



In response to ongoing stormwater management issues and to follow stormwater management best practices, the Village has identified a number of flood mitigation practices to help alleviate residential flooding. One of these practices is residential downspout disconnection. *Gutter downspouts that are directly connected to the Village's storm sewer system increase the volume and rate of storm water runoff entering the storm sewer system. This can exacerbate flooding conditions in many locations in the Village.* When downspouts from your home “splash on grade,” runoff is partially absorbed by the ground. This decreases the volume of water that enters the system at one time, thus stormwater is conveyed to the storm sewer system more slowly. This slower conveyance helps prolong the time at which storm sewers reach their capacity. Many homeowners have connected their downspouts to the storm sewer for a variety of reasons, many times in an effort to avoid having water accumulate on their property during rain events. Below, we have developed a series of Frequently Asked Questions (FAQ's) that are intended to provide additional information to residents regarding disconnection of downspouts.

### **Why Should I Disconnect?**

Connected downspouts can exacerbate flooding conditions. Each downspout on your home can deliver significant quantities of water to the storm sewer system very quickly. This contributes to the inundation of the storm sewer and can lead to basement backups, increased street flooding and sewer overflows. Simply disconnecting a downspout can make a significant difference in keeping excess water out of the sewer system and reduce flooding risks to homes.

### **How Do I Know If My Downspout is Connected?**

A quick visual inspection of your downspout will reveal if it splashes on grade or has an underground connection.

A direct connection will flow into a buried underground pipe, as pictured below:



A downspout that “splashes on grade”, is pictured below:



### **Won't Disconnecting My Downspout Cause More Flooding on my Property?**

A downspout that splashes on grade is designed to allow rain water to sheet drain over the ground, and slowly make its way to the storm sewer system. This may lead to temporary saturation of portions of your property while the water is absorbed or works its way to the storm sewer system. In order to make sure that storm water runoff is properly directed and has no adverse impact to your property or neighboring properties, you may want to discuss disconnection with a Public Works representative. Staff from the Public Works Department is available in order to assist you in determining whether your property is correctly graded to ensure proper drainage, or if re-grading is necessary.

### **Is There A Way To Disconnect My Downspouts And Keep My Yard Dry?**

Sometimes there are no absolute solutions that will keep areas of your yard from becoming wet. However, there are alternatives available. The Village sells rain barrels, which are available at the Village Hall, at a discounted rate. Rain Barrels are connected to your downspouts and act as collectors. They can limit the amount of water released into your yard during rain events and also provide an additional source of free water to be used for watering your yard, garden, or any other non-potable use. Similarly, the Village is encouraging the use of rain gardens as an alternative.



### **Where Should I Direct the Downspouts In My Yard?**

All downspouts **must** drain toward either the front or rear of your property. Water that is directed to your side yard may flow onto an adjacent property, and could cause adverse impacts to neighboring properties. Downspouts should also be directed away from window wells so that excess water does not cause a basement flooding issue. The diagram to the right depicts a typical home with correct downspout drainage. By Village Ordinance, downspouts may extend no more than five (5) feet from a building.

### **I'd Like To Direct My Downspouts as Far from My Home as Possible. Can I Run My Downspout Extension More Than Five Feet?**

You may run an extension downspout *along* the foundation of your home; however you cannot splash your downspout more than five feet away from the foundation.

### **My Downspout Is In The Middle Of My Side Yard. What Should I Do?**

A side yard downspout must run to the front or the rear of the property, along the foundation of the home, through a downspout extension. Again, remember to avoid window wells or directing downspouts toward neighboring properties. Another possible solution is to install a rain barrel under the downspout to collect the water.

### **Can I Run A "French Drain" Underground to Another Location On My Property?**

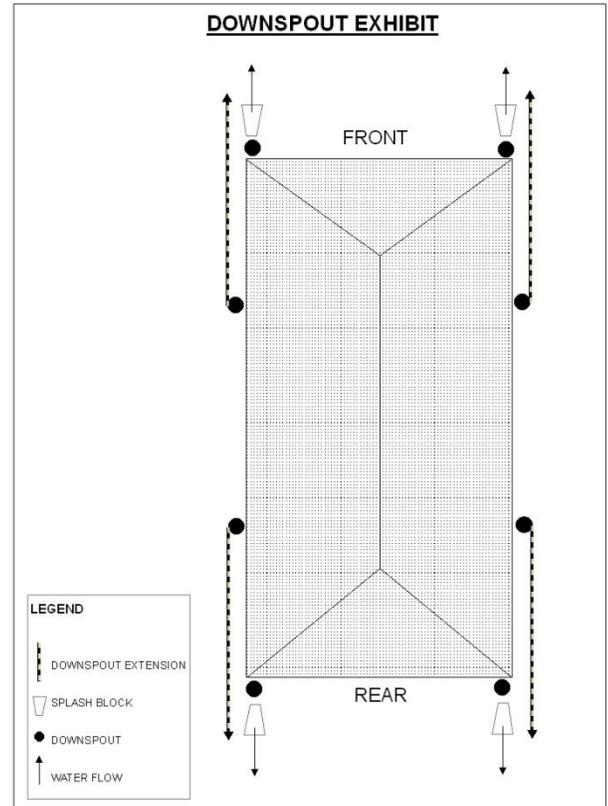
A "French Drain" is a downspout connection that is buried just below the surface that drains to another area of your property. This application will only be acceptable if specific extenuating circumstances exist on your property. The Village Engineer may, at his sole discretion, determine that a French Drain or other solution may be used. Contact the Public Works Department at 847-272-4711 to speak with an inspector on this issue.

### **Do I Need a Village Permit or a Plumber?**

If you are simply returning the downspout to a "splash on grade" condition, you do not need a licensed plumber to do the work. However, to ensure a correct disconnection, we ask that you contact the Public Works Department at 847-272-4711 so an inspector can review the work and answer any questions you may have.

### **This Seems Expensive. How Much Will this Cost?**

Each situation will be different. However, generally, costs should be minimal. If you can disconnect the downspout yourself (instructions for doing so are included in this document), a minimal cost for some basic hardware supplies will be all that is necessary. However, if you are unsure of doing this project on your own, you may want to contact a landscaper or handyman to assist you. In certain circumstances, site grading may be necessary, and those costs might be significant.





## STORMWATER MANAGEMENT BEST PRACTICES

# Disconnecting Your Downspout

Village Of Northbrook

### How Do I Disconnect My Downspout?

Supplies needed to disconnect your downspout:

- hacksaw
- tape measure
- hammer
- screw driver
- pliers
- sheet metal screws
- downspout elbow
- downspout extension
- splash block
- rubber cap



### Step 1

Identify which of your downspouts are connected to the storm sewer system and review the area to determine the best method/location for discharge.



### Step 2

Measure 9" from where the downspout enters the sewer connection.



### Step 3

Cut the downspout with a hacksaw.



### Step 4

Cap the sewer standpipe. This prevents water from entering the drain tile. In most cases, you should be able to use a simple rubber cap secured by hose clamp. You can also use a wing-nut test plug if available cap sizes do not fit.





## Step 5

Insert the downspout *into* the elbow (if you put the elbow into the downspout, it will leak). You may need to crimp the end of the downspout with a pair of pliers to get a good fit.



## Step 6

Attach a downspout pipe extension to carry water away from the house and foundation. You can use a hacksaw to cut the extension to the desired length of less than five feet. Be sure to insert the elbow into the extension to prevent leaks. Secure the elbow and extension with sheet metal screws. To prevent erosion where the water drains, you can place a splash block at the end of the downspout extension.



### ***I Want to Speak With Someone at the Village About This. Who Can I Call?***

If you have any general questions about downspouts, please call 847-272-4711.