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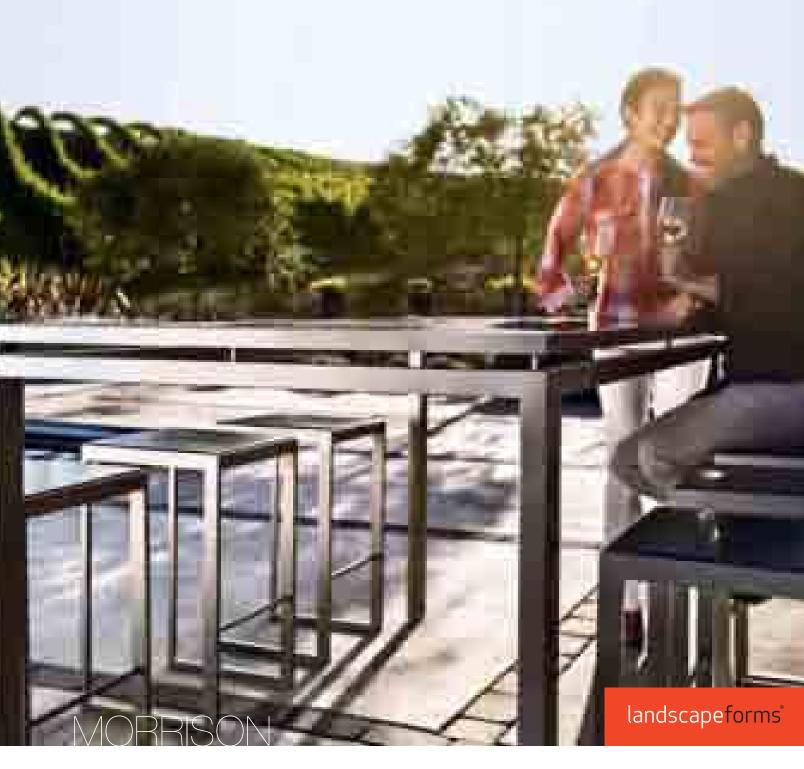
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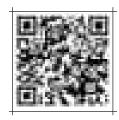
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GUEST EDITORS RÉDACTEURS INVITÉS

RYAN JAMES + NATHAN BRIGHTBILL





"Water is the driving force in nature." « L'eau est la force motrice de la nature. » Leonardo da Vinci (1452-1519)

WATER TESTING CANNOT BE SCALED. DEW TESTED A FULL HEIGHT MOCK-UP THAT WAS 9M TALL X 15M LONG. | ON NE PEUT PAS TRAVAILLER A L'ECHELLE AVEC L'EAU. DEW A DONC FAIT UNE MAQUETTE DE 9 M DE HAUT ET DE 15 M DE LARGE. PHOTO DEW, SEE | -VOIR P 36

ANYTHING BUT DRY TOUT SAUF ARIDE

SOME SAY THAT landscape is the space between buildings. Our observation is that landscape is the space between bodies of water. Water certainly laps at the edges of our nations and our cities, its tides and its currents exacting a universal pull on the human psyche, but it can also fall from above, too much or too little, percolating into soils to nourish our landscapes, or building to a raging torrent that will wash away cherished land masses.

Water covers 75 per cent of the globe, but as Mark Schollen points out in our opening essay, all but 3 per cent is salty. Of that remaining 3 per cent, a tiny fraction less than 1 per cent - is readily available for consumption. Nonetheless, drink it we must to make up 60 per cent of our body mass.

We Canadians are water-rich: we can dive into some of the world's largest stores of fresh water and take all that for granted. Our profession has a fine appreciation for water though, and we've tapped into the best of current thinking. We think it will whet your appetite. Read on to learn how water can unify a campus, captivate children, calm the outrage of September 11th 2001, and lend a fleeting voice to the rivers of Winnipeg – just to skim a bit of what we have distilled. This stuff is anything but dry.

POUR CERTAINS, LE paysage n'est autre que l'espace entre les édifices. Nos observations nous ont pourtant menés à la conclusion qu'il s'agissait de l'espace entre...les étendues d'eau. Nos nations et nos villes ont les pieds dans l'eau. Ses marées et courants exercent une influence universelle sur notre psyché. Elle peut tomber du ciel, trop ou trop peu, nourrissant nos sols et nos paysages, ou s'accumulant pour former des torrents impétueux qui les dévastent. L'eau accapare 75 pour cent de la superficie du globe, mais comme le remarque Mark Schollen dans son article, l'eau douce n'en représente que 3 pour cent. De ce 3 pour cent restant, une petite fraction - moins de 1 pour cent - est facilement accessible pour la consommation. Reste que nous devons bien hydrater ce corps humain, dont la masse est constituée de 60 pour cent d'eau. Nous n'en manguons pas au Canada – au point que nous pouvons nous baigner dans certains des plus grands bassins d'eau douce au monde. et tenir tout cela pour acquis. Dans notre profession cependant, apprenons à réellement apprécier l'eau. Et nous avons puisé, pour ce numéro, certaines des idées les plus novatrices dans le milieu. Voyez comment l'eau peut unifier un campus, captiver les enfants, faciliter la cicatrisation après les événements du 11 septembre 2001, et faire entendre les rivières de Winnipeg. Comme vous le verrez, on était loin de la panne sèche.

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THE WHIMSICAL DELTA ON THE WEST DYKE TRAIL

DOUG SHEARER

WALK ALONG THE West Dyke Trail in Richmond, BC, and your attention may be drawn to the sound of rushing water along an otherwise placid, marshy shoreline. There, you'll see water churning towards the Pacific Ocean through a whimsical, abstracted river delta, set at the outfall of the Williams Road Stormwater Pump Station.

The new station is one of roughly 50 in the city that manage stormwater and provide flood protection, but it is among the very few stations that artfully incorporate site narrative into their designs. Hapa Collaborative worked with the City of Richmond to solve the initial design challenges, raising the dyke to combat rising ocean levels while lowering the station to blend it into the landscape and allow trail access across its roof. For trail walkers, the view is stunning: from three plaza levels, the

vast Sturgeon Banks wetland is visible, with Vancouver Island's mountains beyond. In light of the essential function that the pump station serves for this low-lying, oceanside city, Hapa wanted to reveal rather than disguise the stormwater management process. Rainwater falling on Richmond's urban landscape is suggested through the paving pattern on the station's cast-inplace concrete roof and adjacent plaza, with radial "raindrop waves" juxtaposed onto a grid recalling the flow of water in the city's underground storm infrastructure. As it exits the pump station, stormwater flows across a dramatic "water table" - a large concrete slab inscribed in relief with an alluvial fan, which helps to diffuse the outflowing water's energy. The feature is inspired by the larger delta landscape of Richmond and its adjoining municipalities, whose landmass,

islands and river channels have been formed by the powerful alluvial forces of the Fraser River. When the pump station is operating, the water visibly and audibly churns over the water table as it makes its way to the Strait of Georgia.

For visitors who want to linger, cast-in-pace concrete benches with long cedar bench tops evoke the driftwood collected in the wetlands below the pump station. The designers added simple, industrial-inspired galvanized guardrails and handrails, and renovated a gravel plaza retained from the previous pump station. The plants, too, were carefully considered. Native upland and semi-aquatic plantings enhance what previously was a landscape of largely non-native rough grasses. In the future, a decorative metal scrim featuring water-themed imagery will wrap the building.

DOUG SHEARER, BCSLA, CSLA, nurtured his keen interest in landscape, the environment and design first as a park naturalist. He is still an avid birdwatcher. **dshearer@hapacobo.com**



HAPA COLLECTIVE WORKED WITH APLIN & MARTIN CONSULTANTS LTD., AND BARNET DEMBEK ARCHITECTS. CLIENT MILE RACIC, CITY OF RICHMOND.

PHOTOS HAPA COLLABORATIVE



TAKE MINUTES

... Take just 4 minutes before your day begins, to be inspired. New Street Productions, a Vancouver based film company, has created a short film filled with "passion...heart... community," that tells The PWL Story in Film. The video has a simple mission: to capture over three decades of work contributing to some of the great public spaces of Vancouver. The images, set to music, are an object lesson in what a city can be, when beautiful places, alive with people, capture the public heart.

CLAUDE CORMIER, JURÉ DE L'ASLA



L'American Society of Landscape Architects (ASLA) a invité Claude Cormier à siéger au prestigieux jury de son programme Professional Awards. Chaque année, l'ASLA reçoit plus de 600 soumissions de projets d'architectes paysagistes d'à travers le monde parmi lesquels certains, les meilleurs, se verront récompensés d'un Professional Award. Rappelons que Claude s'est fait décerner un Professional Award en 2012 pour le projet Sugar Beach de Toronto. Selon l'ASLA, le prestige de ses prix repose sur les jurys de haut calibre qui examinent chaque année les candidatures.





CHARTE CANADIENNE DU PAYSAGE

IEAN LANDRY

EN_ CANADIAN LANDSCAPE CHARTER INITIATIVE www.csla.ca

Le Congrès 2013 de Regina marqua une étape importante pour l'Association des Architectes Paysagistes du Canada dans sa démarche de développement d'une Charte Canadienne de Paysage. L'initiative, entamée depuis maintenant plus d'une année par le groupe de travail formé initialement au Congrès 2012 de Halifax, arriva à fruition lorsqu'il fut possible aux quelques vingt congressistes, représentants la diversité canadienne, d'échanger dans le cadre d'une session de travail encourageant la participation de tous. S'appuyant sur une documentation facilement accessible à partir du site web de l'AAPC, les participants furent informés autant de l'état d'avancement du projet de Charte Globale de Paysage débuté en 2006 par la Fédération Internationale de l'Architecture de Paysage que des activités réalisées ici même au Canada. Ainsi. les informations concernant les diverses chartes et déclarations déjà produites, entre autre, en Europe, en Asie, en Amérique du Sud et au Québec servirent de point de départ à une réflexion menant à la possible structure que pourrait prendre notre future Charte Canadienne de Paysage ainsi que sur la nature de son contenu. Maintenant riche de nombreux commentaires et réflexions, le groupe de travail est à préparer une proposition préliminaire de Charte qui sera présentée au Conseil de l'AAPC dès cet automne. Cette première proposition matérialise une étape cruciale de développement qui devrait nous amener à la présentation d'une proposition finale prévue pour le Congrès 2014 d'Ottawa. Évidemment, l'implication directe de toutes les associations affiliées sera assurée tout au long de la démarche et nous vous encourageons tous à suivre l'avancement des travaux qui seront disponibles sur le site web de l'AAPC.

http://www.aapc-csla.ca/resources/ initiative-d-une-charte-canadienne-de-paysage

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THE 1967 INTERNATIONAL and Universal Exposition in Montreal – Expo 67 – left indelible marks on Quebec and Canadian society and culture by opening a window on the world and helping advance Canadian expertise, particularly in the construction field. The construction of the pavilions and infrastructure, the islands in the St. Lawrence and the Expo sites involved a large number of professionals from all over Canada, who worked together in a unique collaborative spirit. While there remain only a few vestiges of the event, Expo 67 was historic for the planning and development professions, including landscape architecture. But just what was the nature of the landscape architects' involvement? At what phase did they get involved? Who created the site plans? Those are the questions addressed by this research project, funded by the LACF.

EDITOR'S NOTE:

For the full, four-page version of this story, see **LP+**. FR: www.csla.ca

FOUR FIRMS, FOUR SITES

Four groups of professionals, comprised mainly of landscape architects, prepared the master plans for four sites. In general, their contribution began after the master plan prepared by the Canadian Corporation for the 1967 World Exhibition received government approval in 1963. These landscape architects do not seem to have contributed significantly to the design of the islands, whose layout is more the result of technical constraints than deliberate aesthetic choices. Nevertheless, each site was built according to its respective master plan.

1. Master plan for the pavilions on Notre-Dame and Sainte-Hélène islands by the Project Planning Associates Consortium (PPAC). PPAC comprised Project Planning Associates Limited, Justin Floyd and Dunnington Grubb & Stensson. They were involved from the beginning, studying seven potential Expo sites before the islands were chosen in 1963. They drafted the master plan featuring the plans for the canals and lakes and the integration of the buildings as construction progressed. They also created public spaces outside certain pavilions.

- 2. Cité du Havre landscape designs by the Harper Lantzius consortium. Comprised of Doug Harper and John Lantzius, the consortium designed the majority of layouts and construction details surrounding the pavilions in the site entrance zone. Among them are the Administration, Photography, Welcome and the Man the Creator pavilions.
- 3. La Ronde master plan by Sasaki Strong & Associates James Secord Consortium, Landscape Architects and Site Planners.
 Canadian Richard Strong and American architect Hideo Sasaki not only planned the layout of these areas, but also drew up construction plans for several of them. La Ronde is an amusement park consisting of thematic recreational areas such as the entrance area, the fountain square and Children's World (designed by John Schreiber).
- 4. D.W. Graham & Associates drew up plans for the Lac des Régates vicinity, known as parc Sud-Ouest, on île Notre-Dame. The firm designed Expo 67's most "natural" site, intended for strolling and relaxation and lacking pavilions. The park, with its sampling of typical Canadian landscapes, is distinct from the others owing to its organic shape language, preponderance of vegetation and the use of the path.

...a large number of professionals from all over Canada...worked together in a unique collaborative spirit.

Landscape architects gave aesthetic unity to the entire site, connecting the pavilions with rest areas, small squares and parks. This period helped assert the importance of landscape architects and coincided with the emergence of multidisciplinarity and the founding of new university programs in landscape architecture, as confirmed by the individuals interviewed. Undoubtedly, this period represents a watershed in the history of the profession.

This research was made possible by a grant from the LACF. The conclusions were presented by Nicole Valois and Jonathan Cha at the 39th Annual Congress of the Society for the Study of Architecture in Canada, held May 23-26, 2012, at the University of Carleton in Ottawa. **NICOLE VALOIS**, principal researcher, is a landscape architect and associate professor, Université de Montréal School of Landscape Architecture.

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PHOTO FROM SERIES VUES AÉRIENNES DE TERRE DES HOMMES (AERIAL VIEWS OF MAN AND HIS WORLD), APRIL 29, 1968 | PHOTO TIRÉE DU REPORTAGE VUES AÉRIENNES DE TERRE DES HOMMES, 29 AVRIL 1968 SOURCE: VILLE DE MONTRÉAL ARCHIVES (VM94,EX64-003) | ARCHIVES DE LA VILLE DE MONTRÉAL (VM94,EX64-003)

LACF CALL FOR PROPOSALS

Have you always wanted to delve into a specific aspect of landscape architecture? Here's your chance.

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The primary goal of Landscape Architecture Canada Foundation (LACF) is to support the fundamental ideals expressed through the profession of landscape architecture.

For 25 years, LACF has funded over 100 projects. Visit our website to see the wide range: historic research, oral histories, professional education programs, design research, habitat design guidelines, environmental education and awareness programs and design communication projects.

NEWS

We will be expanding the forms of membership this year and refreshing our look and website in 2014. We will keep you informed!

LANDSCAPE ARCHITECTURE CANADA FOUNDATION RESEARCH COMMUNICATION SCHOLARSHIP

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le 22 nov. 2013

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En 25 ans, la FAPC a financé plus de 100 projets. Visitez notre site pour voir le large éventail : recherche historique, histoires orales, programmes de formation professionnelle, recherche en conception, règles de conception de l'habitat, éducation environnementale, et projets de communication.

NOUVELLES

Nous allons diversifier les formes d'adhésion et rafraîchir notre site Web en 2014. Nous vous tiendrons informés!

FONDATION D'ARCHITECTURE DE PAYSAGE DU CANADA RECHERCHE COMMUNICATION ÉRUDITION



MARK SCHOLLEN

STORMY WEATHER: MANAGING STORMWATER CLOSE TO THE SOURCE

EVEN IN THE fifteenth century, Leonardo da Vinci, artist, scientist and Renaissance man, realized the profound importance of water as an element that sustains the natural world. As a driving force in nature, water shapes the landscape and is a fundamental necessity for all forms of life. The presence or absence of water determines the viability of habitats, dictates the composition of vegetation communities and modifies microclimate. The power of water has shaped the earth's landscape over millennia to create wonders of the world such as Niagara Falls and the Grand Canyon. Yet for all of its influence, power and potential, water is a fragile resource. In Canada, a country surrounded on three sides by vast oceans and abundant with rivers and lakes, including the world's largest freshwater lakes, clean water is largely regarded as an infinite resource. However, this perspective requires reconsideration.

WHEN LANDS ARE URBANIZED

Since the Earth and its atmosphere are a closed system, the volume of water on Earth and in the atmosphere is fixed and finite. Water cannot be added or removed; it can only be converted from one form to another. Although water covers 75 per cent of the Earth's surface, only 3 per cent can be used as drinking water.

Our supply of clean drinking water is limited, and as populations grow, the conversion of land from natural to rural to urban results in changes to hydrology. Since water is the universal solvent, it absorbs pollutants that are present in the air and on the ground, impairing surface water quality and groundwater reserves.

When lands are urbanized, infiltration rates can be reduced by 35 per cent, and evapotranspiration decreased by 10 per cent, increasing runoff rates by as much as 45 per cent.



In comparison to the natural condition, peak flow rates increase, magnifying the potential for flooding and erosion, impacting both water quality and the stability and sustainability of downstream watercourses

CLOSE TO THE SOURCE

Within urban areas, the landscape affords the potential to reduce the amount of runoff generated from a precipitation event. In the past, cities employed conventional storm sewer systems that conveyed runoff downstream with maximum efficiency. In contrast, effective landscape-based stormwater management systems manage stormwater as close to the source as possible, instead promoting contact with soil, filter media or plant material to encourage filtration and cleansing.

Throughout the Greater Toronto Area (GTA), a number of projects successfully employ landscape-based stormwater management solutions as the primary means of meeting water quality and quantity control objectives. These projects demonstrate the effectiveness of a wide variety of tools that address stormwater management in different ways.

HONDA CANADA: UNIQUE AESTHETICS

The Honda Canada Campus in Markham encompasses over 45,000m² of floor area and includes parking lots that accommodate 1100 cars, in addition to vehicle storage and an extensive loading and service area. Here, in place of a conventional storm sewer and pond system, Honda deployed landscape-based solutions to manage the runoff from the entire Campus and protect the Rouge River.

The stormwater management system comprises biofilters, permeable pavement and a rainwater harvesting and recycling system. The network of biofilters replaces the conveyance function of a

conventional storm sewer system, effectively creating an elongated, sub-terrain stormwater management pond. Permeable pavement installed in the main entrance plaza and parking lot areas provides for the pre-treatment of runoff, enhancing water quality. The granular sub-base below the permeable pavement installations affords additional storage volume.

Runoff from rooftop areas is directed to a rainwater harvesting tank that supplies the irrigation system for the site. The rainwater storage system consists of three tanks. 3 metres in diameter and 30 metres long, which together can store approximately 1500 cubic metres of stormwater. When the stored water is redistributed through the irrigation system, evapo-transpiration is optimized, contributing to the site-wide water balance.

At the Honda Canada Campus, the presence of water is not obvious since the attenuation and filtration of runoff take place largely below grade. However, the stormwater management system itself is legible within the landscape, creating a unique and identifiable aesthetic signature that reflects Honda's corporate focus on efficiency and innovation.

YORK UNIVERSITY: IMPERCEPTIBLE WORKINGS

In contrast, at the York University Life Sciences Building, the stormwater management system was designed to be barely perceptible. Its objectives are similar: the system moderates runoff rates, promotes infiltration and achieves water conservation, yet the permeable pavement, subsurface infiltration gallery and rainwater harvesting system are all but invisible. The permeable pavement pre-treats runoff and the porous pipe system conveys it first to an infiltration gallery and finally to a storage tank. The system is integrated with internal building services; the infiltration media cleanse the water, rendering it suitable for non-portable re-use within the building.





1-3 HONDA CANADA CAMPUS IN MARKHAM: PERMEARI E PAVEMENT IN FORECOURT ROUNDABOUT, PARKING AREAS + PLAZAS 4 YORK UNIVERSITYLID

PHOTOS SCHOLLEN + COMPANY INC.



MISSISSAUGA: ELM DRIVE. PHOTO SCHOLLEN + COMPANY INC.

MISSISSAUGA STREETSCAPES

In Mississauga, two pilot projects aim at replacing conventional road drainage systems with landscape-based solutions. In the established community of Lakeview, for example, ditches lining suburban streets were replaced by bio-retention cells designed as planted rain gardens. which not only contribute to the functional effectiveness of the stormwater system as a whole, but also establish a unique streetscape for the community. On Elm Drive, the LID retrofit project uses a series of stormwater planters to treat runoff and facilitate infiltration. This design represents a hybridized urban streetscape treatment that relies on permeable pavement and porous bottom catch-basins to pre-treat runoff prior to discharge into the planters.

THE LEARNING CURVE

Because each of these projects presented specific challenges, creative collaboration amongst the various disciplines comprising the consulting team was essential. The regulatory approvals process differed from project to project and issues related to operation and maintenane needed to be addressed to ensure reliable performance throughout the life-cycle of the installation.

During the construction phase, contractor education is key, since many of the system elements are new technologies. In particular, filter and bio-retention media must be correctly mixed, and infiltration media protected from contamination. (In practice, partially constructed biofilters and infiltration galleries have proven to be attractive locations for the storage of building materials, equipment and other construction related elements.)

PROOF POSITIVE

In order to gauge their effectiveness, the Toronto and Region Conservation Authority (TRCA) under the Sustainable Technologies Evaluation Program (STEP) is monitoring many examples of these systems. Ongoing monitoring has confirmed the performance of a number of technologies including permeable paving, bio-retention cells, rain gardens, infiltration trenches and swales.

The STEP program has been particularly useful in dispelling myths regarding the perceived lack of reliability of landscape-based solutions. Previously, monitoring data was only available from sources in the United States or Western Canada which reflected different microclimate conditions and precipitation profiles. The STEP program provides local performance data that is painting, for the most part, a positive picture. Landscape-based systems have been proven through monitoring to work and yield excellent results, primarily for the smaller, more frequent storms which tend to be most impactful in terms of water quality and erosion parameters. Life-cycle performance is also proving to be impressive - 20-year plans of operation with less than a 5 per cent reduction in efficiency for infiltration systems and permeable pavement installations.

Just as water is the driving force in nature, through the application of a creative, integrated approach to design, the urban landscape can be a driving force to sustain this fragile and finite resource.

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DAN EUSER + STEVE EUSER

THE VEIL OF TEARS

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UN VOILE DE LARMES

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1+3 HELICOPTER VIEW OF THE SITE 2+4 PETER WALKER, PWP LANDSCAPE ARCHITECTURE |
1+3 VUE DU SITE EN HÉLICOPTÈRE 2+4 PETER WALKER, PWP LANDSCAPE ARCHITECTURE PHOT051-4 PWP LANDSCAPE ARCHITECTURE

BEHIND THE SCENES

IN 2004, DEW was commissioned to be the water feature consultant for the National September 11th Memorial, "Reflecting Absence," by Michael Arad. The genesis of DEW's involvement had begun a year earlier, when the jury for the Memorial advised finalist Arad that he needed to work with a landscape architect: Peter Walker of PWP Landscape Architecture. Walker would craft an environment that would "humanize" the design without diminishing its powerful abstraction.

The story, as told In World Landscape Architecture (Oct. 2011), unfolded quickly. "Walker connected with the purity of Arad's design almost immediately, and envisioned Arad's two waterfall-filled tower footprints, embraced by sculptural columns of trees...a mighty but silent juxtaposition of life and death, mutability and permanence." Through sensitive considerations of the landscape's scale, texture and variety, the design would bring the "sense of human comfort" necessary to create "a great urban space that will endure through the ages."

Turning the concept into reality involved a huge team of consultants. For the waterfalls which would fill the two, one-acre voids where the twin towers once stood, Walker turned to a long-time collaborator, Dan Euser, of DEW. DEW tells their story here.







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Water testing cannot be scaled...DEW tested a full height mock-up...that was 30' tall x 50' long. | On ne peut pas travailler à l'échelle avec l'eau...DEW a donc fait une maquette de 9 m de haut et de 15 m de large.

DEW TELLS THE STORY

The grandly simple concept for the waterfalls, as with most simple designs, was very complex to implement. To begin with, we considered the numbers: "Reflecting Absence" would become the largest waterfall feature in the USA.

The Memorial concept, selected from 5200 design entries, consisted of a 3.6 hectare park (8.9 acres) which included the two large .45ha (I acre) gaping voids matching the footprints of the two destroyed towers. In each 54m x 54m (176'x176') void, waterfalls would emanate from all perimeter sides, falling into the large pools 9m (30') below. Then the water would be further collected and fall again to disappear into a central 13mx13m x6m (40' x 40' x 20') deep void in the middle of each pool. The concept was grand, creating in total approximately 430m (1408') of 9m-high falls, plus an additional secondary 6m-high fall (20') of 104m (320') total length. The winning rendered image depicted significant water display. To achieve this, the falls would require approximately 75mm water depth over the entire edge: the pumping alone would cost over \$6,000,000 in electricity per year!

Many issues needed to be studied. Could a significant display be created with less water? Could the waterwalls maintain a uniform display as they aged? Could crashing water sound be controlled? How would humans and wildlife interact with the water feature? What about sustainability, visual uniformity, safety, accessibility, humidity, wind, maintenance, waterproofing, materials, debris and lighting?

A MODEL 9 METRES TALL

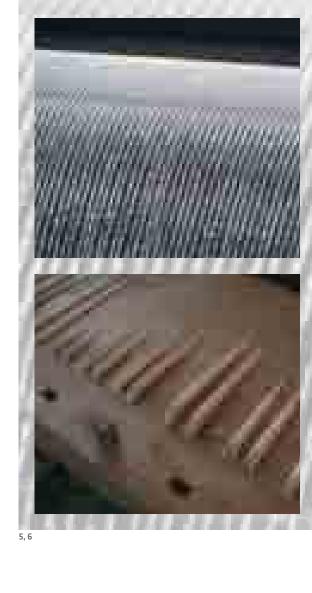
Over the years, DEW has worked on over 1000 water feature designs. We know that water is a beautiful but sometimes unpredictable medium. Because we have

frequently been surprised by how water behaves, we believe mock-ups are essential, not only for exploring options and proving unknowns, but also as an effective sales tool. An incorrect detail, however small, can be very expensive to correct, since water features are typically constructed of costly materials such as stainless steel, bronze and granite.

Water testing cannot be scaled: water stretches as it falls, and displays will be significantly different from top to bottom as water fall heights increase. In 2005, DEW fabricated a full height mock-up of a critical section in our backyard in Richmond Hill, Ontario. (Read about it in a 2005 New York Times story! See page 22.) The mock-up was 9m tall X 15m long (30'x 50'), made of inexpensive wood, foam and sheet metal. Working with Peter Walker and others, we addressed issues of concern, studying water behaviour and character over four seasons to address the many unknowns.

WHAT WE DISCOVERED

We found we could create significant water flow reductions while maintaining an effective uniform display, refining the weir profiles through nearly 50 iterations. The constructed weir had to be accurately level since water will reveal every imperfection. (A visual variation of just 3mm in water depth could be noticed in the water display.) The weirs had to be metal to ensure water trajected off cleanly, something softer stone (even granite) could not achieve since sharp edges could easily break or wear. Joints in the weir created anomalies in the water display and had to be avoided. Varied materials also posed a waterproofing problem. Due to differential thermal expansion, stone, concrete and stainless steel could change in length up to 50mm (2") from each other over the 54m (176') length of each side. This



could easily result in waterproofing failure, something that could not be tolerated with occupied museum space below. Also, concrete structures are not completely stable, and vertical movement could occur over a five-year period. We've seen this happen on many built waterfalls and walls that were constructed level but produce uneven flow after years of use. All these issues were solved by creating an adjustable, single piece, 54m-long stainless steel weir with no joints (welded on site). We fixed each weir at middle, allowed movement below fixed corners, and set each on adjustable screw jacks on 1.5m (5') centres that would be leveled yearly or as necessary to (1.5mm) 1/16" tolerance. Hidden on the backsides of the weir, we attached flexible loops of waterproof membrane to allow for movement without compromising the waterproofing.

The final result is a display of fine individual streams created by tapered

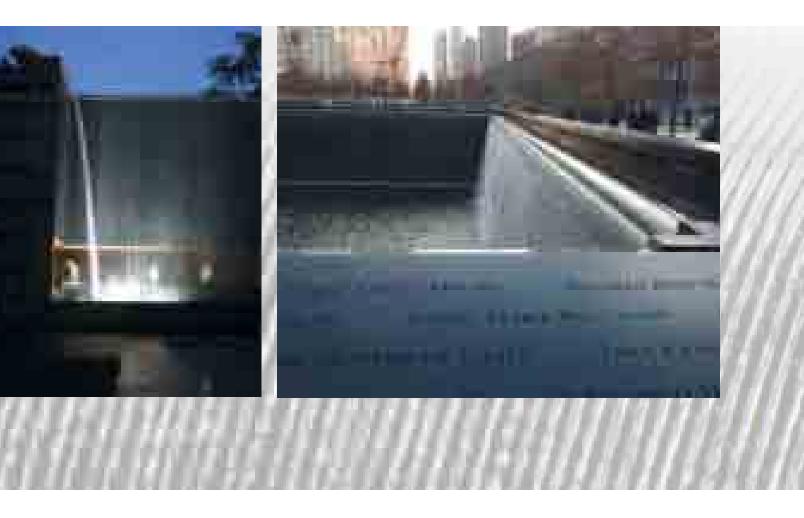


7, 8

"fingers" that manipulate a sheet of water into individual, near laminar streams spaced at 38mm (1.5"). The streams traject outward at a 45 degree angle, since that angle improves wind resistance, making them fairly uniform from top to bottom. By using serrated edges, we reduced the water flow rate to almost an eighth of what we would normally specify for this height of waterfall, and realized well over \$5,000,000 in operating cost savings yearly. The fingered streams also decreased sound levels, which was a concern for family members of those who died. In addition, we were able to use the central 13mx13m (40'x40') basins to store rain water up to 3m (10') deep, significantly easing the consumption of domestic water.

 ${f 7}$ DAN EUSER AND THE FULL-SIZE MOCK-UP \mid 7 DAN EUSER AVEC LA MAQUETTE D'UNE SECTION IMPORTANTE DANS SON COUR PHOTOS 5-6-8-9-10 © DEW INC 7 PWP LANDSCAPE ARCHITECTURE





DEW found the project was challenging on many fronts. The design had to meet the requirements of those who lost loved ones, of politicians at every level, of the millions of New Yorkers who owned it, and of the millions of people who watched worldwide. We were under constant media scrutiny and subject to three peer reviews during design. (Two concluded that what we proposed could not be done. The mock-up proved otherwise. In fact, we can happily report that the final water effects closely resemble the original prototype.)

In 2011 on the 10th anniversary of the terror attack, the constructed waterfalls were opened as part of the Memorial. In the first year, over 4.5 million people visited the site, growing to nearly 7 million this past year. Visitors to the site must obtain a free visitors' pass online, a security measure that will be in place until all the perimeter towers are complete.

The display is very moving; it is often described as a veil of tears. The lightness of the water has allowed it to come alive, changing mood as the weather changes. On quiet days, gentle arcing streams fall in front of grey granite walls, and crystal droplets catch the sun. As the winds pick up, the water falls in sinuous moving waves and occasionally, when the wind is strong, the falling water is lifted up to kiss the faces above. At night you can almost see the water come to life as slight winds move across the space. Our hope is that the waterfalls, set in the midst of a sculptural forest of oaks, will endure as a sacred place, a Memorial that offers healing, rest, reflection and inspiration.

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PHOTOS 9+10 ©DEW INC

HOW IT BEGAN....

The New York Times, May 12, 2005. A Backyard Fountain Like None Before, by David W. Dunlap.
Richmond Hill, Ontario – The Euser family has something in their backyard, sitting on the patio out by the tarp-covered swimming pool, that a wounded city 350 miles away has been waiting a long time to see. It is the first full-scale, three-dimensional intimation of what the World Trade Center memorial will look like and sound like and feel like...

Click http://www.nytimes. com/2005/05/12/ nyregion/12memorial.html?_r=0



PARC GEWURZ-REMER CONCEPT PLAN > PLAN CONCEPTUEL DU PARC GEWURZ-REMER

GROUPE ROUSSEAU LEFEBVRE_MÉLANIE GLORIEUX

L'INTÉRÊT DE L'EAU! DÉFIER LES ATTENTES EN MONTREAL_2X

EN THE ELEMENT OF SURPRISE: DEFYING EXPECTATIONS www.csla.ca



L'EAU EST PRÉSENTE dans les jardins depuis plusieurs siècles. À l'origine cela consistait à l'utiliser comme ressource naturelle, la source de la vie pour se nourrir et de l'intégrer dans les jardins par une série de chemins et canaux pour l'acheminer où nécessaire. De nos jours, l'eau doit être protégée, dans les milieux naturels et surtout dans son utilisation de tous les jours. Les restrictions et les contraintes abondent, et c'est notre rôle de concepteurs de trouver des solutions pour créer des espaces de vie agréables, stimulants et parfois provocateurs pour donner un sens au lieu. Parfois, il faut proposer des formes non traditionnelles aux images attendues et parfois il faut proposer une mise en scène différente des autres. Mais dans tous les cas, nous devons gérer cette ressource de façon responsable. En tant que concepteurs nous avons l'occasion de manipuler l'eau pour créer de l'intérêt dans nos projets tout en permettant une réflexion, il s'agit d'en profiter.



2 3

LE PARC GEWURZ-REMER est un complexe de milieux humides et d'habitats fauniques conçu pour s'intégrer dans un environnement urbain. Des lignes circulaires fortes organisent une série de bassins de rétention et de marais filtrants qui trouvent leur source dans les eaux de ruissellement des sites adjacents et dans le fleuve Saint-Laurent, un dialogue entre l'aménagement et son milieu. Situé dans le nouveau secteur de l'île des Sœurs, à Verdun au sud de Montréal, le parc s'inscrit entre les nouveaux bâtiments résidentiels et le complexe Bell, avec un lien direct avec le fleuve. Les objectifs d'aménagement de cet espace sont la création d'un parc urbain au design contemporain qui tire profit d'un site exceptionnel, la création de milieux humides et d'habitats profitables et la récupération de l'eau de pluie des sites construits adjacents pour la filtrer avant de la retourner vers le milieu naturel.

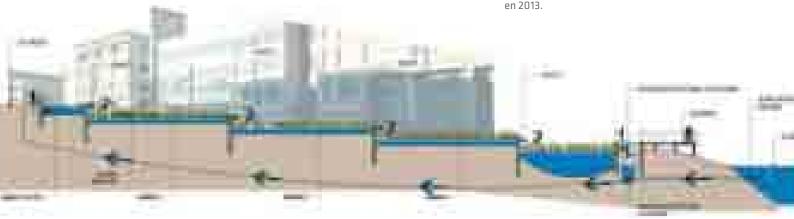
L'important développement de ce secteur a amené la Ville à dédier le parc à la création de milieux humides à titre de compensation environnementale pour le ministère du Développement durable, de l'Environnement, de la Faune et des Parcs (MDDEFP). Suite à l'analyse du site, le concept original de lagune est évacué étant donné la contrainte majeure d'un dénivelé de sept mètres vers le fleuve. Le lieu se serait alors apparenté à un étroit canyon avec des pentes trop fortes et un milieu aquatique assez pauvre. Ce défi technique important a mené à la création d'une série de bassins pour créer des milieux humides permettant aussi de capter l'eau de pluie des propriétés adjacentes pour alimenter le projet. Le parc où circule un sentier récréatif est divisé en paliers qui suivent la pente et créent une suite dynamique de milieux humides et de marais filtrants tous complémentaires à l'épuration de l'eau. Le système utilise l'eau du fleuve lorsque les pluies sont moins abondantes et ne suffisent plus à remplir les bassins. Inversement, l'excédent d'eau du système est retourné filtré au fleuve.

C'est un projet qui dès le départ relevait des défis de conception auxquels toute l'équipe de la firme a participé. Le parti était de réussir le mariage entre les aspects fonctionnels, récréatifs, esthétiques et environnementaux. L'ambition de créer un milieu qui reproduit ce que fait le milieu naturel pour l'intégrer dans le milieu urbain dans lequel il se retrouve peut parfois

surprendre. Les échanges avec le MDDEFP avaient été fructueux jusqu'au dépôt de la version finale pour l'obtention de la compensation environnementale. Un nouveau chargé de projet dans l'équipe a renversé la décision de ses prédécesseurs prétextant qu'un aménagement naturel ne peut être esthétique et architectural.

DESIGN VS NATURE OU DESIGN + NATURE

Les responsables du ministère mettaient en doute le potentiel de colonisation faunique d'un espace concu par l'homme, prévu pour la faune et l'homme. Indirectement, ils remettaient en question la notion de création d'écosystèmes urbains. Dans un contexte où le milieu était créé artificiellement de toute façon, il apparaissait important de confirmer le geste par ces bassins qui animent l'espace pour le plaisir des promeneurs, mais qui aussi purifient l'eau. Le projet a réussi à aller de l'avant et le parc est une vitrine pour ce spectacle où s'enchaînent plateaux et cascades d'eau, rendant hommage à ces écosystèmes productifs et à toute cette vie nouvellement installée grâce aux habitats fauniques. Construites depuis 2012, les structures des bassins offrent de l'intérêt toute l'année et le projet a reçu un mérite régional au concours d'excellence de l'AAPC en 2013.





LE DEUXIÈME PROJET est un

réaménagement de façade d'un bâtiment d'allure résidentielle avec une vocation commerciale de bureau. Le réaménagement de la façade du siège social de la firme Rousseau Lefebvre s'inscrit dans un projet global qui vise à diminuer le ruissellement des eaux de pluie du site et augmenter l'infiltration et l'évapotranspiration. L'aménagement de la façade consiste en une séquence de systèmes intégrés ayant pour objectif de gérer la totalité des eaux de pluie provenant du toit et de maximiser leur utilisation.

Un système de récupération de l'eau de pluie récupère l'eau qui ruisselle sur la toiture par la gouttière et la distribue dans le circuit en trois temps. L'eau commence son parcours dans une canalisation en acier galvanisé percée à partir de laquelle l'eau ruisselle le long de câbles d'acier tels des chaînes de pluie pour alimenter les bacs de plantations intégrés au balcon. L'excédent d'eau peut poursuivre sa course vers un baril de récupération installé à proximité. Cette eau est réutilisée pour arroser les plantes dans les bacs de plantations en période de canicule. L'excédent d'eau peut aussi alimenter directement les jardins de pluie par deux poutres en acier galvanisé émergeant de la structure. Le trottoir en passerelle donne l'illusion d'un passage au-dessus d'un grand bassin alors qu'en fait ce sont deux espaces distincts. Les bassins en façade ont été conçus de façon à reproduire un sol argileux et imperméable, du même type que ce que l'on retrouve souvent en milieu urbain montréalais. Suivant la mission de recherche et développement de la firme, deux types de terreau organique ayant une grande capacité de rétention d'eau ont été mis en place. Un regard en tuyau perforé permet de faire le suivi comparatif du comportement de l'eau dans le système. Les plantes que l'on retrouve sont des espèces indigènes qui ont été judicieusement sélectionnées pour leur

capacité de développement dans un milieu humide par moment et sec en d'autres temps.

La particularité de ce projet est que lors d'une pluie la façade s'anime et transporte une pluie qui plus traditionnellement aurait été acheminée par les gouttières vers le stationnement et les puisards de rue. Pour le passant, on éveille sa curiosité par ce traitement peu commun de la pluie qui glisse le long des cordages. Pour l'équipe à l'intérieur qui travaille ou passe devant les fenêtres, ces fils offrent une animation en contraste avec le mouvement de la pluie. De plus, l'aspect industriel du circuit de récupération des eaux de pluie contraste avec les matériaux d'époque du bâtiment datant du milieu du XIXe siècle, maintenant complètement restauré.

Deux projets et deux approches de design où le traitement de l'eau comme point d'intérêt offre aussi un sous-texte de notre lien envers l'eau.

Parfois il faut proposer des formes non traditionnelles aux images attendues et parfois il faut proposer une mise en scène différente des autres.

1-4 LE PARC GEWURZ-REMER 5+6 LA FAÇADE DU SIÈGE SOCIAL DE LA FIRME ROUSSEAU LEFEBVRE |
1-4 GEWURZ-REMER PARK 5+6 THE FACADE OF ROUSSEAU LEFEBVRE HEADQUARTERS
PHOTOS GROUPE ROUSSEAU LEFEBVRE



PHIL WYATT + ALISON MADDAUGH

WATERPLAY WEIRS, PUMPS, CHANNELS AND GATES

FR_ JEUX D'EAU

BARRAGES, POMPES, CANAUX,

portails...Bien avant le premier coup de crayon, les concepteurs doivent sensibiliser les décideurs à l'importance capitale du jeu dans leurs projets de parc à jets d'eau pour enfants. La collaboration entre les designers, les clients et les enfants est une précieuse source d'inspiration. Pour élargir les possibilités, on doit passer au crible la réglementation et séparer les normes réglementaires des simples conventions. Au parc de la Confédération, space2place a reconfiguré le terrain en pente en une série de terrasses ponctuées par des barrages et des canaux pour que les enfants puissent s'amuser à moduler l'écoulement par des barrages, pompes, canaux et portails.

ΕN

water is one of the most valuable play elements for children. Not only does water play foster social engagement and creative problem-solving, it can also connect children to the natural world, as their play becomes informed by the rhythm of the seasons and weather patterns.

Nonetheless, as a guiding design principle, "play value" is often all but ignored in the design of water play environments. It is superseded by an emphasis on regulatory criteria, budgets and project timelines. In many cases, the essential form of the park has been predetermined before the design is even commissioned. Given the need to meet regulatory criteria governing water play, many clients have already preconceived the play space as a spray park. Spray park sites typically consist of a collection of catalogue-based play elements arranged on a flat slab. In such landscapes, children have limited opportunities to manipulate their environment. Lost in the process are all the diverse play experiences that water can inspire.

To broaden the range of water play opportunities for children, it is vital that design firms engage decision makers well before design begins, becoming advocates for the importance of play. Children learn through play. Educators have been well aware of the value of open-ended play environments for decades, yet according to educator Dale Mann, play is often undervalued as a learning strategy - this "despite the hundreds of empirical citations documenting its power in cognitive development, language development, the growth of imagination and creativity, and the development of social competence." Although Mann explored these issues in

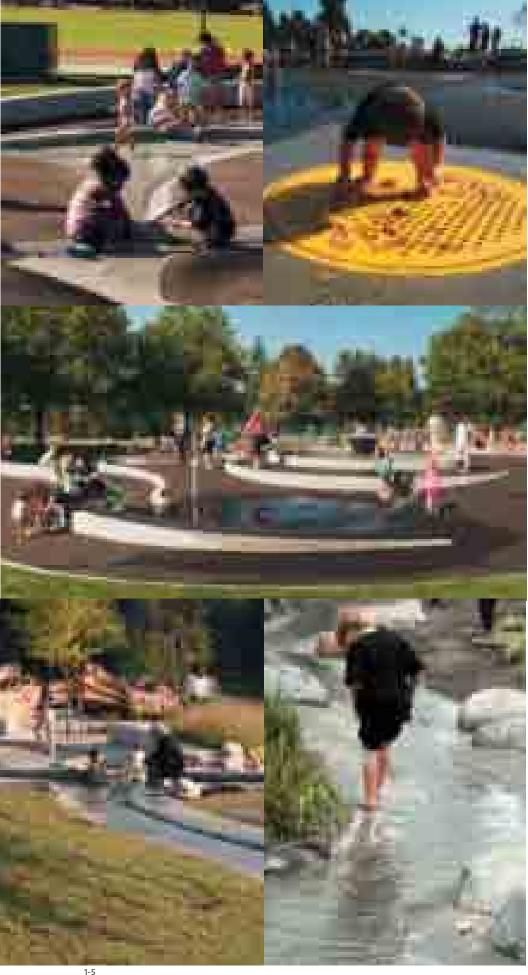
Serious Play, written for the Teachers College Record in 1996, landscape architects working in 2013 are still challenged to effectively communicate the value of open-ended play environments to their clients.

The value of play, it should be stressed, goes well beyond the physical. Historically, play environments in Canada and the United States have focused on physical activity. Today there is growing momentum to provide more inclusive play spaces that foster cognitive, social and emotional development.

Collaboration amongst designers, clients and children is a valuable way to generate inspiration for the project. One successful strategy is to facilitate idea-generating workshops with local students at the outset of the design process. This ensures that the focus on play value is maintained, and that children are invited to help inform the design. Through drawing, text and modelling, students share their ideas and then evaluate them to identify top priorities. Such sessions connect the client directly to the children who will be the ultimate patrons of the site. The priorities identified by the children are then reflected in project goals, and help establish evaluation criteria that can be used to assess the proposed designs.

When aiming to expand play opportunities, designers need to sift through the applicable regulations, separating regulatory criteria from conventional norms. For example, site grading became a key design tool when working with the City of Burnaby to develop the water play feature at Confederation Park. Regulatory criteria for spray parks set the parameters for surface grades, and this needed to be reconciled with the existing slope of the site. While

1-2-3 CONFEDERATION PARK 4+5 GARDEN CITY PHOTOS SPACE2PLACE



the City had anticipated the need to build a significant retaining wall and guardrail, we proposed an alternative approach. The sloping grade was reconfigured into a series of terraces punctuated by weirs and stonelined channels. By layering the landscape and directing water through the site, we could combine traditional spray park elements with opportunities for children to engineer the flow of water using weirs, pumps, channels and gates before the water drains away.

The design became a sculptural focal point, and the low walls of the tiered landscape became popular seating areas where children and adults can stay dry amidst the activity. The result is an elegant water feature that animates the park with interactive play elements, engaging children of all ages and abilities.

The challenge is to combine skill designing water in the landscape with the creation of engaging play environments. By providing children with malleable materials such as water, we give them the opportunity to shape their physical environment. Such open-ended play promotes the inquirybased learning that fosters inventiveness. Moreover, when we make the flow of water through our built environment more visible, we help strengthen a child's connection to natural systems. A water play environment with children's play at its heart should celebrate water from source to drain.

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BRENDA J. BROWN

SOUNDINGS WINNIPEG RIVERS AT BREAK-UP

FR_

LE CHANT DE L'EAU / RIVIÈRES EN DÉBÂCLE À WINNIPEG

www.csla.ca

Brenda J. Brown s'attache à interpréter les phénomènes de l'écosystème du paysage à travers la conception et l'art. Chaque projet appelle une démarche et des médias différents. Le projet *Spring Ice* a grandi pour inclure cinq installations sonores et vidéo, ainsi que deux nouvelles compositions musicales.

EN

SOON AFTER I moved to Winnipeg in 2006, I became intrigued by the annual ice breakup on the three rivers that meet here - the Red. the Assiniboine and the Seine. It seemed to me that Winnipeg's spring really comes with river ice break-up, however sudden, dramatic or protracted it may be. Yet despite the importance of this event - this great harbinger of spring - most people rarely experience it directly. (It was only later that I connected the breakup to another, often ominous, aspect of northern rivers: spring floods.) On late winter and early spring walks along the Seine, I was enchanted by the season's subtle and not-sosubtle sounds, and I imagined that each river's character would correlate to a rich vocabulary of breakup sounds. So was born my idea for the project that became Spring Ice.

SOUNDS, NOT SILENCE

For the past several years I have been particularly interested in landscape sounds – how they can be revealed *in* landscapes and what they can reveal *about* landscapes and their ecosystems. Sounds are not only a neglected aspect of landscape experience, they are also indicators of ecosystem health. My research focuses on ways to reveal and interpret landscape ecosystem phenomena through design and art; different approaches and media are appropriate for different projects. *Spring Ice* became a collaborative venture that grew to include five sound and video installations, and two new musical

compositions and their premieres. These manifestations were distillations of countless hours spent stalking Winnipeg's rivers with recorders and cameras, months of editing and composing, seemingly endless searches for the right poems to set to music, and orchestrations of technology to make it all work.

STALKING THE RIVERS...

I stalked each river, studying and recording its sometimes hard-to-catch phenomena. In Ice: The Nature, the History, and the Uses of an Astonishing Substance, Mariana Gosnell identifies three major phases of river ice breakup: the pre-breakup, the drive, and the wash. These phases, though generally sequential, are not necessarily neat. Pre-breakup can go on for weeks or longer. Small fractures in the ice cover lead to ice sheets that float downstream, eventually breaking into floes. For the stalker, the pre-breakup is a time of quiet waiting, of subtle comparisons, of discoveries of small, large and growing cracks, of slow drips in temporary caverns. In the drive, presumably so named because it resembles a cattle drive, groups of large, white, creaking and groaning objects are on the move. Floes can slam and ram into river banks to form monumental ice piles or they can rise majestically into the air only to fall down and break - all of which can make for thunderous crashes. As the blocks and floes are churned and ground with the river's downstream flow, the shoreline stacks become increasingly varied, reflecting divergent origins and histories. The wash generally takes away any ice still connected to the shore, cleaning up (or washing) the river. This is the time for candled ice - individual crystals formed when the sun melts the impure ice between them. The closest thing I know to the magical tinkling of candled ice is the sound of the marimba.

"I stalked each river, studying and recording..." | « J'ai arpenté chaque rivière pour l'étudier et prendre des notes... »

These common characteristics are naturally expressed differently on each river, as the three differ in size, origin, shape and course. Some fascinating aspects of spring ice do not fit any of the above categories. For example, well past the Seine's wash, after cold nights I sometimes discovered a thin white ice on that river's surface that shrank and broke with loud long creaks and cracks as the morning warmed.

They say the break-up is different every year. Certainly it was different in 2008 and 2009, the two years I so closely observed. Most obviously, the waters of the Red were much higher in 2009, shaping mammoth floes and the ice blocks that dwarfed those curious souls who came to the river shores to investigate and marvel. Yet my best recordings of candled ice on the Red were made in 2008.







1, 2, 3

1 RED RIVER 2 ASSINIBOINE RIVER 3 SEINE RIVER 1 1 LA RIVIÈRE ROUGE 2 L'ASSINIBOINE RIVER 3 LA SEINE PHOTOS BRENDA BROWN

WATER MUSIC | L'EAU EN MUSIQUE

EVERYDAY ENCOUNTERS

Although I had originally planned to create installations purely from sounds, I began to wonder if people would "get it"; moreover, the ice forms were visually fascinating. And so I investigated how sounds and images could enhance one another. I created five videos ranging from 12 to 55 minutes long, each focusing on another aspect of breakup: ice intact, chasms and drips, the '09 drive, the candled ice drive, and the Seine. In 2010, timed to coincide with that year's breakup in late March and April, the videos were installed in downtown Winnipeg and at three University of Manitoba sites. Because encounters with the video installations were meant to be incidental.

4 FILMS PROJECTED ONTO THE FLOORS OF MAIN ENTRIES TO THE RUSSELL BUILDING 5 THE ENTRY OF THE PLUG IN INSTITUTE OF CONTEMPORARY ART 6 THE STAIRWAY OF ENGINEERING 2 BUILDING | 4 FILMS PROJETÉS SUR LE SOL DU PAVILLON RUSSELL, SENTRÉE DU PLUG IN INSTITUTE OF CONTEMPORARY ART 6 L'ESCALIER DU PAVILLON D'INGÉNIERIE 2 PHOTOS BRENDA BROWN

everyday occurrences, visuals in the two main entrances to the J. A. Russell Building were projected onto the floor, and in the Engineering 2 Building, onto the prominent stairway. The downtown installation in the entry of Plug In Institute for Contemporary Art involved two projections, and was intended to be seen and heard primarily from the street.

The sounds were also an integral part of an extra-ordinary, singular concert event. On March 31, in Eva Clare Hall of the University of Manitoba's Marcel A. Desautels Faculty of Music, *Spring Ice* by Richard Festinger and winter is when snakes by Michael Matthews premiered. For both works, my recorded breakup sounds became, in a sense, an additional, integral instrument.

Together, the concert and installations celebrated the rich phenomena of the ice breakup in places where it was far from our sight and hearing. I wanted to bring it close, to create something arresting and revealing that draws attention to the power, wonder and intricacy of this luminous and aurally beautiful event.

"Sounds...are a neglected aspect of the landscape experience..." | « Les sons...sont un aspect négligé de l'expérience du paysage. »

Brenda.Brown@ad.umanitoba.ca Three short videos:

http://www.bbldar.com/engvimeo.htm http://www.bbldar.com/pluginvimeo.htm http://www.bbldar.com/jarvimeo.htm



CREDITS EXHIBIT INSTALLATIONS WERE SUPPORTED BY THE UNIVERSITY OF MANITOBA'S FACULTY OF ARCHITECTURE ARCH 2 GALLERY (NEIL MINUK, DIRECTOR). ADDITIONAL SUPPORT CAME FROM DAVID WITTY (THEN DEAN OF THE FACULTY OF ARCHITECTURE), TED MCLACHLAN (THEN HEAD, DEPARTMENT OF LANDSCAPE ARCHITECTURE), DOUG RUTH (THEN DEAN, FACULTY OF ENGINEERING), AND ANTHONY KIENDL (ARTISTIC DIRECTOR, WINNIPEG'S PLUG IN INSTITUTE OF CONTEMPORARY ART). IN PLANNING, CONSTRUCTION AND INSTALLATION OF THE EXHIBIT THE ASSISTANCE OF YOSHIHIRO YABE WAS ONGOING, VITAL AND INVALUABLE; JOE KALTURNYK'S AND KAILI BROWN'S HELP WAS ESSENTIAL IN FINAL STAGES. MATTHEWS' WINTER IS WHEN SNAKES, A SETTING OF A POEM BY DENNIS COOLEY, WAS PERFORMED BY SARAH KIRSCH, SOPRANO: BRONWEN GARAND-SHERIDAN, OBOE: DEENA GRIER, PIANO: AND EDVANY KLEBIA SILVA, CELLO, FESTINGER'S SPRING ICE, A SETTING OF POEMS BY 12TH CENTURY IAPANESE PRINCESS SHIKISHI AND SAIGYO HOSHI. AND THE AMERICAN A. R. AMMONS, WAS PERFORMED BY SARAH KIRSCH, SOPRANO, AND OLEG POKHANOVSKI, VIOLIN

COLLEEN S. L. MERCER CLARKE, M.SC., M.L.A., PH.D., APALA, FCSLA

RISING WATER: THE CLEAR AND PRESENT DANGER OF CLIMATE CHANGE



PHOTO 1 IOHN DAVID CLARKE

Newfoundland

E. J. Pratt

Here the tides flow, And here they ebb; Not with that dull, unsinewed tread of waters Held under bonds to move Around unpeopled shores-Moon-driven through a timeless circuit Of invasion and retreat; But with a lusty stroke of life Pounding at stubborn gates, That they might run Within the sluices of men's hearts, Leap under throb of pulse and nerve, And teach the sea's strong voice To learn the harmonies of new floods,

> ...EXCERPTED FROM E. J. PRATT, "NEWFOUNDLAND." FROM NEWFOUNDLAND VERSE | 1923.

FR CRUE DES EAUX : LA MENACE IMMINENTE DU CHANGEMENT CLIMATIQUE

LE PROJET CANADA-CARAÏBES C-Change de l'ARUC-I est une collaboration entre universitaires et dirigeants communautaires pour parer aux catastrophes : renforcement de la compréhension locale des impacts probables, préparation à faire face à ces défis et capacité à répondre aux catastrophes environnementales. Quatre universités canadiennes et une dans les Caraïbes ont délégué des chercheurs et des étudiants diplômés. C-Change est aussi un partenariat avec huit localités côtières du Canada et des Caraïbes.

THE WORLD'S CLIMATE is changing. The trends have become undeniable, as coastal areas experience sea-level rise, severe weather and mounting storm surges. These coastal communities are already home to more than half of the world's people and populations are rising, building the demand for coastal ecosystem services and increasing human impacts on the supporting marine environment.

In Canada, fresh and salt waters pound against 241,000 kilometres of populated and urban shores, yet we are widely complacent over conditions on our coasts. The demand for oil and gas and other extractive resources continues to grow, and our wild shores are not so very wild anymore. Scientists attempting to understand the changes are challenged by declining support: available data is often old and geographically fragmented, and there are vast areas of the Canadian coast about which little or nothing is known. Despite passionate efforts to sustainably manage fisheries, to reduce pollution and to better conserve marine areas, conditions in most of the world's coasts are deteriorating, often dramatically.

"What we once thought MIGHT happen, we now know WILL happen."

...COMMUNITY LEADER FROM ISLE MADAME, NOVA SCOTIA

Into this scenario comes climate change. Rising global temperatures are melting polar ice and permafrost, contributing to the thermal expansion of seawater and raising the mean level of the sea. Increasingly severe storms are raising flood levels and driving water further across the landscape, causing short and long-term damage to habitats, homes and livelihoods.

PREPARING FOR CHANGE

Four short years ago, I became part of a multinational research team working to assist coastal communities with proactive planning for climate change: the Canada-Caribbean ICURA C-Change project. Funded by the Canadian Social Sciences and Humanities Research Council (SSHRC) and the International Development Research Centre (IDRC), C-Change is a collaboration of academics and community leaders striving for preparedness: building local understanding of likely impacts, readiness to face those challenges, and capacity to respond to environmental disasters. Four universities in Canada (University of British Columbia, University of Ottawa, University of New Brunswick and Memorial University of Newfoundland) and one in the Caribbean (University of West Indies in St. Augustine, Trinidad and Tobago) have contributed research scientists and graduate students to this interdisciplinary collegium whose expertise spans the often diverse fields of social science, economics, management science, engineering, geoscience, geomatics, planning and landscape architecture.

The C-Change project also partners with eight coastal communities scattered throughout Canada and the Caribbean, where Canadians have for centuries shared resources and cultures. C-Change twinned the low-lying cities of Georgetown (Guyana) with Charlottetown; the geographically remote communities of San Pedro (Ambergris Caye,

Belize) with Iqaluit; the eco-touristic, resort/retirement communities of Grande Rivière (Trinidad and Tobago) with Gibsons (BC); and the small island communities of Bequia (St. Vincent and the Grenadines) with Isle Madame (Cape Breton, NS). Each community is represented by local politicians, municipal staff, business people, conservationists, communicators and/or educators.

PLANNING FOR RESILIENCE

In every community, the fundamental first step in planning for resilience to climate change involves profiling the hazards, vulnerabilities and risks to local areas, but C-Change teams also document local values and priorities and evaluate available knowledge. They provide direct support for local compilation of information on storm events and on real-time impacts to coastal environments and infrastructure; they generate new knowledge on potential flooding from sea level rise and storm surges, and they offer advice to help townspeople adjust existing planning and decision-making tools. Working collaboratively, the teams identify, evaluate, and promote options to mitigate risk, integrating uncertainty in policy and planning, and cultivating resilience in both natural and built systems.

Since the launch of C-Change, severe weather events have become more frequent, and communities have come to better understand the projected impacts of climate change. As a result, local perspectives on the relevance of planning for climate change have considerably altered. A community leader from Isle Madame put it well: "What we once thought *might* happen, we now know will happen."

The products of the research have been applied locally in waterfront development and sustainability plans, in municipal plan revisions, and in the development of new criteria in aid of development decision-making. In Isle Madame, for example, teams have worked with the County government, local development association, fish plant operators and public educators. Currently, increasingly severe storms have flooded the crab processing plant and cut off access to the tiny village of Little Anse. C-Change has worked with the community to document the scope and extent of projected sea level rise, storm surges and flood levels, to identify the options for remedial action (protect, accommodate, retreat), and to model and assess impacts to the local wastewater collection and treatment system. One of our graduate students has also developed a mobile phone application that can readily communicate to neighbours and authorities the changing condition of elderly residents (OK, threatened, in need of assistance).

C-Change has recently launched C-PAC³ (a community of practice on adaptation to coastal climate change) to improve interactions among communities. C-PAC³ members are sharing knowledge and experience, and developing friendships that transcend disciplinary and geographic boundaries. Anticipating their differences, they have been surprised not by the issues that are unique to their communities (such as permafrost!), but by the scope and breath of the shared challenges.

WELL BEYOND THE COASTS

The extreme weather patterns of the past year have contributed to C-Change's growing understanding that coastal communities are not alone in facing higher, more turbulent waters. In November, Superstorm Sandy wreaked havoc throughout the Caribbean and along the eastern coast and inland areas of the United States. On June 20, Calgary was hit with yet another perfect storm. Upriver rainfalls of 300mm over four days gave rise to roaring, flooding rivers in Calgary and other downstream communities, resulting in widespread and catastrophic flooding, erosion and the deposition of a 300mm layer of silt throughout downtown urban parks. Two weeks later, parts of Toronto were hit by a rainstorm that dropped as much as 90mm of rain in four hours. Flooding was immediate, affecting transportation systems, power and water supplies and devastating home owners.

Inland communities, like coastal ones, are recognizing the role of uncertainty over environmental change, and the need for insightful policy and planning. Anne Charlton, Director of Parks, City of Calgary (July 2013), was clear in her assessment of the challenge facing their parks after this year's floods. "The word 'resilience' has rarely been used in public meetings around park design but going forward, it will be as commonplace as the terms 'ecological' or 'design intent,'" she said. "Nature fared better than our built park infrastructure for the most part – our challenge is to learn those lessons and apply them in the rebuild."

CLEAR AND PRESENT DANGER

Because C-Change focuses, above all, on cultivating resilience, our work demands as much from my landscape architectural training as it does from my skills in marine ecology, coastal governance and interdisciplinary studies. Ironically, to some in our profession, I can be seen as working on the fringes of landscape architecture. I heartily disagree. Climate change will challenge every facet of our society, demanding new knowledge, intuitive planning and insightful design. It will exhaust our current ability to sustainably meld the built environment with the natural environment. Whether you work in private practice, in government, or in academia, all landscape architects in Canada should already have an understanding of the impending changes that will be faced by their community and their environment. Every student of landscape architecture should be preparing themselves for the clear and present dangers of today, as well as for the challenges emerging in a fast approaching future.

C-Change website: www.coastalchange.ca Facebook: www.facebook.com/coastalchange mercerclarke@rogers.com

2 THE C-CHANGE TEAM 3 GRANDE RIVIÈRE (TRINIDAD + TOBAGO) 4 NORTHERN SEA STAR 5 CRAB PLANT IN ISLE MADAME, NS 6 BOW RIVER EROSION (CALGARY) | 2 L'ÉQUIPE DE C-CHANGE 3 GRANDE RIVIÈRE (TRINIDAD + TOBAGO) 4 ÉTOILE DE MER NORDIQUE 5 USINE DE TRANSFORMATION DU CRABE À ISLE-MADAME, NS 6 ÉROSION DE LA RIVIÈRE BOW (CALGARY) PHOTOS 1, 2+4 JOHN DAVID CLARKE 3 M. SUTHERLAND 5 COLLEEN MERCER CLARKE 6 ANNE CHARLTON



3 4 5 6

NICOLE TADDUNE, BCSLA

POINT GREY:STORMWATER AMBASSADOR

FR_

POINT GREY: AMBASSADEUR DES EAUX PLUVIALES

L'EAU DÉFINIT L'ESSENCE de l'UBC, mais dans le passé, les eaux pluviales ont été considérées comme une nuisance. Maintenant, on les voit plutôt comme une ressource. PFS Studio a travaillé avec le département de planification de l'UBC sur plusieurs projets du domaine public destinés à encadrer la gestion des eaux pluviales. Ces environnements abordent les questions pratiques, mais ils sont aussi des lieux d'engagement social où l'eau renforce l'identité unique de l'UBC.

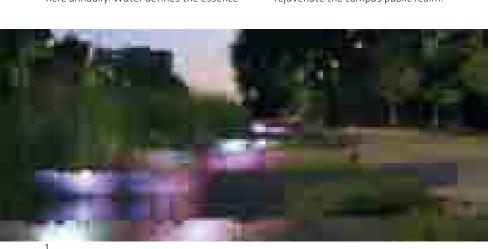
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FROM ITS PERCHED location on a peninsula with expansive views of the Strait of Georgia and Howe Sound, the University of British Columbia's Point Grey campus has always had a strong connection to water. The campus geography and the stunning vistas are only part of the campus' water-rich identity. Over five billion litres of rainfall fall here annually. Water defines the essence

of UBC, and it is now also unifying its public realm, and in the process, helping build the strong sense of place essential to a major educational institution.

Historically, UBC has managed stormwater through its system of underground pipes, catch basins, surface ditches and swales that ultimately discharge into the Fraser River and the Strait of Georgia. For the last 15 years, the University has integrated more innovative stormwater management into campus planning and design. Until recently, however, UBC lacked a formal plan. Now, an "Integrated Stormwater Management Plan" (ISMP) is nearing completion.

Technical studies have identified key concerns relating to flooding (existing drainage systems would likely be insufficient to handle a major storm), spillovers onto neighboring lands (including erosion on nearby cliffs), and general drainage problems stemming from unique soil and geological conditions. UBC intends to address these issues as part of a \$46 million dollar plan to rejuvenate the campus public realm.





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FLIMINATION OR CELEBRATION?

In the past, stormwater was considered a nuisance to be eliminated as quickly as possible. Now, it is seen, instead, as a resource to be utilized and celebrated. Over the last decade PFS Studio has worked with UBC's Campus + Community Planning Department on several public realm projects that frame and formalize stormwater processes. These campus environments address the practical issues, but they are also socially engaging places where water reinforces UBC's unique identity.

PLACES OF RITUAL AND COMMUNITY: UNIVERSITY BOULEVARD TERRACES

University Boulevard is a primary campus gateway. Here, on an area that was once a parking lot, grand stepped pools of water, weirs and grasses introduce the contrasting typologies of campus. The landscape is at once formal and wild; the terraced "wetland" embodies both the beaux-arts structure of campus and the natural environment of shore. cliff and forest that surrounds it.

The terraces are edged with seating and framed by pathways that lead into the academic heart of campus. The terraces culminate with a large wooden stage, where students gather to socialize or sunbathe, study or contemplate.

Despite the dramatic sweep of terraces, grasses and social places, this is, in essence, a pragmatic stormwater feature with the terraces serving important ecological functions. Run-off collected from Main Mall, a linear high point, feeds the terraces and trickles over weirs before reaching the cistern below, where water is stored and ultimately recirculated back through the system. An undulating swath of grasses serves to cleanse the water while providing a cultural

acknowledgement of the Musqueam people, "People of the River Grass": the university sits on their un-ceded territory.

MODERNIST EXPRESSION: **BUCHANAN COURTYARDS**

Water lies at the heart of the Buchanan Courtyards revitalization, where the redesign of two forgotten courtyards offers a new interpretation of Modernism, which respects the original modernist context of the Buchanan Complex. Home to the Faculty of Arts, the Courtyards also serve as a venue for artistic expression and, through innovative stormwater management, showcase the University's commitment to sustainability.

The two courtyards are unified by water yet contrast in form and function. The defining element of the West Courtyard is the folded, open-air pavilion that sits on a stage within a simple rectilinear pool. The pool, which replaces an historic reflecting pool, now functions as the collection area for surface and pavilion runoff. Quotations are typeset in radiating rings within the pool. When water levels drop, the words themselves are the focal point: a visual expression of The Arts at UBC. Here, stormwater becomes an integral part of a compelling composition - pavilion, stage, pool - that is at once a focal point and avenue for artistic events.

1+2 +5+7 (NEXT PAGE) UNIVERSITY BOULEVARD TERRACES IMAGES TAKEN AT SEVERAL HOURS OF THE DAY 3 UNIVERSITY BOULEVARD TERRACES 3-D MODE 4 EAST BUCHANAN COURTYARD 6 (NEXT PAGE) WEST BUCHANAN COURTYARD | 1+2 +5+7 (PAGE **SUIVANTE)** LA TERRASSE CENTRALE À DIVERSES HEURES DE LA JOURNÉE 3 MAQUETTE DES TERRASSES SUD-OUEST 4 L'EST DU JARDIN BUCHANAN 6 (PAGE SUIVANTE) L'OUEST DU JARDIN BUCHANAN

PHOTOS 1+2 +5 +7 KRISTA IAHNKE 3 PES STUDIO 4 PES STUDIO 6 @NIC LEHOUX FOR PFS STUDIO. CREDIT FOR PAVILION DESIGN AND GRAPHIC TYPE IN THE POOL - PUBLIC ARCHITECTURE + COMMUNICATION





4.5





While the West Courtyard is a more formal place of gathering and celebration, the East Courtyard offers opportunities for contemplation and relaxation in a more serene setting. Overflow from the pool runs into the East Courtyard where it flows through an ephemeral, naturalized rain garden. In this recycling system, wetland vegetation filters the water; subsurface pipes carry it to a large cistern under the pavilion, and finally, it is used to recharge the reflecting pool and irrigate the surrounding landscape.

HIGHLIGHTING NATURAL PROCESS: FAIRVIEW COMMONS

Fittingly, the new social heart or "centre of gravity" for The Sciences at UBC makes the natural system itself its focal point. At Fairview Commons, the intent is not to hide stormwater off-to-the side or down below, but rather to highlight it in a central location

Framed by three public museums, the Commons is designed as a stepped plaza facing a large green commons. Stormwater is a key element of the design. Run-off from the plaza and an adjacent building canopy is directed into a rectilinear planted channel which runs centrally through the lower plaza. The overflow feeds a densely planted bioremediation pond, which eventually becomes a cascading waterfall that ties into an adjacent campus demonstration project, Sustainability Street. (See "On Sustainability Street," by Jeff Cutler, LP Spring 2010.)

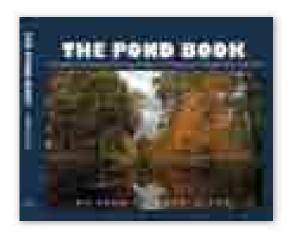
The channel and pond illustrate ecology-in-action. Anyone using the plaza can't help but appreciate the natural system flowing through the site.

The use of water to create mesmerizing and engaging focal points is not new, but at UBC today, stormwater that might have otherwise gone unnoticed or unused has become an invaluable resource. By using stormwater as a primary water source, designers have created public spaces that function as ambassadors of sustainability and resource management. Taken together, these beautiful landscapes shape a uniquely interesting campus character.

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READ BY DAN GLENN

THE POND BOOK



Book info:

The Pond Book
A Complete Guide to
Site Planning, Design, and
Management of Small Lakes
and Ponds
By John Stephen Hicks
Fitzhenry & Whiteside,
Markham, Ontario and Brighten,
Massachusetts, 2013.
\$34.95. 216 pages. 8.5x10
(Paperback)
ISBN: 978-1-55455-160-6

"WATER IS A GOOD servant, but it is a cruel master," wrote John Bullein in 1562. If you manage your own pond, you already understand why this rings true, and why the OALA's John Stephen Hicks produced The Pond Book. Hicks aims to demystify the pond in this "How To" manual of rural pond and small lake design, construction and management. As he says in the book, "A successful pond is not simply a hole dug out in a wet area and filled with water. The resulting body, if permanent, will become a complex biological and zoological system that ultimately forms part of the surrounding watershed."

John Stephen Hicks was hooked on ponds early in life. "We called the pond 'the greenie,' and it was there that my passion for the environment grew and my journey toward an outdoor profession commenced," he writes. In fact, he spent most of his career in the Ontario Provincial Parks system working as a landscape architect. He is an advocate of environmental stewardship; it is clear that this book is a comprehensive collection of his extensive research on shoreline restoration, the creation of wildlife habitat, and pond management techniques.

The book covers the complete ecosystem, including the plants, fish and wildlife of the old swimming hole. Ample photographs and diagrams clearly illustrate how to site, construct and manage most facets of ponds

from dams and spillways to aquatic-plant and algae control. "To alter the progression from 'swimming hole' to 'swamp' for instance, proper watershed and pond management must be undertaken," he warns.

One caveat: if you are looking to design displays or pondless waterfall features, which have become popular either on their own or in combination with an urban swimming pool or stormwater retention system, additional sources of information will have to be sought out. The book does not cover commercial mechanical systems for water filtration such as skimmers or ion-gen treatment for algae management. Lighting is a magical element in and around ponds and this subject is not broached in the book.

Nonetheless, *The Pond Book* will help you make sound technical decisions in the complicated field of pond ecosystems, everything from which plants to use to what species of fish to stock the pond. As Hicks says, "Ponds are hard work. They do not flourish on their own. The wise property owner manages his or her pond for maximum enjoyment and pleasure." I couldn't agree more.

DAN GLENN, FCSLA, is a self-confessed pond slave. The tale of the construction of his own backyard pond ("The Little Dig", LP Winter 2012) is well worth a re-read! We guarantee a laugh – and perhaps, a smile of recognition.

dkg@glenngroup.ca









4 YELLOWKNIFE HARBOR PLAN

1 JEFFREY HUMBLE 2 DONNA HINDE

JEAN TROTTIER SPEAKS WITH | PARLE AVEC DONNA HINDE + JEFFREY HUMBLE

TO THE EDGE OF THE ICE

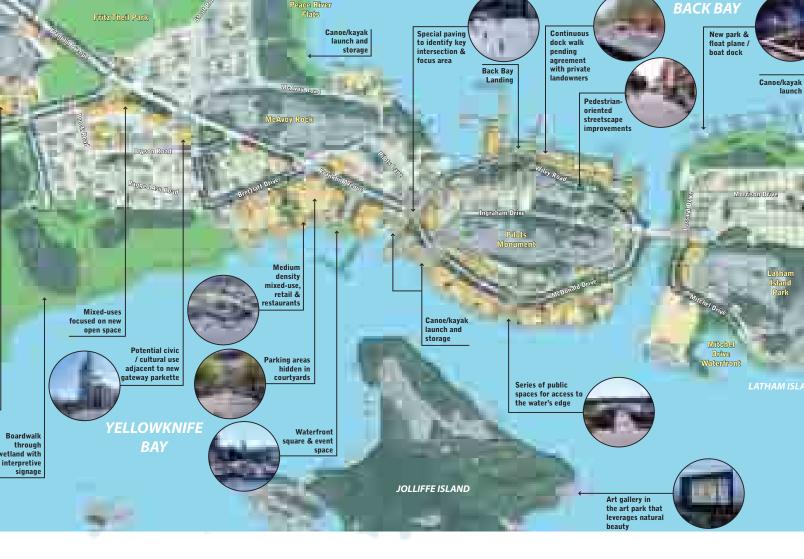


3 JEAN TROTTIER

À LA LIMITE DES GLACES www.csla.ca

LE PLAN DU port de Yellowknife a récemment reçu la plus haute distinction de l'AAPC : un prix Honneur national. Jeffrey Humble (JH) de la municipalité de Yellowknife et Donna Hinde (DH) de The Planning Partnership décrivent l'évolution du projet à Jean Trottier (JT), nouveau président du le comité de rédaction de l'AAPC.

THE YELLOWKNIFE HARBOUR Plan recently received the CSLA's highest recognition: a National Honour Award. Jeffrey Humble (JH) of the City of Yellowknife and Donna Hinde (DH) of The Planning Partnership tell Jean Trottier (JT), the new Chair of CSLA's Editorial Board, how the project evolved.



JT: First, congratulations to both of you for earning a CSLA National Honour award.

JH: Well, it demonstrates the merit of the consulting team we brought up from down south, which we sometimes get criticized for! This plan is very high calibre and getting that recognition really helps gather additional support for implementation. Hopefully we'll see continued capital funding support and make some significant headway on jurisdictional issues. If we achieve those two things, this plan will have done more than we envisioned when we undertook it seven years ago.

JT: Donna, what's a "down south" firm's take on this?

DH: Jeff really underestimates the role of his staff at the City of Yellowknife. Our role was to put in place a framework and then leave the details of implementation to people like Jeff who live and work there, and to draw on people that make Yellowknife their base of professional practice to develop it.

JT: You both described this project as one of the most challenging in your respective careers...

DH: We do waterfront projects all over Canada. But this one, because of the various administrative jurisdictions, the float planes, the float

home community, the informal complexes of houses at the water's edge, the First Nations, the ice roads, the snowmobile trails...we knew it was going to be complex from the beginning but it became more complex as it went along. Halfway through we realized we had to pause and reach out through more collaboration with the Yellowknife community. And that's when we did the series of 11 focus group conversations to make sure that we were on the right track.

JH: We're also dealing with many federal departments such as Fisheries and Oceans, Transport Canada, Environment Canada, Aboriginal Affairs, and so on. The devolution [of some federal powers to the Northwest Territories in April 2014] will really help the city deal directly with issues associated with lakebed and water uses.

JT: You're referring to float homes and informal settlements in Yellowknife?

JH: It's still a bit of a pioneer Wild West out here and that's what makes it an interesting place. There is a history of houseboat communities, which have strong supporters. So we took a really collaborative approach towards a long-term solution.

DH: For us, from Southern Ontario, our initial reaction was probably too heavy-handed. We could not understand why people are allowed to build houses on land they didn't own; couldn't understand why

Halfway through we realized we had to pause and reach out... À mi-chemin, nous avons réalisé que nous devions les impliquer davantage...

people could live in float homes and not have to pay anything to the municipality. We were quickly reigned in. Like Jeff said, it's one of the iconic images of Yellowknife: the people on their houseboats. We tried to figure out how to move Yellowknife gradually to a different condition – a longer term plan to have a permanent floathome community with services and amenities.

With respect to the [informal settlement of] Woodyard, the challenge was that everybody else in Yellowknife felt like they didn't have the same access to the publicly-owned waterfront land. When public land is not occupied, people start using it informally, for storing their own stuff, parking, or repairing boats, or building their own docks, whatever. It's a very blurred line of public versus private. We heard clearly and overwhelmingly that the people of Yellowknife want access to the water's edge. So our job was very much trying to figure out how to balance everybody's access to that resource.

JT: Where do the Dene First Nation, the Yellowknives, fit into this?

JH: Because land claims remain unresolved, it was very difficult, both for the city and the First Nation, to target uses for specific parcels. Jolliffe Island was something that both the city and the Yellowknives had an interest in, and the vision is to maintain it as a park and eventually develop some traditional artist space that could be worked on collaboratively. That really set the tone for our relationship. The Yellowknives also maintain a very strong interest for the east side of the Harbour.

DH: We didn't isolate the Yellowknives Dene as a specific user, just like we didn't isolate any other residents of Yellowknife. In Yellowknife, there are First Nations people that live all throughout the city, so we treated the city as one community. We did spend a lot of time talking to the elders. One of the chiefs laid out for us a topographic map that filled the whole floor of the recreation

centre. And on it he had marked trails, and communities, and burial grounds, and hunting grounds. It was completely overwhelming to see the scale of this map and the effort that went into mapping all of the features that were special to their community.

JH: Claims have so far really been a land-based exercise. But for the Yellowknives, the Bay has always been a natural resource for fishing and hunting, so the plan really helped them frame the water issues as part of the negotiations. Part of that involves consideration for the municipal boundary, which cuts through the Bay, as well as for establishing water lots on the eastern shoreline which, if the boundary does get revised, would be within their jurisdiction.

JT: Traditionally, planning does deal primarily with land uses, not water uses. Did this plan require a shift in thinking?

JH: The biggest issue for us is jurisdictional. There's just so much more uncertainty when you're dealing with water than when you're dealing with land. It's more intangible, I guess. It's not just water. It's ice in the winter. We had to look at how it changes throughout the seasons.

JT: You suggested that one way of dealing with float homes is to apply municipal by-laws to water lots. But even in that case, I understand that you're looking at tying the water lots to a section of shoreline?

JH: Yes. Donna's team looked at communities across Canada that have established water lots. For us I think it was about finding out how to establish legislative support for municipal government. We're looking at formalizing houseboats communities around Joliffe and Brodie Islands as a long-term strategy, with some degree of infrastructure cost-recovery arrangements.



1 AURORA. PHOTO RHONDA KENNEDY



2 HOUSEBOAT COMMUNITIES ARE PART OF THE CITY'S HISTORY. PHOTO SERGIO GAUSTEIN



3 SKIER ON YELLOWKNIFE BAY. PHOTO PAT KANE

JT: You mentioned the iconic quality of float homes and other informal settlements. The plan recommends adopting form-based zoning for Old Town. Isn't there a risk of stifling the kind of organic process that created the Old Town's character in the first place?

DH: A form-based approach is well suited for a complex and mixed-use urban environment such as Old Town because it shifts the emphasis away from trying to regulate uses, and focuses more on codifying what is most important to reinforcing the area's distinct character – namely the scale, placement and forms or types of buildings. A great deal of flexibility with respect to uses, architectural styles and other qualities should be permitted within these envelopes and they should even be allowed to evolve over time without having to amend the regulations. The process would begin with a workshop with the people that live in Old Town so that whatever we put in place would be very much grounded in what people treasure most about Old Town and what they would like to see change in the neighborhood. There are so many examples of outstanding architecture in Old Town. There's no shortage of great talent there. Guidelines could make sure that there continues to be an eclectic mix.

JH: The idea of the form-based zoning is in the spirit of what we have: balancing some of the modern architecture with heritage preservation. There's really a rich, rich heritage in the Old Town area that dates back to the mining activity in Yellowknife and the two major mines that we still have within municipal boundaries.

JT: Jeff, what's that Yellowknife spirit for you?

JH: Well, we are at the end of the road. We're in a fairly remote capital city; a lot of people flying in. It's rapidly changing, with all the mining activity and so on, but still it is very much about that pioneering spirit, that wilderness aspect. It's the float planes, the people boating, the fishing, the dramatic changes from summer to winter, with the sunlight and the darkness and all that stuff.

JT: Donna?

DH: Being out in the harbour and going way out in the bay to the edge of the ice. There were so many memorable moments: the drum dance, I had never experienced a drum dance...having the elders speak to us when, as a team, we figured out how to simplify the complexity in the seven frameworks...our focus group sessions... Every time I'd think there was nothing new we could learn it would come from the least expected people and situations.

DONNA HINDE, BES, MLA, FCSLA, is a partner with The Planning Partnership who has facilitated hundreds of public consultation programs and now regularly provides expertise in public consultation and mediation to other firms. She has taught at the University of Toronto and University of Guelph, is a certified charrette planner and a past president of OALA.

JEFFREY HUMBLE is Director of Planning and Development at City of Yellowknife. He is a member of the Canadian Institute of planners and a registered professional planner.





4 VIEW ALONG THE WATER'S EDGE OF THE INFORMAL SETTLEMENT KNOWN AS THE WOODYARD 5 POSSIBILITIES FOR A FUTURE WOODYARD DOCK WALK ACCESSIBLE TO EVERYONE | 4 VUE, LE LONG DU LITTORAL, DU HAMEAU INFORMEL DE WOODYARD 5 UN CONCEPT ENVISAGEABLE POUR UNE PROMENADE À WOODYARD ACCESSIBLE À TOUS.

PHOTOS THE PLANNING PARTNERSHIP, DONNA HINDE

Jean Trottier: jean.trottier@umanitoba.ca
Donna Hinde: dhinde@planpart.ca
Jeffrey Humble: jhumble@yellowknife.ca



6 TO THE EDGE OF THE ICE | À LA LIMITE DES GLACES. PHOTO THE PLANNING PARTNERSHIP

RON WILLIAMS, AAPQ, FCSLA

WESTERN RIVER PARKS

FR_ ÉTAT DES LIEUX LES PARCS RIVERAINS DE L'OUEST CANADIEN

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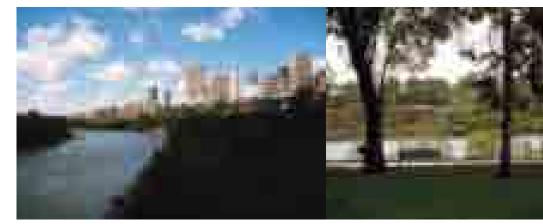
THE SUDDEN AND catastrophic floods that devastated Western Canadian towns and cities in June underline the importance of the riverside park to such cities as Edmonton, Calgary, Lethbridge and Saskatoon. These parks are so central to the identity of their host cities that we may imagine they had always been there. But that is not the case. They were, in fact, created gradually over many decades

The topography of the Prairies is often "negative," characterized by valleys recessed into the broad horizontal plains and enclosed by steep, forested slopes that often harbour the only native trees in an open and relatively arid landscape. Great rivers – the Saskatchewan, the Assiniboine and the Qu'Appelle – proceed majestically along the floors of these coulees. Historically, they provided a water supply and means of transportation that caused major western cities and towns to be built astride them.

EDMONTON'S RIVER VALLEY PARK SYSTEM

As the new cities developed, the valley floors and slopes were often left, by default, as undeveloped open spaces, but their potential urban value was soon identified. In 1907, Canada's outstanding landscape architect, Frederick Todd, sketched out the first draft of a splendid network of river parks in Edmonton: a network of greenways based on the majestic North Saskatchewan River and its tributary streams and ravines, reinforced by continuous parkways at plateau level along the escarpments of the great valley.

The city indeed purchased lands along the river, but it did not adopt a systematic program of land acquisition, until the day in 1915 when the worst flood in the city's history destroyed a great number of industries built in





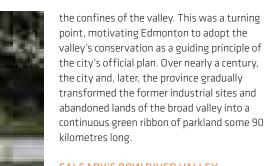


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1EDMONTON 2 SASKATOON - MEEWASIN TRAIL + SOUTH SASKATCHEWAN RIVER 3 CALGARY RIVER PATH 4 SASKATOON MEEWASIN VALLEY 5 LETHBRIDGE VALLEY PARK 6 BATOUCHE, SOUTH SASKATCHEWAN RIVER | 1EDMONTON 2 SASKATOON: LE SENTIER MEEWASIN ET LA RIVIÈRE SASKATCHEWAN SUD 3 LE SENTIER DE LA RIVIÈRE À CALGARY 4 LA VALLÉE DE MEEWASIN À SASKATOON 5 LE PARC DE LA VALLÉE DE LETHBRIDGE 6 BATOUCHE, RIVIÈRE SASKATCHEWAN SUD. PHOTOS RONALD WILLIAMS

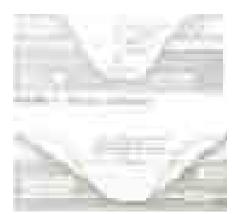
The sudden and catastrophic floods that devastated Western Canadian towns and cities in June underline the importance of the riverside park.

Les inondations soudaines et catastrophiques qui ont dévasté les villes de l'Ouest canadien en juin dernier rappellent l'importance des parcs riverains.



CALGARY'S BOW RIVER VALLEY

Further south, in Calgary, another visionary provided a similar élan to the creation of a river park system. As soon as he moved to the city in 1884, William Pearce, inspector of federal lands, reserved several wooded islands in the Bow River as sites for future parks, adding a strip of land along the river's north side for a future parkway between the riverbank and a steep slope that parallels it. Other elements of Pearce's vision were incorporated into the elaborate and indeed spectacular city plan prepared by visiting British town planner and landscape architect Thomas Mawson in 1913. Long-term proposals were, however, put on the shelf. Until the 1950s, downtown Calgary turned its back on the Bow, partly due to repeated instances of flooding. The Calgary Local Council of Women and other civic groups promoted the idea of a continuous park system along the river. Finally, following the city's rejection of a proposal to relocate a new cross-town railway and expressway along the south side of the river (thus precluding the creation of new parks), Calgary began to realize this goal. In 1966, it created new parks along the river's southern margin, combined with high-density residential development between the river and the downtown. In 1968, it transformed Prince's Island, a long-time industrial site, into a green oasis just minutes from downtown skyscrapers (planned by landscape architecture firm Man, Taylor and Muret); and since then, it has "greened" the river banks (and built trails and bikeways) along the Bow River and its tributaries.



7 WESTERN RIVER CROSS-SECTION, BY GARRY HILDERMAN 17 VUE EN COUPE D'UNE RIVIÈRE DE L'OUEST PAR GARRY HILDERMAN

ALONG THE SOUTH SASKATCHEWAN

A similar pattern informed the development of many Western cities. Below the mile-long High Level Bridge in Lethbridge, a broad greenway traverses the city along the Oldman River, which later joins the Bow to form the South Saskatchewan River. This majestic waterway proceeds eastward through Medicine Hat, where the civic centre looks down on the river below from a lofty river terrace: the river then crosses into Saskatchewan and turns northeastward through Saskatoon. Here, the river's steep banks were preserved more or less by default, though denuded of much of their original vegetation. Some riverside lands had become "an unsightly dump" by the late 1920s. In response, a town planning report developed in 1929-30 by Toronto city planning and landscape architectural firm Wilson, Bunnell and Borgstrom proposed a series of riverbank parks and boulevards. This gradually came to fruition over the next halfcentury. Environmental studies commissioned by all levels of government culminated in 1978 in a landmark "100-Year Conceptual Plan" by Toronto architectural and planning firm Moriyama and Teshima. This resulted in the Meewasin Valley Project, inspired by the Cree word meaning "beautiful": a series of parks linked together by the 40-km Meewasin Valley Trail.

HISTORIC LEGACY

These riverside park systems are not only treasured metropolitan resources; they have also served as effective flood-control measures. But times are changing. Calgary experienced severe flooding with extensive damage in 2005, then truly devastating floods last June. In retrospect, the relatively infrequent flooding during the second half of the twentieth century reflected not just good water management, but also a lucky run of good weather.

The current problems seem to be occurring at a whole new scale, and to be caused by new phenomena. According to the Edmonton Journal, meteorologists blamed "a massive high pressure system [that was] held in place by a loop in the jet stream." This, they attributed to hemisphere-scale events, including the long-term warming of the Arctic Ocean and the melting of Arctic sea ice. In some areas west of Calgary, spring storms dumped as much rain in 18 hours as would normally fall in two months and in other areas, nearly half the annual precipitation. All this rain - and augmented snowmelt water - wanted to get through central Calgary via the Bow River and its tributary the Elbow. This multiplied normal volumes of flow by a totally unprecedented factor of 6 to 10. Since such dramatic changes are likely to continue, entirely new strategies of landscape design and management will be required, including extended river park systems, zoning changes, dams and reservoirs for water retention, diversion or floodway systems, and channel improvement. To balance these new strategies, we landscape architects will have to expand our reach into whole new disciplines. We don't want the river parks to sacrifice their esthetic and recreational qualities in the quest for security from flooding.

ron@williams-ala.com References: www.csla.ca/LP



CONGRESS HIGHLIGHTS FAITS SAILLANTS DU CONGRÈS

FR_ L'AAPC CONCLUE UNE ENTENTE HISTORIQUE

L'ADHÉSION PROFESSIONNELLE RECONNUE D'UNE PROVINCE À L'AUTRE

Le 13 juillet 2013, huit associations d'architecture de paysage provinciales ont signé un accord historique précisant les conditions selon lesquelles un architecte paysagiste qui est membre à part entière d'une juridiction canadienne (qu'elle soit ou non réglementée) pourra obtenir une reconnaissance de son adhésion professionnelle dans une autre juridiction. Cet accord de réciprocité, signé à Régina lors de notre dernier Congrès annuel, était une priorité de l'AAPC depuis 1979. L'entente a enfin été conclue suite à trois années de travail acharné de la part de bénévoles, qui en ont élaboré et négocié les clauses avec huit des neuf associations provinciales canadiennes.

http://www.aapc-csla.ca/resources/accord-de-r-ciprocit

LA CÉRÉMONIE D'INVESTITURE À RÉGINA

L'Ordre des agréés de l'AAPC a organisé sa cérémonie annuelle d'investiture pour introniser huit nouveaux agréés, en conjonction avec le Congrès 2013. Les intronisés, en reconnaissance de leur contribution exceptionnelle et de longue date à la profession, ont été sont Peter Bigelow (APALA), Neil Dawe (NLALA), Jean Landry (AAPQ), Edward (Ted) C. Muller (AALA) et James (Iim) C. Thomas (MALA).

L'élection au titre d'agréé est le plus insigne honneur que l'AAPC/CSLA accorde à ses membres. Les nouveaux agréés suivront la prestigieuse tradition de 179 agréés élus depuis 1964. Les agréés dirigent le Conseil d'agrément en architecture de paysage, établi par l'Ordre en 1986, et la Fondation d'architecture de paysage du Canada, établie en 1987. Ils siègent à des comités d'agrément qui révisent les programmes universitaires et, par le truchement de la Campagne des agréés, ils ont recueilli plus de 320 000 \$ pour le programme de bourses d'études de l'AAPC. Une plaquette de présentation, avec les profils des nouveaux membres, sera publiée sur le site Web de l'AAPC. Investiture Handbook 2013: http://bit.ly/16MySFC

EN_ CSLA BROKERS HISTORIC AGREEMENT

PROFESSIONAL MEMBERSHIP RECOGNIZED ACROSS JURISDICTIONS

ON JULY 13TH, 2013, eight provincial landscape architecture associations signed a historic agreement to establish the conditions under which a landscape architect, who is a full member in one Canadian jurisdiction (either regulated or non-regulated) is able to have his/her professional membership recognized in another Canadian jurisdiction (either regulated or non-regulated). The Reciprocity Agreement, which was signed at the CSLA Congress in Regina, has been a long-term priority of the CSLA since 1979, but over the last three years, determined volunteers drafted and refined agreements with eight of Canada's nine provincial associations.

http://www.csla-aapc.ca/resources/reciprocity

THE FELLOWS IN REGINA

THE CSLA COLLEGE OF FELLOWS hosted its annual investiture ceremony to admit five new Fellows-Elect, in conjunction with the 2013 Congress. Inducted to the College, in recognition of their outstanding contributions to the profession over an extended period of time, were Peter Bigelow (APALA), Neil Dawe (NLALA), Jean Landry (AAPQ), Edward (Ted) C. Muller (AALA) and James (Jim) C. Thomas (MALA). Election to Fellow is the highest honour the CSLA/AAPC bestows on its members. New Fellows will follow in the prestigious tradition of 186 Fellows elected since 1964. The Fellows assist in the operation of the Landscape Architecture Accreditation Council, established by the College in 1987, as well as the Landscape Architecture Canada Foundation (LACF). Since the Campaign of Fellows commenced in 1988, over \$480,000 has been donated to the LACF. These funds are used to promote the ideals of the profession through research and scholarship grants, firmly establishing the Foundation as a significant force in the future of the profession in Canada. A presentation booklet, featuring profiles of the new Fellows, will be placed on the CSLA Web site. (Records are on file for 87 percent of all Fellows.)

Investiture Handbook 2013: http://bit.ly/16MySFC











1 CEREMONIAL SIGNING OF THE RECIPROCITY AGREEMENT 2 CSLA'S NEW PRESIDENT, PETER BRIGGS WITH PAST PRESIDENT CLAUDE POTVIN. 3 E J. (JACK) AND WALKER, RECIPIENT OF CSLA LIFETIME ACHIEVEMENT AWARD 4 LINDA IRVINE, PRESIDENT'S AWARD 5 FELLOWS INDUCTED IN 2013, FROM LTO R: EDWARD C. MULLER, NEIL DAWE, JAMES C. THOMAS AND JEAN LANDRY (MISSING PETER BIGGLOW) 1 LA SIGNATURE HISTORIQUE DE L'ACCORD DE RÉCIPROCITÉ 2 LE NOUVEAU PRÉSIDENT PETER BRIGGS AVEC SON PRÉDÉCESSEUR CLAUDE POTVIN 3 E. J. (JACK) WALKER, RÉCIPIENDAIRE DU PRIX D'EXCELLENCE DE L'AAPC POUR L'ENSEMBLE DE SES RÉALISATIONS 4 LINDA IRVINE, LAURÉATE DU PRIX DU PRÉSIDENT 5 LES AGRÉÉS INTRONISÉS EN 2013. DE GAUCHE À DROITE: EDWARD C. MULLER, NEIL DAWE, JAMES C. THOMAS ET JEAN LANDRY (PETER BIGELOW EST ABSENT DE LA PHOTO). PHOTOS JEAN LANDRY

FOR MORE CONGRESS PHOTOS | POUR D'AUTRES PHOTOS DU CONGRÈS : LP+

http://www.nxtbook.com/naylor/CSLQ/CSLQ0413/index.php

PRESIDENT'S AWARD

The CSLA's 2012–13 President Claude Potvin named Linda Irvine the recipient of the CSLA President's Award to honour her remarkable 20 years of service to the component and national associations, which continued unabated throughout the last year. Most recently, said Potvin, she was key in drafting the reciprocity agreement. "If it were not for her, we would not have achieved consensus among eight out of the nine components," he said, adding that in the process, she increased the level of dialogue between CSLA and its components. Potvin credits her with pointing the way forward: the IFLA 2017 Congress will be held in Montreal in large part due to her work as CSLA President. "I have always admired her thoroughness and her touch of excellence," said Potvin, who said he has known Linda Irvine since their early days in Guelph. "She is one impressive lady: just take a look at her CV!" (See The College of Fellows Investiture Handbook for 2012, when Linda Irvine was inducted to the College.)

http://bit.ly/1955MRz

A LIFETIME OF ACHIEVEMENT

At the CSLA 2013 Congress in Regina last July, E. J. (Jack) Walker was awarded the association's Lifetime Achievement Award. Spurred on by a lifetime passion for horticulture, Jack took degrees from the University of Saskatchewan and the University of California at Berkeley, followed by an MLA from University of Michigan at Ann Arbor. In Canada, he first joined the Plant Research Institute in Ottawa, but by 1966, he had joined the Wascana Centre Authority in Regina, where his influence was legendary. Since 1975, Mr. Walker has been the Principal of Habitat Design Limited. Mr. Walker has served on the Design Advisory Committee of the Meewasin Valley Authority, and as a sessional lecturer in the Department of Horticulture at the University of Saskatchewan. In 2012, he was honoured with SALA's first Lifetime Achievement Award, in recognition of his unique and lasting impact on the profession. Indeed, he was instrumental in establishing SALA over 30 years ago. (See our story in LP Summer, 2012.)

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WATER WORLD | MONDE D'EAU



- 1 RYAN JAMES, OALA, CSLA, is not an avid swimmer. Not a seasoned sailor either. But this is one man that you can lead to water and set him there in a warm, dry spot to drink. He lives near the banks of the Otonabee River in Peterborough, ON. ryan@basterfield.ca
- 2 NATHAN BRIGHTBILL, MLA (University of Washington), CSLA, BCSLA, ASLA, WASLA, is a landscape architect at Phillips Farevaag Smallenberg in Vancouver. Along with projects in British Columbia, Toronto and Washington State, he was project manager for the design guideline phase of the Blatchford redevelopment. www.pfs.bc.ca nbrightbill@pfs.bc.ca
- 3 JEAN LANDRY FCSLA, MBA est un architecte de paysage et un photographe qui, de concert avec Raquel Penalosa et une poignée de volontaires, met de l'avant l'initiative de Charte. Il est architecte paysagiste depuis plus de 30 ans. Il se consacre à la gestion de projets intégrant une participation active de parties prenates. landryjean@videotron.ca
- 4 NICOLE VALOIS est architecte paysagiste et professeure agrégée, École d'architecture de paysage, Université de Montréal, responsable des programmes de baccalauréat et de maîtrise en Architecture de paysage. Nicole.valois@umontreal.ca
- 5 MARK SCHOLLEN, BLArch., OALA, CSLA, ASLA, is Principal of Schollen & Company Inc., an award-winning landscape architectural consulting practice with offices in Toronto, Ontario and Shanghai. Mark has been a Sessional lecturer at U of T since 2000, and he has pioneered a number of Low Impact Development guidelines that set the new standard for sustainable design in Ontario. marks@schollenandcompany.com
- 6 DAN EUSER, President of Dan Euser Waterarchitecture Inc.(DEW), has designed 50 to 100 water features each year since 1997, and planned constructed water feature projects ranging in size from \$10,000 to \$40,000,000. Completed designs and designs under construction include reflecting pools, architectural waterfalls, rain curtains, classical

fountains, animated fountains, fog and steam fountains, ice and winter fountains, children's water play areas, swimming pools, and a variety of other features. dan@dewinc.biz

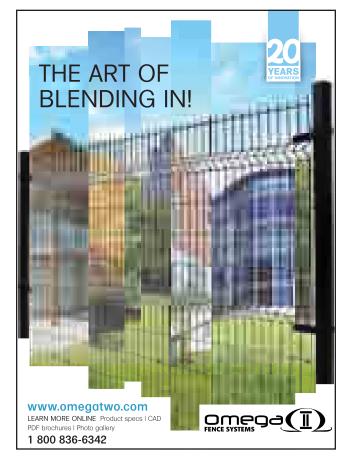
- **7 STEVE EUSER** is a landscape architect working with Dan Euser Waterarchitecture Inc (DEW) on water feature projects. He is an artist (digital media), and has experience on projects located from Toronto to Las Vegas to Bejing. steve@dewinc.biz
- 8 MELANIE GLORIEUX est architecte paysagiste avec une maîtrise en ingénierie. Elle a récemment intégré le Groupe Rousseau Lefebvre en tant que directrice de projets. Porteuse d'une vision de conception intégrée, la diversité des projets d'aménagement auxquels elle a participé l'a amené à développer son intérêt pour la gestion de l'eau dans les projets et du rôle que l'architecte paysagiste doit y prendre pour l'intégrer de manière responsable et novatrice. Elle partage cette vision avec ses collègues, collaborateurs et étudiants. m.glorieux@rousseau-lefebvre.com
- 9 ALISON MADDAUGH is a landscape architect and a lead designer with space2place. Alison has developed a unique understanding of outdoor play environments for children, informed by her academic research and her professional design experience. alison. maddaugh@space2place.ca
- 10 PHIL WYATT brings a fresh perspective to landscape architecture, founded on his experience in a UK-based studio in Public Art and Landscape Design. He is passionate about creating meaningful design within the public realm, and endeavours to protect the integrity of the project vision through to the final stages of implementation. phil.wyatt@space2place.ca
- 11 BRENDA J. BROWN of Brenda Brown Landscape Design Art Research, lives and works in Winnipeg where she is an Assistant Professor at the University of Manitoba. Her research deals with eco-revelatory design, with a particular focus on sound. Recent projects include Spring Ice (Winnipeg, 2010) and, currently, a hummingbird habitat restoration

in Michoacán, Mexico. brenda.brown@ ad.umanitoba.ca brenda@bbldar.com

- 12 NICOLE TADDUNE, CSLA, BCSLA, LEED® AP, is a landscape architect with PFS Studio. For four years, she has been working on the University of Vancouver's Point Grey Campus on public realm projects including the design and management of the new civic heart for UBC's campus. ntaddune@pfs.bc.ca
- **13 JEAN TROTTIER** is Assistant Professor in the Department of Landscape Architecture at the University of Manitoba, where he teaches urban design and history. He currently chairs the Winnipeg Urban Design Advisory Committee and sits on the board of the Council for Canadian Urbanism. jean.trottier@ad.umanitoba.ca
- 14 COLLEEN MERCER CLARKE is a Fellow and a Past President of both APALA and of the CSLA. With graduate degrees in both landscape architecture and marine ecology, Colleen recently completed an interdisciplinary studies doctorate and a post doctorate with the Canadian Healthy Oceans Network. A strong proponent for recognition of the Great Lakes as Canada's fourth coast, Colleen spends her time rattling about between her home in Waterloo, her beloved Newfoundland and on coasts throughout the world. mercerclarke@rogers.com
- 15 RON WILLIAMS, FCSLA, AAPQ, FRAIC, a long-time professor at the École d'architecture de paysage of the Université de Montréal, co-founded WAA (Williams, Asselin, Ackaoui and associates). Ron participated in many of the firm's award-winning projects including the Montreal Beach Park. In 2007, he was honoured with the Lifetime Achievement Award of the CSLA. ron@williams-ala.com
- 16 DOUG CARLYLE, FCSLA, is a landscape architect and principal with the integrated design practice Dialog. He has a passion for cities and the extraordinary experiences the best of them offer. He brings this passion to the design of places from large to small, seeking to assist communities to enhance liveability. dcarlyle@designdialog.ca

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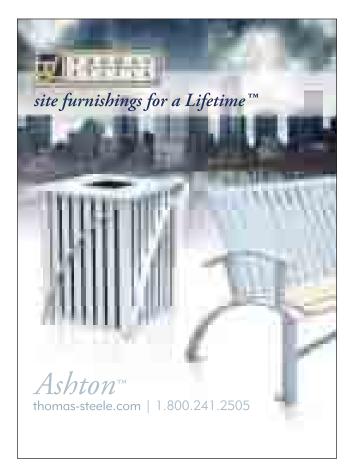
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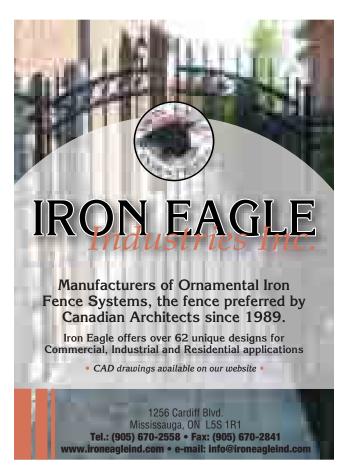


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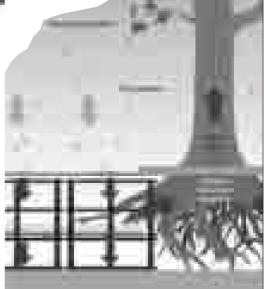


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DESPITE THE CALAMITOUS events this June, Southern Alberta is traditionally a water-sparse region, a landscape that depends on water collected from rain and melting snow. Thus, when Calgary set out to build its Water Centre to house 750 employees of the City of Calgary's Waterworks and Wastewater operation, it envisioned a technical and aesthetic showcase of water efficient site and building design.

The Water Centre has exceeded expectations. The functional and decidedly poetic building and landscape are an eloquent expression of environmental responsibility and of outstanding sustainable design. "Steward," the site's extensive prairie garden, bears testimony to the design philosophy. Doug Carlyle of Dialog collaborated with sculptor Thomas Sayre, to graphically celebrate water and the natural prairie.

The Prairie Garden design emphasizes the collection of rain and snow water beginning at the gestural roof of the building. The water from distinctive rainwater leaders (downspouts) is funnelled to three handcrafted runnels of river rock which also serve as walkways, and thence to a series of wetland swales and cast earth vessels containing vegetation. Eventually, all the water flows to a cistern from which the entire site is irrigated during the arid summer months. Thomas Sayre's multiple earthcast vessels speak to the delicate balance between the natural rhythms of precipitation and the human need to collect, channel and contain water.

The building itself reaches out to the landscape. Because the building has a long east-west orientation, the garden is sheltered from prairie winds and open to the south sun. The prairie aesthetic is expressed in large sweeps and arcing areas within the site. Conventional manicured and irrigated turf lawns are sited in higher traffic areas to complement the more rustic prairie plantings. From the building's terrace, staff

can access a roof garden, which insulates part of the building while contributing to water storage and filtration.

Not only do the building and garden address the City's policy objectives, they also exceed LEED silver standards and reflect the City's commitment to the Melbourne Principles for Sustainable Cities. Nearby, a mixed use neighbourhood is under development on 21 acres (8.5 ha) of former industrial land. As one observer put it, the Water Centre will cease to be a lonely standout in the industrial hinterland, and become a newly thriving part of the city.

For close-up photos of Thomas Sayre's cast earth planters, seating and vessels, see LP+.

1 PANORAMA, FALL 2012, 4TH YEAR AFTER
INSTALLATION: NOTE SAYRE'S EARTHEN VESSELS
EMERGING FROM MATURING GRASSES 2 RUNNELS
FLANKED BY MOWN TURF FORM WALKWAYS |

1 PANORAMA, AUTOMNE 2012, QUATRE ANS APRÈS
L'INSTALLATION: NOTEZ LES JARDINIÈRES EN TERRE
MODELÉES PAR THOMAS SAYRE, QUI ÉMERGENT
DES HERBES HAUTES. 2 DES RIGOLES FLANQUÉS
DE PELOUSES TONDUES FORMENT DES SENTIERS.
PHOTOS 1 DOUGLAS CARLYLE 2 KELSEY FRANK

THE FINISHING TOUCH















And because Umbriano is from Unilock, it features EnduraColor™ Plus – an advanced technology that delivers both superior surface durability and color longevity.

Sometimes bigger is better. Especially when it's Umbriano from Unilock. Available in sizes up to $12'' \times 24''$ ($30 \text{cm} \times 60 \text{cm}$) rectangle/ $36'' \times 36''$ ($90 \text{cm} \times 90 \text{cm}$) square.







LANDSCAPES PAYSAGES +

LP+
INTRODUCING LP PLUS!
There's MORE to LP than you imagined!

VOICI LE NOUVEAU LP PLUS!
LP, c'est encore PLUS que ce que vous croyez!





LANDSCAPES PAYSAGES +

FALL AUTOMNE 2013

ΕN

Welcome to LP+ ... A compendium of news and views from across the country

- ... Congress highlights
- ... LP's new Christmas tradition
- ... Wonderful images we just couldn't squeeze in!

For the direct links... turn the page.

FR_

Découvrez LP+ : Un florilège d'idées et d'actualités de partout au pays

- ... Les faits saillants du congrès
- ... La Rédaction fête Noël
- ... Des images épatantes qui valent le détour!



FALL 2013

EN_

CONGRESS HIGHLIGHTS

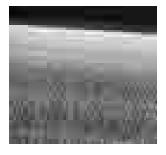
The CLSA has brokered an historic agreement; 5 new fellows were invested in the FCSLA; Awards were presented; A new president elected...

EXPO 67: A WATERSHED



Expo 67 Watershed for Canadian Landscape Architecture the full version of our report from researcher Nicole Valois... illustrated.

9-11 MEMORIAL WATER FEATURE



The Veil of Tears Memorial Water Feature: More images! DEW was the water feature consultant for the National September 11th Memorial, working with landscape architect: Peter Walker of PWP Landscape Architecture.

FR_

LES FAITS SAILLANTS DU CONGRÈS

Les faits saillants du congrès L'AAPC conclut une entente historique; l'Ordre des agréés de l'AAPC accueille cinq nouveaux membres; des prix ont été remis; un nouveau président a été élu...

Expo 67: ÉVÉNEMENT CLÉ DE L'HISTOIRE

Nicole Valois parle de l'exposition universelle de Montréal en 1967 (Expo 67) qui a marqué la société québécoise et canadienne sur le plan social et culturel ... (LP+ été)

9-11 L'EAU MÉMORIAL

Un voile de larmes : des images supplémentaires des chutes commémoratives. DEW a travaillé de pair avec Peter Walker de PWP Landscape Architecture pour la création du mémorial national du 11-septembre.



AUTOMNE 2013



EN _

WATER STEWARD:

Doug Carlyle collaborated with sculptor Thomas Sayre to graphically celebrate water and the natural prairie. See Sayre's cast earth vessels close up...

FR

WATER STEWARD:

Doug Carlyle a collaboré avec le sculpteur Thomas Sayre pour célébrer concrètement l'eau et la beauté sauvage des prairies. Voyez les citernes de l'artiste et sa technique de terre moulée...



WILL YOU GO A-WASSELING?

It's beginning to look a lot like Christmas..... and in LA offices far and wide, we take up our pens to spread tidings of good cheer. The Editorial Board of LP is celebrating, too. We're sharing some of our favourite messages from Christmas' Past ... wonderful, creative, inventive greetings – and community spirited to boot. Add us to your Christmas list – and we'll post YOUR message on our site.

LES FÊTES APPROCHENT!

Partout à travers le pays, des architectes paysagistes composent des vœux chaleureux. Il va de soi que la Rédaction aussi célèbre! L'envie nous a pris de partager certains de nos souhaits de Noël d'antan préférés. Ils sont créatifs et ont de quoi inspirer toute la communauté. Ajoutez-nous donc à votre liste de Noël, et nous publierons votre message sur notre page Facebook.



LP LOSES ITS HEAD...2013

LP Loses its head! After almost a decade as Editorial Board Chair, Don Hester steps down....

LP PERD LA TÊTE!

LP perd la tête! Après près d'une décennie à la direction du comité éditorial, Don Hester se retire...

CONGRESS REGINA 2013















EN_ REGINA CONGRESS 2013 (from left to right)

Natalie Walliser leads the show 2 Peter Briggs, new CSLA president with outgoing CSLA president Claude Potvin _ Thank you, Claude.
 Components sign the ratification agreement at the AGM 4 Ron Middleton raising money for Landscape Architecture Foundation at the closing banquet 5 The extraordinary organising committee 6 Happy Fellows at the Fellows banquet 7 Natalie with keynote speaker, Greg Johnson, talking tornados 8 CSLA Award winners at the closing banquet held at the RCMP Center, Regina 9 Prairie landscape

PHOTOS: Jean Landry









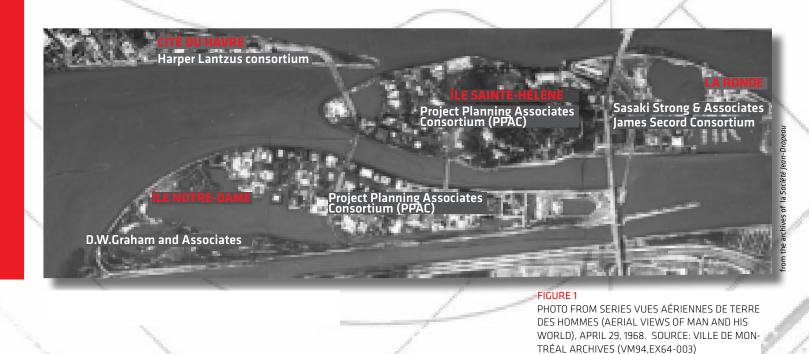




FR _ L'ÉDITION 2013 DU CONGRÈS À RÉGINA (de gauche à droite)

1 Natalie Walliser mène le bal 2 Peter Briggs, nouveau président de l'AAPC, et le président sortant Claude Potvin. Merci, Claude!
3 Les parties prenantes signent l'entente à l'AGA 4 Ron Middleton amasse des fonds pour la Fondation d'architecture de paysage lors du banquet de clôture 5 Le fabuleux comité organisateur 6 Le banquet des agréés 7 Natalie et notre conférencier principal, Greg Johnson, « Talking Tornados » 8 Les lauréats des Prix de l'AAPC lors du banquet de clôture tenu au centre de la GRC à Régina 9 Paysage des Prairies

PHOTOS: Jean Landry

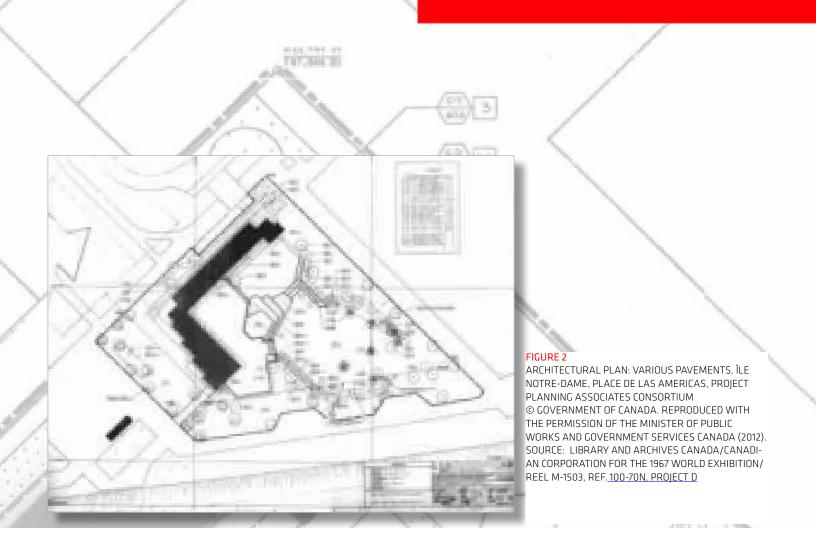


EXPO67: NICOLE VALOIS

A WATERSHED FOR CANADIAN LANDSCAPE ARCHITECTURE

THE 1967 INTERNATIONAL AND UNIVERSAL EXPOSITION in Montreal – Expo 67 – left indelible marks on Quebec and Canadian society and culture by opening a window on the world and helping advance Canadian expertise, particularly in the construction field. The construction of the pavilions and infrastructure, islands in the St. Lawrence and the Expo sites involved a large number of professionals from all over Canada, who worked together in a unique collaborative spirit.

While there remain only a few vestiges of the event, Expo 67 was historic for the planning and development professions, including landscape architecture. Landscape architects' involvement is well known, and some of them are still with us to reflect on the experience. But just what was the nature of their involvement? At what phase did they get involved? Who created the site plans? Those are the questions addressed by this research project, funded by the LACF, of which select results are presented in this article.¹



...The construction of the pavilions and infrastructure, islands in the St. Lawrence and the Expo sites involved a large number of professionals from all over Canada, who worked together in a unique collaborative spirit.

FOUR FIRMS, FOUR SITES

Interviews with key players, along with archival research, allowed us to confirm the involvement of four groups of professionals, comprised mainly of landscape architects, in the preparation of the master plans for four sites.² In general, their contribution began after the master plan prepared by the Canadian Corporation for the 1967 World Exhibition received government approval in 1963. Our research shows that these landscape architects do not seem to have contributed significantly to the design of the islands, whose layout is more the result of technical constraints than deliberate aesthetic choices.³ Nevertheless, each site was built according to its respective master plan:

Master plan for the pavilions on Notre-Dame and Sainte-Hélène

islands by the Project Planning Associates Consortium (PPAC). PPAC comprised Project Planning Associates Limited, Justin Floyd and Dunnington Grubb & Stensson. They were involved from the very start of planning, studying seven potential Expo sites before the islands were chosen in 1963. Their main contribution was the drafting of the master plan featuring the plans for the canals and lakes and the integration of the buildings as construction progressed. They also created public spaces, landscape designs for spaces outside certain pavilions and typical details.

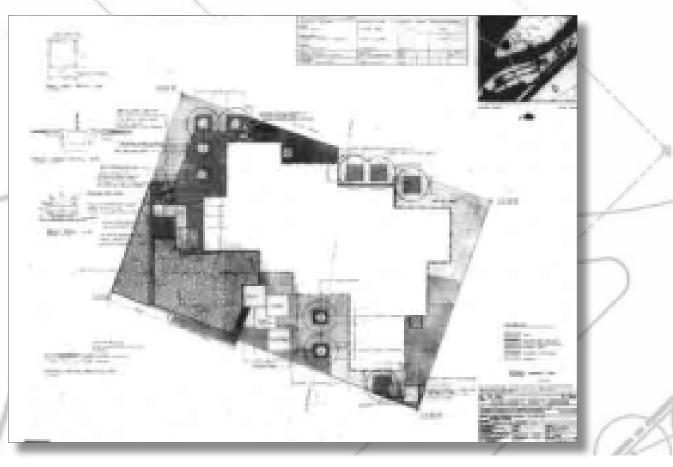


FIGURE3

ARCHITECTURAL PLAN: INTERNATIONAL TRADE CENTRE, LANDSCAPE DESIGN, PLANTATION, 1966, HARPER-LANTZIUS CONSORTIUM, DASTOUS-POTHIER ARCHITECTS, GOVERNMENT OF CANADA. REPRODUCED WITH THE PERMISSION OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA (2012). SOURCE: LIBRARY AND ARCHIVES CANADA/CANADIAN CORPORATION FOR THE 1967 WORLD EXPOSITION FONDS/BOBINE M-1518, RÉF. 200-15, PROJET T

Cité du Havre landscape designs by the Harper Lantzius consortium. Comprised of Doug Harper and John Lantzius, the consortium designed the majority of layouts and construction details surrounding the pavilions in the site entrance zone. Among them are the Administration, Photography, Welcome and the Man the Creator pavilions.

La Ronde master plan by Sasaki Strong & Associates - James Secord Consortium, Landscape Architects and Site Planners. This office was set up by Canadian Richard Strong and American architect Hideo Sasaki. La Ronde is an amusement park consisting of thematic recreational areas such as the entrance area, the fountain square and Children's World (designed by John Schreiber). As well as planning the layout of these areas, the group drew up construction plans for several of them.

D.W. Graham & Associates drew up plans for the Lac des Régates vicinity, known as parc Sud-Ouest, on île Notre-Dame. The firm designed Expo 67's most "natural" site, intended for strolling and relaxation and lacking pavilions. The park, with its sampling of typical Canadian landscapes, is distinct from the others owing to its organic shape language, preponderance of vegetation and the use of the path.

Landscape architects' contribution was significant, giving aesthetic unity to the entire site and connecting the pavilions with rest areas, small squares and parks. This period helped assert the importance of landscape architects to major projects and coincided with the emergence of multidisciplinarity and the founding of new university programs in landscape architecture, as confirmed by the individuals interviewed. Undoubtedly, this period represents a watershed in the history of the profession.

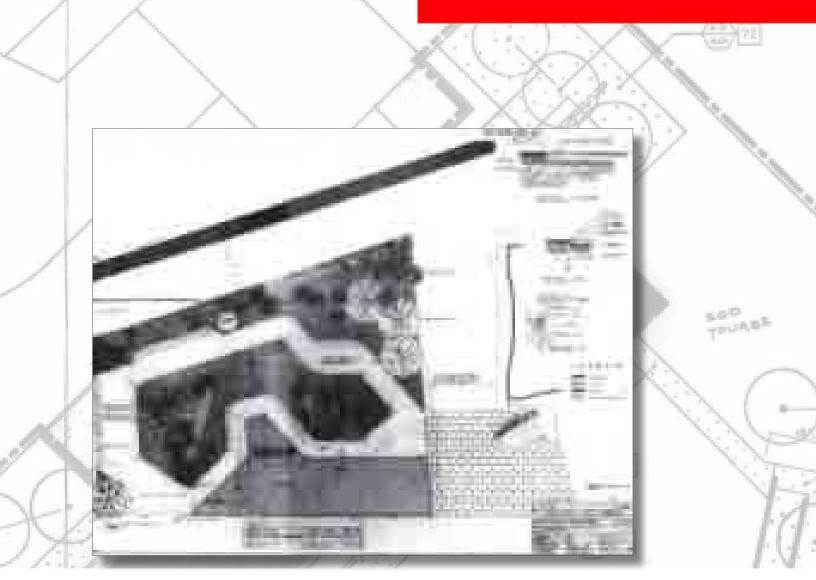


FIGURE4

ARCHITECTURAL PLAN: MISCELLANEOUS PAVING, LOT 4048, ÎLE NOTRE-DAME, PROJECT PLANNING ASSOCIATES CONSORTIUM © GOVERNMENT OF CANADA. REPRODUCED WITH THE PERMISSION OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA (2012). SOURCE: LIBRARY AND ARCHIVES CANADA/CANADIAN CORPORATION FOR THE 1967 WORLD EXPOSITION FONDS/REEL M-1503, REF. 100-70N, PROJECT D

NOTES:

Works by Taylor, J. R. (2006), The Practice of Landscape Architecture in Canada, LeGeyt, L.M. (1997), Changing The Face of Canada: profiles of Landscape Architects, vol. 1 and Paine, C. (1998), Cinquante ans d'architecture de paysage have discussed landscape architects' contributions to Expo 67.

Landscape architects also contributed to designing the areas around the pavilions (for example, C. Oberlander and the Canada pavilion), but for feasibility reasons this research looked only at master plans. Our thanks to the following individuals who agreed to answer our questions: Pierre Bourque, Don W. Graham, André Hoffmann, Peter Jacobs, Brad Johnson and Ron Williams.

The construction of islands in the St. Lawrence River radically transformed the river landscape in Montreal. The expansion of île Sainte-Hélène and the creation of île Notre-Dame required more than 35 million tonnes of fill — an effort that would surely be unacceptable today.

This research was made possible by a grant from the LANDSCAPE ARCHITECTURE CANADA FOUNDATION.

Research team:

Principal researcher: Nicole Valois, landscape architect and associate professor, University of Montréal, School of Landscape Architecture. Research associate: Jonathan Cha, landscape architect and instructor, University of Montréal, School of Landscape Architecture. Research assistant: Ombéline Guémard, student, University of Montreal, School of Landscape Architecture.

Research findings were presented to the 39th annual conference of the Society for the Study of Architecture in Canada, May 23-26, 2012, Carleton University, Ottawa.

nicole.valois@umontreal.ca

THE VEIL OF TEARS

Memorial Water Feature: More images!

PHOTO credits: ©DEW INC . PWP LANDSCAPE ARCHITECTS

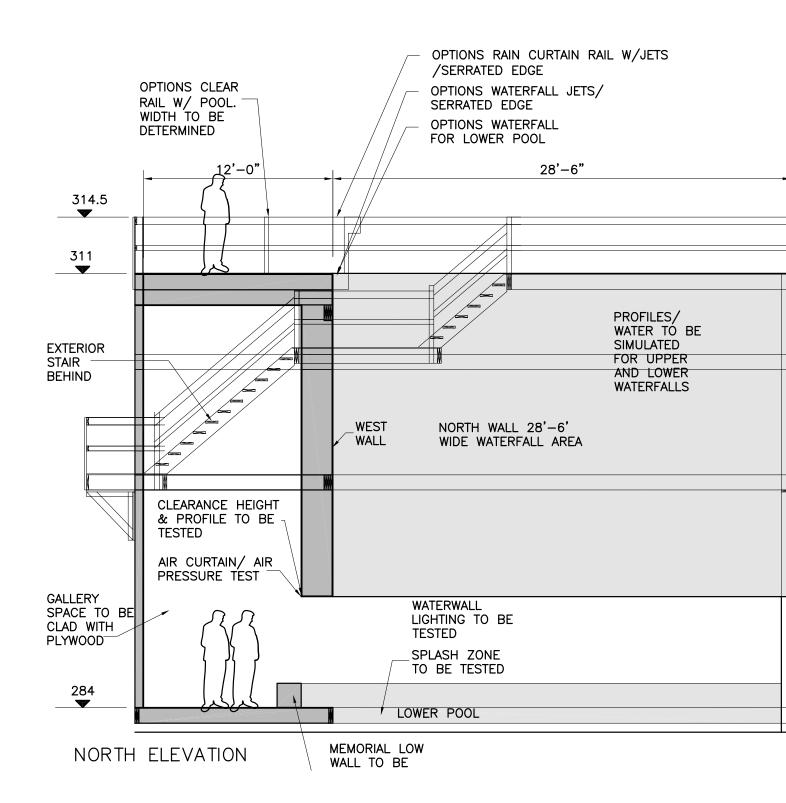




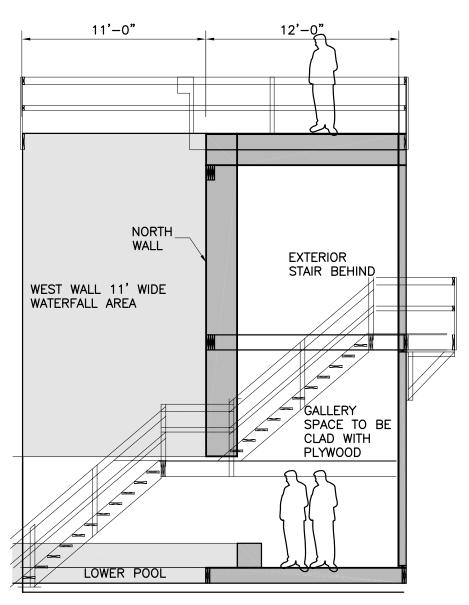








WORLD TRADE CENTER MEMORIAL PROPOSED WATER FEATURE MOCKUP DEW INC SEPTEMBER 8/04



WEST ELEVATION









WATER STEWARD:

For more close-up photos of Thomas Sayre's cast earth planters, seating and vessels, see: Pour d'autres photos des créations en terre réalisées par Thomas Sayre :

www.thomassayre.com/work/people_places/08_steward/index.php





Les Fêtes approchent! LOOKS LIKE CHRISTMAS!



CATALYSE URBAINE, 2012, www.catalyseurbaine.com

WAA INTERNATIONAL



CORVUS DESIGN: 2012 http://corvus-design.com/happyholidays2009/

... and a snowflake, a boot, a bird, some mittens, a gift, and a toboggan! Happy Holidays from all of us at Hilderman Thomas Frank Cram (Hints and solutions available at www.htfc.mb.ca) Puissiez-vous trouver la paix, la prospérité et le bonheur en cette période des Fêtes! et un flocon de neige, une botte, un oiseau, des mitaines, un cadeau et un toboggan! Joyeuses Fêtes de la part de Hilderman Thomas Frank Cram (Indices et solutions à www.htfc.mb.ca)

May you find peace, prosperity, and happiness this holiday season

HILDERMAN THOMAS FRANK CRAM, 2012, www.htfc.mb.ca

TIDINGS OF GOOD CHEER!

WHY NOT SHARE YOUR 2013 GREETING WITH US ...?

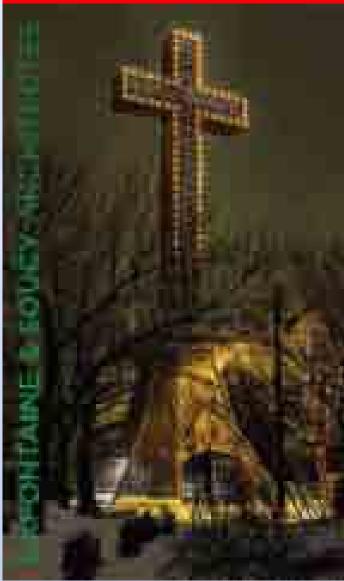
Christmas 2012 brought some marvellous mail...wonderful, creative, inventive e-cards spreading good cheer. Take a look at a few of our favourites here – then add us to your Christmas list. We'll post your message on our site!!

IL Y A DE LA JOIE DANS L'AIR!

PARTAGEZ AVEC NOUS VOS VŒUX POUR LA NOUVELLE ANNÉE! Nous avons reçu de bien belles choses à l'occasion des Fêtes l'an dernier. Des cartes virtuelles épatantes, chaleureuses et créatives. Voici quelques-unes de nos préférées. Et pensez à nous cette année : nous publierons votre message sur notre site!



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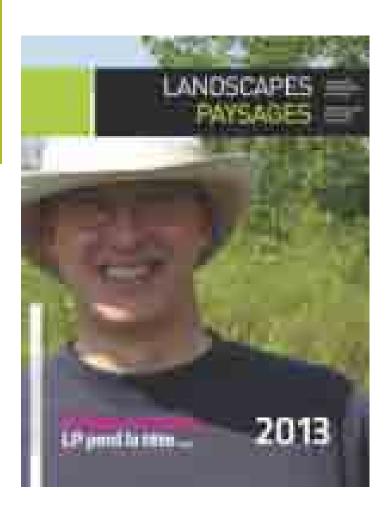
LA FONTAINE & SOUCY, 2012 info@lafontainesoucy.com





URBAN SOLAND'S GREETINGS FOR 2012 | VŒUX POUR 2012 D'URBAN SOLAND, www.urban-soland.com

LP LOSES ITS HEAD...2013 EN 2013, LP PERD LA TÊTE...





AFTER ALMOST A DECADE in the big Chair, our Editorial Board Chairman is stepping down. Don Hester has served the CSLA's Editorial Board as MALA's representative since Landscapes Paysages was founded in 1999, and has been our stalwart Chair and Chief since 2004. Fortunately, he is not retreating from the front lines, but will continue to share his ideas and

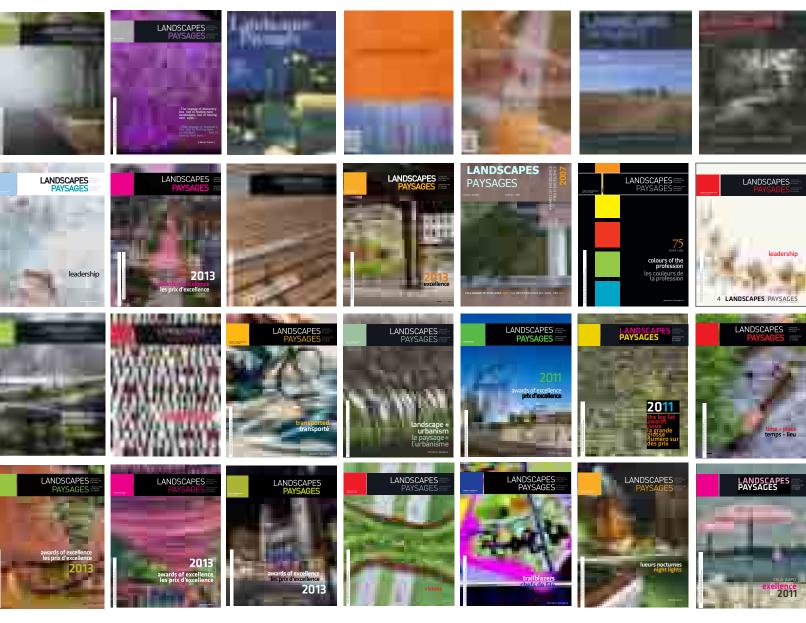
direction with the Editorial Board. We will need his dedication, his knowledge and his positive spirit as we shape our ambitious plans for the CSLA's 80th anniversary year.



FR_

APRÈS AVOIR OCCUPÉ LE SIÈGE du directeur pendant près de dix ans, le patron de la Rédaction se retire. Don Hester a aidé le comité éditorial de l'AAPC en tant que représentant de la MALA depuis la création de Landscapes Paysages en 1999. Il en a été un leader et un président exemplaire depuis 2004. Heureusement, il ne se retire pas tout à fait et continuera de partager ses idées avec la Rédaction. Nous aurons bien besoin de son dévouement, de son expertise et de son optimisme pour mener à terme nos projets ambitieux pour le 80° anniversaire de l'AAPC.

On behalf of the entire Editorial Board, **THANK YOU, DON HESTER!** Au nom de toute l'équipe de la Rédaction , **MERCI, DON HESTER!**



Welcome to **Jean Trottier**, new editorial board chair!

Nous en profitons aussi pour souhaiter la bienvenue à M. **Jean Trottier**, nouveau directeur éditorial.

