



# Maintaining Your Private Water System Non-Residential Properties



Winnipeg

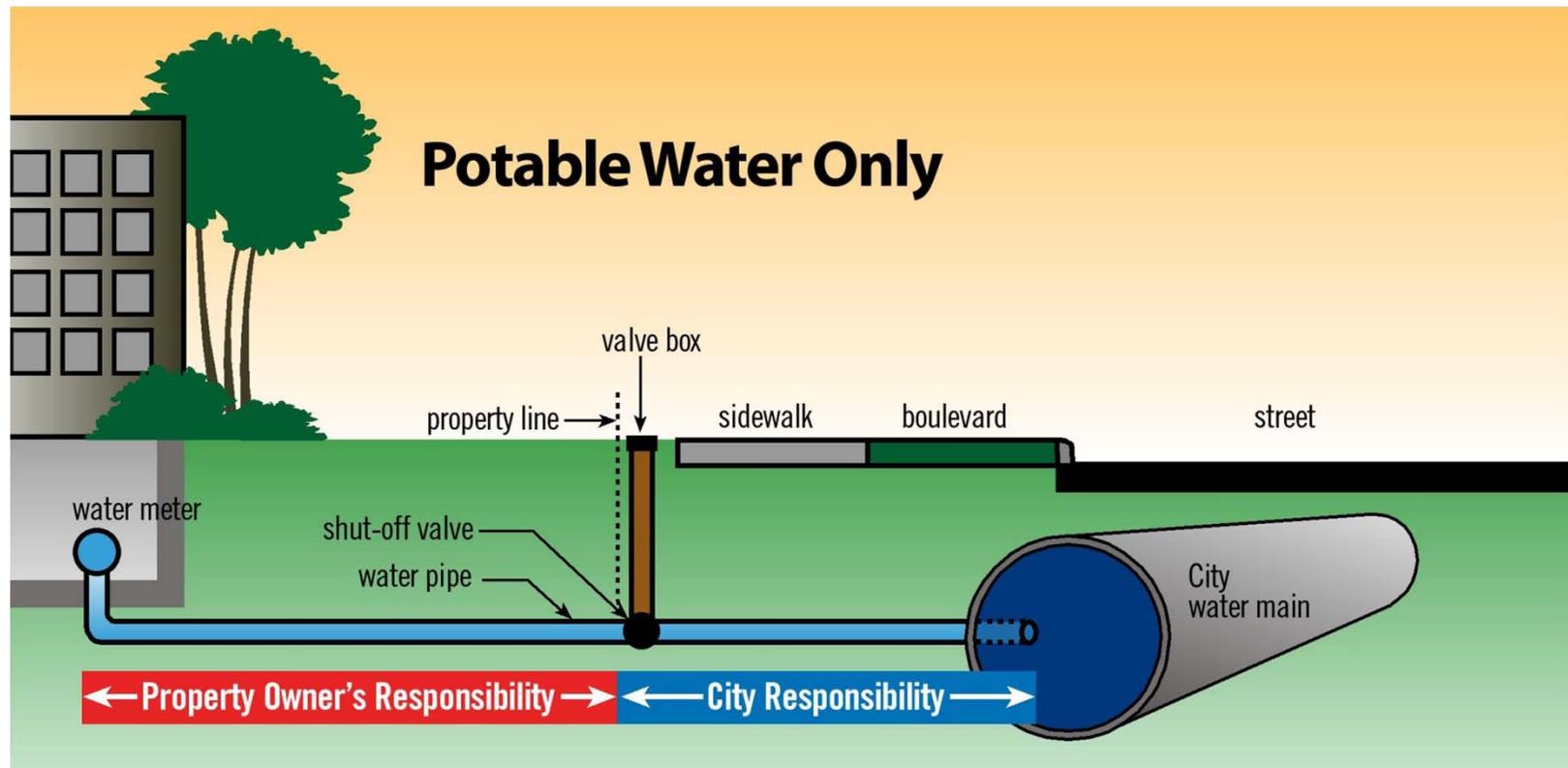
Water and Waste Department



## Your water system – No fire protection

- A water service for potable water and/or for use in business processes, but not for fire protection
- You own the water pipe from your building up to the shut-off valve (usually near your property line)

## Your water system – No fire protection

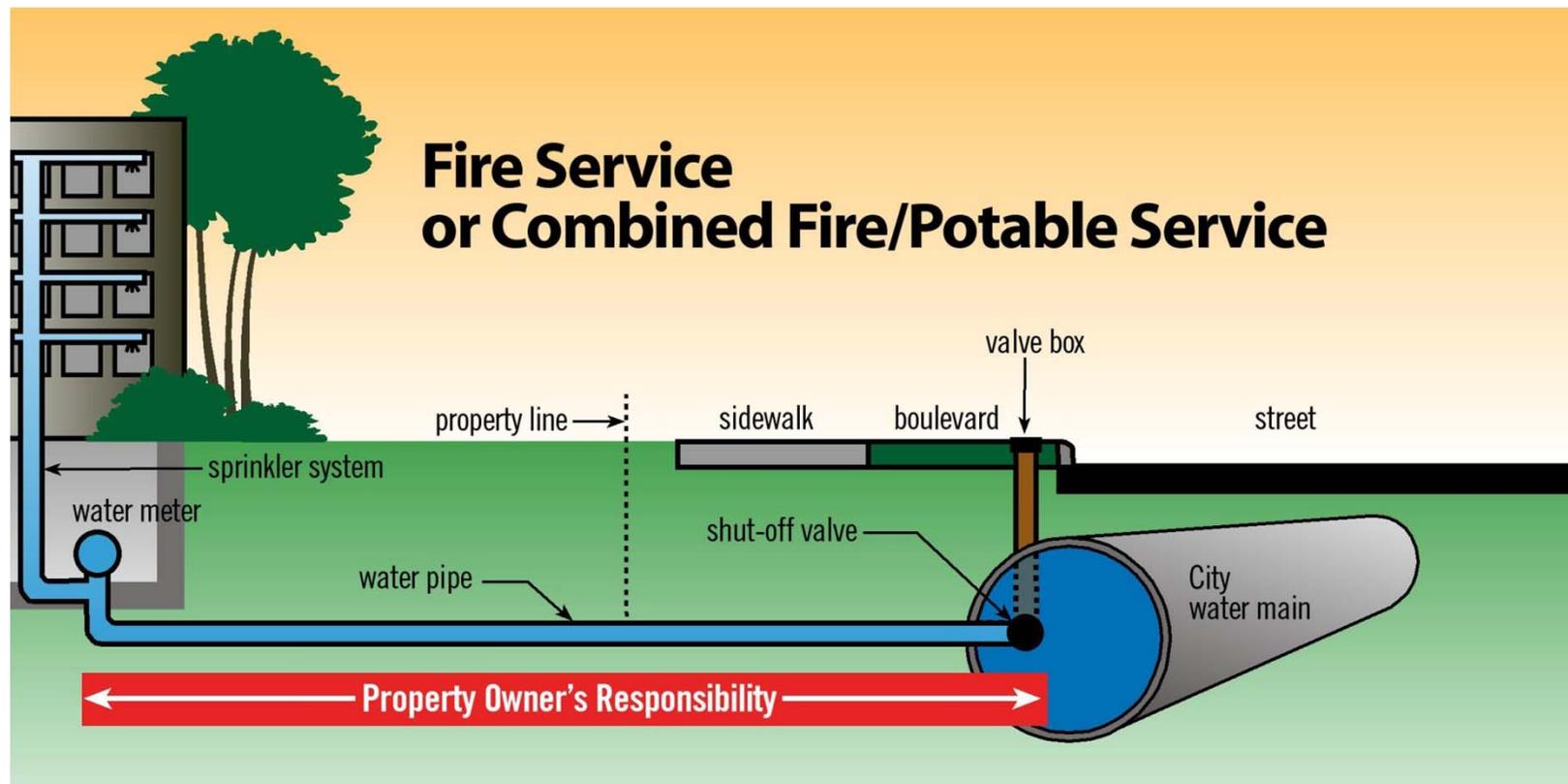




## Your water system – With fire protection

- Fire protection is a water service that includes sprinklers and/or hydrants
- You own this water pipe from your building to the City's water main, including all pipes, tees, sprinkler systems, valves, valve boxes, hydrants, and plumbing
- A combined fire and potable water service (one pipe serves both purposes) is treated the same way as a fire service

## Your water system – With fire protection





## You benefit from regular maintenance of your water system

- Ensures that your system will continue to work properly
- Prevents pipe failures which may cause extensive damage to your property and others
- Eliminates service disruptions which may result in costly business downtime
- Is more economic and less disruptive than emergency repairs



## Recommended maintenance activities

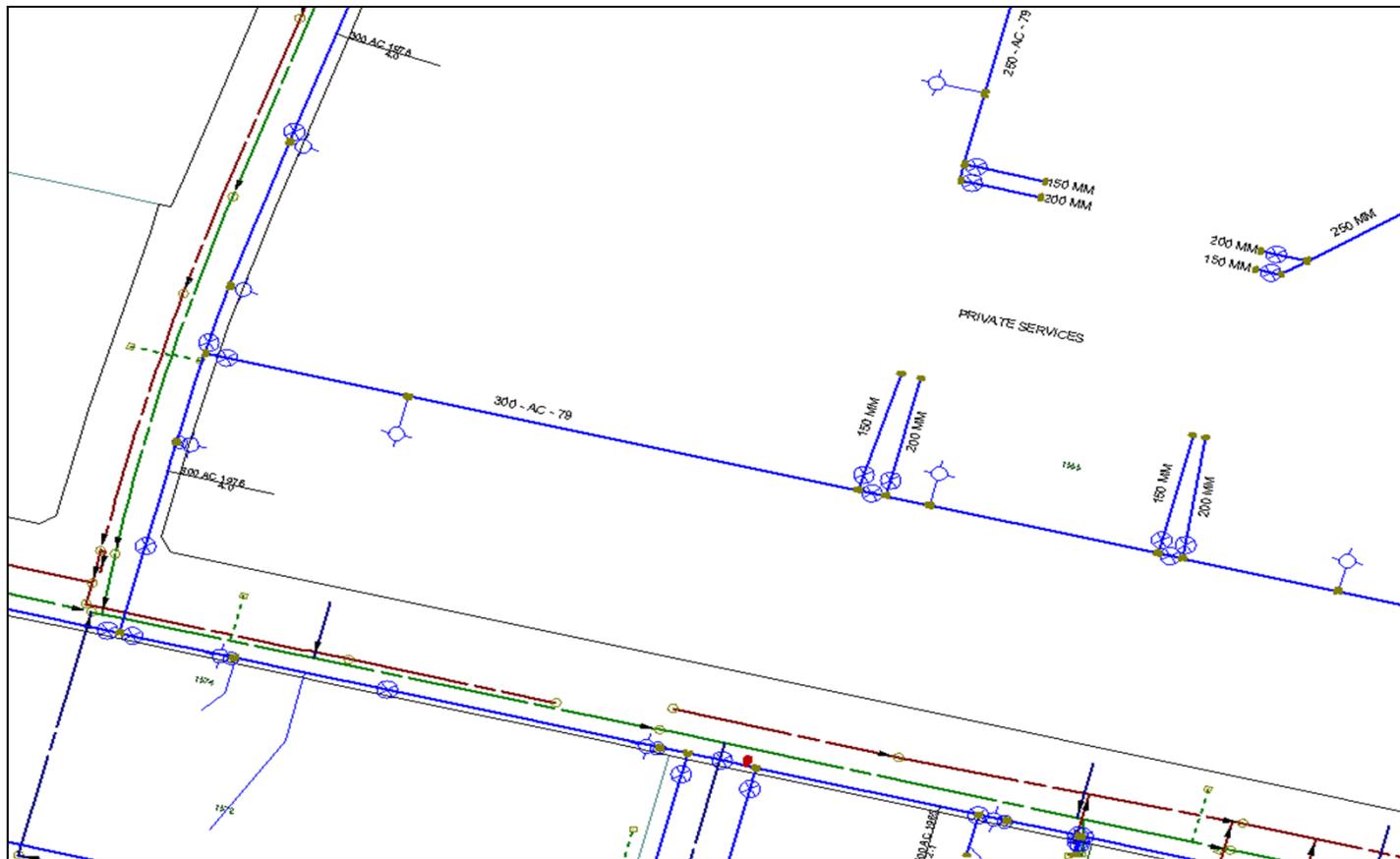
- Accurate mapping of pipe & valve location
- Pipe condition assessment (inspection)
- Pipe rehabilitation
- Cleaning / flushing
- Valve exercising and maintenance
- Hydrant maintenance
- Emergency planning



## Accurate mapping

- A key factor in your ability to maintain and repair your pipes and valves
- Gives us information which could improve service to you (in the event of a water main break)
- We may be able to help you locate your service valves
- To give us your water system information, phone 204-986-4453

# Accurate mapping



## Pipe condition assessment

- Inspect and if necessary repair/replace your service connection or private water main system if your business depends on a reliable water supply
- Qualified engineers can tell you which condition assessment technique is best suited to your system



## Pipe rehabilitation

- Various techniques are available
- If your business is dependent on a reliable water supply, you might choose to rehabilitate your water pipes before they cause any service disruption
- Qualified engineers can tell you which rehabilitation technique will best address your pipe system needs



## Clean your private water system

- Clean your water system regularly
- Coordinate cleaning of your private water system with our water main cleaning program



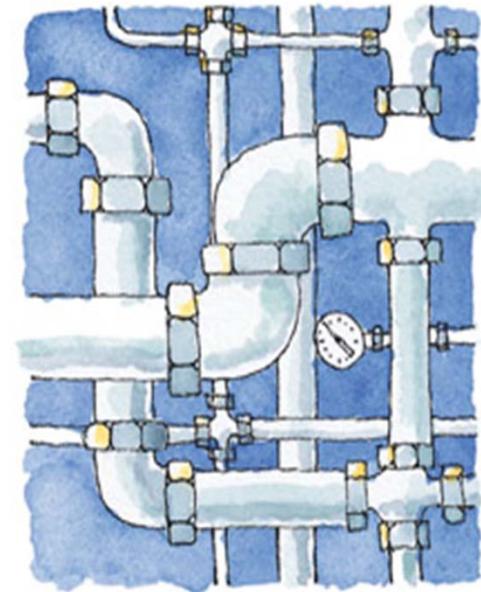
## Maintenance of your internal plumbing is key to high quality water!

- Regular flushing of internal plumbing may be required to maintain high quality water
- Maintain backflow prevention devices according to manufacturer's recommendations and test annually



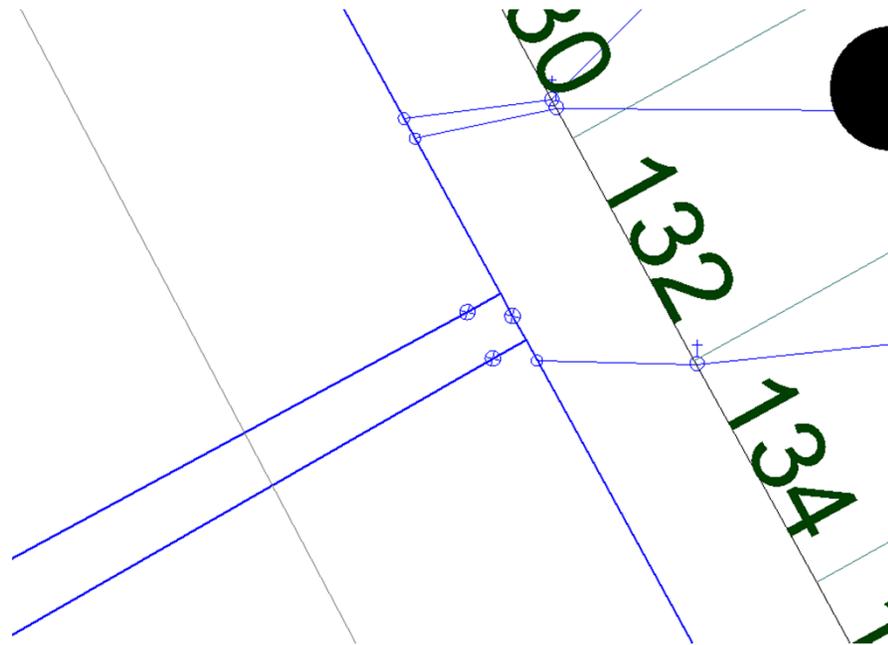
## Maintenance of your internal plumbing is key to high quality water!

- Consider using filters or other water treatment systems if your business operation requires consistently high quality water
- Maintain these water treatment systems according to the manufacturer's recommendations
- Heat recovery/cooling that sends water back to the City water main is not permitted



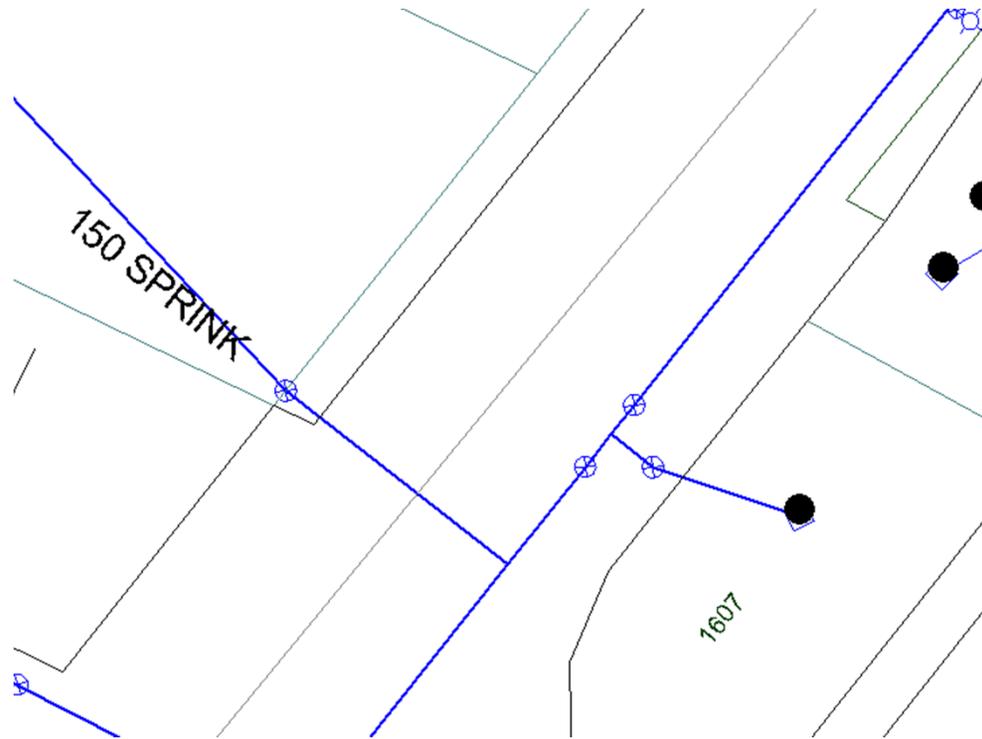
## Increasing reliability of supply

- Install two services, with a valve between the services and have inter-connections inside the building



## Increasing reliability of supply

- Install two valves on the water main – one on each side of your water service



## Emergency planning

- Emergencies can and do occur!
  - pipe breaks (external or internal)
  - internal water quality problems
  - loss of supply or pressure





## Emergency planning

- Include pipe breaks in your emergency plan
  - leak detection alarms
  - external/internal pipes mapped
  - procedures (posted on the wall)
  - communication plans
  - access to equipment
  - training and exercises



## Summary

- Regular maintenance of your water system is important to your business
- If you need more advice regarding inspection and rehabilitation, contact a qualified professional engineer
- Use experienced, qualified contractors
- Build a reliable water supply
- Ensure you have an emergency plan