

Chapter TWO

SITE PREPARATION, DEMOLITION & EXCAVATION

Site preparation addresses the question of safety on the building site as well as how the environment will be affected.

SAFETY:

From a safety point of view, it is essential to adhere to and comply with all the Ministry of Labour regulations. It is also crucial for a builder to have a health and safety policy in place and to strictly enforce compliance. At PCM, the services of a health and safety consultant are used on every project, to make certain that all health and safety measures are being stringently followed.



A builder also has to carry an adequate amount of liability insurance which is usually about \$10,000,000.00. It is important that the client is named on this policy, and to ensure that this is done, the builder's insurance company will always issue an insurance certificate in the name of the client.

In order to address any potential safety concerns of the surrounding community, the actual site is completely fenced in with a temporary fence and gate to safeguard against anyone, and especially children, from entering the site.

At PCM every precaution is taken to avoid potential dangers. One of the most common safety issues, on site, are adolescents from the community who view the in-fill site as an attractive hang out spot. We always inform families in the community about the need to keep their children away from the site in order to protect them from serious injury.

It is common practice at PCM to send out a letter to all the neighbouring homes, informing them of the pending construction project. Most builders neglect this step because they do not understand the benefits. The letter informs neighbours of the approximate date of completion and highlights any possible dangers. Secondly, it encourages communication and the development of a good relationship between the client and their new community.

ENVIRONMENT:

One of the key differences between a luxury property and a subdivision home are the trees and the surroundings. Trees carry a considerable amount of amenity value that can significantly increase or decrease the value of the property. The goal in preserving trees is not to protect all of them and it is also not simply to follow the standard set by the municipal by-laws. The goal is rather to maximize desirability while protecting the clients' investment in the process.

In order to insure that everything is completed with the client's best interest in mind, and in accordance with the municipal by-laws, PCM always brings a certified arborist on site to make sure the amenity value is maximized. The arborist prepares a report outlining the status of each and every tree on the property and also the status of the trees in close proximity to the site. The arborist also makes recommendations, which are strictly followed, regarding the steps needed to ensure the preservation of the property's trees, during construction. Hoarding is placed around the drip line of the trees to protect them.

With all of the above steps taken, the demolition and excavation process begins.

DEMOLITION:

This is one of the fastest changes that occur in the building process. In a matter of hours, an entire house

is demolished. The most time consuming component is the dividing up and disposing of the site waste. The entire process should take no longer than two to three days, for a conventional 4000 SQF, double story home and should be immediately followed by an inspection by the municipality. The inspection results in the refund of some of the securities initially placed with the municipality and, if applied for by the homeowner, it can also mean a reduction in property taxes.

Once the demolition has taken place, the surveyor becomes an intricate part of the process to ensure the exact location of the home and depth of the excavation. During the surveyor's initial site visit, after demolition and before excavation, the surveyor locates the exact points of the new home and also gives a cut (the depth of the hole) using a reference point which usually is the top floor of the new home.



EXCAVATION:

With the surveyor's information, excavation begins and the entire process takes no longer than two to three days for a conventional 4000 SQF double story home. Again, safety is always the greatest concern. The angle of repose is just one of the many aspects often neglected by less experienced excavators.

There are many other issues that need to be taken into consideration, but they will not be discussed here, as this book is not meant to be an in-depth, A-Z guide.

Once the excavation is near completion, the surveyor returns to site to insure exact depth has been met and that the ground is perfectly level, throughout. During this visit, the surveyor "pins" the exact location of the foundation footings.



Simultaneous with the visit of the surveyor, a soil engineer is brought in to test the quality and condition of the undisturbed soil where the new home will be situated. The result of the soil engineer's test confirms that the designed footings are in fact adequate for bearing the load of the new home. Should it be found that the bearing capacity of the soil is not adequate; the soil engineer will make a recommendation as to the necessary steps to be taken to address any potential problems. This soil engineer report can also be used as a footing report for the municipality, at the time of footing inspections.

HINT:

Depending on the soil conditions and the proximity to adjacent properties, the builder may have to do some shoring to avoid cave-ins and to ensure the safety and integrity of the job-site. If this is not identified ahead of time, very high and unexpected cost overruns may result.

Builders often don't bring the land surveyor or the soil engineer to site as frequently as required and they rather approximate things based on "experience".

BEWARE:

This can result in adverse repercussions for the homeowner and the need for variances and uncalled for settling, at a later date. The misleading assumption in construction is that shortcuts save money and time, but in reality they cost more money, result in safety violations, wasted time, and severely escalate the liability to the homeowner.

HINT:

Hire the best surveyor, engineer and excavator you can buy; not the cheapest you can find!