

GCG ASSOCIATES, INC.

PROFESSIONAL CIVIL ENGINEERS AND LAND SURVEYORS  
84 Main Street  
Wilmington, Massachusetts 01887

---

Phone: (978) 657-9714  
Fax: (978) 657-7915

October 21, 2014

Mr. Charles Aspinwall  
Town Hall  
900 Main Street  
Millis, MA 02054

RE: Union Street Sewer Repair  
Test Pit Results

Dear Mr. Aspinwall:

Our office has completed the investigation of the cause of the sewer breaks last April on Union Street and the overall condition of the sewer pipe. On October 17<sup>th</sup> and 20<sup>th</sup>, Blue Diamond Equipment Company excavated two test pits on Union Street and GCG inspected the condition of the sewer pipe at the next bell joint on either end of the section of pipe replaced by the DPW during the last sewer break. This allowed further inspection of the two pipe bells in each test pit on either side of the repaired pipe which was suspected of causing the corrosive conditions that lead to the pipe failure.

Within each test pit, the outside of each pipe was thoroughly cleaned and inspected for visible signs of corrosion. The pipe corrosion was not present, and therefore it was not necessary to take a soil sample from around the pipe for testing. GCG is of the opinion that the corrosion was local and due to a pipe joint that was most likely leaking from the day of installation and no additional investigation is required. The replacement of the affected pipe and the backfill material by the DPW during the last break has resolved the corrosion problem and the remainder of the pipe is unaffected. Normal and expected chipping of the asphaltic coating due to the removal of the mineralized soil coating on the pipe after approximately 25 years was observed as seen in the attached photos.

If you require additional information or have any questions, please call.

Respectfully Submitted,  
GCG ASSOCIATES, INC.

*Michael J. Carter*

Michael J. Carter, P.E.

