

## One example of green building design

### Sustainable King



Under the Environmental Pillar of King's Sustainability Plan, the most pressing theme is that of land use planning. "Supporting and encouraging green building design, development and construction" and "educating the public about the benefits of green development" are both important actions of the Plan.

So just how is the township doing in achieving these goals?

Let us examine one significant application with which council and staff have recently dealt. During the application process for the proposed LCBO outlet in Nobleton a number of controversial points were discussed at council. In the end these were resolved and residents can expect a new LCBO outlet to open in 2014 in the No Frills plaza on Highway 27.

Some of the discussions concerned the nature of the exterior lighting system. The attached photo shows how the Nobleton outlet will look and that the LED and fluorescent lights will be subdued and point downwards. This is an example of "Dark Sky Technology" that prevents light pollution from spilling into neighbouring properties and the sky above.

The building will also have a number of other interesting energy conserving features. For example, light will be harvested from outside the outlet. Lights over the cash desks near the windows will have sensors that turn them off when natural light levels are sufficient to illuminate the area. Staff service area lights will be motion activated and thus only turned on when needed. Multiple lighting circuits will allow the staff to turn some circuits off during periods of high-energy use such as heat waves and after hours stocking.

Automated controls will monitor and reduce energy consumption of the heating, refrigeration, ventilation and air conditioning systems to reduce the energy bills considerably. In a residential context, homeowners can lower their utility costs by seeking out something like a [TXU energy promo code](#) or by switching energy providers from their existing one to one with more competitive rates. Buildings such as this need good industrial refrigeration to keep it in working order, check out [altarefrigeration.com](#) to see what they can do for businesses who have industrial buildings like this one.

Do you know how new LCBO beer cold rooms are kept cold? Once the outside temperature goes below 10 degrees Celsius, the outside air is used to help cool the room! Makes a lot of sense, doesn't it?

The exterior brick is made by Hanson and is locally manufactured in Burlington. LEED provides a point for building products manufactured within an 800-kilometre radius from the project site (by truck). Additionally, masonry is recognized as environmentally friendly as it is less prone to waste and easily recycled and reused as crushed fill. Brick provides thermal regulating to reduce the building's heating and cooling costs.

Low flow toilets will conserve water. The wood will all be certified by the Forest Stewardship Council that promotes responsible management of the world's forests. No toxic chemicals will be allowed in the paints, glues or fabrics and the insulation in the walls will be R35 even though the building code requires only R20. The roof will include reflective ballast material that will reflect heat from the sun.

You may well ask if the building will be LEED certified (Leadership in Energy & Environmental Design) like the Trisan Centre. The LCBO does not independently seek LEED certification but is able to partner with landlords to achieve such certification. The plaza landlord, Tribute Communities, is responsible for the building shell and the LCBO for the interior. Over the last five years, the government agency has built LEED Certified stores in Scarborough, Brooklyn, Gloucester, Oakville, Brantford, Whitby, Vaughan, Burlington, Markham and Richmond Hill. The Markham building even has a green roof!

No response regarding LEED certification or a green roof for the Nobleton LCBO was received from the developer in time for

publication. We will let you know when this information is available.

The LCBO has a dedicated Energy and Environmental Department that continually monitors, evaluates and improves new and existing stores. This strategy has resulted in an 11% reduction in energy consumption across more than 630 stores across the province.

The LCBO outlet about to be built in Nobleton will be 35% more energy efficient than stores built just five years ago!

Using responsible, sustainable methods, materials and technology to build one store in Nobleton will not have an earth shattering impact on King's overall sustainability into the future. However, it sets a high standard for all future retail and prestige employment developments such as those being planned in King City, Schomberg and elsewhere in Nobleton.

If council, staff and the general public continue to insist that these new buildings meet very high "green" standards, then King will be a cleaner, greener, energy efficient community of communities into the future.

Your Sustainability Challenge: Have you and your family entered King's Sustainability Summer Photo Contest on Facebook yet? Have you voted online for your favorite photo? There are not many entries yet. Check out the details at [www.king.ca](http://www.king.ca). Surely you can take a few shots with your cell phone and perhaps win a great prize!