

### **Developer's responsibility**

1. To hire a Professional Engineer to create the overall grading and drainage design of the subdivision and is responsible for setting elevations and lot grades.
2. To hire a site Engineer to be responsible for certifying that each lot has been graded in accordance with the proposed plan.

### **Builder's responsibility**

1. To fine grade and sod each lot within the timeframes specified in the Subdivision Agreement.
2. To ensure the grading of each lot has been certified by a Professional Engineer.
3. To repair any grading or sodding deficiencies until the subdivision has been assumed.

\*Note: Any grading deposits taken by a Builder are NOT a requirement of the Town. The Town of Aurora is NOT party to the taking of deposits from purchaser's.

### **Homeowner's responsibility**

1. To ensure surface water flows away from your building.
2. Within an unassumed subdivision to ensure permission to construct a fence, shed, deck, pool, etc. is granted from the developer's engineer. This is to ensure elevations and drainage is not interfered with.
3. To maintain the property from settlements. Beyond the certification period and years after it is anticipated that there will be minor ground settlements.
4. Annual maintenance is good for grading, drainage, and the environment.
5. All new landscaping and construction should be carried out by the home owner without disruption to the grading design of the lot so as not to adversely affect the drainage pattern within or around their lands.

## **For More Information**

**Contact Engineering Services  
at (905) 727-3123, ext. 4381**

**or send an email to**

**[info@aurora.ca](mailto:info@aurora.ca)**



**Infrastructure and  
Environmental Services**

**100 John West Way, Box 1000**

**Aurora, Ontario L4G 6J1**

## **LOT GRADING AND DRAINAGE**



**PROPER LOT GRADING AND DRAINAGE is important to ensure surface water flows away from a building's foundation to a suitable outlet. Improper lot grading can result in ponding, settlements, basement dampness, insurance claims, and conflict between owners of neighbouring properties.**

**Principles of good Lot Grading and Drainage include:**

- Positive drainage.**
- Maintaining drainage swales as originally established.**
- Ensuring splash pads are placed at downspout discharge locations.**
- Properly designing flower beds that are located near foundation walls and swales.**
- Making certain that areas under decks and stairs are sloped away from the building.**

## Lot Grading Process

All new residential lots created by plan of subdivision or by land severance require preparation of an overall lot grading plan by the Developer's Professional Engineer as part of the plan of subdivision process. The overall grading plan is reviewed and approved by the Town to ensure that the subdivided land incorporates a proper overall grading design that takes existing drainage patterns, neighbouring property elevations and storm water outlets into consideration.

At the time of building permit application an individual plot plan is prepared by a Builder's Engineer or Surveyor for each new lot based on the overall approved grading plan for the subdivision or severed lands. The individual plot plan shows in greater detail specific grading design for each new lot and the outline of the actual house to be constructed. This plan is reviewed by the Town prior to release of the building permit.

The interim lot grading inspection is carried out shortly after sod has been placed. The Builder's Engineer and a Town official ensure that the grading and drainage are in accordance with the approved plan.

The final lot grading inspection is carried out by the Builder's Engineer after sod has been placed for one full winter and spring season. The Builders Engineer certifies to the Town that the lot has been graded in accordance with the grading plans approved by the Town.

Once the subdivision has been assumed, it is the Homeowner's continuing responsibility to maintain the grading of their property as approved by the Town.

## Lot Grading Design

### Lot Grading

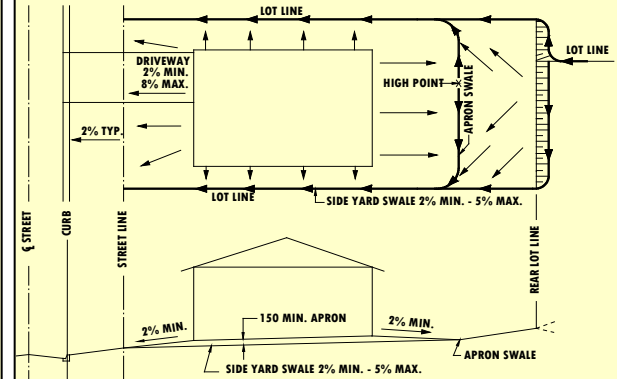
1. Swales are shallow grassed drainage channels with gently sloping sides and are used to collect and direct storm water away from the building foundation to a suitable outlet.
2. Side yard swale is considered to be the swale located on the side lot line of a dwelling.
3. Rear Yard swale is considered to be the swale located on or near the rear lot line.
4. Rear apron swale is the depression located at the rear of a dwelling, typically no closer than 4.0m from the rear foundation wall. This is typically found on a front lot drainage lot.

### Rear Lot Catch Basins

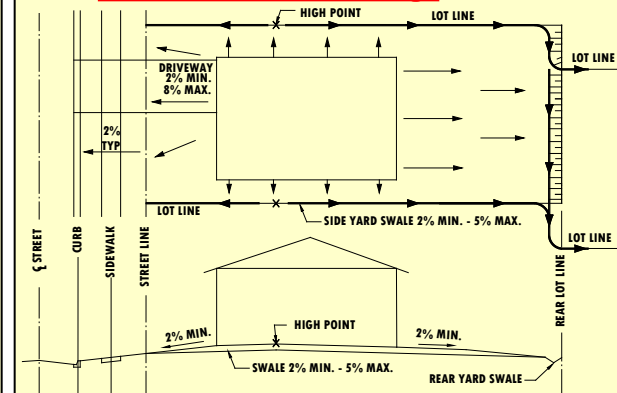
1. A rear lot catch basin is a concrete inlet chamber with a metal grate at the top which is flush with the ground surface.
2. Rear lot catch basins are located at low points along the rear property line to allow storm water to enter through the metal grate and discharge to the Town's sewer system.
3. Slopes around a rear lot catchbasin are typically surrounded by a 3 horizontal:1 vertical grade.
4. Wherever there is a rear lot catch basin there is an underground pipe connected to it, that connects to the Town's sewer on the road. It is the homeowners responsibility when constructing a fence or any other digging to ensure pipe is not damaged
5. It is the homeowners responsibility to ensure that a rear lot catchbasin is not blocked in any way that would prevent rain water from entering and discharging to the sewer system.
6. Disposal of any liquid or material is NOT permitted in a rear lot catchbasin, other than surface runoff water.

## Types of Grading

### 1. Front Lot Drainage



### 2. Back to Front Lot Drainage



### 3. Walkout & Back Split Lot Drainage

