7550 Sunwood Drive NW | Ramsey, MN 55303
Building 763-433-9850
Planning 763-433-9824
www.cityoframseymn.gov/permits
permits@cityoframseymn.gov

Lawn Sprinklers

This handout is a compilation of some of the standard requirements of the 2020 Minnesota Residential Code and City Zoning Code for projects of this type. This handout does not contain all of the specific code requirements for construction and should only be used as a guide. The permit holder is responsible to meet all code requirements applicable to each project.

The Minnesota State Building Code requires an approved type of backflow prevention device to be installed on all lawn sprinkler systems. This device must be installed by a licensed plumber or the homeowner. This requirement prevents backflow contamination of your water and the city's public water system.

To locate and inspect these systems, the City of Ramsey requires a permit for all lawn irrigation systems. If a contractor installs a system, they must be licensed with the city and obtain the permit. If a homeowner is installing the system, they may obtain the permit. Please provide the approved backflow preventer type when applying for the permit. The city does not need a system layout.

Any irrigation system that contains pumps or injectors for adding chemicals and/or fertilizers is considered a greater contamination hazard and requires a higher level of protection. All system designs shall meet Minnesota Plumbing Code 4715.1900 and related sections for potable water protection. Contact city inspection staff or a licensed plumber for further details.

As per Minnesota State Statute 103G.298, all automatically operated landscape irrigation systems shall have furnished and installed technology that inhibits or interrupts operation of the irrigation system during periods of sufficient moisture (i.e., Rain Sensor).

In addition to a rain sensor, Ramsey City Code also requires all new irrigation systems to include some form of water-efficient technology to reduce demand on groundwater aquifers. Examples of water-efficient technology include smart controllers, soil moisture sensors, Evapotranspiration (ET) sensors, etc.

811 Know what's **below** **Call** before you dig

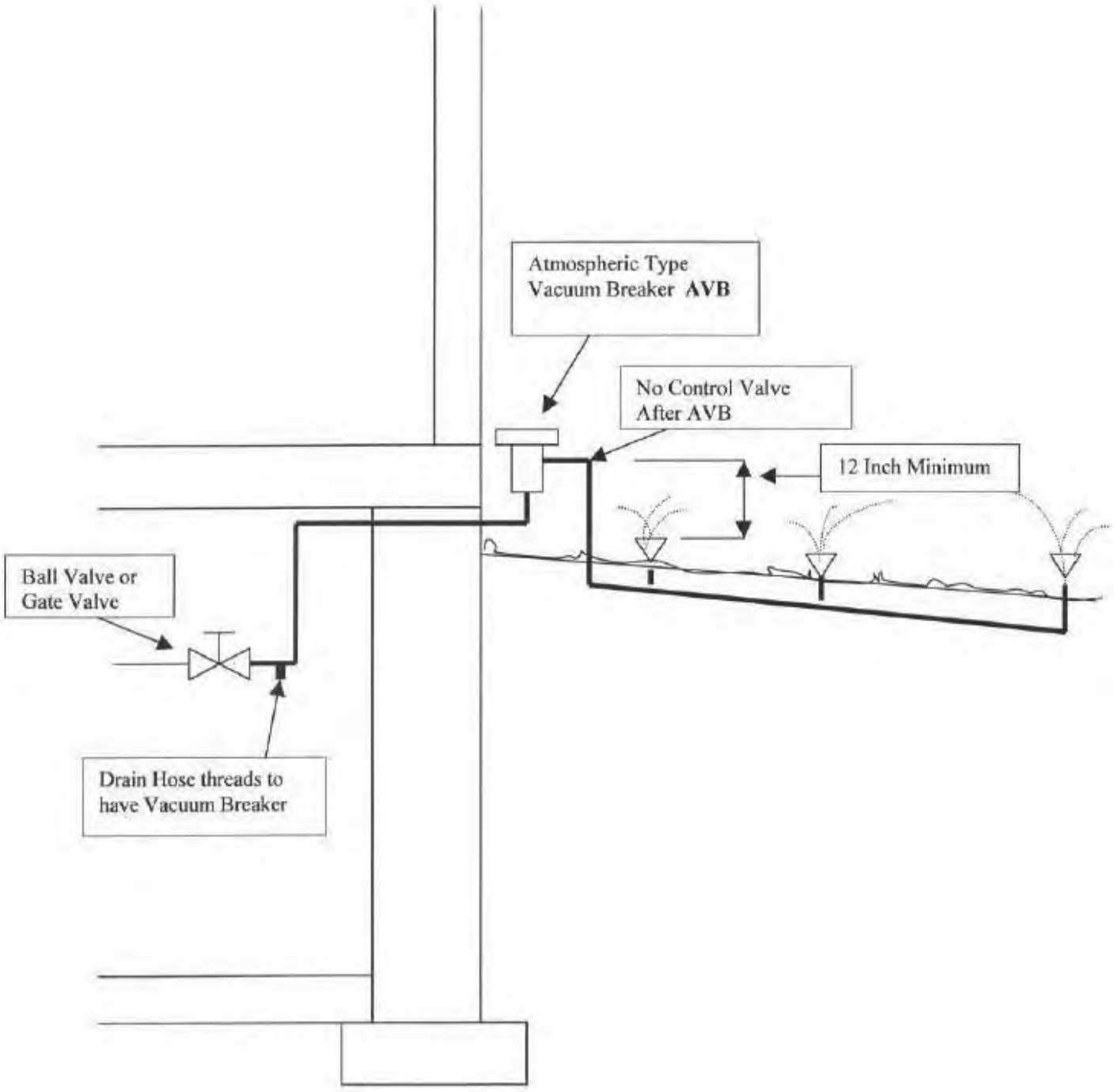
Color Code for Marking for Underground Utility Lines

- Electric
- Gas - Oil - Steam - Propane
- Communications - CATV - Fiber
- Water
- Reclaimed Water - Irrigation
- Sewer
- Temporary Survey Markings
- Proposed Excavation

GSOC
GOPHER STATE ONE CALL

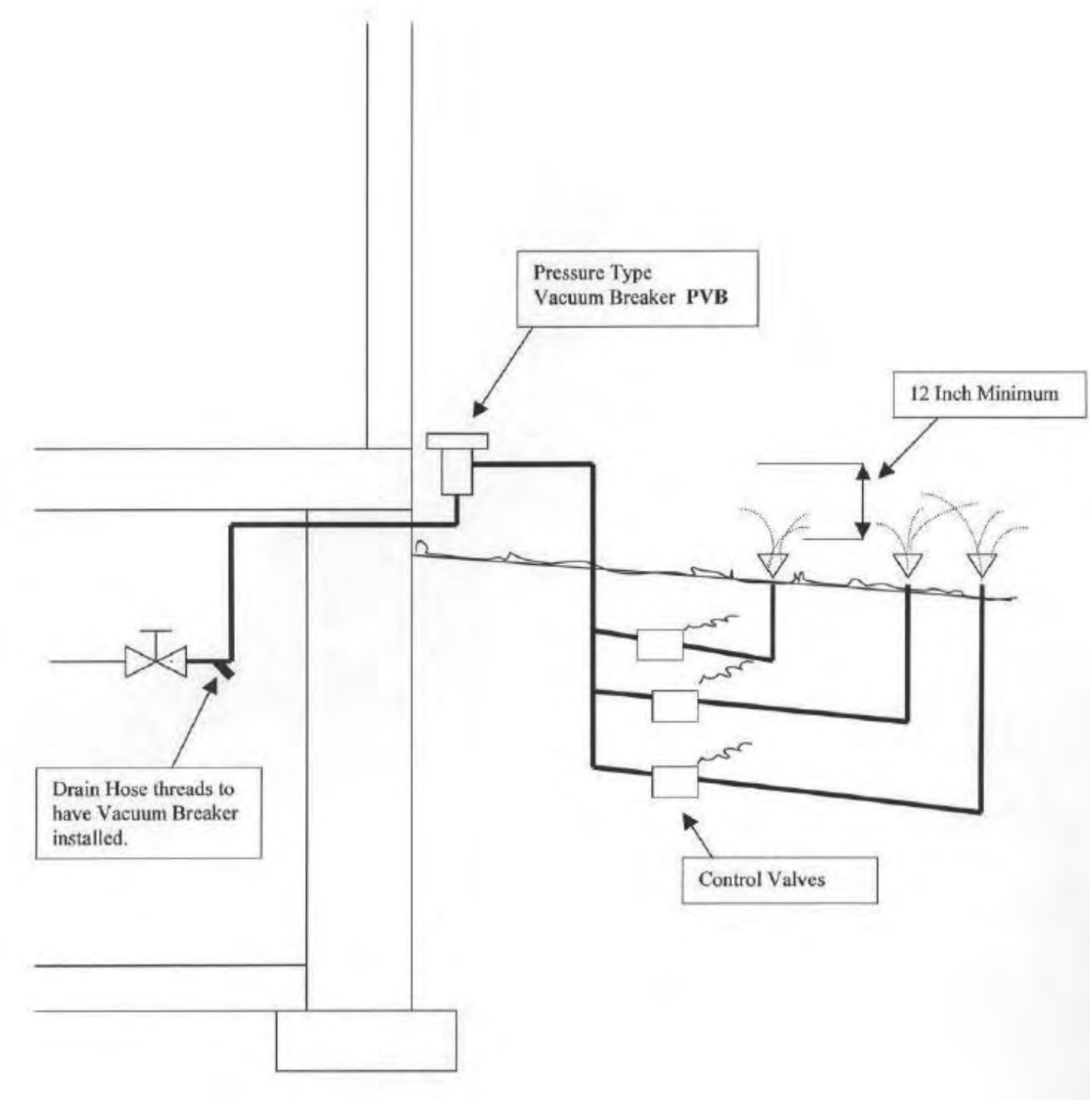
www.gopherstateonecall.org

Vacuum Breakers Atmospheric Type AVB



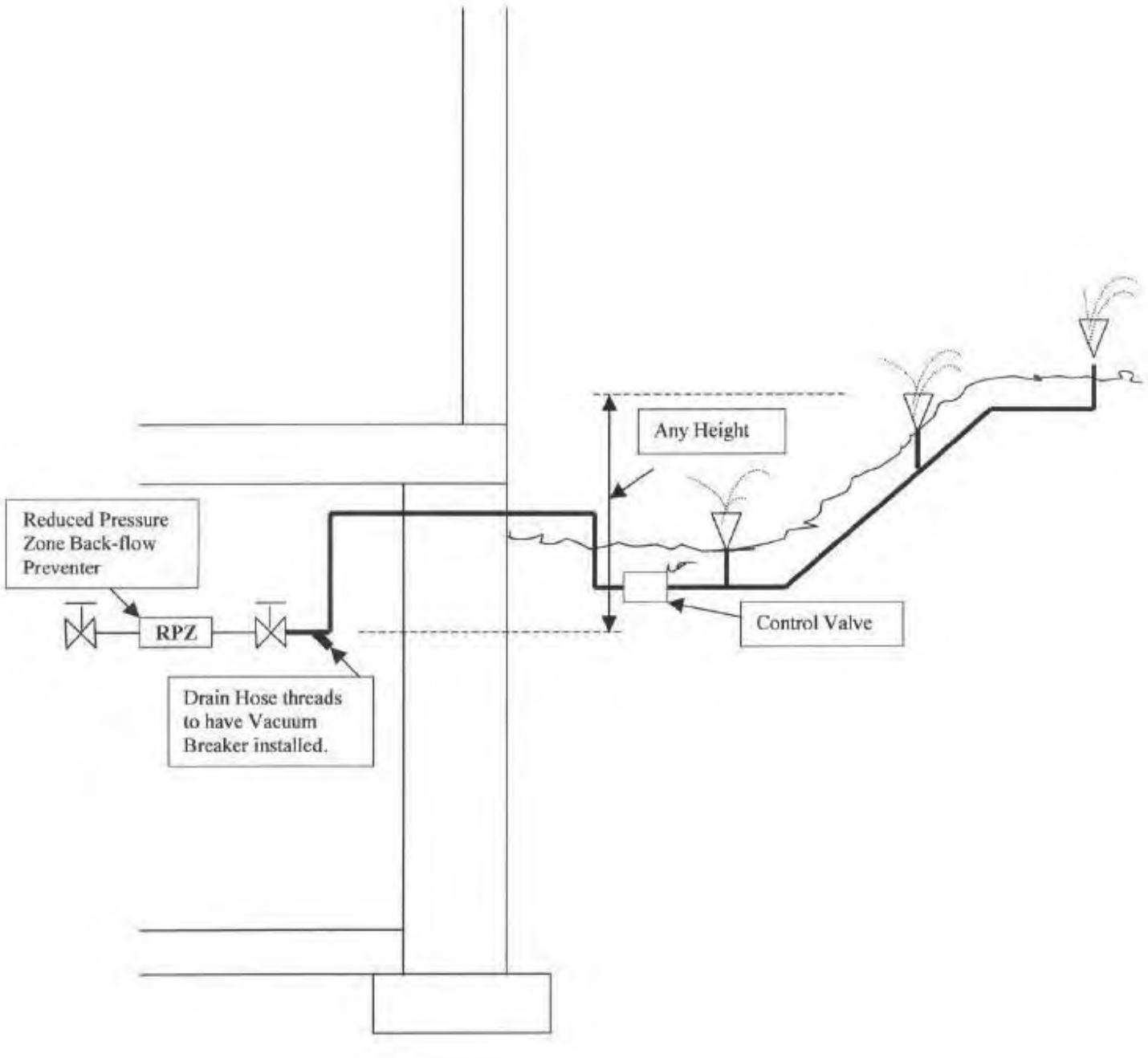
Atmospheric Vacuum Breakers on a lawn sprinkler system must be installed at least 12 inches above the highest sprinkler outlet and on the non-pressure side of the last control valve

Vacuum Breakers Pressure Type PVB



Pressure Vacuum Breaker on lawn sprinkler system must be installed at least 12 inches above highest sprinkler outlet an may be subject to constant static pressure.

Reduced Pressure Zone Back-Flow Preventer RPZ



A Reduced Pressure Zone type back-flow preventer must be installed on lawn sprinkler systems when any sprinkler outlet is higher than the back-flow preventer or when the system is designed to add chemicals or fertilizers. (May be subject to constant static pressure, back pressure, and back syphonage.) Use RPZ as the last backflow preventer if AVB-PVB will not work. Must test RPZ upon installation, every year and rebuild every 5 years. Contractors and homeowners installing RPZ backflow preventers in the City of Ramsey are required to inform the Building Official and provide details of their testing and inspection program.