## What Else Can I Do?

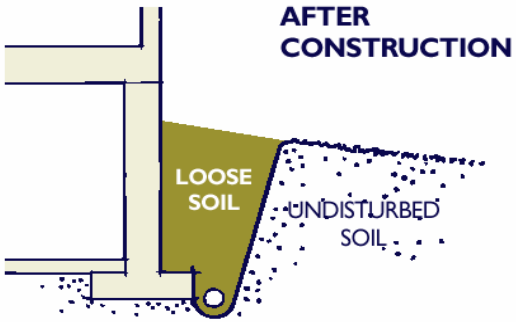
### Ensure Functional Lot Grading and Drainage

When your house was first built, your lot was graded or sloped away from your house. Your roof downspout was also equipped with an extension to discharge roof water away from your house. These conditions should be maintained to ensure that water did not accumulate at or near your house.

### Take the following precautions:

a) Regrade the backfill near your basement wall, if it has settled over time (See Figure 2). Your lot should slope at 10% for the first 2.0 m away from the foundation and the remainder at 2% to the property line. (For more information see The City of Lethbridge Lot Grading brochure).

b) Your downspout should discharge to a splash pad, or a surface of concrete or other impervious material, that slopes away from your house.



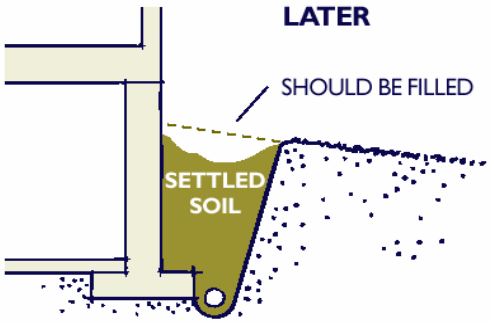




**Figure 2**
**Ensuring Positive Lot Grading**

**For more information on drainage issues, please, call:**

**City of Lethbridge Infrastructure Services**
**320 3076**

CITY OF Lethbridge

**Infrastructure Services**

# Sump Pump System Works....

*....Learning how to live with it*

## SUMP PUMP SYSTEM

The water in the ground outside your basement walls drains into a sump through a drain tile system as shown in Figure 1. It is required to discharge the sump to the surface, away from the foundation wall, a location where it will drain away or to a storm sewer if available on the street . Recirculation of water can occur if discharged water follows foundation wall back to drain tile. The foundation is drained to protect the building from frost heave and settlement. There is a possibility that the sump can overflow when the pump fails, during a power outage, or when the pump is overloaded.

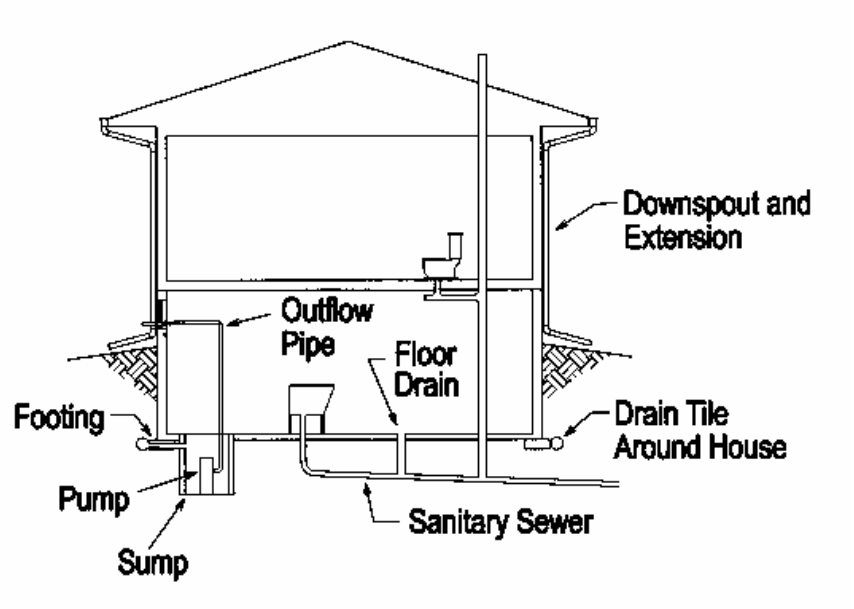



**Figure 1**

**Typical Foundation Drain Tiles and Sump**

**FIVE WAYS TO FULLY UTILIZE YOUR SUMP PUMP SYSTEM**

### 1. Periodic Maintenance

You should periodically check that your sump pump works properly. The failure of a sump pump can be prevented by proper maintenance and operation according to the manufacturer's owner's manual . This includes periodic cleaning of the debris screen.

### 2. Effective Emergency Floor Drain

Ensuring that water runs to a floor drain will also prevent flooding by allowing excess water into the sanitary sewer if the pump were to fail. It is best to have the sump pit located close to (within 2.5 m) of a floor drain.

### 3. Downspout Drainage

Pump overload occurs when there is more water coming into the sump than the pump can handle. You will have to ensure that the downspout from the roof is not connected to the foundation weeping tiles and it also discharges away from basement walls.

### 4. Float Setting and Pump Operation

You can adjust the float settings of your sump pump system to allow more water to be pumped at a time. This will also decrease the frequency of pump starts and stops.

### 5. Back Up Pump

Flooding due to power or pump failure can be avoided by provision of a back up system with a battery-operated, direct current (dc) or water-driven pump.