

### Section 384.103 Finding

To: Bill Stowe, CEO and General Manager



Project: Emergency Main Replacement – NE 27<sup>th</sup> Avenue at Mud Creek

During the first weekend of December 2018, Water Distribution (WD) crews responded to a main break in the vicinity of NE 27<sup>th</sup> Ave and Mud Creek. The normal main break repair efforts were complicated initially by difficulties in locating our facilities and then eventually by the confirmation that the leak itself was on a portion of the 4-inch line installed beneath Mud Creek. With the leak beneath the creek, it became apparent the water outage for this event was going to be far longer than normal, as contracted services were going to be needed. Two residential customers east of Mud Creek on NE 27<sup>th</sup> Ave would be without water service until repairs could be made. WD personnel made special arrangements for these two customers to lessen the negative aspects of a prolonged water outage.

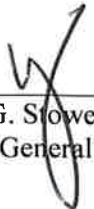
Engineering and WD personnel met early on Monday, December 3<sup>rd</sup>, to discuss the unique challenges associated with a main break beneath a creek bottom. Staff discussed and contemplated the two major options present; excavate beneath the creek to make necessary repairs versus using directional drilling equipment to install a new creek crossing. A newly installed creek crossing was determined to be in the best interest of DMWW and the impacted customers.

Water Distribution personnel consulted with two different contractors, Synergy Contracting and AAA Trenching & Specialized Boring. A lone quote of \$72 per lineal foot of 4-inch PVC water main (including material, installation, connections, pressure testing, and chlorination) was obtained from Synergy. Synergy mobilized on Wednesday, December 5<sup>th</sup>, and by Monday, December 10<sup>th</sup>, restoration of all water services was complete. Total contracted services here will likely exceed \$30,000 depending upon the exact tie-in locations.

Based on the foregoing, I certify that emergency installation of 4-inch water main at NE 27<sup>th</sup> Ave and Mud Creek was necessary.

	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.	
		12/11/2018
	Michael J. McCurnin, P.E. Des Moines Water Works	Date
	License Number:	13836
	My license renewal date is:	December 31, 2018
	Pages or sheets covered by this seal:	All

Based on the above certification, I find that the emergency installation of the 4-inch water main at NE 27<sup>th</sup> Ave and Mud Creek was necessary to avoid prolonged loss or injury to the utility.


  
 William G. Stowe  
 CEO and General Manager

12.11.18  
 (date)