

ENVIRONMENTAL MAKEOVER:

Presenter: Susan Black



Transforming a 1950's Hospital with the Health Gardens Planning Concept



Susan Black, MRAIC

Ms. Black is a founding partner of Perkins Eastman Black Architects in Toronto and a principal of Perkins Eastman Architects in the U.S.A. With over 25 years of professional experience, her work spans the full range of large-scale master planning, architecture and interior design. Healthcare is the focus of Ms. Black's firm. Her planning and design work has resulted in new creative approaches in chronic care, dementia, acute care and, most recently, her firm's Health Garden Concept for ambulatory care and wellness services. A creative process in partnership with clients and a knowledge-based approach to design have been hallmarks of Ms. Black's firm and an important complement to her personal expertise in health care.

As advanced in-patient treatments have become more concentrated in large regional centres, ambulatory care has been able to move closer to the community and open up a whole new set of possibilities for health care settings. New combinations of preventative and wellness services have begun to emerge - some large, some small, and some now exploring design ideas for a more relaxed and welcoming environment for health care.

For new construction, especially for small scale facilities such as medical spas and health retreats, there have been few obstacles to realizing these new design possibilities. In more and more new-build situations, hospitable anxiety-reducing environments are being created as an integral part of the services themselves. For larger facilities with older existing buildings or high density sites, it has been much more challenging

- even daunting - to attempt a total environmental transformation. Trillium Health Centre in Toronto has taken on this challenge. Created from the merger of two acute care hospitals in Toronto's western suburbs, Trillium has consolidated its' in-patient services on the former Mississauga Hospital site. On its' Queens-way site, Trillium has undertaken not only to concentrate out-patient services but to create an innovative ambulatory campus with a mix of publicly and privately funded services in a radically different healthcare environment.

The environmental obstacles were certainly there: older buildings in the midst of the proverbial sea of asphalt; a confusing maze of corridors in multiple buildings; and an overall atmosphere that was, at best, indifferent, at worst dispiriting. But there were also good possibilities - "good bones," so to speak. The initial low density of the site (0.3 overall Floor Area Ratio) gave enough flexibility to insert new buildings strategically among the old. While close to noisy arterial roads and a six-lane highway, the site is also adjacent to a broad river valley on the south and west. Perhaps most important of all were good management bones: a CEO and a Board very supportive of change that is far more fundamental than just a quick facelift. (Image 1)



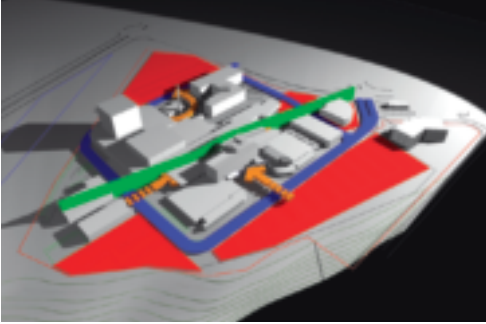
Building on these assets, Trillium launched a three part environmental makeover in its overall institutional transformation:

- Conversion of a conventional mix of in-patient and out-patient services to a totally new ambulatory program, adding a new range of preventative and wellness services, from fitness and rehabilitation to specialized clinics, a medical spa, and surgicentre.
- Gradual introduction of alternate financing, not only in the form of leased premises but also through capital investment in land and buildings - a major shift from the traditional public funding regime in Canada and a generator of future new income for Trillium; and
- Transformation of Queensway's bland institutional atmosphere to a totally new environment.

While our work at Trillium has necessarily touched on all three parts of the transformation, it is the last one that has been our focus. Our vision for Trillium was expressed as a simple but challenging question: why can't an older health complex have the refreshing healthful image of a garden or spa with an uplifting ambiance, instead of clinical corridors and bland spaces? The agenda of ideas to fulfill this vision -- a vision that is campus wide and many years long - we have called the Health Gardens Planning Concept. Keeping the vision "front of mind" meant keeping it simple -- just a few key design ideas that everyone could understand and easily relate to. Queensway's Health Gardens Planning Concept has four such ideas.

1. "Street" Wayfinding

A health service can't be anxiety-reducing if it requires an anxiety-producing experience just to get to it. The access difficulties of Queensway's disjointed campus and its confusing network of corridors had to be overcome, as the underpinning of a more relaxed architectural atmosphere. Our starting point was to base both the indoor and outdoor parts of the new master plan on a familiar time-tested urban element: the street. Specifically, the plan incorporates two main street patterns to restructure the campus:



- For vehicles, the site's partial perimeter road was extended to form a complete loop, with separate entries for different health services along it - the equivalent of having individual addresses as you "drive around the block." To make access easy, parking is planned in pods close to each entry point: see your address, park, go straight in.

- Once inside, a dramatic new pedestrian street is being created through and between the buildings, as the major reference point for orientation, the main internal connection between health services, and the opportunity for defining a new identity for the Queensway site.

Threading this indoor street through the scattered existing buildings on site was one of the important design ideas that unlocked the new potential of Queensway - and one of the most

difficult ideas to implement. Even with the site's low initial density, the central area was already congested, floor levels varied, existing utilities had to be skirted, and the selective new construction had to be carefully coordinated with the renovation of existing areas. But the effort will pay off for decades to come. Today's unfocused campus will have a simple but strong structure around which the inevitable space and service changes can be made while preserving a clearly legible wayfinding. (Image 2)

In addition to these two street patterns, other supporting ideas for wayfinding will make arrival and access as stress-free as possible:

- Large scale graphics make the main campus entrance easier to find - especially important because of the visual distraction of the regional shopping mall across the road and the commercial developments on nearby arterial roads;

- The visual barrier of large pay parking gates at the main entry is being removed, substituting low key self-pay kiosks close to the walk-in points;

- Unique designs for each of the entrances to the various health care services will make them easier to identify and remember, as well as give a more lively urban character to the whole development. (Image 3)





2. A Bold Green Environment

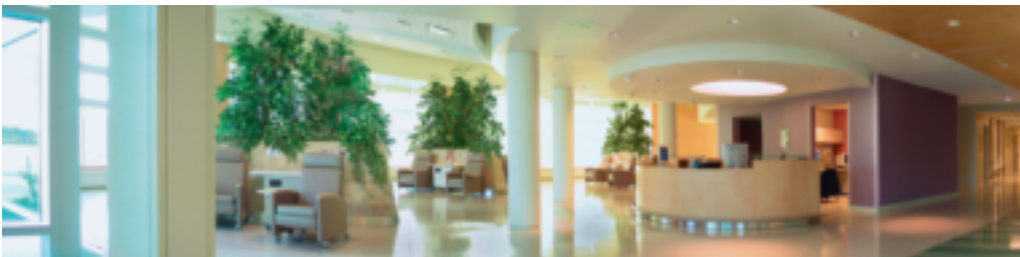
As much as being stuck in depressing spaces and losing your way can work against healthcare objectives, so too can the wrong kind of green spaces. Over the last fifty years, too many shopping centres and office lobbies have demeaned the value of natural features in interior spaces, with their potted plastic plants and feeble fountains. Instead of nature enlivening our experience, such token greenery has rendered nature invisible - a virtual green wallpaper that we no longer see, let alone benefit from.

The green setting at Queensway has aimed to be deliberately bold, especially in the new indoor street. Vined walls mark the east atrium, not only rooted in the ground but suspended in the air. Horizontal and vertical planes separate functional areas, with water spilling from some planes

for both visual and acoustic delight. The street is flooded with natural light, filtering down through the vines above, reflecting off the moving waters at ground level, and brightening the waiting areas and "pocket parks" that extend into the street area to benefit from its natural light and planting. All greenery is natural, with no pots in sight. (Image 4)



The green ambiance does not stop when one leaves the street but carries into the medical service areas themselves. For example, after extensive analysis to ensure cleanliness and infection control, greenery in the recovery area of the new Surgicentre, along with abundant natural light, helps to create the ambiance of a resort spa, reducing post treatment anxieties and easing the transition back to the outside. (Image 5)



While Queensway's new setting aims for the ambience of a classy resort spa, the architectural design has also been conscious of cost economies. Instead of emanating from large expensive skylights, the indoor street's natural light comes from modest clerestory windows, the light source veiled by the vines and planes above. Soil and water at grade level are placed where the natural grade is below, rather than over expensive suspended concrete slabs.

A green environment without attention to sustainability would be a hollow achievement indeed. At Queensway, Trillium has pushed for environmentally responsible construction as much as feasible within the financial and time constraints of the public approval process. Along with the renovation of many of the existing structures and the intensification of the site overtime, (saving landfills and maximizing land use) some of the more sustainable initiatives include: solar chimneys, buffer planting and berming, high performance envelope systems and sun shading devices. (Image 6)



3. How Does the Garden Grow?

Indoor garden environments can be costly to build and to expand, especially in a climate like that of Canada. Having a practical strategy for growth is therefore critical.

Our Health Gardens Planning approach utilizes three key ideas to continue Trillium's environmental transformation in a practical way:

- The garden street is built incrementally. As space for each new set of medical services is added, a segment of the green indoor street is added with it. Since the early growth of the project is more dependent on public funding than later growth, the overall environmental transformation does not have heavy front end costs for the public purse.

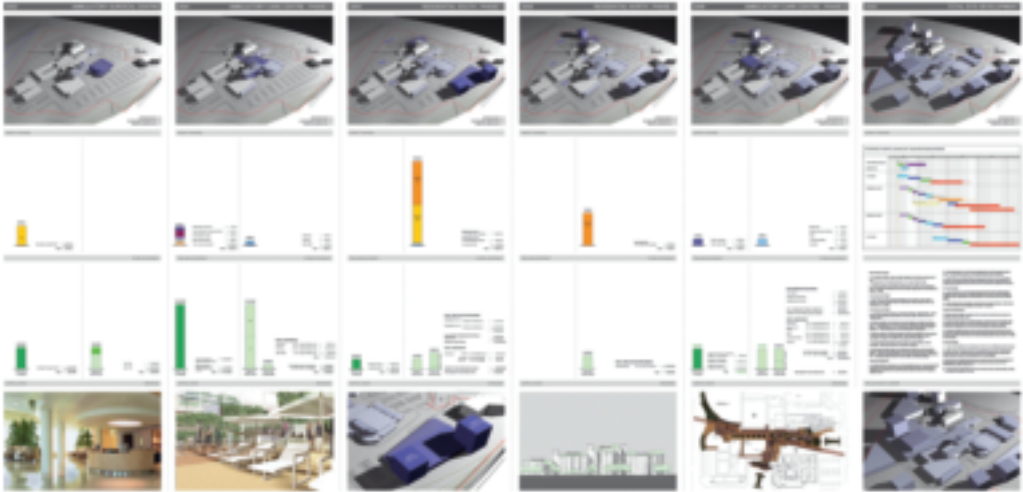
- As the street extends, more privately funded premises will be added. Following growth guidelines for the site, the greenery incorporated in those new private premises adds to that along the street, further enhancing the overall impact with less special funding from Trillium. In some cases, garden-like waiting areas for these premises actually extend right into the pedestrian street. (Image 7)

Some of the early premises (for example, a medical spa) add substantially to the overall transformation of the common areas of the centre.

- The greenery of the street penetrates into the medical service area only where it is practical and does not interfere with the effectiveness of the service itself. Some of the early new facilities, such as the Surgicentre, have been designed to demonstrate how challenges like infection control could be dealt with.

The incremental pattern of growth gradually builds out a two part structure: (1) a green spine, infrastructure which, over time, provides a planning "anchor" and a consistent wayfinding element; and (2) adjacent to the spine, flexible medical service areas which can easily be changed as technology and medical service procedures evolve. Also, over time, the private portion of funding should increase and the public portion may decrease, eventually evolving into private development of complete buildings that enrich the mix of wellness services in the development, enhance the identity of the project, and strengthen it financially.





The aim of Trillium is to expand the transformation of its' complex to encompass the whole site. It is a green vision coupled with a financial blueprint. In fact, Perkins Eastman Black prepared a sample 25 year growth and development scenario, with a projection of potential revenues and costs for the first decade. While only one example of how the Queensway site could develop, this projection showed clearly how the transformation of the site could be sustained by the strategic use of building and land assets with a diminishing reliance on public and institutional funding. (Image 7)

In an era where the rising costs of healthcare are a widespread concern, the Queensway Health Garden Concept demonstrates an alternative to simple cost cutting, which often works against the objective of a better environment for healthcare. At the Queensway campus, the site development strategy aims to improve the quality of the environment dramatically while simultaneously keeping costs under control in a creative way.

4. From Suburban to Urban

Ultimately, an environmental makeover at Queensway is not just an institutional transformation; it's also an urban transformation. Today, the site is still largely suburban in charac-

ter, a low density drive-to destination that is less and less in sync with contemporary expectations for a major inner suburban site in Canada's largest city. In a decade (or less), Queensway must evolve consciously and carefully into a multi-use healthcare campus that demonstrates in its' very fabric a model of healthful urban living at densities that will inevitably become higher.

We see this evolution as an important facet of our Health Gardens Planning Concept. Where today there are windswept walks across huge asphalt parking lots, tomorrow there will be structured parking discretely out of view, allowing landscaped walkways to predominate. The loop road that aids wayfinding will take the form of an intimately scaled pedestrian-friendly streetscape. Buildings on that street will be located to frame views of the river valley parklands to the south and west.

Indoors, the green spine will be more than a relaxing garden environment. It will also be the central core of a network of new connections to all parts of the campus: to health services, to residential developments (especially seniors housing), to a future subway stop at the northeast corner of the site, and perhaps even to the shopping mall across the road which itself will likely evolve into a more urban layout.



In the face of the many immediate financial pressures on the healthcare field today, planning for such longer term goals may seem like an unnecessary luxury. It is anything but. Those very pressures could easily overwhelm Trillium's health garden vision unless it is buttressed by a larger concept for greening the entire site -- a concept that anticipates future urbanization imperatives such as higher densities and is underpinned by a smart financial strategy. With this foresight, Trillium can actually use those urbanization pressures to its advantage, to create a more enticing multi-use setting and to generate higher property values to be used to serve healthcare objectives.

With many institutions contemplating next steps, particularly involving conversion and development, this case study for Trillium Health Centre may offer viable approaches for building upon existing assets to create an innovative healthcare campus. Within a spirit of true collaboration, design teams must offer a wide range of expertise. Services must span urban design, master planning and feasibility studies (which will include not just

building assessments but financial proformas) through to sustainable architecture, detailed medical planning and uplifting interior design. Successful projects will match environmentalism with innovative design and financing.

How does your garden grow?

