



## Drainage

Poor drainage causes obvious problems: standing water, foul odor, insects, diseased or dying plants, mud and ruined turf. Planning and installing suitable drainage will solve these problems and prevent the site from turning into a maintenance nightmare during storms and rainy seasons.

### Planning Your Drainage System

The first step you should take when planning a drainage system is to identify low spots in the landscape. If obvious low spots exist on the property, the water must have a way to exit those areas. If you don't install drainage, a puddle probably will develop whenever it rains.

There are several different types of drains to draw standing water away from the landscape, all include underground pipes which collect water and empty it to a more appropriate area within your property. Draining into public right of ways, streets, sewer drains, varies per your municipalities; refer to specific guidelines as necessary. Most importantly call your local utility marking service, such as J.U.L.I.E in the suburbs of Chicago. Review with us the options of also turning a drainage solution into an opportunity to plant a Rain garden.

### Types of Drains

**Channel Drain** - Ideal for keeping patio or driveway runoff from flooding the nearby landscaping or areas near buildings. A protective grate along the top of the channel keeps out yard debris. The channel drain is connected to another pipe, which leads water away from towards the outlet drain.

**Roof Drains** - A common mistake made by homeowners is installing a downspout along the side of the house so that it drains at the edge of the house. The job of a downspout is to drain water from the roof, but if you don't redirect it away from the house and into the ground. To assist in directing water away from the residence we connect an adapter to the downspout and connect a small section of drain pipe. The drain pipe length can vary from 2' to 100' and always should end at an open bottom 'T' outlet drain.

**Area Drain** – usually a square or round drain box larger than 6" in dia. located in the low area of lawn or planting beds. Again the drain pipe length can vary from 2' to 100' and always should end at an open bottom 'T' outlet drain.

**French Drains** – Are great to alleviate surface drainage solutions when directing excess water is unavailable. The drain is essentially a perforated drain pipe wrapped in landscape fabric and then covered with rock. The landscape fabric protects the pipe so that soil and roots can't get in. A French drain can vary from holding 2 gallons to hundreds of gallons of water at one time. A downfall is they do have a capacity limit and only drain as the soil will absorb.

**Surface Drainage** – Water pooling in low spots (retention) drains very slowly. All though this is the most natural drainage solution it offers the most problems. Not only does it look bad, but it also can create a breeding ground for mosquitoes. It can be harmful to the vitality of shrub, trees or lawn depending on the length of water remaining. Best solution is to add area drains or augment soil with organics to assist in water absorption.