586
304	Electric Service	36,976	2.50%	924	462	55.32%	36.26	732
307	Pumps / Mechanical	66,556	10.00%	6,656	3,328	55.32%	36.26	1,268
304	Electrical	29,581	2.50%	740	370	55.32%	36.26	586
304	Emergency Generator	51,766	2.50%	1,294	647	55.32%	36.26	1,025
304	Piping / Valves	51,766	2.50%	1,294	647	55.32%	36.26	1,025
304	Telemetry / Controls	29,581	2.50%	740	370	55.32%	36.26	586
		454,062		16,343	8,172			8,945
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	Crawford Ridge Booster Station							
304	Building (14 Ft. x 16 Ft.)							
304	Site Work / Grading							
304	Driveway / Access							
304	Electric Service							
307	Pumps / Mechanical							
304	Electrical							
304	Emergency Generator							
304	Piping / Valves							
304	Telemetry / Controls							
<hr/>								
	Mt. Washington Place Booster Station							
304	Building (14 Ft. x 16 Ft.)							
304	Site Work / Grading							
304	Driveway / Access							
304	Electric Service							
307	Pumps / Mechanical							
304	Electrical							
304	Emergency Generator							
304	Piping / Valves							
304	Telemetry / Controls							
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	Dedicated Tank Water Main							
331	8 Inch Ductile Water Main	454,770	2.00%	1,692	846	55.32%	36.26	9,106
331	8 Inch Gate Valves	7,084	2.00%	198	99	55.32%	36.26	140
331	3" Bit Pavement Trench Patch	17,001	2.00%	119	59	55.32%	36.26	340
335	Hydrant	7,084	2.00%	198	99	55.32%	36.26	140
		485,938		2,206	1,103			2,572
<hr/>								
	Pressure Reducing Valves (Rosebrook Lane, Mt. Adams Lane)							
331	Pressure Reducing Valve Vaults							
331	Pressure Reducing Valves							
331	Gate Valves / Bypass Piping							
331	Pavement Replacement							
<hr/>								
	Total Construction Costs	940,000		18,549	9,275			11,516
303	Land Easement		0.00%	-	-	55.32%	36.26	-
	Total Project Costs	940,000		18,549	9,275			11,516
<hr/>								
	Tax Value as percent of Total Net Utility Plant	848,200		1,533,175		55.32%		
	Combined Property Tax Rate (State and Town)	\$ 6.60		\$ 29.66			\$ 36.26	

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Abenaki Water Company

SPS-8

2018 Financing with CoBank - Rosebrook Pressure Reduction Project

Horizon Engineering, Inc.'s Preliminary Opinion of Probable Costs  
System Improvements for Limited Pressure Reduction

Item	Total Costs	Allocation within Proj Item	Adjusted Total Costs	Allocation of Indirect Costs	Adjusted Total Costs
General Conditions/Mobilization	\$ 25,000		\$ 25,000	\$ (25,000)	\$ -
Well Pump Replacement					
Well #1 Vertical Turbine Pump					
Well #2 Submersible Pump					
Electrical / Controls					
Mechanical / Piping					
Storage Tank Booster Station					
Building (16 Ft. x 18 ft.)	\$ 72,000	\$ 3,166	\$ 75,166	\$ 31,324	\$ 106,490
Site Work / Grading	35,000	1,539	36,539	15,227	51,766
Driveway / Access	20,000	879	20,879	8,701	29,581
Electric Service	25,000	1,099	26,099	10,876	36,976
Pumps / Mechanical	45,000	1,979	46,979	19,577	66,556
Electrical	20,000	879	20,879	8,701	29,581
Emergency Generator	35,000	1,539	36,539	15,227	51,766
Piping / Valves	35,000	1,539	36,539	15,227	51,766
Telemetry / Controls	20,000	879	20,879	8,701	29,581
Connection to Existing	5,000	(5,000)	-	-	-
Surface Restoration	7,500	(7,500)	-	-	-
Erosion Control	1,000	(1,000)	-	-	-
	\$ 320,500	\$ (0)	\$ 320,500	\$ 133,562	\$ 454,062
Crawford Ridge Booster Station					
Building (14 Ft. x 16 ft.)					
Site Work / Grading					
Driveway / Access					
Electric Service					
Pumps / Mechanical					
Electrical					
Emergency Generator					
Piping / Valves					
Telemetry / Controls					
Connection to Existing					
Surface Restoration					
Erosion Control					
Mt. Washington Place Booster Station					
Building (14 Ft. x 16 ft.)					
Site Work / Grading					
Driveway / Access					
Electric Service					
Pumps / Mechanical					
Electrical					
Emergency Generator					
Piping / Valves					
Telemetry / Controls					
Connection to Existing					
Surface Restoration					
Erosion Control					
Dedicated Tank Water Main					
8 inch HDPE Water Main	\$ 237,500	\$ 83,500	\$ 321,000	\$ 133,770	\$ 454,770
Directional Bore River Crossing	40,000	(40,000)	-	-	-
Ledge Removal	22,500	(22,500)	-	-	-
8 inch Gate Valves	5,000		5,000	2,084	7,084
Connection to Existing	9,000	(9,000)	-	-	-
3" Bit Pavement Trench Patch	12,000		12,000	5,001	17,001
Hydrant	5,000		5,000	2,084	7,084
Surface Restoration	10,000	(10,000)	-	-	-
Erosion Control	2,000	(2,000)	-	-	-
	\$ 343,000	\$ -	\$ 343,000	\$ 142,939	\$ 485,939
Pressure Reducing Valves (Rosebrook Lane, Mt. Adams Lane)					
Pressure Reducing Valve Vaults					
Pressure Reducing Valves					
Gate Valves / Bypass Piping					
Connection to Existing					
Pavement Replacement					
Traffic Control					
Surface Restoration					
Erosion Control					
Subtotal Construction Costs	\$ 688,500	\$ (0)	\$ 688,500	\$ 251,500	\$ 940,000
15% Contingency	103,275	525	103,800	(103,800)	-
Total Construction Costs	\$ 791,775	\$ 525	\$ 792,300	\$ 147,700	\$ 940,000
Land Easement - Unknown?					
Legal	10,000		10,000	(10,000)	-
20% Engineering	137,700		137,700	(137,700)	-
Total Project Costs	\$ 939,475	\$ 525	\$ 940,000	\$ -	\$ 940,000
Rounded Project Costs	\$ 940,000				

SPS1, Cvr  
6/15/2018

## **Abenaki Water Company**

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**SPS 9**

### **2018 Financing with CoBank - Rosebrook Pressure Reduction Project**

Total Costs of Projects \$ 940,000

#### **Source of Funds:**

CoBank \$ 940,000

#### **Use of Funds:**

2019 Pressure Reduction Project - Phase 1 \$ 940,000

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6/15/2018

## **Abenaki Water Company**

**SPS 10**

### **2018 Financing with CoBank - Rosebrook Pressure Reduction Project**

#### **Estimated Financing Costs on portion of the CoBank Loan**

	<u>Fin Costs</u>
CoBank	\$ 5,000
Stephen P. St. Cyr & Associates	<u>5,000</u>
Total Financing Costs	\$ 10,000
Life of Loan	<u>20 Yrs.</u>
Annual Amortization Expense	<u>\$ 500</u>

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6/15/2018

**NHPUC NO. 1 - Water  
Abenaki Water Company, Inc.  
Carroll, NH**

**NHPUC No.1 - Water**

**ABENAKI WATER COMPANY, INC.  
Carroll, NH**

**TARIFF  
For  
WATER SERVICE  
In  
THE STATE OF NEW HAMPSHIRE**

Issued: March 6, 2018  
Effective: August 9, 2016

Issued by: \_\_\_\_\_  
Title: Chairman

Authorized by NHPUC Order No. 25,613 in DW 12-306 dated December 23, 2013, and NH PUC Order No. 25,934 DW 16-448 dated August 9, 2016.



NHPUC NO. 1 - Water  
Abenaki Water Company, Inc.  
Carroll, NH

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Issued: March 6, 2018  
Effective: August 9, 2016

Issued by: ~~Donald Vaughan~~ Pauline M. Doucette  
Title: ~~Chairman~~ President

Authorized by NHPUC Order No. 25,613 in DW 12-306 dated December 23, 2013, and NH PUC Order No. 25,934 in DW 16-448 dated August 9, 2016.

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Abenaki Water Company, Inc.  
Carroll, NH

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## SERVICE AREA

The territory authorized to be served by Abenaki Water Company and to which this tariff applies is as follows:

A limited area in the Towns of Carroll, Bethlehem and the incorporated Township of Crawford's Purchase as shown on a map filed separately with the Commission and incorporated in this tariff by reference.

## DEFINITIONS

**Approved backflow device** - A backflow prevention device that has been manufactured to allow for accurate testing and inspection by a Rosebrook Water Company licensed operator so as to allow verification of performance.

**Backflow** - The flow of unwanted substances into the water distribution pipes of a potable supply of water.

**Backflow prevention device** - A device that is designed to, and which in practice does, prohibit unwanted substances from flowing into the water distribution pipes of a potable supply of water.

**Bypass** - Any piping arrangement installed so that water flows around rather than through a meter, pressure reducing valve or backflow prevention device.

**Common Areas** – Those sites which are owned commonly by an association

**Company** - Employee or Representative of Rosebrook Water Company, Inc.

**Cross-connection** - Any actual or potential physical connection between public water supply and a potential source of contamination that would allow water or contaminants to be drawn back into the water system.

**Developer** - A person or entity proposing a new subdivision or other type of development.

**Exterior shut off ('Curb Stop')** - ~~water shut off controlled by the Company.~~

**Individual Connection** – ~~a connection having a securable water supply valve that shall only be opened or closed by an employee or agent of the Company.~~

**Premises** - includes the building, common area, and lawns.

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Private Property – Property owned by a single entity.

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Effective: August 9, 2016

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Title: ~~Chairman~~ President



## TERMS AND CONDITIONS

### 1. Service Pipe

#### a. Location.

(1) Single Family Homes: Service pipe connections will be made in the street which is nearest to the premises served.

(2) Condominiums and Other Multi-Family Residences: One main service pipe may serve the total structure with individual connections to all units therein from a distribution manifold located on common property owned by the property owners' association.

(3) Commercial Buildings: Service pipe connections will be made in the street which is nearest to the premises served and one main service pipe may serve the total structure with individual connections to all businesses/units therein from a distribution manifold.

#### b. Installation, Ownership, and Maintenance.

(1) Single Family Homes: All service pipes from the main to the property line or common area including the premises exterior shut-off valve shall be owned and maintained by the Company. From the property line or common area to the premise served, the service pipe shall be installed, owned and maintained at the expense of the customer(s). Such installations shall be in a manner approved by the Company in writing prior to construction and shall be no less than 3/4 inch inside diameter. All new exterior shut-off valves shall be placed at the property line or common area.

(2) Condominiums and Other Multi-Family Residences: All service pipes from the main to the property line or common area including the unit's exterior shut-off valve shall be owned and maintained by the Company. From the property line or common area to the premises served the service pipe shall be installed, owned and maintained at the expense of the association or customer(s).

(3) Commercial Building: All service pipes from the main to the property line or common area including the premises' exterior shut-off valve shall be owned and maintained by the Company. From the property line or common area to the premises served, the service pipe shall be installed, owned and maintained at the expense of the customer(s).

c. Joint Use of Service Pipe Trench. No service pipes shall be laid in the same trench with gas pipe, sewer pipe or any other facility of a public utility, nor within three (3) feet of any open excavation or vault.

d. Temporary Service Connection. Temporary service is one installed to any building or trailer not placed on a permanent foundation or approved for other temporary use. The whole cost of installation from the nearest available main, and maintenance, shall be at the customer's expense.

e. Common Areas Defined, refer to Attachment B Which illustrates in detail location and boundaries of common areas

### 2. Mains

The company will be responsible for maintenance and repair of all mains except those in located in private or common property.

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**Abenaki Water Company, Inc.**  
**Carroll, NH**

**2. Winter Construction**

Ordinarily, no new service pipes or extensions of main will be installed during winter conditions (when frost is in the ground generally identified as November 15<sup>th</sup> and until local road bans are lifted and frost is out of the ground) unless the customer shall defray all extra expense occasioned by such installation.

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Title: ~~Chairman~~ President



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Carroll, NH**

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**3. Maintenance of Plumbing**

Customers shall maintain the plumbing and fixtures within their own premises [e.g. building, common areas and lawns] in good repair, free from leaks and protected from freezing, at their own expense. Failure to do so as soon as possible after a problem is detected may result in service disconnection. Any relocation of the service pipe on customer's premises due to change in grade, relocation of grade or otherwise shall be at the customer's expense. In no event shall the company be responsible for any damage done by water escaping from the customer-owned portion of the service line.

**4. Meters and Meter Valves**

a. Use of Meters. All water service shall be metered. The initial meter will be furnished and installed by the Company~~provided to the developer or homeowner by the Company. Subsequent owners will not be charged for a meter.~~

b. Size of Meter. The size of the meter will be determined by the Company.

c. Meter Setting. The customer shall provide a clean, dry, warm and continuously accessible place for the installation of the meter, as nearly as possible at the point of entrance of the service pipe to the building. Owners shall install in the following order: pressure reducing valve, backflow preventer, inlet valve, and meter, and outlet valve -as shown on Attachment A. Owner shall contact the Company prior to ~~installing~~purchasing a pressure reducing valve to ensure it meets the Company requirements ~~for sufficient PPSI ("psi").~~ Once accepted by the Company, the meter and setting shall become the property of the Company. The owner is responsible for all expenses related to meter valves and installation.~~Company reserves the right to charge customers for all expenses involved in water hook-ups.~~ A meter, once set, will be relocated only at the customer's expense. ~~No meter shall be installed if the percent error of registration is greater than that allowed by commission rules.~~

d. Meter Boxes. When the customer fails or neglects to furnish a suitable location for a meter inside his building or where, for other reasons, it is necessary or expedient to locate the meter in an underground box or vault, the customer shall bear the expense of same. Any relocation of such underground box or vault shall be at the customer's expense.

e. Testing and Repairs. The Company shall be responsible for all meter testing. Meter repairs or replacements necessitated by company policy or regulations~~ordinary wear~~ will be paid for by the Company; those caused by freezing, hot water or by other fault of the customer will be charged to the customer.

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f. Auxiliary Meters. If additional or auxiliary meters are desired by the customer or required for showing subdivision of the supply, they shall be furnished, installed and maintained at the customer's expense.

g. Meter Valves. Inlet and outlet valves, per attachment A, shall be installed immediately upstream and downstream of the meter. They shall be installed and maintained at the expense of the owner. Meter valves shall be maintained in good working order and operate easily under normal conditions. Damage caused by normal operation shall be at the expense of the owner.

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Carroll, NH**

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g. The Company reserves the right to remove and to test any meter at any time and to substitute another meter in its place. In the case of a disputed account involving the question as to the accuracy of the meter, such meter will be tested by the Company upon request of the applicant. The fees for testing such meters will be: \$225.00 for a 5/8" meter, \$250.00 for a 1" meter or at market rate, whichever is greater. Any meter in excess of 1 " will not be sent out for testing but will instead be tested in place. The cost will be \$500 for the first meter, \$300 for each subsequent meter tested on the same day at the same location - all costs for the testing of these meters will be a direct pass through to the customer. All fees are payable in advance of the test. In the event the meter so tested is found to have an error in registration in excess of three percent (3%) at any rate of flow within normal flow limits, to the prejudice of the customer, the fee advanced for testing will be refunded and the current bill will be adjusted based on the results of the meter tested. This correction shall apply to both over-and-under registrations.

h. The customer shall permit no one who is not an agent of the Company, to remove, inspect, or tamper with the meter or other property of the Company on his premises. The customer shall notify the Company, as soon as it comes to his knowledge, of any injury to, or any cessation in registration of the meter.

**5. Hot Water Tanks**

All customers having direct pressure hot water tanks or appliances must place proper automatic vacuum and relief valves in the pipe system to prevent any damage to such tanks or appliances should it become necessary to shut off the water on the street mains or service pipe. Service will be provided to such direct pressure installations only at the customer's risk and in no case will the Company be liable for any damage occasioned thereby.

**6. Restricted Use**

Customers shall prevent all unnecessary waste of water. They shall not allow it to run to prevent freezing or longer than necessary for proper use. When necessary to conserve supply, the Company may restrict or prohibit the use of hand hoses, lawn sprinklers and other non-essential water consuming equipment.

**7. Cross Connections**

No cross connection between the public water system and any non-potable supply will be allowed unless protected by a system specifically designed for this purpose and the connection is approved by the Company and by the State of New Hampshire. No connection capable of causing back-flow between the public water supply system and any plumbing fixture, device or appliance or between any waste outlet or pipe having direct connection to waste drains will be permitted. If the Company discovers such a connection, service will be discontinued immediately.

A protective device shall be installed wherever a ~~recognized~~ approved cross connection of water systems exists and/or where a potential threat to the potability of the water system can be shown to exist. All such devices shall be located at the service entrance, and all water consumption within the premises shall pass through the protective device.

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Title: ~~Chairman~~ President

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The Company reserves the right to (1) require periodic inspections of customers' building or premises to ensure that the plumbing has been installed in such a manner as to prevent the possibility of ~~contamination~~ ~~pollution~~ of the potable water supply of the Company by the plumbing; (2) require the purchase and installation of approved protective devices located at the service entrance to the premises as may be required to protect the potable water supply from potential cross connections; (3) require periodic inspection, testing and necessary repair of all such protective devices, the frequency of which will be dependent upon the degree of potential hazard, and (4) terminate service upon failure to comply with any of the above requirements.

No interconnections with other systems shall be made unless said secondary source satisfies in all respects RSA Chapter 149 and other State laws and regulations pertaining thereto.

If a business' water usage alters the content of the water drawn off the Company system so that it could potentially contaminate ~~the water~~ ~~purity~~ if it flowed back into the system, the Company will require a cross connection backflow preventer. Examples include but are not limited to: soda foundations, coffee makers connected to the water supply, ice makers, bars, spas and pools. The business owner shall pay the full cost of all necessary installations, inspections and repairs, which shall be arranged by the Company. A charge consistent with current testing costs to the Company will be made when a backflow preventer is tested since the Company merely serves as the agent to arrange for testing to be done. Reduced pressure type devices will be tested twice each year as required by NH Code of Administrative Rules, Env-WS 364 Backflow Prevention. Double check valves will be tested annually.

**8. Excessive System Pressure**

Pursuant to the State of New Hampshire, Department of Environmental Service's standard regarding maximum system pressure and prior to regulatory approval to comply with same, the Company will be responsible for system infrastructure repair only and will not be responsible for damage and consequential liability caused by a rupture or breakage of services/mains at locations where line pressure exceeds 125 psi.

**8. ~~Tampering~~ Unauthorized Operation and Impact on Company Property**

All exterior valves, grates, shutoffs, standpipes, hydrants, meters, and all other Company property shall not be opened, or closed, or tampered with in any way by any person other than an ~~authorized~~ employee of the Company or as authorized by the Company.

(1) Valves must not be paved over in roadways, ~~walkways or driveways.~~

(2) Shut offs must be accessible, clear of trees, bushes and mulch, ~~and a distance of not less than 4 feet from the building.~~

(3) There shall be no shrubbery, fencing or rocks that obscure a clear path to all hydrants.

(4) Bypasses are prohibited, ~~except where approved by the Company. If necessary to have one, owner must install in a location specified by the Company.~~

**9. Company Liability**

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- a. The Company will not be responsible for any damage caused by cessation of supply, ~~by~~ shutoffs in the mains or service pipes because of shortage of supply, breaks, repairs, ~~or~~ construction or for other reasons beyond the control of the Company.
- b. The Company will not be responsible for damage caused by dirty water which may be occasioned by periodic cleaning of pipes, reservoirs or standpipes, or the opening or closing of any gates, valves or hydrants, or any other cause due to no lack of reasonable care on the part of the Company.

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c. The Company will not be responsible for indirect or consequential damages caused by a lack of water or by ~~breaks~~leaks in the Company's mains, pipes or fittings.

**10. ~~Landscape Repairs on Condominium Property~~**

~~The Company will replace or repair landscaping or paving required by the Company's repairs to mains, piping and fittings located on condominium property if the Company's actions necessitated those repairs. The Company will not be liable for those landscaping or paving repairs which were required as a result of homeowner or association damage or alterations. Landscaping replacements will be similar to those installed by the developer of similar units.~~

**11. Customer Responsibility**

Where there is more than one (1) occupant of a building supplied with water, the plumbing must be so arranged as to permit a separate service for each place of business or abode;

~~unless the owner of the premises makes application for service and thereupon assumes responsibility for payment of all charges for water service rendered to the property.~~

**12. Deposits** The company policy will comply with section 1203.03 of the commission rules.

**13. Payment for Service**

a. Water service invoices will be billed monthly by the company to the customer for any usage and base charge and any applicable fee or surcharge for services rendered for the previous month in accordance with the "Terms of Payment" specified in the applicable rate schedule. Payments are due and payable within thirty (30) days from the date the bill was rendered.

b. Disconnection for Non-Payment. Service may be interrupted or discontinued for nonpayment sixty (60) days or per current ruling from the date the bill was rendered provided a fourteen (14) day written notice has been given, per PUC 1203.11 of the commission rules.

c. Penalties and Charges. Interest shall be charged at eleven percent (11 %) on all bills where payment is not received by the Company within thirty days (30) of the due date printed on the bill, until payment is received.

d. Non-water Rates:

Shut-off certified notice - \$15.00

Service Re-Connection - \$100.00

Penalty for Non-sufficient funds - \$35.00

Pre-disconnection payment at premises - \$40.00

Service Connection Charge - \$100.00

Customer-requested meter testing - Depends on size of meter: see section 4.hg.

Back-flow preventer testing - actual expense to Company

All non-water rates are subject to adjustment in order to recoup any cost to the Company.

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**14. Applications for Service**

Application for water service ~~must~~ may be made by either the owner or non-owner occupant of the premises. If the rendering of service requires a new service pipe, and the application is made by the occupant of the premises, the occupant must present to the Company a permit in writing from the owner of the premises authorizing the company or the Company's agent to enter the premises and do the necessary work. ~~When~~ Whether or not a signed application for service is made by the customer and accepted by the Company, the rendering of service by the Company and its use by the customer shall be deemed a contract between the parties and subject to all provisions of the tariff applicable to the service.

**15. Disconnection of Service**

Service may be disconnected without notice to a residential or non-residential customer if the commission is notified by the utility within 48 hours of the disconnection and one of the following conditions exists:

- a. The customer has obtained utility service in an unauthorized manner or used utility service fraudulently
- b. The customer has clearly abandoned the property as demonstrated by the fact that the service address premises have been unoccupied and vacant for a period of 60 calendar days
- c. A condition dangerous to the health, safety or utility service of others exists
- d. Clear and present danger to life, health or physical property exists
- e. Tampering with Company property or not maintaining customer's property to allow ease of access for Company personnel
- f. For vacancy as defined in PUC 1203.11.
- g. For cross-connecting the Company's service pipe with any other supply source (section 7).

**16. Vacancy of Premises**

Until the Company is notified in writing of a change in occupancy, the customer of record will be held responsible for all charges.

**17. Service Re-Connection Charge**

A charge of one hundred dollars (\$100.00) will be made when service is re-established following disconnection for any reason.

**18. Right of Access**

As a condition of water service, any authorized Company representative shall have the right to enter upon, and be permitted access to, the premises served at any reasonable time under the circumstances to inspect, maintain, repair or replace any utility property used to supply water; to set, read, remove, replace or repair meters; and to ensure these terms and conditions.

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**19. Penalty for Bad Checks**

Whenever a check or draft presented for payment of service is not accepted by the institution on which it is written, a charge of thirty-five (\$35.00) or the actual administrative cost of recovery, whichever is greater, may be imposed.

**20. Collection Policy**

Whenever the Company sends an employee to the customer's premises for the purpose of disconnecting service for non-payment and the customer tenders payment in full of the bill to prevent disconnection, a charge of forty dollars (\$40.00) will be imposed.

**21. Main Pipe Extensions/Initial Connection/New Service**

A written, general plan or proposal for extensions of water mains and associated facilities to serve new customers will be reviewed and subject to approval by the Company for the proposed subdivision or development at the developer's sole cost and expense. Once approved, construction plans and specifications for the proposed extension of mains and additions to valves, fittings, hydrants, pumps or other facilities shall be prepared by the Company in accordance with industry standards and local, state and federal regulations. The developer's proposal and requirements are subject to review and approval by the company's engineer before it is incorporated into the final plan. The developer shall also reimburse the Company for its costs to finalize construction plans and specifications, solicit bids, prepare agreements, review engineering plans, project manage the work and inspect the new facilities. The developer shall pay for the entire cost of construction.

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GENERAL SERVICE - METERED

Rate Schedule - "GM"

AVAILABILITY:

This schedule is applicable to all water service in the territory except municipal and private fire protection.

CHARACTER OF SERVICE:

Water is obtained from wells and will be transmitted by pumps to a storage tank and then transmitted by gravity flow to the individual service pipe at a pressure ranging from 40 to 200+ pounds per square inch.

RATES-MONTHLY:

The rate for metered service shall include a monthly charge per customer unit based upon the size of the meter, which shall include gallons used, as follows:

<u>Size of Meter</u>	<u>Monthly Charge</u>
5/8"	\$9.91
1"	\$32.69
2"	\$106.00
3"	\$230.83
6"	\$924.29

QUANTITY OF WATER USED:

Per 1,000 gallons      \$5.33

MINIMUM CHARGE:

The minimum charge will be the monthly charge per customer unit based upon the size of the meter.

TERMS OF PAYMENT:

Bills under this rate are net and will be rendered monthly and are due and payable within thirty (30) days from the date the bill was rendered.

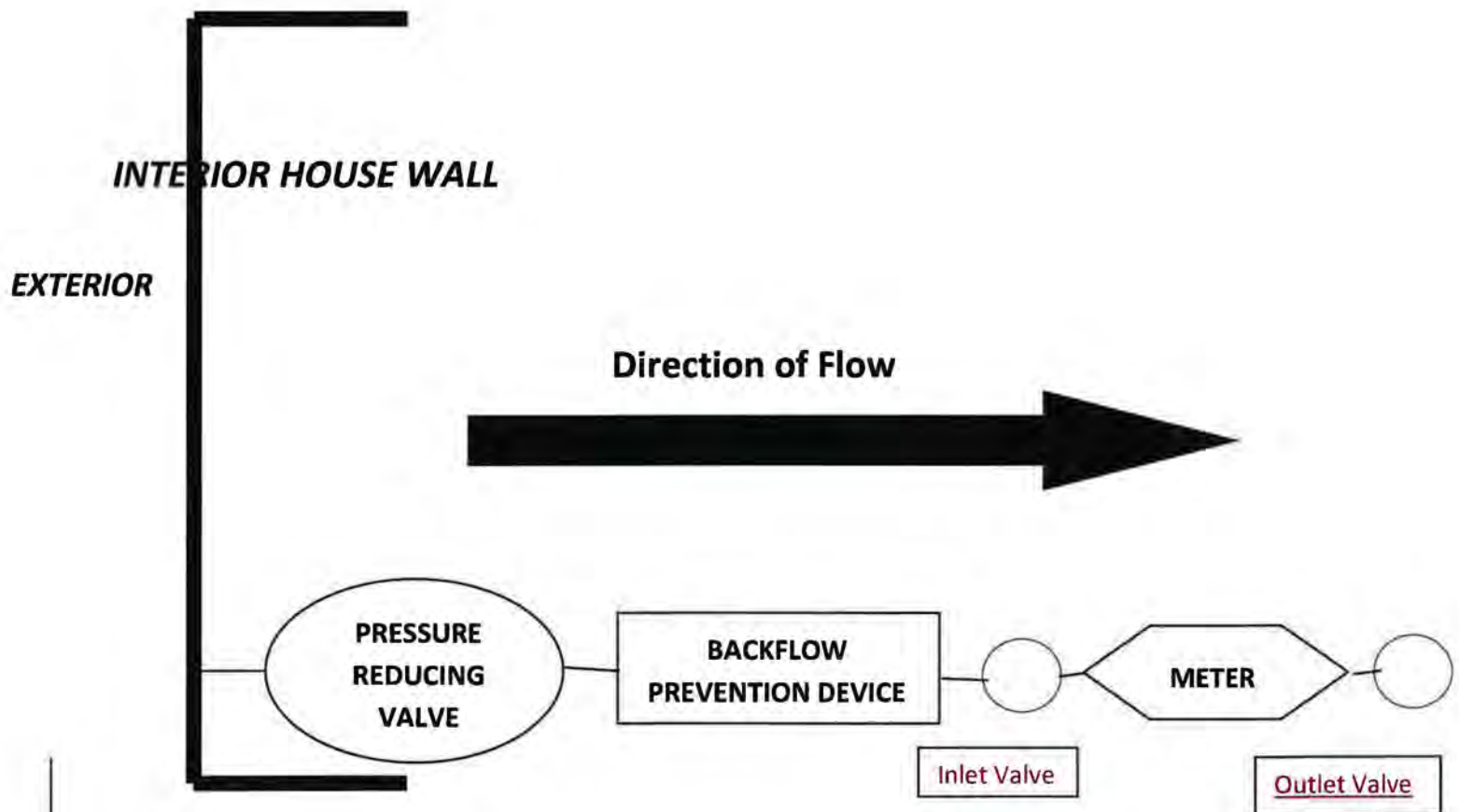
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***Attachment A: INSTALLATION SEQUENCE***



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