

March 13, 2018

Ms. Theresa Schefstad, Director  
Pointe Towers Condominiums, Inc.  
[theresajhs@yahoo.com](mailto:theresajhs@yahoo.com)

*PROJECT: Pointe Towers Condominiums, Inc.  
555 Gulf Way  
St. Pete Beach, FL 33607  
KEG File #17RP-0232: Owner Plumbing*

Dear Pointe Towers Board of Directors:

In September of 2017, Pointe Towers Condominiums completed the vertical stack sanitary pipe restoration and the underground pipes utilizing a method of cleaning and installing a CIPP lining within the pipes. Blue Works, Inc. completed this work along with replacement of cast iron fitting when the fitting was cracked or damaged beyond repair. During this plumbing restoration, KEG was made aware of conditions outside of the main vertical stacks within the building that required repairs. These conditions were identified as owner owned plumbing, such as the horizontal or lateral lines for sewer within the units and fresh water copper lines.

The existing structure is a seven-story waterfront condominium with a total of fourteen living units, built in 1969. Copper lines within the units are approximately 49 years of age. The life span of a typical copper water supply line is approximately 50 to 70 years. Municipalities use chemicals to treat water and these chemicals can cause the water to become acidic or alkaline causing a reaction with the copper. Iron deposits from rusty water heaters can also cause pitting and corrosion of the copper pipes. Pitting can lead to pinholes and then bursting of pipes.

Similar to the vertical stacks for the discharge or sewer lines, the horizontal or lateral lines to the vertical stacks are at the end of the life span. Evidence of this has been seen within unit owners who have remodeled and were required to remove and replace piping. Detergents, grease, chemicals, sands or salts, bodily waste all contribute to the deterioration of the cast iron pipes.



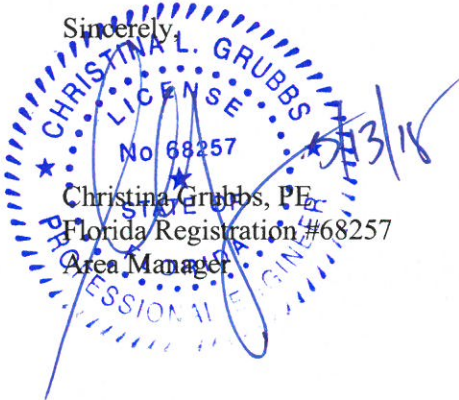
Examples of Cast Iron Piping Replaced at Pointe Towers

KEG's professional opinion is the piping and horizontals are at their end of serviceable life. KEG recommends the Association make each individual unit owner aware of the foreseeable issues and remediation as well as related costs with the unit owned plumbing systems component. Maintenance and detection of these problems systems and component prior to a leaking pipe is much more cost effective than a catastrophic flood from a burst pipe to the owner, and surrounding units.


Our opinion is based on information contained within this report and is subject to change upon review of additional information. This report is prepared for the sole benefit of the client. Any unauthorized use without our permission shall result in no liability or legal exposure to Karins Engineering Group, Inc.

We trust this information is helpful. Should questions arise, or should you wish to discuss this report with us further, please do not hesitate to call.

Sincerely,



Christina Grubbs, PE  
Florida Registration #68257  
Area Manager



Tom Buffington, PE  
Project Engineer