



GARDEN AVENUE RENOVATION

REPORT 2

June 2012

Christine Lolley

Since our first report much progress has been made at the house.

First, the basement floor was tackled. Although the existing concrete slab was relatively new and had in-floor heating, the new basement plan required so many changes to under-slab services that it made sense to simply replace the slab entirely. Removing the 4" concrete slab was a huge task: it took a full week of jack-hammering and disposal. Replacing the slab gave us the opportunity to add much more insulation (most houses don't have under slab insulation as it has only become a code requirement in the last few years). To better water-proof the basement, we installed a water-proofing membrane on the inside face of the walls and tucked it down behind an interior weeping tile along the footing connected to a sump pump under the stair. This avoided the need to excavate around the exterior perimeter of the house as it would have certainly damaged the mature trees in the front yard. Once the new gravel was in place and leveled, the drains were



roughed-in. Next we installed 4" of XPS rigid insulation (R20) which will greatly increase the energy efficiency of the in-floor heating, meaning less heat will be lost to the earth and more re-directed into the house. A 10M steel reinforcement grid was laid over the insulation and the in-floor heating tubes were attached to the steel. The concrete floor was then poured. The entire basement floor finish will be exposed buffed concrete, to ensure the slab cured properly was of utmost importance. A recessed shower pan was created by slopping the concrete slab slightly towards the center drain. Finally, the floors were sealed with a water-based acrylic.

Also completed in the last 2 months is all the framing so we can see the outline of the final room layouts. The exterior walls are framed with 2x4 studs set 1 to 2" away from the inside face of the original brick structure. This will allow for adequate space behind the studs to spray a continuous layer of spray-foam insulation that will act as both insulation and a full air-barrier. It also provides a level and flat base to hang the new drywall unlike the wonky plaster and lathe that was torn out.

Work has also progressed on the exterior. The west wall was re-designed to better suit the new floor plan. The door that was awkwardly located at the south-west corner of the kitchen was bricked-up and a new door was aligned with the main interior circulation path to the north. The second floor master bedroom 'juliette' balcony door was made into a large window which will let more light in and work better with the furniture layout. In the kitchen, a floor to ceiling window in the kitchen will not only bring in more light but also improve the visual connection to the much used backyard. Significant steel beams and posts were installed to reinforce the new window arrangement.

Another great feature added to the house is a door on the stair landing at grade. This will be so useful for hauling in strollers and groceries! Although the original fireplace was used frequently, it had a number of problems that made it inefficient. It leaked warm air in the winter, smoked the house and required a lot more wood than newer models. Julia and Nick decided to invest in a new wood fireplace insert but re-configured the location to better suit their needs. The enclosed unit is much more energy efficient, uses less wood while producing more heat and is insulated so that the chimney no longer leaks hot air. The new design also gave us the opportunity to raise it up off the floor away from "little kid height" and allowing a wood storage nook below.

Stay tuned for our next report when we tackle the building systems: heating, cooling, electrical, plumbing and insulation!

In other news, Solares was the "Featured Business" in this month's Bullfrog Power newsletter. You can read the article here:

<https://www.bullfrogpower.com/powered/solares.cfm>

