

Appendix I Water Services Future State Programs

1. Valve Operational Status Tracking

- Water Service Operations currently utilizes a paper-based system for recording the operational status of valves involved in the day-to-day operation of a water main break or other incident requiring the isolation of a section of the water main network.
- The so-called “Valve Cards” capture the following information in such event:
 - Incident location
 - Listing of all valves involved in the isolation of the network, status (on/off), who performed the valve operations and when (date/time)
 - Listing of Water Main(s) affected by the isolation and status (off, reduced flow, etc)
 - Hydrants and Sprinklers taken out-of-service (OOS) as a result of the isolation.
- At any given time, many Valve Cards are in “open” status, potentially for days or weeks. During this time, the Valve Cards are retained within the truck assigned to each designated service area of the city and are handed off between shifts.
- Using this convention, the Valve Cards provide the best known collective understanding of the “state of the network” (and assets) for the operators on a shift.
- At the completion of the incident, the status of all affected assets (valves, water mains, hydrants) is recorded on the Valve Card, along with date/time and operator. The Valve Card is then considered “Closed” and may be moved from the truck (at the end of a shift) for filing at 552 Plinguet Ave.
- A sample Valve Card is included in Section 3, in this document.

2. Valve Exercise Management Program

- The Water Services division would like to initiate an on-going program focused on the organized maintenance and management of all water main valves and their condition.
- Similar to establishing recurring inspections and PM work on other assets, “Valve Exercising” is a simple preventative maintenance activity aimed at ensuring all valves are in good operational status, during their useful life.
- The so-called “exercising of a valve” should record the following event information:
 - Valve identifier (Asset Number)
 - When the valve was operated and by whom
 - Any information regarding the valve or surrounding conditions
- To do this, the WS Division would like to track the following:
 - Track all valve operational activities through the day-to-day operations of the network (see Valve Card above)
 - Proactively setup recurring PM activities to ensure all valves are exercised at least once every X months / years.
- The exercise program should also take into account any valve exercise events that were undertaken and recorded on a Valve Card

