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(513) 732-7075

1000 LOCUST ST.
OWENSVILLE, OH

LOOK BEFORE YOU BUY



**A GUIDE OF DRAINAGE CONSIDERATIONS
TO MAKE WHEN PURCHASING A HOME OR
PROPERTY IN CLERMONT COUNTY**

**OUR MISSION - TO PROVIDE RESOURCES TO MEET
THE CONSERVATION NEEDS OF CLERMONT COUNTY**

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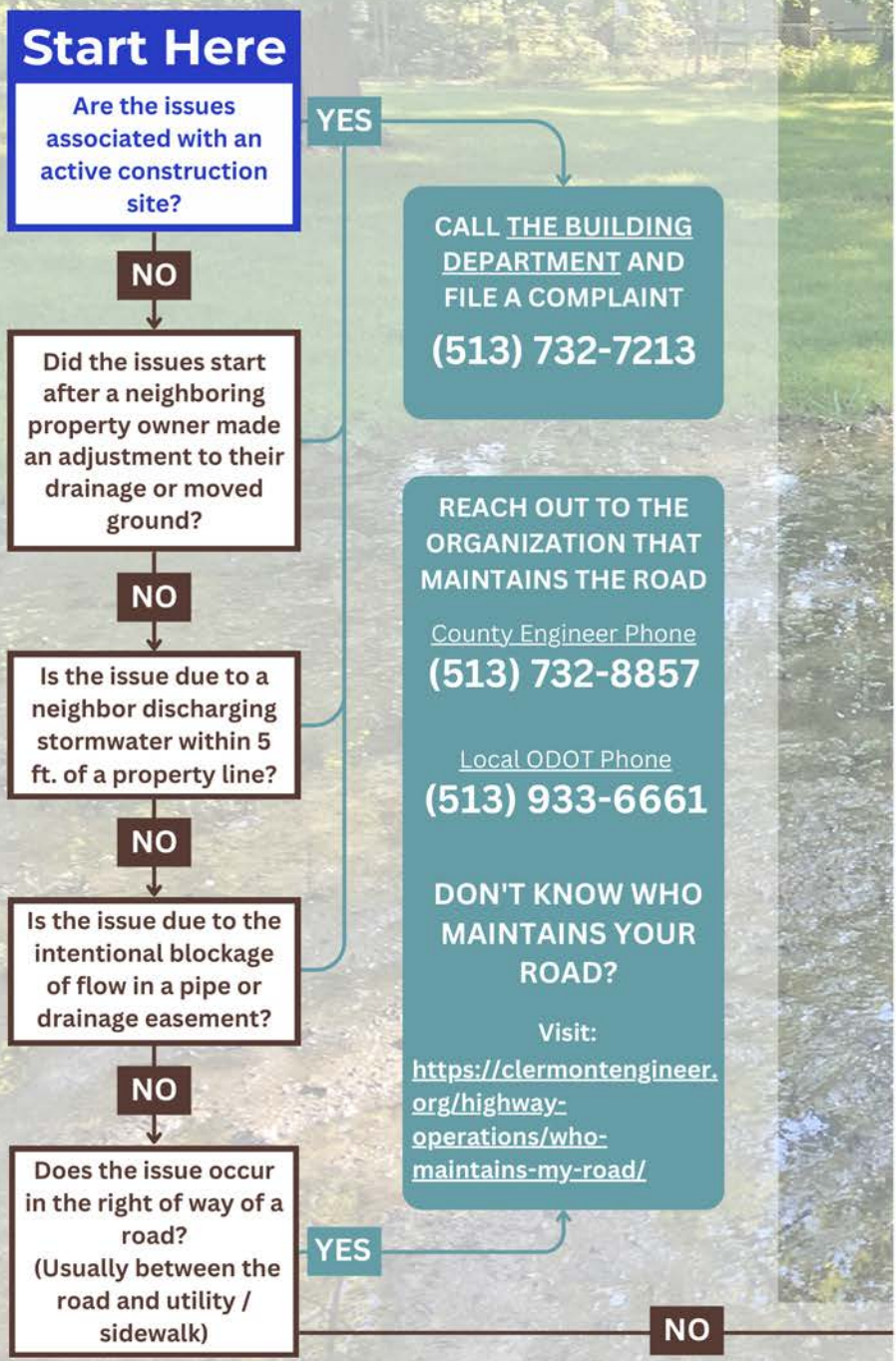
If you are experiencing soil erosion or drainage issues on your property, use this tool to help identify the best organization to contact.

STILL UNSURE?

Call the Clermont County Soil and Water Conservation District for help
(513) 732-7075



Drainage or Erosion Issues?



WHERE TO OBTAIN SPECIFIC INFORMATION

- Clermont SWCD (Soil & Water Conservation District)** ----- (513) 732-7075
Information and technical assistance available on soil capabilities and limitations, erosion control measures, drainage/private storm sewers and pond installation/management. Can also provide maps and a list of contractors.
- Clermont Building Inspection Department** ----- (513) 732-7213
Administers and enforces Clermont County Water Management & Sediment Control Regulations, issues permits for storm sewer construction and pond construction; enforces activities within easements. Flood Plain Administration.
- OSU Extension** ----- (513) 732-7070
Information on agronomic matters, weed and pest management, soil testing.
- Clermont County Engineer's Office** ----- (513) 732-8857
Maintains drainage systems within ROW* on county roads, maintains some private storm water basins and systems under the ditch petition program or within established storm water districts.
- Cities of Loveland and Milford**
Operate a storm water district within their city limits. Check with each on services provided.
- Townships and Villages**
Maintain drainage systems within ROW* on township and village roads.
- Ohio Dept. of Transportation** ----- Clermont County: (513) 797-6008
Maintains drainage system with-in ROW* along state and interstate highways.
- Clermont County Recorders Office** ----- (513) 732-7236
Recorded plats, easements
 - **How do I find a copy of the plat or deed?** Visit the Clermont County Recorder's Office at 101 E. Main St., Batavia, OH 45103 or online at <https://recorder.clermontcountyohio.gov/>
- Ohio Utilities Protection Services (OUPS)** ----- 1-800-362-2764
Locate and mark existing underground utilities. Always call before you dig.

Already own a property and need assistance with a drainage issue? Refer to the Drainage and Erosion Contact guide (pg. 14-15)

*Right-Of-Way

INTRODUCTION

Looking to buy a new home or property? How exciting! How the house looks, the landscaping, and upkeep on the property are the first things to grab your attention.

But wait - Don't stop there!

This booklet will guide you through important questions and considerations to have in regards to land drainage and water management as you look for new property to purchase.



House with poor drainage.

PLEASE NOTE:

That drainage on private property - outside the road right of way - is usually the responsibility of the property owner. Even if the drainage channel or storm sewer carries water from the street or other parts of the neighborhood, **it's typically the owner's responsibility to keep it clean and maintained.**



When looking at property to purchase, it is highly recommended that you visit the site during a rain storm or soon after. This will give you an idea of where the water flows and where it pools - water pooling close to the house could be a problem!

DEFINITIONS

Buffer Zone: an area along the stream planted with trees and other vegetation to protect the stream from erosion and improve water quality.

Easement: An easement is an agreed-upon use of land by a party other than the landowner. Please see page 8 for more information on drainage easements.

Flood Plain: a flat area around a stream that is prone to flooding

Right of way: A right-of-way allows another individual to travel through a portion of your property.

Swale: a shallow, usually grassy channel with gently sloping sides.

LANDSLIDES

Landslide questions arise when the property you are interested in has steep slopes.

Areas that are prone to landslides include:

- At the top, bottom, or on steep slopes
- At the bottom or top of an old fill slope
- Developed hillsides where leach field septic systems are used or added water from downspouts is evident.



A steep, bare hillside has high risk of landslides.

Warning signs of land movement:

- Springs, seeps or saturated ground in areas that have not typically been wet before
- Soil moving away from the foundation
- Tilting and/or cracking of concrete floors and foundations
- Decks, patios tilting and/or moving relative to house
- Leaning telephone poles, trees, retaining walls or fences
- Sunken road beds



Land movement is occurring here, you can see the ground splitting.

If signs of potential problems are evident, you may wish to contact a geotechnical engineer.*

*** Check with Clermont SWCD for list of Geotechnical Engineer Contractors.**

This list is provided as a public service. Clermont SWCD does not endorse any particular contractor, company or products

CLOGGED DETENTION BASIN OUTLET

- Storm sewers are designed to handle up to a “ten year storm,” meaning there is a 1 in 10 (or 10%) chance of a storm of this magnitude occurring in any year. **Larger storms than this may overwhelm the system, so where does the water go during extreme storms?**
- **Is there a detention or retention basin on the property?** If so, find out who is responsible for maintenance. These basins are designed to store water during heavy storms, then release the water at a slower rate over time, causing less erosion and allowing more of the water to be absorbed back into the land. Remember that nothing may be constructed within a detention/retention basin easement. Any modifications to the basin must be approved by the Clermont County Building Inspection Department.

Please see our retention/detention basin guides for more information. These are available at www.clermontswcd.org/swcd-publications/.

- **Is the property on a public or private road? If public, is it a township, county or state road?** If private, find out what your responsibilities are.
- **Are there any ditch maintenance, storm water district or HOA storm water fees associated with the property?**



Both pictures showcase non-functional basin outlets. Sediment covering the outlet can slow water exiting the basin

OHIO DRAINAGE LAW

The Ohio drainage law encompasses Ohioans’ rights in regards to drainage on their property. It’s good practice to understand the basics of this law and what it might mean for you as a property owner.

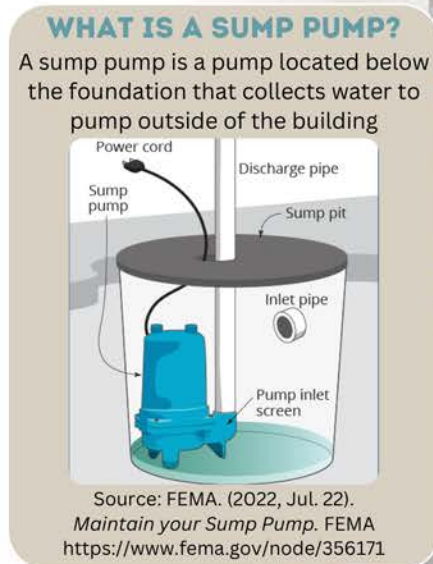
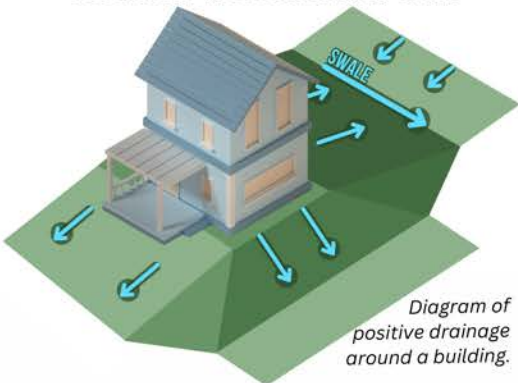
This law is not easily summarized. However, most people who work in the area of drainage or water management would agree the following principles apply:

- Landowners are entitled to reasonable use of the water that flows across their land as long as it is returned to its natural water course.
- Landowners are generally required to accept the water that flows onto their property in a natural water course.
- Landowners are generally obligated to outlet a natural water course onto their downstream neighbor at the same point the water left the property prior to any development of the site. Changing the flow of water (i.e. volume, direction or velocity) in a manner that causes damage to an upstream or downstream neighbor may result in legal liabilities for damages.
- At this time, the authority to issue orders or resolve conflicts over water rights or drainage problems between neighbors lies with the common pleas court.

An overview of this law is available at www.clermontswcd.org under Programs & Services/Storm Water Programs/Drainage & Erosion

DRAINAGE INSIDE / BESIDE THE HOUSE

- **Does the house have a basement?**
 - **Is there a history of water in the basement?** Are there signs such as staining or water marks on the walls; wall or floor repairs?
 - **Is there a sump pump in the basement?** (bottom right)
 - **What condition / how old is the pump?**
 - **Is there battery backup in case of power failure?**
 - **Is there a back-up pump?**
 - **Where does the sump pump discharge?**
 - It is illegal for sump pumps, foundation drains and downspouts to discharge to the sanitary sewer.
 - **Are there window wells in the basement?** Do they drain well or fill with water during a storm? Are they covered to keep out leaves, grass clippings, etc.?
- **Does the house have a foundation drain? Where does it discharge?**
 - **Again, it is illegal to discharge to the sanitary sewer.** Homes built prior to 1972 that have foundation drains connected to the sanitary sewer may qualify for reimbursement from the Clermont Water Resources Department to disconnect it.
- **Is the ground sloped towards or away from the foundation wall?** Surface water should never be directed towards the foundation.
- **Can you see the outlets for downspouts and/or sump pumps, or are they buried?** Are they clear or clogged with sediment and leaves?
- **Do downspouts empty at least five feet from the foundation wall?**



STORM SEWERS & ASSOCIATED INFRASTRUCTURE

Are there storm sewers, catch basins or manholes on the property? A storm sewer system is designed to capture and convey rain water to some waterbody such as a ditch, creek, river or lake. This system is separate from “sanitary sewers” that carry waste from a house or building to a treatment plant. Storm sewers can vary greatly in size, from a few inches in diameter to 6 feet or more. Regardless of the size, there are some things you should consider if the property contains storm sewers:

- **Who is responsible for maintenance?** The public entity in charge of road maintenance is responsible if in the road right of way and if constructed as part of a capital improvement project. If located off the road (side yard, back yard, etc.), or was installed by a previous property owner in the right-of-way, it may be your responsibility.
- **If there's a driveway culvert, is it in good shape and clear of sediment and debris?** While the public entity is responsible for roadside ditches, the property owner is responsible for driveway culvert pipes.
- **What condition are the storm sewers and other structures in?** Signs of problems include sinkholes over the pipe or at the edges of the catch basin, material obstructing inlets or outlets, crumbling concrete or broken or disconnected pipes. You may want to consider a video inspection of storm sewers on private property as part of your whole house inspection, especially if maintenance would be your responsibility.



DRAINAGE & STORM SEWER EASEMENTS

WHAT THEY ARE, WHAT THEY MEAN:

An easement (pg.4) is a legal right to use an area of land for a specific and limited purpose. Drainage easements identify an area through which storm water runoff is intended and permitted to flow, whether it is on the surface or in a storm sewer. Drainage easements may be public or private; check the record plat or deed (see pg. 3) for this information. Public easements are usually limited to roadside right-of-ways and are maintained by ODOT, the county, township, or municipality. Private easements are maintained by the property owner or in some cases, the homeowners association (HOA). **If you have a storm sewer on your property that's not in the right-of-way, you or the HOA are most likely responsible for maintenance & repairs.**

Things to Consider Regarding Easements:

- **Does a drainage easement exist? Public or private?**
- **Are there structures located in the drainage area that would block the flow of water?** You cannot build a permanent structure or driveway within the drainage easement.
- **Are you thinking of adding a pool?** Again, these cannot be located within the easement.
- A property owner cannot dam or divert the flow of water within a drainage easement.
- As a property owner, it will be your responsibility to keep private drainage easements maintained and open. This may include mowing and the removal of any debris or obstructions.



Shed built in a drainage way

NATURAL WATER FEATURES ON THE PROPERTY

Features such as swales, ditches, streams, ponds or wetlands may be present on your property.

- **Are there defined swales (see definition on pg. 4) or ditches on the property?**
- **Are the swales within an easement (pg. 4)?**
 - **Is the easement public or private?** If private, maintenance will likely be the responsibility of the home-owner or possibly a homeowners association.
 - **Are there signs of erosion?**
 - **Is there standing water in the ditch even if it's been dry for a few days?**
- **Do you have a stream in your yard?**
 - **How high might the stream rise during heavy storms?**
 - **Is there significant erosion of the stream bottom or banks?** Are there overhanging banks, where the soil underneath has eroded away?
 - **Are there obstructions such as dead trees or branches in the stream that could block flow, causing flooding and erosion?**
 - **Does the stream have a buffer zone (pg. 3)?**



Bank erosion along stream .



PONDS

- **Is the water level lower than you would expect given recent weather?** If so, there may be a leak in the pond
 - check for signs of water on the backside of the dam.
- **Is there heavy algal growth, bad odors or dead fish?** Any of these could be signs of a water quality issue.
- **Are there defined wetlands on the property?** There are federal and state regulations regarding the draining of wetlands

SURFACE DRAINAGE

Topography in Clermont County ranges from the rolling hills along our rivers and creeks to the flat uplands found everywhere else.

When looking at a property to purchase, consider the following:

- **What is the general slope of the property?** Where does the water go when it rains?
- **Are there signs of ponding water such as lower areas with bare soil or grayish, matted leaves?** Will artificial drainage be needed? Keep in mind that some ponding water may be natural during or shortly after a storm.
- **How about the land surrounding this property? How large of an area drains TO the yard? Could there be problems from off-lot storm water runoff?**
- **Is the property at the base of a steep hill?** If so, are there water channels draining the hillside onto the property? Even if these channels are small, they can carry a tremendous amount of water during intense storms - where will the excess water go?



Water pooling in a yard.

SURFACE DRAINAGE (CON.)

- **Is future development possible in the area that drains to the yard?** If so, this will add to the volume of storm water runoff if it's developed.
- **Is the property located in a flood plain?** If so, is flood insurance required and/or available?
- Residents who live in high risk areas called Special Flood Hazard Areas (SFHAs) are required to purchase flood insurance if their mortgage is through a federally backed lender.
- Flood maps can be found at <https://msc.fema.gov/portal>. More information on flood insurance is available at www.floodsmart.gov



SOILS

There are over 40 different soil types in Clermont County. The county soil survey is a publication that lists each soil type, its characteristics, limitations and what it is best suited for. By obtaining a soils map of the property you are evaluating, you can see if the soils present have any limitations.

- High seasonal water table
- Standing water on surface / poor permeability
- Slope of site / erodibility / slippage
- Sand & gravel subsoil
- Depth to bedrock
- Flooding Hazard

You can access the soil survey of your area by going online to websoilsurvey.nrcs.usda.gov. If you have problems, please contact Clermont SWCD.