



2010 CUI Brownie Awards

Summary of Finalists

Category 1 - Legislation, Policy and Program Development

FINALIST: Streamlined Risk Assessment Approved Model,
Toronto, ON

The Ministry of the Environment has developed a streamlined risk assessment approach for developing property specific standards (PSS). This is part of their amendments to Ontario Regulation 153/04 (Records of Site Condition). This new approach, called the Modified Generic Risk Assessment (MGRA), will be fully implemented with the amended Regulation on July 1, 2011. In the interim, the Ministry has allowed the use of the new MGRA submitted under O. Reg. 153/04 provided they follow existing risk assessment rules.

This new approach is expected to save time and money when redeveloping certain brownfield sites. It can help cut the legislated review time in half and is much simpler to complete.

The system will allow users to input site-specific data to generate property specific standards instead of being confined by generic assumptions used to capture Ontario-wide conditions. The model can be adjusted to include site specific conditions (soil type, fraction or organic carbon, distance to closest surface water body, minimum depth below grade to the highest water table, or aquifer horizontal hydraulic gradient and conductivity) as well as defining incomplete exposure pathways (simple risk management measures designed by the Ministry, meeting soil vapour screening levels, and modified ecological protection). These can then be used to calculate property specific standards applicable to the site. This will shorten the review process and increase brownfield development.

To assist those who wish to use the MGRA approved model, a technical update and step-by-step user guide was created and posted on the Ministry's website for download. The guide provides detailed guidance on how the model should be used, creating a user-friendly experience and encouraging proponents to utilize it for completing risk assessment at brownfield sites.

FINALIST: A Comprehensive Plan for Brownfield Redevelopment in New Brunswick, City of Fredericton, NB

The intent of this plan is to improve the regulatory system and develop appropriate incentives for redevelopment of all currently and formerly contaminated lands in the province. In New Brunswick, many redevelopment projects are undermined by "regulatory liability" concerns. Remediation costs can also be a significant deterrent, and access to financing is limited for these sites, as lenders are wary of the associated risks. The plan aims to overcome these obstacles by:

- Providing a finite list of types of parties that can be held responsible for regulatory purposes (notable is the ability to exclude financiers)
- Allowing previously uninvolved 3rd parties that wish to undertake clean-up or redevelopment to be held blameless for regulatory purposes
- Creating a "voluntary remediation regime"
- Allowing for permanent transfer of regulatory responsibility
- Improving regulatory closure.

Legislation is now in place for the plan, and major industry groups (Canadian Petroleum Products Institute, Canadian Bankers Association, etc) have praised it and the redevelopment opportunities that it will bring.

FINALIST: City of Windsor Brownfield Redevelopment Strategy and Community Improvement Plan,
City of Windsor, ON

This targeted framework is designed to overcome barriers to redevelopment of brownfields in the area. It positions the city's brownfields as viable options for urban growth when compared to greenfields. Before this project, many of the city's brownfield properties stood very little chance of being redeveloped.

The Windsor Brownfield Redevelopment Strategy and Community Improvement Plan (CIP) utilizes incentives and strategic municipal leadership to encourage redevelopment of brownfields. The framework went through extensive public consultation to identify barriers to brownfield development and solutions to overcome them.

Some of the highlights of the framework include:

- a) Custom designed financial incentive programs
- b) Extensive information contained in the Priority Redevelopment Sites and Areas Report
- c) Recommendations for Official Plan policy change
- d) Inclusion of municipal leadership strategy for brownfields
- e) Inclusion of a proactive marketing strategy.

The City Council approved the Brownfield Redevelopment Strategy and CIP on April 19, 2010. Since then there are currently three large scale brownfield projects (2 private sector and 1 municipal) in the preliminary stages of applying for incentives or redevelopment – an encouraging sign, given Windsor's current economy and the relatively short existence of the Strategy and CIP.

Category 2 - Sustainable Remediation Technologies & Technological Innovation

CATEGORY 2 & FINALIST: Little Mountain,
Vancouver, BC

Little Mountain Housing was the oldest public housing developments in Vancouver. Covering 15.27 acres, the 37 stucco buildings were designed by Vancouver architects Sharp and Thompson, Berwick, Pratt between 1953 and 1954. They fit the social housing needs at the time.

The structures are now obsolete and contained asbestos. Little Mountain will be remediated to British Columbia Contaminated Sites Regulation residential land standards. Any proceeds from the redevelopment project will be reinvested back into affordable housing assistance. At least the same number of subsidized housing units will be built on the redeveloped site as currently exist, and all residents will have the option to return to Little Mountain subsidized housing.

The combined approach of demolition recycling (much of the wood and concrete remained on site for re-use) and on-site remediation will qualify the project for four Leadership in Energy and Environment Design (LEED) points. The onsite treatment demonstrates the best environmental, practical and cost-effective solution for remediation of the site.

The site will be redeveloped into a mix of new subsidized and market housing, along with community facilities and other neighbourhood amenities.

FINALIST: Port Lands Soil Recycling Pilot Facility,
Toronto, ON

Waterfront Toronto is a tri-government funded corporation (2001) with a 25-year mandate to revitalize 800 hectares of underutilized brownfield lands on Toronto's waterfront. Soils within the Designated Waterfront Area (DWA) have been contaminated from 150 years of industrialization, making remediation of the area a priority.

The soil recycling pilot facility will process soils from across the DWA. Prior to committing to full-scale operation, Waterfront Toronto will conduct a smaller-scale recycling pilot test that will treat up to 50,000 cubic metres of soil. The pilot will use soil washing (which is already in use in the US and Europe) as well as field trials of a number of other leading technologies. The pilot will identify treatment options and costs; confirm soils can be treated to Ministry of the Environment Brownfield Regulation standards; and showcase innovative treatment technologies.

By treating the soil and reusing it close to the site, the project will save fuel, reduce traffic loading, reduce greenhouse gas emissions associated with the transport of contaminated soil to landfill and the importation of clean soil, and reduce the need for aggregate resources as replacement backfill.

FINALIST: Meyers Pier Redevelopment, Belleville, ON

Materials used to infill the land through the Bay of Quinte resulted in the Meyers Pier lands becoming heavily contaminated. Subsequent heavy industrial land uses further deteriorated the environmental condition of the site and created both human health and ecological exposure risks. Over the years the land became underutilized as increased environmental knowledge and awareness rendered the site as potentially harmful, which discouraged both public use and private investment. When the City of Belleville acquired the land, it set to work on environmentally managing and productively redeveloping the waterfront lands. In late 2009, the Meyers Pier was renamed Jane Forrester Park, and has been used in the past year as a vibrant public park, with a revitalized marina. It has inspired private investment in residential development around the park site.

The redevelopment strategy included a public communications plan for public and private stakeholders emphasizing the adoption of an environmental management strategy that would preserve and protect human, terrestrial and aquatic receptors while enhancing public parkland at an affordable cost.

The redevelopment design includes a bentonite slurry wall that restricts groundwater flow to the bay and a groundwater collection system to control and intercept the contaminated groundwater that would otherwise flow into the Bay of Quinte. The collection system is a unique design, controlled by a network of pressure transducers that automatically regulates the groundwater recovery using a series of variable speed pumps to maintain a continual inward hydraulic gradient from the bay to the interior of the collector through a process logic control panel. This also minimizes the volume of contaminated water collected and treated on-site, prior to its disposal in the municipal sewage treatment plant.

Category 3 - Financing, Risk Management and Partnerships

FINALIST: Waterscape on the Grand River,
Cambridge, ON

This former coal tar site is being redeveloped into luxury condominiums, using a municipal and regional tax increment grant program custom tailored to suit the project. Construction started in early 2009 and occupancy of the first phase is scheduled for late 2010.

Integral to the success of this project was a series of sub-events including dividing the land into sub-parcels to deal with various levels of contamination in each part, as well as the development of a tax increment grant (TIG) program, which both the Region of Waterloo and the City of Cambridge are taking part in, to help recover the costs of remediation. By dividing the land into smaller parcels early development

FINALIST: Durham Region Courthouse,
Oshawa, ON

This project was built on a vacant former industrial property in downtown Oshawa. The site was contaminated with a cleaning solvent used for de-greasing automobile parts as a result of the site's previous use. Remediation of the site to the Ministry of the Environment's standards allowed for the construction of the new courthouse and helped to revitalize Oshawa's downtown core.

For this project, the Ontario Government used an Alternative Financing and Procurement approach for the project, which ensured it was delivered on time and on budget. Using this approach, a third-party review found the Province will save \$49

of less contaminated areas could proceed to provide cash flow for remaining parcels with more complex concerns.

Additionally, the Region of Waterloo and the City of Cambridge waived the regional and municipal development charges associated with the project. The City of Cambridge also donated \$1,500 per suite to offset environmental remediation costs and forgave any municipal planning and building permit fees associated with the project.

Category 3 & 4 FINALIST: Heartwood Place at 26 Ainslie St. S., Cambridge, ON

Heartwood Place was started by volunteers concerned about the diminishing availability of affordable housing in the Region of Waterloo. The goal of this project was to turn an unused newspaper plant and parking lot into an attractive residential building with 66 affordable apartments, ready for occupancy in September 2009. The project had far greater contamination concerns than originally identified, which further increased the cost of the project.

To support the total building budget of \$10.662 million, Project Heartwood hoped to raise \$1.78 million to help cover the cost of the building materials. A waiver of the development charges by the City of Cambridge and the Region of Waterloo, along with \$99,000 from the Incentive Program at the City of Cambridge for Brownfield Redevelopment, lowered the campaign requirements to \$1,435,766. Generous contributions from the private sector helped to reach these goals. Heartwood Place also received approval for a \$4.62 million grant from the Canada-Ontario Affordable Housing Program to help fund this project. Finding the outside balance of the project was a challenge. The charitable organization relied upon their experience from a previous affordable house project to secure the rest of the financing at a competitive rate from the Laurentian Bank. Their determination and strong business sense help raise the funds needed to build this project.

Category 4 - Excellence in Project Development: Building Scale

FINALIST: Town of Newmarket Municipal Operations Centre, Newmarket, ON

The Newmarket Operations Centre is located on a 4.5 HA site which was built up over a period of years with fill relocated from other locations. The site's original topsoil was buried and additional organic soil is interspersed at varying depths. This creates a building condition wherein buried organic material will continue to release volatile gases through the life of the building. To solve this problem and avoid regrading the site, soil venting and specialized foundation were built to help extract fugitive gas. A gas sampling system will be provided to check periodically for gas (methane) concentration above 10% of Lower Explosion Limit (LEL).

The design of the Town of Newmarket's Operations Centre is intended to position the project as a new civic landmark and to reconsider the potential architectural qualities of the building type. The project has targeted LEED (Leadership in Energy and Environmental Design) Silver accreditation. Green strategies include a geothermal heating and cooling system; extensive daylight and natural ventilation; high-albedo roof membranes to reduce the 'heat island' effect; an accessible, intensive green roof; solar hot water heating; storm-water collection from the building roofs for irrigation of the green roof and landscaping, and further on-site storm-water retention.

million than if a traditional delivery model was used.

The project also utilized a Design Build Finance Maintain (DBFM) model to transfer risk to the parties best suited to manage those financial risks. Under an agreement with Access Justice Durham (the successful bidder), various risks associated with the project were transferred from the public sector to the private sector, mitigated, or are now shared with the public sector instead of being solely retained by the Province. The project agreement with Access Justice Durham obligates that company to provide the Province with a fully functioning courthouse on a fixed-date and at a fixed price.

Category 3 & 5 FINALIST: East Village Re-Development, Calgary, AB

After years of significant industrial and commercial use, most of the land in Calgary's East Village, located within the larger Rivers District, required extensive environmental remediation. For the past three years, The Calgary Municipal Land Corporation (CMLC) has worked to remediate this area and turn it into an attractive area for new development and residents.

To make the rejuvenation of East Village possible, CMLC's shareholder, The City of Calgary, adopted a unique funding model called the Community Revitalization Legacy (CRL). This financial mechanism, the first of its kind in Canada, allows for incremental property tax revenues, which result from new development in Rivers District, be directed to CMLC as the revenue stream used to complete necessary infrastructure programs. To date CMLC has invested \$80 million into the area and has approval from shareholders to invest up to \$256 million by 2012. The CRL model required support at the municipal and provincial levels of government who effectively are foregoing their increase share of property tax revenues generated by East Village until 2020. Without the infrastructure investment made possible via CMLC's Community Revitalization Levy, land developers, investors and builders would not have the financial capacity or inclination for developing the area.

FINALIST: Brownfield Remediation and Redevelopment in Relation to Vancouver Convention Centre's New West Building, Vancouver, BC

The project redeveloped the previously-contaminated waterfront lands and nearshore properties into a world-class 30,980 m² facility with numerous sustainable features. The Vancouver Convention Centre's new West building was home to the International Broadcast Centre and the majestic Olympic flame for the 2010 Olympic Winter Games, and now serves as a world-class convention and exhibition facility.

The project has sustainable design features throughout, including a living roof and high efficiency energy and water conservation systems. In February 2010, it became the first and only convention centre facility in the world to be awarded a LEED (Leadership in Energy and Environmental Design) Platinum Certification.

This project completes a major brownfields conversion from a century-old complex of industrial sites to an extensively-used residential/retail neighbourhood that incorporates waterfront features like parks, promenades, marinas and a major cruise ship terminal. The Centre has become a lively and welcome addition to the community with its public gathering spaces, plazas and retail/commercial operations.

FINALIST: John Street Roundhouse and Park,
Toronto, ON

The John Street Roundhouse, built by the Canadian Pacific Railway in 1929, sits on 8 acres of one of Toronto's most ambitious land fill sites. Formerly an engine repair facility, when the Roundhouse closed its doors in 1988 it was one of Toronto's largest brownfield sites. Today it is one of the most successful examples of "Brownfield Regeneration" in North America.

The John Street Roundhouse was declared a National Historic Site in 1990. In 2007, IBI Group Architects were retained to adaptively reuse 60,000 sq. ft. of the Roundhouse to better serve the public. Today, the John Street Roundhouse and Park project has combined a range of facilities, including a brewery, a furniture showroom, and a rail heritage centre, all surrounded by the re-designed and enriched park space. The Roundhouse continues to attract Torontonians and visitors alike. The Railway Historical Association has a rich and varied program for the railway museum, while the brewery continues to run a successful event space, and the furniture showroom attracts a steady flow of customers.

The building is connected to Toronto's district heat and deep lake water cooling system to create a sustainable mechanical system and increase the efficiency of the building. The project developers are in the process of applying for LEED (Leadership in Energy and Environmental Design) certification for the furniture showroom and museum portion of the project.

CATEGORY 3 & 4 FINALIST: Heartwood Place at 26 Ainslie St. S., Cambridge, ON (See Category 3 for General Project Details)

Category 5 – Excellence in Project Development: Neighbourhood Scale

Category 3 & 5 FINALIST: East Village Re-Development,
Calgary, AB (See Category 3 for Project Details)

East Village aims to be a pedestrian focused neighbourhood. The River Walk is CMLC's first major public amenity infrastructure project. It will reconnect Calgarians with the Bow River and is the first enhanced pedestrian pathway connection east of downtown. CMLC has also begun work on the 4th Street Underpass – a key connection corridor that will link East Village to Stampede Park. This is slated for completion in 2012 to coincide with the 100th anniversary of the Calgary Stampede. In addition to these plans, CMLC is working toward adding life to St. Patrick's Island – one of the least used park spaces in Calgary – by making it an extension of East Village.

To help provide much needed working space to artists, CMLC has partnered with Calgary Arts Development Authority in a pilot project to re-adapt a former seafood market in the area into a creative space for artists.

FINALIST: Prince Arthur's Landing, Thunder Bay, ON

The project aims to redesign a mixed-use village and parkland along the historic shores of Lake Superior, and breath economic life into Thunder Bay.

Development of the Prince Arthur's Landing Project will significantly strengthen the sense of community identity and provide a basis for expanded economic growth through tourism and resident retention in the area.

The project will combine a range of new public activities and buildings, which are designed in association with aboriginal communities, artists and artisans. The Spirit Garden, which is at the heart of the project, will be developed in collaboration with the aboriginal communities in the Thunder Bay Region. Also integrated into the project are a new hotel and two 7 storey residential buildings which provide the project with a critical mass of activity – ensuring the area's vibrancy on a year-round basis.

The proposed park and buildings will incorporate a range of sustainable design measures to create an environmentally driven design initiative that combines strong public art and heritage components.

Category 2 & 5 FINALIST: Little Mountain, Vancouver, BC (See Category 2 for Project Details)

FINALIST: Rail Lands Redevelopment in the City of North Bay, North Bay, ON

After purchasing the abandoned CN Rail line and underutilized CP Rail line that ran through the community and downtown area of Lake Nipissing Waterfront, the City of North Bay worked on the removal, remediation and rehabilitation of the rail lands within the city's core. This resulted in tens of millions of dollars in infrastructure investment; the development of new parks and sports fields; the construction of new housing, including entry-level and affordable housing projects and a large retirement facility in the central business district; the reconnection and widening of the arterial streets that have been cut-off for nearly a century; and the creation of a community waterfront park and civic square.

Along the former CP Rail line there now exists a 33 acre Community Waterfront Park and Civic Square. The new parkland and the associated increase in visitors have helped to revitalize the downtown. In addition to the Community Waterfront Park, an incentive program known as the Downtown Community Improvement Plan was established in 2003 and continues to this day. DCIP has been showcased by public sector organizations as a best-practice and has been replicated by a number of municipalities around Ontario. DCIP has leveraged an estimated \$30 million in private sector investment and resulted in the creation of about 300 jobs in the process. As for the CN Rail land, by the spring of 2010 most of the available land from the sale of the rail lands has been redeveloped into millions of dollars worth of new home construction. Thanks in part to this project, North Bay experienced an all-time record construction boom culminating in \$92.5 million worth of building permits in 2009.

Category 6 - Communications, Marketing, and Public Engagement

FINALIST: Partnership Workshop to Build Local Capacity on Brownfield Redevelopment in BC, Communities of Nanaimo, Prince Rupert, Prince George and Mission, BC

The BC Ministry of Agriculture and Lands, in financial partnership with the Federation of Canadian Municipalities (FCM), and in collaboration with the Ontario Centre for Environmental Technology Advancement (OCETA), BC Ministry of the Environment, and the Canadian Petroleum Producers Institute, hosted four one-day workshops in Nanaimo, Prince George, Prince Rupert, and Mission BC.

The goal of the workshops was to educate local government councilors, planners, engineers, economic developers and property owners on the brownfield redevelopment process as well as available funding in the province. The workshops covered all aspects of brownfield redevelopment from liability issues to regulatory frameworks, funding programs, available resources and tools, as well as local examples selected by the host community.

The workshops created a rich dialogue on all aspects of brownfield redevelopment and cultivated relationships among participants. In total, the workshops engaged 91 participants from government, developers, consultants, petroleum industry, economic development, land owners, real estate, academia, First Nations and NGOs. The workshops also produced an action plan outline for the host municipality on how they could move forward on selected sites.

After attending the workshops, many organizations were able to move forward on actions and strategies on their community's brownfield(s).

FINALIST: University of Waterloo, Faculty of Environmental School of Planning, Waterloo, ON

Working with mentors from the City of Kitchener, the university's School of Planning has undertaken a variety of in-class design projects to identify the potential for viable urban re-use of contaminated lands. The sites have gained wider public attention through the School's work in International Design Competitions and have attracted media coverage on the front page of the local newspaper, helping to bring the issue of brownfield redevelopment to the forefront.

The School uses contemporary professional techniques to accurately characterize sites, as well as comprehensive research and consultation to identify preferred development concepts. The clear plans and images showing the future neighbourhood designs produced by the School can help bring a greater acceptance and understanding of brownfield development when presented to the real estate and investment community.

FINALIST: Development of Regulatory Tools to Stimulate Redevelopment of Contaminated Lands, Halifax, NS

Nova Scotia Environment is developing a regulatory tool that can stimulate development of contaminated land and contribute to economic development while protecting the environment. This regulatory tool is part of Nova Scotia's Environmental Goals and Sustainable Prosperity Act (EGSPA).

Nova Scotia Environment relied heavily on consultation with stakeholders to ensure the proposed process met their needs and protected human health as well as the environment. The department engaged the legal community, the Law Reform Commission, to conduct an independent study of barriers and issues to redevelopment. The study and resulting recommendations, which Nova Scotia Environment followed, engaged the legal community and associations as well as specialized stakeholder input and public consultation.

To lay the groundwork for moving from a voluntary to a regulatory process, a technical forum was delivered to an audience of several hundred industry and municipal officials laying out the current process, discussing challenges and asking for support and input into the program development. This was followed up with the establishment of a Deputy Minister's Stakeholder Advisory Committee with representatives of involved associations and sectors.

FINALIST: Environmental Health, Equity & the Law: Making the Links, Brantford, Cornwall, Hamilton, Kenora, Sarnia and Windsor, ON

The Canadian Environmental Law Association and the Environmental Health Institute of Canada, with funding from the Law Foundation of Ontario, developed an interdisciplinary outreach program, called "Making the Links" to educate a wide range of people on the importance of brownfield redevelopment and ensuring public safety. In response to requests from members in the 6 targeted communities for more information about brownfields, the Making the Links project developed a presentation about general information on brownfields as well as municipal initiatives which are tailored to each community's situation.

The project works to promote an exchange of knowledge and expertise between community members and local legal and health service providers. For those who could not attend the presentations, a downloadable version was made available online.

As a result of the presentations, CELA staff have been interviewed by media, increasing the exposure of the importance of brownfield redevelopment. Extensive consultation with service providers and community members also helped to develop and promote the project.

Category 7 - Individual Achievement- “Brownfielder of the Year”

WINNER: Terry Boutilier

Over the course of his career Terry Boutilier, MCIP, RPP, has been instrumental in raising awareness of brownfield issues at a local, provincial and national level. As the Senior Business Development Officer & Brownfield Co-ordinator, Terry has earned a reputation as an advocate and experienced practitioner in the field.

Terry has been involved in numerous roles that have helped promote a better understanding of brownfields. In the past several years alone, this has included organizing several conferences and sessions relating to brownfields in Waterloo Region, various speaking engagements and presentations, collaborating on research projects with the University of Waterloo such as the NSERC “Potable Groundwater Criteria Use in the Regional Municipality of Waterloo” as well as many other research and design projects, working with OCEDA to develop the “Redevelopment Framework for Former Service Stations”, and promoting the collaboration between various levels of government to create joint incentives which lead to the Brownfields Financial Incentive Program in the Region of Waterloo.

Terry’s commitment to brownfields goes beyond a professional interest. He has consistently been willing to stand behind his personal convictions, be a strong advocate for brownfield projects and issues, mentor and educate colleagues new to the field, and collaborate with any players necessary in order to see progress. Without his involvement it is certain that several key projects and initiatives in Waterloo region would not have taken place.

International Recognition Award

WINNER: City of Zwolle, Netherlands

This year’s special CUI International Recognition Award has been awarded to the City of Zwolle, Netherlands for their leading area-based approach to groundwater remediation and a formal subsurface management plan for its city centre. This plan facilitates an integrated approach to managing water, soil and energy. By defining different subsurface functions to the areas that need them most, Zwolle can create a better balance between people, planet and sustainability.

By creating a uniform management zone, the City of Zwolle’s approach to groundwater remediation can reduce costs by 75% and develop brownfields much quicker.

Zwolle’s plan is the first of its kind in the Netherlands as well as globally, but has already gained a substantial amount of national and international interest.

Public Realm Award

WINNER: Meyers Pier Redevelopment, Belleville, ON
(See Category 2 for project details)