



REDUCING OR ELIMATING REAR YARD STANDING WATER

1. Construct a **BERM/DIKE** between adjacent properties that will prevent water from crossing property lines. This may not eliminate any water falling or ponding on either side of the berm. Obviously, no construction should be done on other properties without the owner's permission. No permits are required for this work.
2. **RAISE THE GRADE** in the area where water ponds. This may require importing fill dirt. Raising the grade will only move the water to another low point, especially in areas where soil conditions will not allow the infiltration of water into the ground (clay soils). This may work in conjunction with other methods listed here in to direct water to a location where it may drain freely to a drainage collection point, the public right-of-way or a location where it is less of a nuisance. Raising the grade of one property, which causes ponding water on a neighboring property, is **NOT RECOMMENDED** as it may legally challenged. No permits are required for this work.
3. Construct a **SWALE** or shallow ditch that can carry water to a lower point where it can drain freely either to the nearest street or catch basin. No permit is required for this work. Be aware that public right-of-way cannot be swaled or changed to accommodate any drainage changes. No permits are required for this work.
4. Construct a **DRY WELL** to accelerate the infiltration of water into the ground. A dry well is a pit filled with stone, which is dug deep enough to allow water to infiltrate into a more permeable layer below the top layers of soil. This will only work if a more permeable soil layer, such as sand, exists within reasonable digging depth. No permit is required for this work. Dry wells are not allowed per the Michigan plumbing code but are allowed if they can drain completely either in combination with a **sump** or outlet pipe as follows in items 5 and 6.
5. In addition to a dry well, a **SUMP** may be placed in the dry well where a pump can be installed during wet times. The pump can be turned on as necessary and the water can be pumped to a location where it can drain freely. Contact the City Building Department upon completion of plans for this construction for any permits that may be required.
6. Construct a **FRENCH DRAIN** or **CATCH BASIN** which would be connected to a storm or combined public sewer to drain water away from the affected areas. This work requires a plumbing permit and shall be performed by either by a plumber or drain layer to make a connection to a public storm or combined sewer. Connection cannot be made to a sanitary sewer or private sanitary sewer lead.

These methods create new low points to drain water to. A French drain is a perforated outlet pipe at the bottom of this shallow trench or pit filled with stone. The outlet pipe is extended to another low point that drains freely or can be connected to the City sewer at an appropriate location. Please note that it is unlawful to connect yard drains to any building's foundation drain.