

OPERATION OF THE WATER DISTRIBUTION SYSTEM IN NEW SUBDIVISIONS AND TIE-INS

Water Services has made changes to the required process to be followed for new subdivisions. The intent of this revised process is to mitigate risks to the quality and supply of water provided to customers. This process takes effect July 1, 2018. The changes apply to Construction Drawings (CDs), both in progress and new. In progress CDs are to apply the changes with the next iteration submission.

NOTE: While the implementation date of the process change is July 1, 2018, early adoption is highly recommended due to the safety implications.

Consultants and contractors are to adhere to the following requirements when working in new subdivisions:

1. Perimeter valves are required to be identified and numbered on subdivisions drawings. These valves are defined as the existing valves closest to the construction boundary of the approved drawing. While optional, it is recommended that all valves be numbered. The numbering convention to be used is each valve to receive a number from 1 through to 99. Development Approvals will be reviewing the CDs to ensure inclusion of the numbering.
2. Only **one** perimeter valve is permitted to be open at a time.
3. All perimeter valves which are closed are to have tag-out discs installed with the contractor's 24/7 contact information installed by the contractor. Installation will be confirmed by the Water Resources Utility Inspector.
4. The contractor is to contact Water Services, Customer Care at (403) 268-4355 to ensure perimeter valve status is recorded. Water Services will record the perimeter valve status and ensure there are no conflicts with other work being completed by Drinking Water Distribution.
5. If there are customers in service within the construction boundary the consultant/contractor must submit for approval a Valve Operation Plan to Water Resources, Inspection Services for review and approval prior to commencing work. This Plan must identify valves to be operated, planned date of operation, impacted customers, duration of impacts, plans for temporary water supply, reason for loss of water, copy of customer notice and date of return to service.
6. The contractor is permitted to operate perimeter valves under the following conditions:
 - a) All preliminary flushing, pressure testing, chlorination is to comply with Waterworks Standard Specifications 504.09.00
 - b) The contractor will meet with the Water Resources Utility Inspector prior to operating valves in order to review the approved drawing and discuss any potential issues which could occur when flushing or chlorination is performed.
 - c) The contractor is required to provide Water Services and Inspection Services with 24-hour advance notice for any flushing or chlorination activity by way of an email to LIMSResults@calgary.ca
 - d) A Utility Inspector is to be present during the entire chlorination process.
 - e) A Valve Operations Record is required to be maintained by the contractor that has the following information and must be readily available upon request by the Utility Inspector.
 - i. Valves identified and numbered on the approved drawing
 - ii. For each time a valve is operated, a record of the time and date of operation, valve status (open, closed, controlled) and condition of the valve.



- f) Valve rods are **not** to be removed.
 - g) The contractor must ensure that tag-out discs are installed and maintained on the perimeter valves. These will be checked by the Utility Inspector.
7. When chlorinating, the following steps are to occur:
- a) After the pressure test and prior to chlorination, the Utility Inspector will ensure all bordering valves within the chlorination area are closed as tight as possible. This can be confirmed with the pressure test unless a valve is operated after pressure test.
 - b) During the injection of chlorine, the Utility Inspector is to be present to ensure positive pressure is maintained at the open flushing end point.
 - c) Once the main is chlorinated to the satisfaction of the Utility Inspector, the Inspector will ensure the valve is closed tight prior to closing flushing end point. If resilient seat valves are not closed tightly enough, leak-by can occur.
 - d) The Utility Inspector will ensure tag-out discs are installed on each valve bordering the chlorinated area. The contractor is to clearly mark on tag out "Chlorine In", contractor's name, and 24/7 contact information.
 - e) The Utility Inspector will be onsite to ensure the flushing end point is open prior to opening the main valve to start flushing the chlorinated water.
 - f) The Utility Inspector will take samples once flushing is complete.
 - g) If, for any reason, chlorine is released into the existing water system the contractor is required to contact the Utility Inspector immediately. The contractor must then instruct impacted customers not to use the water until further notice.

Questions or concerns should be directed to Natasha Kinloch at natasha.kinloch@calgary.ca or (403) 268-4301.