

CONNECTING YOUR SITE TO CITY WATER

Many growers need more options for watering their gardens. Connecting your site to the city water lines could be an option for you. As an additional perk to easier watering, metering your garden water separately could allow you to make a case to the water department to remove the sewerage charge! Let's take a look at the process so you can determine if this is a good option for your site.

Understanding the Process

Own the property! Installing a hydrant is an investment and you or your community group should own the property *before* you consider installing.

Select a contractor. As with any project, be sure to get a contractor who is licensed and insured. It is also a good idea to get 2 or 3 estimates. The cost to tap the water line and install the spigot can range from \$3,000 to \$10,000, depending on the distance from the water line to your site and the type of piping and spigot you choose.

Getting permission from the city. Your contractor will need to pull a permit with the Detroit Water and Sewerage Department (DWSD) to inspect the water tap. The estimated cost for this is \$650.

What type of spigot is best? There are a few different types of spigots you and your contractor can purchase. For watering vegetable crops in Michigan, a sanitary frost free hydrant is recommended. Generally in Michigan, ground water freezes to a depth of 42 inches known as the frost line. Frost free hydrants give us an advantage because they have a plug that doesn't allow water to flow above the frost line when the valve is closed. Water stuck above the frost line will freeze and expand possibly bursting the line or the spigot. Frost free hydrants also have a drainage chamber or "weep hole" that diverts water trapped in the pipes above the frost line before it can freeze. However, this weep hole can actually cause a sanitation risk by siphoning water that has been in contact with underground deposits back up and out of the hydrant when you water. A sanitary frost free hydrant has a protected chamber that holds drained water so that there is no drainage hole open to possible contamination.

Deciding where to place spigot on your site. Consider your watering routine and running hoses from the hydrant. Try to place the spigot in a convenient location to avoid running hoses everywhere! Be sure the spigot will be visible to vehicle traffic on your site. Placing it in an area that receives full sun will make it less likely to freeze.

What your contractor will do:

- Locate and flag all existing underground utilities including the water line.
- Pull a permit from DWSD.
- Dig a trench deeper than the frost line running from the water line to the location where you want the spigot and lay new piping. You can choose between plastic PEX piping (rated for direct bury) or copper.
- Tap the water line, connect it to your new piping and install a water meter.
- Install the spigot filling the bottom foot with pea rock or crushed stone for drainage.
- Once all the lines are laid, you and your contractor should consider installing a shut off valve at the main or service line this way you can shut off the water in the winter or for repairs without having to call the city.
- Connect your new piping to the hydrant and attach a back flow preventer so water cannot leach back into the main system.
- Test for leaks, cover the trench, and protect the meter by installing a wabash box over it.

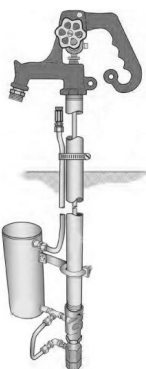


Photo courtesy of Simmons Manufacturing Company

Maintaining your new spigot

Shutting the water off in the winter. If you did not install a shut off valve you will need to contact DWSD to have the city turn off water each year in the fall.

Winterize water lines. If you did not install a frost free hydrant, you will need to hire an irrigation company before the ground freezes to winterize your system. They will get all of the water out of line so it doesn't freeze, expand and cracking your new pipes.

Detach hoses in the winter. If left on hoses can actually prevent the hydrant from draining completely and if the hydrant head and the pipe freeze, your new spigot could be destroyed.

Lubricate O-Rings. Over time, your o-rings can crack causing leaking at the on/off valve. To avoid this be sure to coat with a silicone lubricant every couple years.

