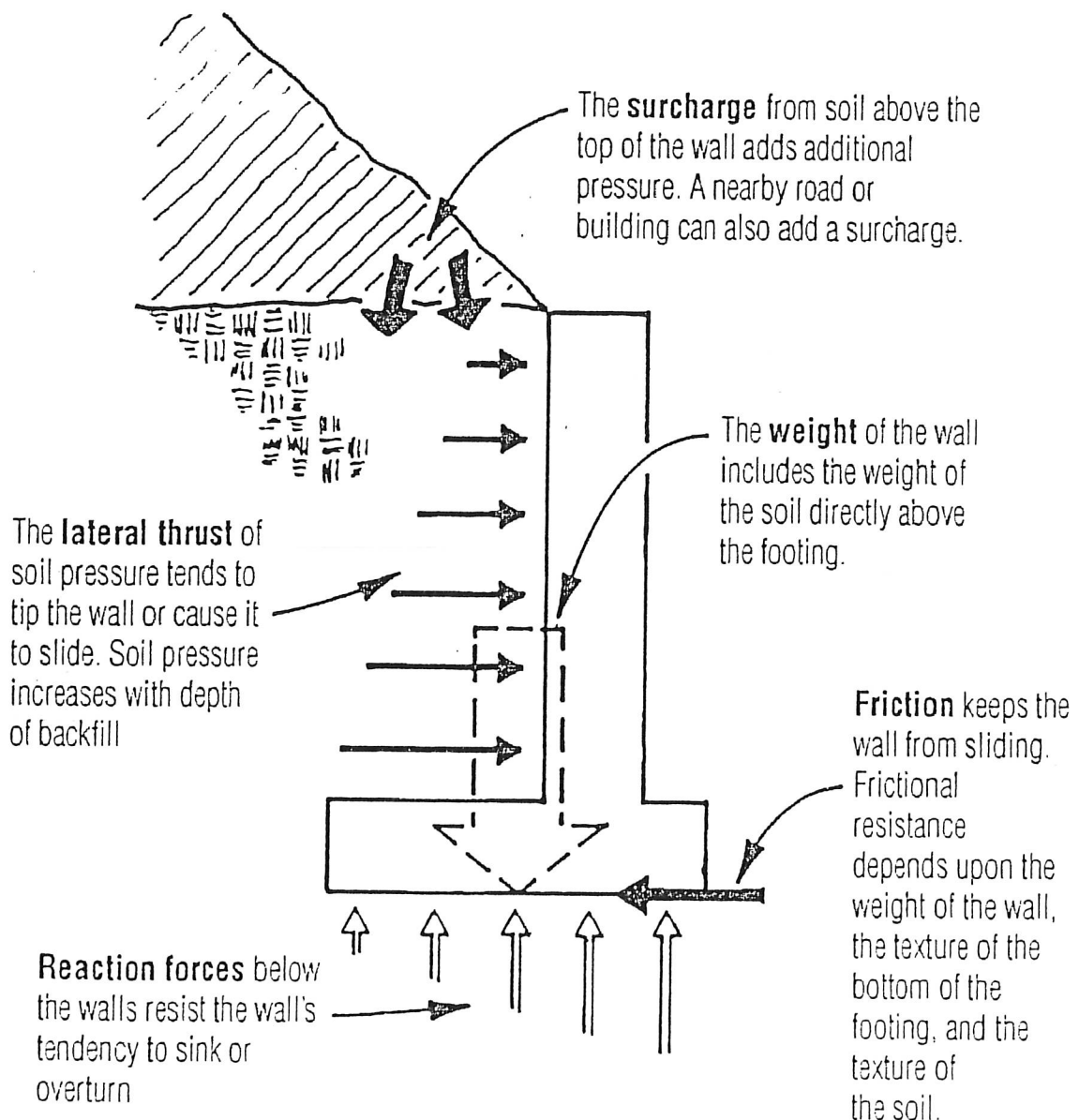


## How Retaining Walls Work

When you're engineering a wall, three failure modes must be analyzed.

Soil pressure on a retaining wall increases with the depth of the soil it is holding back. Walls typically fail in three ways - by bending, by sliding, or by toppling. When engineering a wall, the lateral thrust, reaction forces and friction must all be analyzed to account for these three failure modes.



The greater the depth of the wall, the greater the total lateral force of the soil. This exerts an overturning force that is resisted by the weight of the soil over the footing and the weight of the wall itself. Friction at the base of the footing keeps the wall from sliding.

# CITY OF INVER GROVE HEIGHTS MISCELLANEOUS PERMIT APPLICATION

PERMIT #

1. BUILDING SITE ADDRESS \_\_\_\_\_ ZIP CODE \_\_\_\_\_

2. OWNER NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_ PHONE (HOME) \_\_\_\_\_ (WORK) \_\_\_\_\_

3. CONTRACTOR \_\_\_\_\_ ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_ (FAX) \_\_\_\_\_

4. EMAIL \_\_\_\_\_

**TYPE OF PERMIT:**

- |                         |                          |                     |                          |
|-------------------------|--------------------------|---------------------|--------------------------|
| FENCE                   | <input type="checkbox"/> | POOL (ABOVE GROUND) | <input type="checkbox"/> |
| RETAINING WALL <4' HIGH | <input type="checkbox"/> | SIGN (TEMPORARY)    | <input type="checkbox"/> |
| CONCRETE (FLAT WORK)    | <input type="checkbox"/> | FEE ONLY            | <input type="checkbox"/> |
| ASPHALT                 | <input type="checkbox"/> | OTHER _____         | <input type="checkbox"/> |

DESCRIBE WORK \_\_\_\_\_

\_\_\_\_\_

VALUATION (Including Labor): \_\_\_\_\_

The undersigned acknowledges that he/she has read this application and that the above is correct and agrees to comply with all the ordinances and laws of the City of Inver Grove Heights regulating building construction.

\_\_\_\_\_  
SIGNATURE OF CONTRACTOR OR AUTHORIZED AGENT                      DATE

NOTICE: This is an application only. The Permit will be issued after city approval and payment of fees.

OFFICE USE ONLY

Application Accepted By	FEE TYPE	AMOUNT	RECEIPT CODE
Zoning	Permit Fee	_____	AL
Occupancy	Plan Review Fee	_____	AM
License No.	Misc. Permits (Sign, Fence)	_____	AR
Building Approval	MCWS Sac Charge	_____	BP
Planning Approval	Sewer Connection Fee	_____	BD
Engineering Approval	Water Connection Fee	_____	BC
Fire Marshal Approval	Water Treatment Fee	_____	CD
Approved to Issue By	Meter Sale	_____	WD
Date Approved	Tax on Meter	_____	BQ
	Other Forms & Fees	_____	AS
	<b>TOTAL FEE</b>	_____	
	Receipt # _____	Date Issued _____	Check # _____

SPECIAL CONDITIONS \_\_\_\_\_

\_\_\_\_\_

NOTICE: Inspections made by the City are a public service and do not constitute any representation, guarantee or warranty, either implied or expressed, to any person as to the condition of the building inspected.

**8150 BARBARA AVE. • INVER GROVE HEIGHTS, MN 55077 • INSPECTIONS 651-450-2550**