



HIGH SERVICE HYDRANT FLUSHING PLAN

(last updated August 25, 2011)

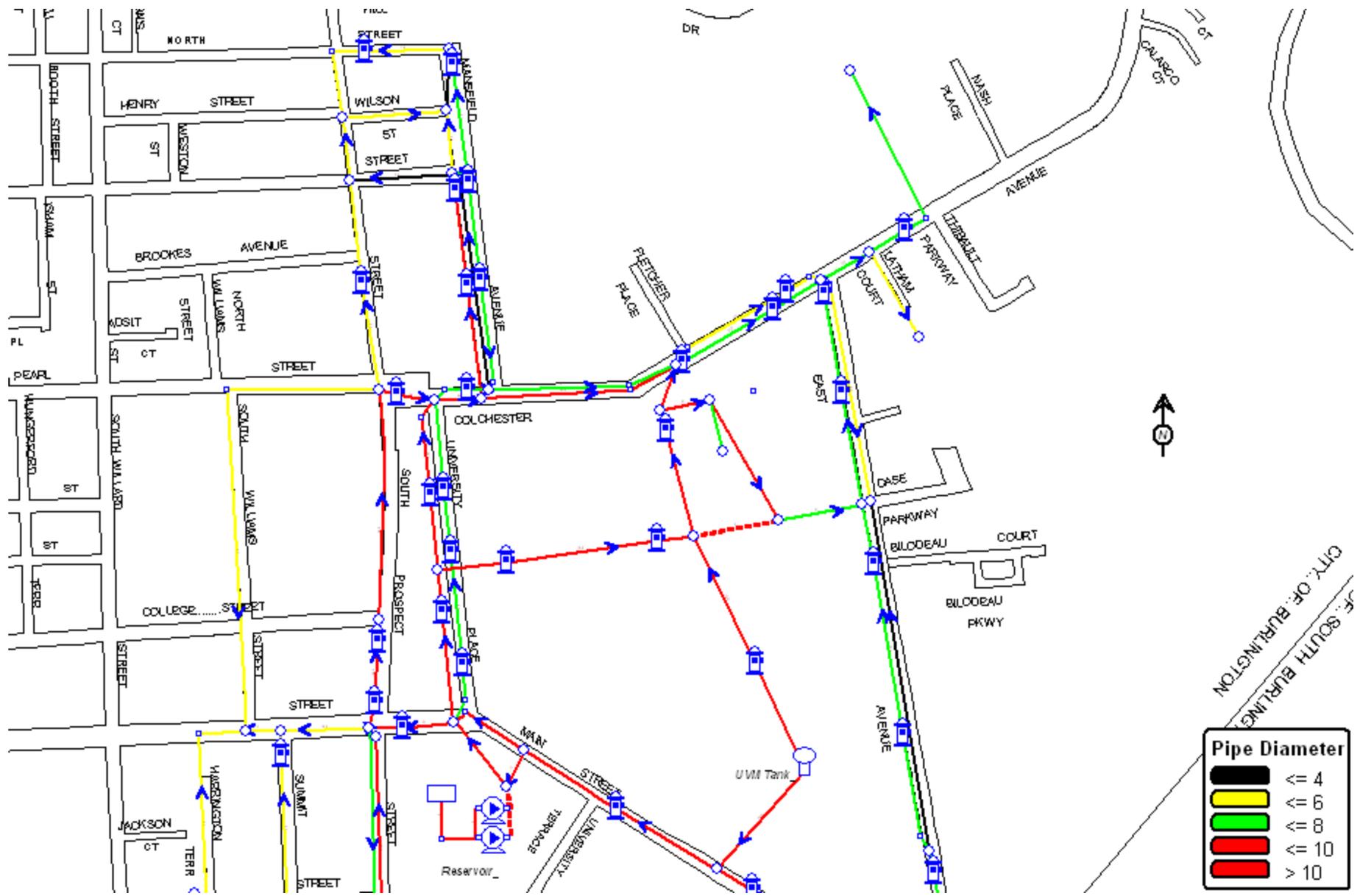
The intent of this plan is to aid the water distribution crews in maximizing the removal of sediment and rust when performing citywide hydrant flushing while minimizing rusty water complaints. While studies prove that uni-directional flushing of water mains is best in removal of sediment, this concept is not possible in Burlington due to the large number of inoperable valves. This high service plan typically involves starting at the water source (elevated tanks, assuming the high service pumps are off) and flushing hydrants outward, beginning with the major feed mains (10" diameter and larger) and then finishing with the smaller pipes after the major lines have been cleaned. Remember to use the hydrant's 6" steamer nozzle in order to get the highest flushing velocities. Here are a few comments on this plan:

The attached maps show:

- Pipe sizes by color with 10" and larger mains just shown in red. The larger pipes are primary feeds to smaller pipes. The recommendation is to clean the primary feeds first, starting from the elevated tanks, and then going back to flush the secondary pipes.
- The arrows show direction of flow when the elevated tanks are feeding this system and no hydrants are flowing. While direction of flow will change when hydrants are opened since multiple mains will feed the hydrant, after a hydrant is closed the rusty water will follow the flow path shown by these arrows. It is important to flush downstream along a primary water main to remove sediment as it flows outward from the source and hopefully minimize rusty water complaints.
- These high service maps are laid out from north to south and are not following any recommended flow path. The flushing scenario described below involves typically starting on streets with primary mains, then working on streets with smaller mains.
 - From the UVM tank, flush hydrants west on Main Street, both pipes on University Place and both pipes on Colchester Ave eastward to hydrants on the Trinity Campus.
 - Backtrack on Main Street and flush the 12" east of the UVM tank and all of East Ave.
 - From Main at S. Prospect, flush hydrants along S. Prospect to Colchester Ave at University Place.
 - From Colchester Ave at Mansfield, flush hydrants on both pipes on Mansfield Ave and adjacent streets to North Street at N. Prospect.
 - Flush hydrants around FAHC after they've been notified of this annual event.
 - Pick up any hydrants on Main Street west of S. Prospect and then S. Williams.
 - From Main Street, flush all the way down S. Prospect to the cul-de-sac of S. Prospect Ext. Pick up Robinson and Henderson along the way.
 - Backtrack on S. Prospect and flush down Maple to S. Willard and follow Willard to Cliff Street.
 - Pick up hydrants down Cliff at S. Prospect and then flush hydrants on S. Willard all the way to Ledge Road.
 - From Main Street, pick up all of Summit, Overlake and Deforest Road.
 - Flush all of Ledge Road from S. Prospect to S. Willard.
 - Flush Crescent Road from S. Prospect and pick up the remainder of streets south.
 - Finish flushing hydrants on all streets not mentioned above.

Just as with the low service flushing plan, this document is intended to change as we gain experience and adapt to problems encountered.

High Service Map 1



CITY OF BURLINGTON
OF SOUTH BURLINGTON

Pipe Diameter	
Black	≤ 4
Yellow	≤ 6
Green	≤ 8
Red	≤ 10
Orange	> 10

High Service Map 2

