

Fall | Automne 2023
vol.25_no.3 | 8.00\$

LANDSCAPES PAYSAGES

LANDSCAPE
ARCHITECTURE
IN CANADA

L'ARCHITECTURE
DE PAYSAGE
AU CANADA

leading the way
ouvrir la voie



US Patent D899,802 S.
Brevet E.-U. D899,802 S.



Connecting since 1962.

Créateur de liens depuis 1962.

THE STELLA OF SUNNE™ COLLECTION.

LA COLLECTION STELLA OF SUNNE^{MC}

Celebrating 60 years, Victor Stanley has designed, engineered and manufactured timeless site furnishings so you can bring communities to life. Our Stella of Sunne™ collection features a classic, minimalist look inspired by Scandinavian design aesthetics. Its eased edges and clean lines transform any environment into a comfortable and inviting space.

Célébrant ses 60 ans, Victor Stanley conçoit, met au point et fabrique des éléments de mobilier urbain intemporels, pour que vous puissiez donner vie aux collectivités. Notre collection Stella of Sunne^{MC} offre un style classique et minimaliste, inspiré par l'esthétique scandinave. Ses coins arrondis et ses lignes épurées transforment n'importe quel environnement en espace confortable et invitant.



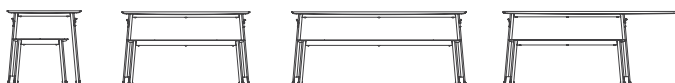
Create a timeless moment.™
Créateur de moments inoubliables.^{MC}

VICTORSTANLEY.COM



Take-Out

landscapeforms®



Flexible in its Function. Fluid in its Simplicity.

We believe that for design to be truly great, it must stand the test of time, be sustainably crafted, and proudly North American made.

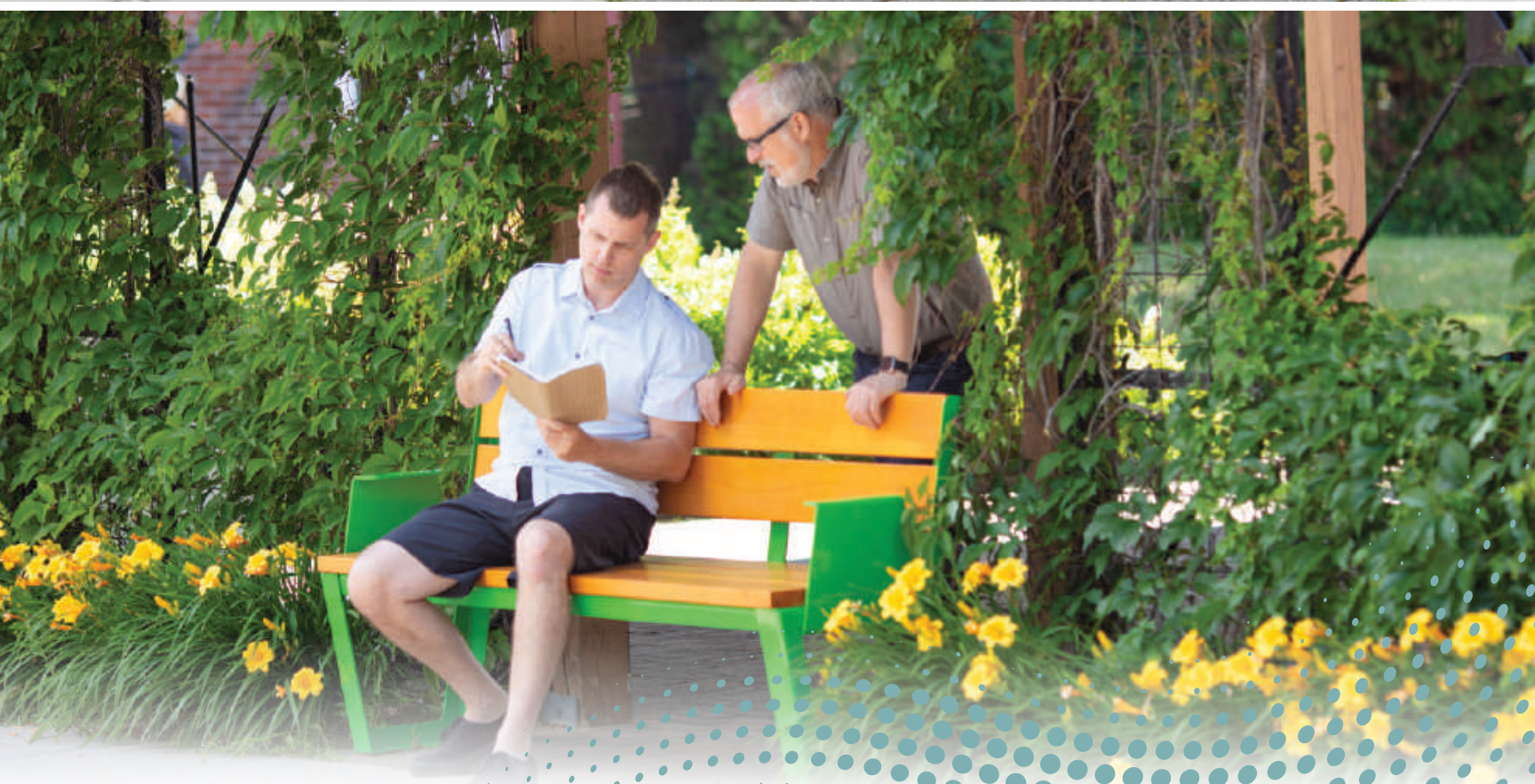
Take-Out : Pick it up, arrange it and rearrange it.

Designed by Rodrigo Torres

Landscape Forms | A Modern Craft Manufacturer

DESIGN. CULTURE. CRAFT.

Create a
Colourful
experience



LONGSHADOW[®].COM

Hand Crafted in Southern Illinois by The Artisans at Classic Garden Ornaments, Ltd.[®]

New
Bermuda Urn 38
LS 9885

38" high
26" diameter
11" diameter base

Fine Dry Cast Limestone Planters



LANDSCAPES PAYSAGES

www.csla-aapc.ca

ISSN 1492-9600

Editorial Board | Comité de rédaction :

Ryan Wakshinski, Chair/président, MALA, CSLA/AAPC
Cameron DeLong, NuALA, CSLA/AAPC,
Board Representative | Représentant du CA
Luc Deniger, AALA, CSLA/AAPC
Jonathan Cha, AAPQ, CSLA/AAPC
Iseult Séguin-Aubé, AAPQ, CSLA/AAPC
Matt Williams, AALA, CSLA/AAPC
Blake Creamer, APALA, CSLA/AAPC
Kevin Fraser, BCSLA, CSLA/AAPC
Maren McBride, BCSLA, CSLA/AAPC, ASLA
Taylor LaRocque, MALA, CSLA/AAPC
Heidi Redman, NuALA, CSLA/AAPC
Timothy Bailey Edwards, NWTALA
Linda Irvine, OALA, FCSLA/FAAPC
Cindi Rowan, OALA, CSLA/AAPC
Faye Langmaid, SALA, FCSLA/FAAPC, MCIP
Kayla Tulloch-Kowula, SALA, CSLA/AAPC
Jennifer (Qian) Wan + Kulsum Fatima, Student Interns | Étudiants stagiaire

CSLA Board of Directors | Conseil d'administration de l'AAPC :

Bob Somers, MALA, SALA, OALA, FCSLA/FAAPC, President, président
Chris Grosset, NuALA, NWTALA, OALA, FCSLA/FAAPC, Past President,
président sortant
Catherine Berris, BCSLA, FCSLA/FAAPC President-Elect, président élue
Joanne Moran, OALA, FCSLA/FAAPC, Chair, Finance and Risk Management
Committee | présidente, comité des finances et gestion des risques
Michael Magnan, AALA, CSLA/AAPC
Tracey Hesse, AAPQ, CSLA/AAPC
Hans Pfeil, APALA, CSLA/AAPC
Emily Dunlop, BCSLA, CSLA/AAPC
Vanessa Jukes-Strutt, MALA, CSLA/AAPC
Cameron DeLong, NuALA, CSLA/AAPC
Steve Barnhart, OALA, CSLA/AAPC
Laureen Snook, SALA, CSLA/AAPC
Michelle Legault, Executive Director, directrice générale
executive-director@csla-aapc.ca
Katherine Velluso, Communications Coordinator | Coordonnatrice
des communications | coordinator@csla-aapc.ca
Hope Parnham, Manager, Advocacy and Strategic Affairs | Gestionnaire de
la promotion et des affaires stratégiques

Translation | Traduction :

Christian Caron | tcmcaron@gmail.com
Matthew Sendbuehler | letraducteur@gmail.com

Editor | Rédactrice : Laurie J. Blake

Published by | Publié par :

NAYLOR
ASSOCIATION SOLUTIONS

200-1200 Portage Avenue, Winnipeg, MB R3G 0T5
Tel: 204.947.0222 | Fax: 204.947.2047 | www.naylor.com

Publisher | Éditeur : Darryl Lazarenko

Naylor Editor | Rédactrice Naylor : Andrea Németh

Layout & Design | Mise en page et conception graphique : Emma Law

©2023 Naylor (Canada) Inc. All rights reserved. The contents of this
publication may not be reproduced by any means, in whole or in part,
without the prior written consent of the publisher.

Return undeliverable Canadian addresses to: Naylor (Canada) Inc.,
Distribution Dept., 200-1200 Portage Avenue, Winnipeg, MB R3G 0T5

Canadian Publication Agreement #40064978
PUBLISHED SEPTEMBER 2023/CSL-Q0323



STUDENT-BUILT CEDAR BRIDGE
PHOTO COREY DAWSON

EXPLORE | EXPLORER

8 | TO BEGIN WITH | POUR COMMENCER

Dean Gregory + Vanessa Jukes Strutt
Guest Editors | Rédacteurs invités

12 | OUR WRITERS | NOS COLLABORATEURS

18 | PROLOGUE

Cultivating a Landmark Landscape
Ziibiing

Indigenous Values at Seneca's
New Wellness Centre

From Beaux-Arts to Indigeneity at UBC
Saskatoon's Innovation Place

FOCUS | FOCUS

26 | WORKING TOGETHER: DECOLONIZING CAMPUS LANDSCAPES

> **FR_LP+** TRAVAILLER ENSEMBLE :
DÉCOLONISER LES PAYSAGES DES
CAMPUS

Liat Margolis + Elder Whabagoon +
Agata Mrozowski

30 | CAMPUS UNIVERSITAIRES : SAVOIR RÉPONDRE À PLUSIEURS BESOINS

> **EN_LP+** BALANCING THE NEEDS OF
MULTIPLE USES AND USERS ON
A UNIVERSITY CAMPUS

Pierre-Luc Tranclé-Armand

34 | UNIVERSITY COLLEGE OF THE NORTH THOMPSON CAMPUS – REFLECTING INDIGENOUS VALUES & BELIEFS

> **FR_LP+** CAMPUS DE L'UNIVERSITY
COLLEGE OF THE NORTH À
THOMPSON – REFLET DES VALEURS
ET DES CROYANCES AUTOCHTONES
Bhavana Bonde

38 | TRANSFORMING UNIVERSITY OF CALGARY – SUSTAINABILITY, SCIENCE + RECONCILIATION > **FR_LP+** TRANSFORMATION DE L'UNIVERSITÉ DE CALGARY – DURABILITÉ, SCIENCE + RÉCONCILIATION

Daniel Saenz

42 | UNIVERSITY OF MANITOBA RIVERBANK MANAGEMENT STUDY > **FR_LP+** ÉTUDE SUR LA GESTION DES BERGES D L'UNIVERSITÉ DU MANITOBA

Ian Young + Bruno Pierre Arpin +
Chris Robak + Cheryl Oakden

46 | DALHOUSIE'S AGRICULTURAL CAMPUS: HISTORIC BEAUTY, EDUCATIONAL VALUE, AND COMMUNITY ENGAGEMENT > **FR_LP+** CAMPUS AGRICOLE DE DALHOUSIE : BEAUTÉ HISTORIQUE, VALEUR ÉDUCATIVE ET MOBILISATION COMMUNAUTAIRE

Corey Dawson

50 | SIMON FRASER UNIVERSITY: RENEWAL OF A CONTEMPORARY CLASSIC

> **FR_LP+** RENOUVELLEMENT D'UN
CLASSIQUE CONTEMPORAIN

Gerry Eckford

52 | A TALE OF THREE CAMPUSES

> **FR_LP+** LE RÉCIT DE TROIS CAMPUS

Andrew Wilson

FORUM

58 | CRITIQUE

A Natural Balance: The K.C. Irving
Environmental Science Centre and
Harriet Irving Botanical Gardens at
Acadia University

Reviewed by Ed Versteeg

Finding the Mother Tree: Discovering
the Wisdom of the Forest

Reviewed by Heidi Redman

66 | MENTORSHIP MOMENT | PAROLE AUX MEMBRES

Success Requires Others to
Guide You Along the Way
Faye Langmaid

LP+ ONLINE | EN LIGNE

TRANSLATIONS | TRADUCTIONS
ONLINE EXCLUSIVES | EXCLUSIVITÉS
EN LIGNE

COVER | COUVERTURE
UBC VANCOUVER CAMPUS, FALL 2016
PHOTO GEOFF LISTER

upcoming issues

spring 24 | generations

deadline 23 october

summer 24 | awards of excellence

deadline 25 march

prochains numéros

printemps 23 | générations

date de tombée 23 octobre

été 24 | prix d'excellence

date de tombée 25 mars

For submission guidelines |
Pour connaître les normes
rédactionnelles :

Laurie J. Blake,
Editor | Rédactrice
lp@csla-aapc.ca

LANDSCAPES | PAYSAGES is published by the Canadian Society of Landscape Architects to provide a national platform for the exchange of ideas related to the profession. The views expressed in LANDSCAPES | PAYSAGES are those of the authors and do not necessarily reflect those of CSLA. Guest editors and contributors are volunteers, and article proposals are encouraged. Articles may be submitted in either English or French.

LANDSCAPES | PAYSAGES est publiée par l'Association des architectes paysagistes du Canada pour servir de plate-forme nationale destinée à l'échange d'idées sur la profession. Les opinions exprimées dans LANDSCAPES | PAYSAGES appartiennent aux auteurs et ne reflètent pas forcément celles de l'AAPC. Nos rédacteurs invites contribuent bénévolement. Nous attendons, en français ou en anglais, vos propositions d'articles.



MATHISON HALL, UNIVERSITY OF CALGARY.
PHOTO 02

GUEST EDITORS | RÉDACTEURS INVITÉS
DEAN GREGORY + VANESSA JUKES STRUTT

Leading the Way

THE WORD “CAMPUS” derives from the Latin word for field. In a discussion of landscape architecture on university and college campuses, the idea of landscape as “field” is what gives the campus legibility and meaning. Landscape is the canvas; the connected solid. Buildings are the disconnected voids. The campus landscape is unique from most other built contexts in which buildings are the focus. At a university, college or other such institution, landscape is “the place.” It is in this place that academics and students from diverse backgrounds come together to learn and develop a sense of belonging and pride that can last a lifetime.

A common thread that ties together most of Canada's universities and colleges is that they are public institutions. As such, they have a unique obligation not only to educate students, but to lead the way in design, sustainability, stewardship, community development and reconciliation. For staff or consultant landscape architects tasked with designing, developing and stewarding campus landscapes, the work must be guided by this question: Does it support the academic mission of the institution, by creating spaces that support learning, teaching, interdisciplinary collaboration, social interaction and the health and well-being of student, faculty, staff and the broader community?

We see several important themes emerge in the submissions for this issue. The landscapes of university and college campuses across Canada serve as living laboratories; address social and environmental issues; promote a supportive culture that enhances wellbeing and mental health; foster connections between students, faculty and staff; strengthen ecological systems and resiliency; and make open spaces more accessible. Whether situated in dense urban areas or in smaller towns and suburbs, connecting with the broader community sets the foundation. Many campus projects strive to reach out to everyone who wants to learn, to those who have not previously felt welcome in a college/university environment or, as one of our writers said, “just want to visit the space and enjoy the feeling of a community or village.”

From the east coast to the west coast and in the north, we see campus landscape architecture that is linked to place. Local materials and native plants reflect the diverse regions of this country, located on land that is the traditional territory of the Indigenous peoples who first lived here. Campus landscapes on Turtle Island are pivotal to decolonizing institutions, moving beyond centralized green lawns to multi-use spaces that are immersive and meaningful, fostering inclusivity through learning, gathering and ceremony.

These themes are not unique to campuses, but carried out on them in unique ways that focus on formal and informal education, technological advancements, living labs, celebration of student work, and programmatic extension. In this issue, submissions ranging from Dalhousie University, established in 1818, to the University College of the North, established in 2004, show that landscape architecture on Canada's university and college campuses is leading the way. **LP**

Ouvrir la voie

CAMPUS, MOT LATIN « camp, champ », est un emprunt de l'anglo-américain qui signifie « parc d'un collège ou d'une université ». Dans le cadre d'une discussion sur l'architecture paysagère, il fut question des paysages de campus qui se présente comme des « parcs » et qui en définissent l'essence. Le paysage, à la manière d'une toile, vient unifier l'espace construit. Les paysages de campus sont uniques dans leur constitution parmi les paysages bâtis. Dans le cadre des universités, c'est « la place » où se réunissent les universitaires et les étudiants de tout horizon, c'est le lieu qui donne naissance à un sentiment d'appartenance et de fierté qui perdurera la vie durant.

La plupart des universités et collèges du Canada sont des établissements publics. Au-delà de l'obligation morale d'instruire les étudiants, ils montrent la voie en matière de conception, de durabilité, d'intendance, de développement communautaire et de réconciliation. Pour les architectes paysagistes responsables de la conception, du développement et de la gestion des aménagements sur les campus, une question oriente leurs travaux : L'aménagement soutient-il la mission académique de l'établissement, crée-t-il un espace qui soutient l'apprentissage, l'enseignement, la collaboration interdisciplinaire, l'interaction sociale ainsi que la santé et le bien-être des étudiants, des enseignants, du personnel et de la collectivité en général?

Ce numéro nous présente plusieurs grands thèmes émergents. Les campus peuvent servir de laboratoire vivant pour aborder les enjeux sociaux et environnementaux, favoriser un sentiment d'appartenance qui améliore le bien-être et la santé mentale, faciliter les liens entre les étudiants, le corps professoral et le personnel, renforcer les systèmes écologiques et la résilience, et rendre les espaces verts plus accessibles aux personnes à mobilité réduite. Qu'ils soient situés en zones urbaines, en banlieue ou dans de petites villes, la relation du campus avec la collectivité environnante en définit la nature. Les campus cherchent à toucher tout individu qui souhaite apprendre, y compris ceux qui ne sont pas familiers avec l'environnement universitaire ou, comme l'a dit l'un de nos rédacteurs, « qui veulent simplement visiter l'endroit et apprécier le sentiment d'appartenance qui s'en dégage ».

De la côte Est à la côte Ouest, en passant par le Nord, l'architecture paysagère des campus façonne le lieu. Les matériaux locaux et les végétaux indigènes reflètent les multiples régions du pays, territoires traditionnels des premiers peuples. L'aménagement du campus de l'île de la Tortue est essentiel à l'idée de la décolonisation des établissements, en transformant les pelouses centrales en espaces polyvalents et immersifs qui favorisent l'inclusion par l'apprentissage, le rassemblement et les cérémonies.

Ces thèmes ne sont pas propres aux campus, mais leur mise en œuvre est unique, centrée sur l'éducation formelle et informelle, les avancées technologiques, la contribution étudiante et l'extension des programmes. Qu'il s'agisse de l'Université Dalhousie créée en 1818 ou du Collège universitaire du Nord créé en 2004, l'architecture paysagère sur les campus est un véritable laboratoire vivant qui nous montre la voie. **LP**

PROJECT Allendale
Streetscape, Allendale, NJ.

DESIGN Neglia-Engineering
Associates.

PRODUCT Copthorne® in
Burgundy Red (SR 0.35),
Burnt Clay (SR 0.36, Old Oak
(SR 0.37) and Basalt.

Your CREATION

Our TEAMWORK

Our team of Unilock hardscaping experts are ready to support your next unit paving or retaining wall project from start to finish.

Combine our technical expertise with a vast array of Unilock colors, shapes and textures, to bring your unique vision to life.

European inspired pavers with delicate dimensions Inspired by the rich color and timeworn beauty of European street pavers. Copthorne® pavers proportions make it possible to design curved walkways and borders, without the need for cutting.

Cast using Reala Technology for an authentic surface appearance, and using Ultima Concrete Technology to deliver up to four times the strength of conventional poured concrete, Copthorne offers timeless beauty for both residential and commercial projects.



Copthorne® is available in dark red and brown heritage colours with high SR values to meet the ever-growing need for reduced heat island of dark pavements.

COMMERCIAL.UNILOCK.COM
1-800-UNILOCK



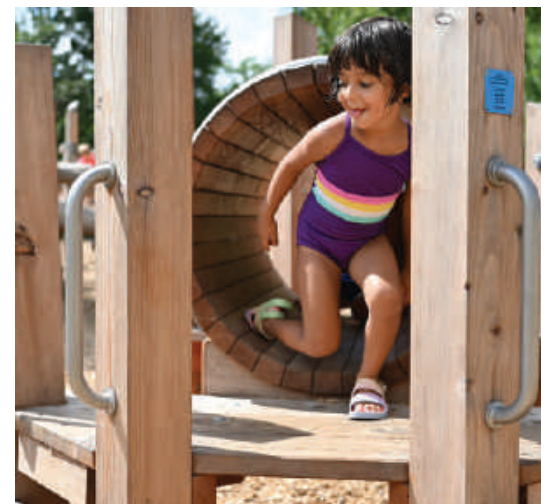
**CONTACT US
FOR SAMPLES,
INFORMATION,
& CEU SEMINARS**

UNILOCK®
PAVERS & WALLS

Our model is the child at **play**.



Photos: Pease Park, Austin, TX, USA, credit: Daniel Perales



To discover more of our **original** play offers,
visit us at www.apeoriginal.com

ape STUDIO™

Exclusive North American partner of

Richter Spielgeräte GmbH



OUR WRITERS | NOS COLLABORATEURS

OUR GUEST EDITORS | NOS RÉDACTEURS INVITÉS



DEAN GREGORY

Dean Gregory, BCSLA, CSLA, ASLA, SITES, LEED. As landscape architect at the University of British Columbia, Dean provides subject matter expertise on the planning, design, maintenance and operation of all landscapes at UBC's Vancouver campus, and led the University's award winning 2009 Public Realm Plan project. He has served on several design juries and panels and is the author of numerous articles relating to campus planning and design.



VANESSA JUKES STRUTT

Vanessa Jukes Strutt, MALA, CSLA, PMP, is a landscape architect and Project Manager with Physical Plant, Architectural & Engineering Services at the University of Manitoba (UM). Vanessa's project portfolio primarily includes leading project teams for infrastructure renewal and public realm development on all UM campuses. Some of her favourite recent projects include those that help shape the landscape to be more resilient through flood mitigation, more sustainable through the establishment of a native revegetation and reforestation strategy, and more accessible through the advancement of a University wide accessibility audit of the built environment and public realm. Vanessa is the current Past President of the MALA.



LIAT MARGOLIS

Liat Margolis, OALA, CSLA, grew up in Israel along the Mediterranean Sea and relocated to Turtle Island as a teen over 30 years ago. She has been dedicated to sustainability and environmental justice for over 20 years through her work as a landscape architect, researcher and educator. Liat is an Associate Professor at the University of Toronto Faculty of Architecture, Landscape and Design and has served in various institutional leadership roles advocating for Truth and Reconciliation, environmental conservation and land-based education. For the past six years, with Elder Whabagoon, she has been co-leading the *Nikibii Dawadinna Giigwag* Indigenous youth program to support pathways to postsecondary education in fields related to design and the environment.



ELDER WHABAGOON

Elder Whabagoon is of Ojibway heritage, who sits with the Loon Clan, a Keeper of Sacred Pipes, a member Obishikokang, Lac Seul First Nation and a 60s Scoop survivor. She has lived in Toronto for 46 years and is a community Elder. Whabagoon is a writer, speaker, land defender and water protector. In April 2023, Elder Whabagoon was appointed inaugural First Peoples Leadership Advisor to the General Manager, Transportation Services, City of Toronto. Elder Whabagoon's passion for working with youth has led her to being the co-founder, co-lead and Elder for *Nikibii Dawadinna Giigwag*. Her favourite season is Summer, when she embraces the opportunity to spend time with the program's youth, shares her gifts and listens to their incredible thoughts, visions and dreams.



AGATA MROZOWSKI

Agata Mrozowski, BDes, MLA is a Polish-born landscape designer who resides in Treaty 13 territory. She was a recipient of the OALA Scholarship, the ASLA Award of Merit and the Claude Cormier Award in Landscape Architecture. Agata worked with *Nikibii Dawadinna Giigwag* as a graduate mentor for three years. Since graduating, she has worked as a writer and researcher with Trophic Design, as a Sessional Lecturer at UofT, and is currently a Landscape Designer at SvN Architects and Planners. She has over a decade of experience as a Community Mental Health Worker in Toronto, where she has been involved in anti-poverty advocacy and organizing for Indigenous rights.



PIERRE-LUC TRANCLÉ-ARMAND

Originaire de Montréal, Pierre-Luc Trancé-Armand est un jeune architecte paysagiste, membre agréé de l'AAPQ depuis 2020. Il est le premier architecte paysagiste engagé à l'interne par l'Université de Montréal depuis au moins 20 ans. Passionné par la gestion de projets, il travaille au sein d'une équipe multidisciplinaire qui veille à la planification, la gestion et l'entretien de l'ensemble des propriétés de l'Université. Dans ses temps libres, Pierre-Luc jardine, rénove, et pratique le vélo, le hockey et le ski de fond. Épicurien, il aime aussi découvrir, avec sa conjointe, la vaste offre alimentaire et les activités culturelles montréalaises.



BHAVANA BONDE

Bhavana Bonde, OALA, AALA, BCSLA, MALA, APALA, CSLA, LEED AP, serves as National Practice Leader of the Landscape Architecture and Urban Design group at Architecture49. She has over 30 years of experience in landscape architecture, site studies and master planning through her work in India, Singapore, Mexico and across Canada. Originally trained as an architect, Bhavana brings a unique perspective in the integration of buildings and landscape. With a strong commitment to design excellence and a holistic design approach, she brings critical experience in the delivery of integrated design, planning and sustainable solutions.



IAN YOUNG

Ian Young, M.Sc., Scatliff+Miller+Murray, has a decade of experience as a plant biologist with a specialized knowledge in terrestrial assessment and rehabilitation and revegetation of disturbed land that has been accrued by working on projects in the mining, hydro-electrical, construction and water resource industries. Ian is routinely responsible for the provision of environmental design and best management practice recommendations for projects that range considerably in scope and scale. Fields of expertise include vegetation assessment and plant identification, design and implementation of terrestrial rehabilitation and revegetation programs, the development of remedial and mitigative measures to correct environmental disturbance, and critical review of technical reports and assessments.

BRUNO PIERRE ARPIN

Bruno Pierre Arpin, P.Eng., KGS Group, has 23 years of progressive engineering experience in both the public and private sectors where he co-leads Manitoba's largest geotechnical engineering consulting group. Having grown up surrounded by rivers in North St. Boniface located on Treaty 1 territory, Bruno has been passionate about waterways from a young age. He is fluent in French and English, and is licensed to practice engineering in Manitoba, Ontario, Saskatchewan and Yukon. Notable projects Bruno has contributed to include the University of Manitoba Fort Garry Campus Riverbank Management Study, the Canadian Museum for Human Rights, the Assiniboine Riverwalk, the Waterfront Drive development project, and most recently, the Wellington Crescent waterfront project that both championed and highlighted the importance of green infrastructure.

CHRIS ROBAK

Chris Robak P.Eng, KGS Group, has 14 years of experience in the geotechnical engineering field in a variety of areas including geotechnical site investigations, instrumentation, slope stability and seepage analysis and design, foundation design, risk assessment and on-site supervision/construction inspection. He is the geotechnical engineer of record for many erosion protection, slope stabilization, and/or flood protection projects in Winnipeg and the surrounding area. His designs, which frequently integrate green infrastructure elements and/or community development works, have been constructed along the Assiniboine River along a kilometre of Wellington Crescent east of Assiniboine Park and at several key flood protection locations between Portage La Prairie and Headingly. On the Red River, Chris's geotechnical design work can be found at the Ste. Agathe community boat launch, the Red River Fort Garry Campus and along St. Mary's Road at Vivian Ave.

CHERYL OAKDEN

Cheryl Oakden, MALA, FCSLA, is the design director at Scatliff+Miller+Murray's Winnipeg office, overseeing more than 10 professional designers, drawing on 30 years of experience as a landscape architect. Cheryl is a major contributor on all the firm's significant projects and was a key member of the SMM team that implemented the first naturalized wetland system for stormwater management in Winnipeg. Notable work at the University of Manitoba includes the Riverbank Biodiversity Report that provided significant insight to the follow-up work undertaken in the Riverbank Management Study.



DANIEL SAENZ

Daniel Saenz is an Urban Designer at O2, originally from Quito, Ecuador, but now proud to call Calgary home. Daniel's creativity and design acumen allow for vigorous exploration in the early stages of design, collaborating with multidisciplinary teams in the conceptualization and development of some of the most interesting projects where O2 is involved. Over the past two years, Daniel has been involved with the University of Calgary, where he teaches the Advanced Graphics for Landscape Architecture course. Proud father of a young daughter, he enjoys working and learning from others. Surprisingly, he also loves winter.



COREY DAWSON

Corey Dawson, OALA, CSLA, ISA, is an Assistant Professor in the Landscape Architecture program at Dalhousie University (Agricultural Campus). He started a design/build business in Ontario while completing his MLA at the University of Guelph, which he continued while completing his PhD at Western University. He moved to Nova Scotia with his two-week-old baby girl this past January and loves all river-related activities.



GERRY ECKFORD

Gerry Eckford, BCSLA, FCSLA. Recently retired after over 40 years of private practice including 20 as senior partner at ETA landscape architecture inc., and seven years as the in-house Landscape Architect with Arthur Erickson Architects, Gerry retains a strong belief in the professional's civic and environmental responsibilities. Gerry remains active in the profession as a director of the Landscape Architecture Canada Foundation.



ANDREW WILSON

Andrew Wilson, MLA, OALA, BCSLA, CSLA, arrived in Toronto from Scotland in 1967. Mount Albert, Cheltenham and Fergus were home before 10 years on university campuses as a student of planning, then landscape architecture. Professional practice and registration followed in BC and Ontario. He was a campus planner/landscape architect at UBC and York University as well as a consulting landscape architect and municipal urban designer. In 2007 he settled in London, ON, where for the last 14 years he's been Coordinator of the Honours Bachelor of Environmental Design and Planning degree in Fanshawe College's School of Design. He's served the profession as a BCSLA Director and President, a CSLA Director and the Chair of the Southwest Chapter of the OALA.



520 COLLECTION

Make a connection. Connect 520 series benches with “528” angle connectors. Design a layout using 30, 45, or 90 degree connectors. Additional pieces in this collection include standard benches, connected straight benches, curved benches, curved and straight wall mount benches, seat islands, and tables. A solid steel frame supports seating surfaces made of Thermally Modified Red Oak, Ipe, or Recycled Plastic(HDPE).



REPRESENTED BY

Parkworks
*Alberta, British Columbia,
 Saskatchewan, Manitoba*
www.parkworksco.com

A.B.C. Recreation LTD
Atlantic Canada, Ontario
abc recreation.com

ABC Récréation Québec Inc.
Québec
www.abc recreationqc.com

FORMATM

The contemporary new anywhere playsystem by Landscape Structures®

Connections. Our lives are built around them. At Landscape Structures, we see it every day. Everywhere. This is the beauty of play.

Forma brings a contemporary vibe to any play environment. With its architectural influences and endless color possibilities, create the perfect complement to your play setting, whether you're looking for a nature-inspired style or something more modern. Kids will love the dynamic, challenging, and inclusive play opportunities provided by Forma's clean, angular design and sensory-rich mix of materials. To learn more visit us at playlsi.com/forma

#playconnectsus

LS
landscape
structures®



©2023 Landscape Structures Inc. All rights reserved.



All of our outdoor kitchens feature dozens of styles available in hundreds of sizes, all made from durable and environmentally-friendly stainless steel, powder coated in a rich palette of finishes.

DANVER



Canada

Shaun Loewen

403.899.3725

info@danver.ca

USA

danver.com

205.269.2300

info@danver.com

inquire about a dealer near you • 1 Grand Street, Wallingford, CT USA

Rough&Ready Circular Bench

Project: Hayward Public Library in Hayward (USA)

Architect: RHAA

Product Range: Rough&Ready, beam size: 7 x 15 cm
Wood options: FSC®-certified hardwood or Accoya
TWIN option: All Black (recyclate)
Accessories: Back- and armrests, USB Power Charger



Solid Skirt Top Seats



Tumbling Tubs



Rough&Ready Hug a Tub Oval



Plaza Shade & Heavy-Heavy Benches TWIN
Lava Grey (recyclate)

PROLOGUE

01/

CULTIVATING A LANDMARK LANDSCAPE AT THE UNIVERSITY OF TORONTO

How can landscape architecture honour heritage landscapes while investing in future generations?

STEFAN HERDA

THE HISTORIC ST. GEORGE CAMPUS at the University of Toronto, and Queen's Park nearby, contain many of the city's oldest urban trees. Their largest oaks stand as relics of a once-sweeping Carolinian forest ecology while rows of English elms can be traced back to the 1827 founding of King's College. Although the urban fabric of Toronto has changed over decades, UofT St. George remains a picturesque reminder of a quintessential campus landscape; its mature tree canopy and sweeping lawn frame roadways leading to the core of the institution.

Michael Van Valkenburgh Associates' Landscape of Landmark Quality project centres on a renewed vision for the contemporary academic environment – one that is more pedestrian friendly, more horticulturally diverse and more sustainable. Once completed in early 2024, the revitalized

St. George's Kings College Circle and its surrounds will serve as the green threads that weave the sprawling campus into the heart of Toronto.

Reviving the centre of one of Canada's most prestigious academic institutions has resulted in an incredible investment in campus infrastructure. By relocating surface parking to an underground garage and capping the structure with a massive green roof, the Landmark project incorporates resilient improvements to offset the vast material requirements that facilitate its construction. The design collects roof runoff for its irrigation systems and integrates Canada's largest urban geothermal exchange field to date, which will save over 15,000 tonnes of greenhouse gas emissions annually. Additionally, MVVA's maximalist planting strategy contributes over 240 additional understory and canopy trees, over 6,000 shrubs and nearly 55,000 perennials and groundcovers to bring a range of seasonal variety to dozens of new gardens.

Inspired by the vertical strata and density of robust plant communities, MVVA's planting design embraces ecological performance while remaining grounded in the realities of its context. Concurrent with the construction of Brook McIlroy's *Ziibiing* (Anishnaabemowin for "River") project honouring the Indigenous legacy of the Taddle Creek, the Landmark planting design consists primarily of native plant species that thrive under the pressures of a busy, urban environment. Given the realities of climate change within an urban space, Landmark's dense plantings are designed to suppress weeds while

contributing to a range of ecosystem services unmatched by trees and lawns alone.

With the required degree of maintenance and care over the seasons, a range of intermixed gardens will mature into diverse plant communities evoking a more naturalistic, engaging campus experience.* Given the extensive species added to the landscape, seasonal interest is maintained throughout the year with punctuated moments linked to the academic calendar. A tapestry of blazing colours from a range of trees and shrubs welcomes the fall term, while a ring of over 100 flowering understory trees bloom during the celebratory time of spring graduation.

Urban campus spaces are unique in that the timeline of investment and the continuity of the institutions allow for benefits across generations of students, as well as the public. By sowing the memory of generations of students with a pedestrian-friendly, ecologically driven university experience, the Landmark Project strives toward an ideal learning environment.

* See Michael van Valkenburg's article "Landscapes Over Time" (March 2013) in Landscape Architecture Magazine, on the importance of ongoing and collaborative gardening and maintenance of built landscapes.

Stefan Herda received his BAH in Studio Art from the University of Guelph and his MLA from the University of Toronto in 2022. He was a Landscape Architecture Canada Foundation Regional Scholar in 2021. Stefan is currently a Senior Designer at MVVA coordinating planting for the Landmark project. Stefan is also a recipient of a CSLA Student Award of Excellence.

1 THE VISION. 2 MAXIMALIST PLANTING IN PROGRESS.
PHOTOS COURTESY MICHAEL VAN VALKENBURG ASSOCIATES





1

02/ ZIIBIING - INDIGENOUS LANDSCAPE AT TADDLE CREEK

Inspiring Indigenous Land-Based Education on the University of Toronto's St. George Campus

ANDREA MANTIN + RYAN GORRIE

THE NAME "ZIIBIING" means "river" in Anishinaabemowin, a fitting name for a project located along the historical course of Taddle Creek, located at Hart House Circle, one of the most prominent landscapes at the University of Toronto and the eastern gateway to the St. George Campus. Designed by the Indigenous Design Studio and the landscape architecture team at Brook McIlroy with input from University of Toronto Elders, faculty, staff, students and host nations, this landscape will be an immersive, active and meaningful space that is representative of the many diverse Indigenous Nations on Turtle Island. The resulting landscape will connect visitors with land, culture and each other. The

Ziibiing project will be a multi-use greenspace for learning, gathering and ceremony.

To foster an inclusive space, the design draws from cultural elements significant to many Indigenous communities such as fire, water and the stars. A bronze open-air pavilion will feature a sacred fire and wood seating and will serve as a ceremonial gathering place. Situated atop a hill, the pavilion will form a focal point in the landscape and will be a beacon of welcoming to all. Constellation patterns commemorating the sky world will be etched into the bronze soffit below the pavilion's canopy. Star constellations are relevant to a broad range of Indigenous and

non-Indigenous cultures and will act as a unifying element that can be associated with varied culturally specific interpretations.

Marking the importance of waterways in Indigenous cultures, the design seeks to honour the memory of Taddle Creek, which once flowed through the site and is now buried far below. The creek is acknowledged through a rainwater feature that transports water from the hardscape surfaces to rain gardens in the lower elevations of the site. The feature is made up of a long stone rill that lines both

1 THE VISION
PHOTOS COURTESY BROOK MCILROY



2

sides of the pathway from the east entrance to the pavilion and gathering place. The rill is embedded with undulating river stones mimicking the bottom of a creek bed.

A portion of the wood-top bench seating installed throughout the site will be harvested from reclaimed White Oak and Siberian Elm trees that will be felled as part of the larger reconstruction of the campus landscape. Wood for the remaining benches will be supplemented by trees reclaimed from Queen's Park landscape improvements.

Bronze cultural markers etched with leaf patterns from four sacred trees will be located at each entrance marking the cardinal directions of the site. The paving below the markers also integrates the leaf pattern in the form of bronze embedments scattered across the ground plane, as if leaves had fallen from trees.

Engagement with the University's Council of Indigenous Initiatives Elders' Circle included meaningful conversations with the late Lee Maracle, an Indigenous scholar and renowned Uof T author. Lee guided the development of the medicine gardens, providing council on culturally significant storytelling through the design of cultural markers as well as gathering places for ceremony and celebrations.

Inspired by the Anishinaabemowin words *Awaadiziwin* (knowledge you can see) and *Akinoomaage* (to look to and take direction from the Earth), this landscape encourages reclamation of Indigenous knowledge. Working with Indigenous plant medicine expert Joseph

Pitawanakwat, the palette – including woodland plantings, rain gardens and forest plantings – is curated to demonstrate a microcosm of this region's most significant plants. Kayanase, an Indigenous-owned ecological restoration and native plant company located on Six Nations of the Grand River land, will provide plant material and plant installation for the project. Following on the University's mandate for teaching, this is intended to inspire education about plant medicine and increase Indigenous planting initiatives in urban settings. Indigenous plantings and immersive teaching spaces will provide resources for unique land-based education.

This project is a reflection of *Wecheehetowin*, UofT's response to the Truth and

Reconciliation Commission's Calls to Action and will contemplate reclamation and (re)conciliation. It is being coordinated with a larger campus revitalization project, Landscape of Landmark Quality, which will fundamentally rethink the landscapes in and around King's College Circle. Landscapes that are inclusive of Indigenous cultures are a critical part of any campus revitalization and the *Zibiing* project will mark U of T's effort to provide significant spaces for Indigenous communities both on and off campus.

Andrea Martin is a principal, project manager and landscape architect at Brook McIlroy and brings a broad range of creative skills to all her endeavors. She has worked as a landscape architect, curator and visual artist in Canada and the U.S. Andrea has been deeply involved in the work of Brook McIlroy's Indigenous Design Studio and played an active role in community engagement, design and implementation on a number of key Indigenous place making projects.

Ryan Gorrie is a licensed architect who has been collaborating with Brook McIlroy since 2009 and formally joined the firm in 2016 to lead the Winnipeg office and the Indigenous Design Studio. A First Nation member of Bingwi Neyaashi Anishinaabek (Sand Point First Nation on Lake Nipigon), Ryan strives to ensure the perpetuation of Indigenous culture through creative opportunities ranging from the crafting of traditional items for ceremonial use to large-scale landmark architecture. As part of a broader effort to support Indigenous presence in the design industry, Ryan also provides mentorship for Indigenous students and young designers who work at the firm.



3

03/ INDIGENOUS VALUES PROVIDE HEARTBEAT FOR SENECA'S NEW WELLNESS CENTRE

BRYCE MIRANDA

IN DESIGNING A new Health and Wellness Centre in the heart of the Newnham Campus for Seneca College, the DIALOG & Two Row Architect team have effectively embodied Indigenous values to improve the campus experience. Two Row Architect is a 100 per cent native-owned architecture practice operating from the Six Nations of the Grand River First Nation and Tkaronito. Collaborating with the multi-disciplinary design firm DIALOG, the team has promoted a design approach that realizes the meshing of local traditional knowledge with current design technology.

Indigenous cultures often have a strong spiritual relationship with the natural environment. Incorporating elements such as sacred spaces, ceremonial areas or traditional plantings can create opportunities for spiritual connection and reflection. This can enhance the overall well-being and mental health of the Seneca community, providing spaces for cultural practices and fostering a deeper connection to the land.

Central to the site design approach is the protection of an open courtyard or *dewe'igan*: the drum circle. The building orientation and site design directs people into the core space. In many ways, the new Health and Wellness Centre will become the new heartbeat of the campus.

Orientation and directionality play a crucial role in defining and drawing campus users to the new heartbeat. The cardinal directions – north, south, east, and west – hold cultural, spiritual and symbolic meaning. The sun and new day starts in the east, and by intentionally orientating the main entrance in this direction there becomes a stronger connection to the broader natural and spiritual world.

This design approach also applies to other celestial events such as sunset, solstice, equinox and other observances that have deep reverence in Indigenous cultures. The alignment of buildings, entrances, pathways and open spaces, captures light and incorporates the movement of the sun into the design. Highlighting the changing light throughout the day and year begins to pay respect to the natural rhythms and cycles of the “skyworld.”

The design also responds to the specific climatic inputs of the site, such as prevailing winds, solar exposure and temperature variations. It informs decisions about the building orientation, shading strategies, natural ventilation and the selection of appropriate plant species.

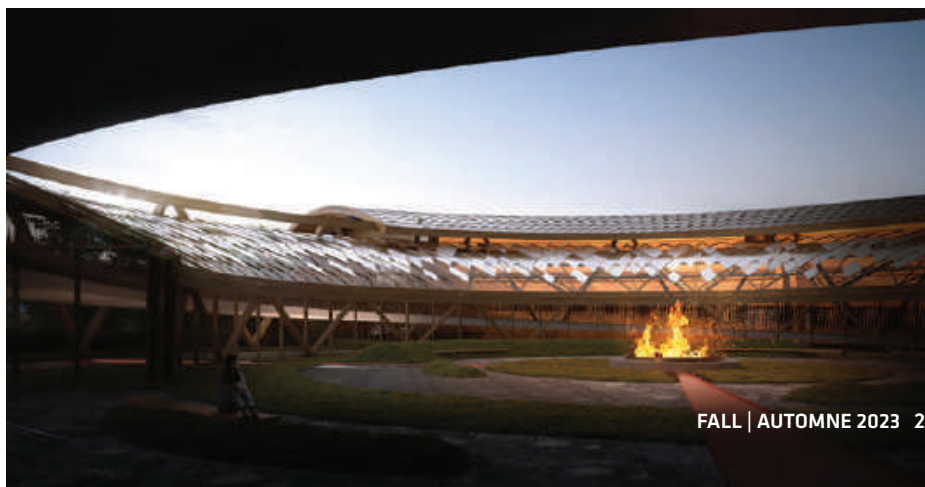
By aligning the campus design with the natural elements, the site can better integrate with its context and optimize its relationship with Mother Earth's gifts. Rainwater, for instance, is not just stormwater to be shunted into drains – it is considered a valuable resource. The Seneca site sits within the Don Valley watershed system. Below the drum circle sits a buried tributary. In healing the landscape, the design recognizes the tributary as a natural heritage gift worth celebrating. The eastern entrance embraces the rainwater, making it an important part of the arrival sequence. A series of boardwalks at the eastern entrance

lightly touch the new wetland for a naturally immersive entry experience that is both spiritual and educational.

Planting also plays an important educational role in the landscape design. Indigenous and vernacular plant species not only help restore the ecological balance but also support the well-being of “All of Our Relations.” By providing habitats for wildlife, such as birds and pollinators, the campus becomes an integral part of the local ecosystem. Using this as an educational tool, the weaving of planting into the centre's roof terraces fosters biodiversity, connects students with the natural world and strengthens the campus community's relationship with the land.

The New Health and Wellness Centre at Newnham Campus exemplifies how thoughtful design can embrace Indigenous values, providing a space that promotes holistic well-being while respecting and celebrating the profound connections between humans and nature.

Bryce Miranda is an award-winning landscape architect and urban designer, renowned for his expertise in city-building and public realm projects. With decades of experience, he transforms complex spaces into thriving, accessible communities. Bryce's work across Canada, including Toronto's Waterfront and Evergreen Brick Works, leave a lasting, positive impact on our cities.



04/ FROM BEAUX-ARTS TO INDIGENEITY

Unraveling the Evolution of Landscape Design at UBC

CHRIS PHILLIPS + SOROUSH GHADI + JEAN-GABRIEL CHIASSON

UNIVERSITY CAMPUSES, WITH their rich history and architectural diversity, can serve as an archive for the evolution of landscape, charting the rise and fall of design traditions over time. Traditions play a significant role in campus life, symbolizing continuity and new beginnings. The ritual painting of “The Cairn” at University of British Columbia (UBC) or “The Cannon” at the University of Guelph are examples of students marking their presence on campus, creating layers of artful vandalism over classes past. Much in the same way, layers of landscape architectural traditions form a palpable connection to a school’s history. Exploring the role of landscape architects and observing traditions of design in campus development, we delve into changing trends through PFS Studio’s work on the UBC’s Main Mall and compare modern approaches with historical master planning, highlighting the collaborative nature of the profession today and its contrast with earlier campus planning styles.

Universities have a unique relationship with their landscapes, which define their sense of identity and place. The term “campus” itself derives from the Latin word for “field,” emphasizing the importance of open spaces. Landscape architects such as Frederick Law Olmsted played a pivotal role in shaping early campus landscapes. Despite Olmsted’s call for more botanical diversity and natural relationships, campuses such as Stanford University and Simon Fraser University followed more controlled design approaches, prioritizing formality and order over nature. These contrasting approaches define the spectrum of campus planning over time.

Recently, the role of landscape architects in campus planning has evolved to become more collaborative and consultative, moving away from the traditional master-planning approach. At UBC, the involvement of various stakeholders, including Indigenous consultants from the Musqueam Nation, has become essential in shaping the university’s ecological approaches and the Campus Vision 2050 Plan. This shift is evident in the design of new public spaces at UBC, which now prioritize sustainable

landscape, unfolding views and a departure from formality. These changes reflect the movement in campus design toward a more inclusive and sustainable approach.

Early Development and Beaux-Arts Influence:

During the early 1900s, the Beaux-Arts school of thought dominated UBC’s original campus plan. The Beaux-Arts style was meant to communicate the cultural importance of advanced education. Its grand axial corridors were designed to accommodate the influx of vehicles, reflective of the era’s fascination with automobile transportation. The campus layout revolved around efficient vehicular circulation, which shaped the formal arrangement of buildings and open spaces. This is reflected in the Main Mall’s previous function as a combined street for pedestrians and vehicles.

Transition to Early Modernism: As the early modernism movement gained traction, the Beaux-Arts planning philosophy at UBC was gradually rejected. The focus shifted away from formal axes to a modernist aesthetic of buildings in landscape. The vehicle’s presence remained prominent, particularly in the form of expansive parking lots and wide streetscapes. More modernist architecture began to appear with a focus on monumental scale.

Shift to Human-Centric Planning: In the 1990s and early 2000s, UBC underwent a significant paradigm shift in campus planning. The dominance of vehicles was gradually curtailed, limiting access to the core of the campus. The campus’s design philosophy now centered around creating inviting public spaces and nurturing the ecological aspects of the environment. Attention was given to developing an arboretum and prioritizing campus ecology, reflecting a growing awareness of sustainable practices and environmental stewardship.

The Importance of Campus Indigeneity:

Since 2015, UBC has included Indigeneity and reconciliation in its campus planning. There has been a renewed focus on restoring the ecological framework and integrating Indigenous art and cultural expressions into placemaking. Indigenous perspectives and

knowledge are now being woven into the fabric of the campus, creating a richer and more inclusive environment. The emphasis on Indigenous values and traditions serves as a testament to UBC’s commitment to reconciliation and honoring the land’s original inhabitants.

The evolution of campus planning philosophies at UBC exemplifies the dynamic nature of urban development and design. From the Beaux-Arts dominance of the early 1900s to the human-centric and indigenized approaches of the present day, UBC’s campus has continually adapted to reflect changing societal values and aspirations. This evolution underscores the dynamic nature of campus design and the significance of adapting to meet the evolving needs of educational institutions. By understanding this historical progression, we gain insight into the layers of planning philosophies that have shaped UBC into the vibrant and diverse campus it is today.

Chris Phillips, FCSLA, is a founding partner of PFS Studio, who has received acclaim for his contributions to Vancouver’s livability and the prestigious CSLA Lifetime Achievement Award. Chris’s influential role in the redevelopment of the UBC Campus and his passion for integrating context, metaphor and public art into urban spaces make him a sought-after speaker and juror in the field.

Soroush Ghadi is a highly skilled and process-oriented project professional with a decade of experience in landscape architecture. His expertise in design, development and planning spans British Columbia and Alberta, where he strives to craft environmentally conscious and versatile community facilities. Soroush prioritizes community involvement, ensuring project goals align with expectations.

Jean-Gabriel Chiasson is an urban planning and landscape design professional with experience in project management across a variety of public and private sector contexts. Jean-Gabriel has collaborated with local and Indigenous artists, community associations, architecture practices and municipal organizations to develop active and social spaces in major cities across North America.

MAIN MALL AND LIBRARY SQUARE, UBC CAMPUS.
IMAGE 1 PFS STUDIO.

05/ SASKATOON'S INNOVATION PLACE CAMPUS

WILLIAM HRYCAN WITH ROB CROSBY

THE SASKATOON CAMPUS of Innovation Place is an environment that encourages and fosters innovation, collaboration and entrepreneurship. The physical environment creates interior and exterior spaces that enhance tenant experiences, promotes interaction and collaboration among tenants and the adjacent University of Saskatchewan (UofS), supports the establishment and growth of businesses, and provides some of the highest quality and best-managed public spaces for residents of, and visitors to, Saskatoon. The creation of an environment like this is largely due to the successful implementation of a fully planned development, with ongoing updates to respond to shifting needs. From the outset, Innovation Place landscapes were considered as important to campus success as basic utilities.

Innovation Place is a young campus with roots that go back to the late 1970s. Crosby Hanna & Associates was integral to the overall planning, and site and landscape development, of the park since its inception, providing ongoing master planning updates as campus developed and expanded. Our relationship with Innovation Place continues with a new generation of designers.



1

The Innovation Place campus shares more than a border with the adjacent UofS core campus. Innovation Place was founded through an agreement between the city, the province and the university and resides on land leased from the university. Innovation Place has its own clear identity separate from the university, but the two campuses are physically integrated. This facilitates collaboration among research groups on both campuses.

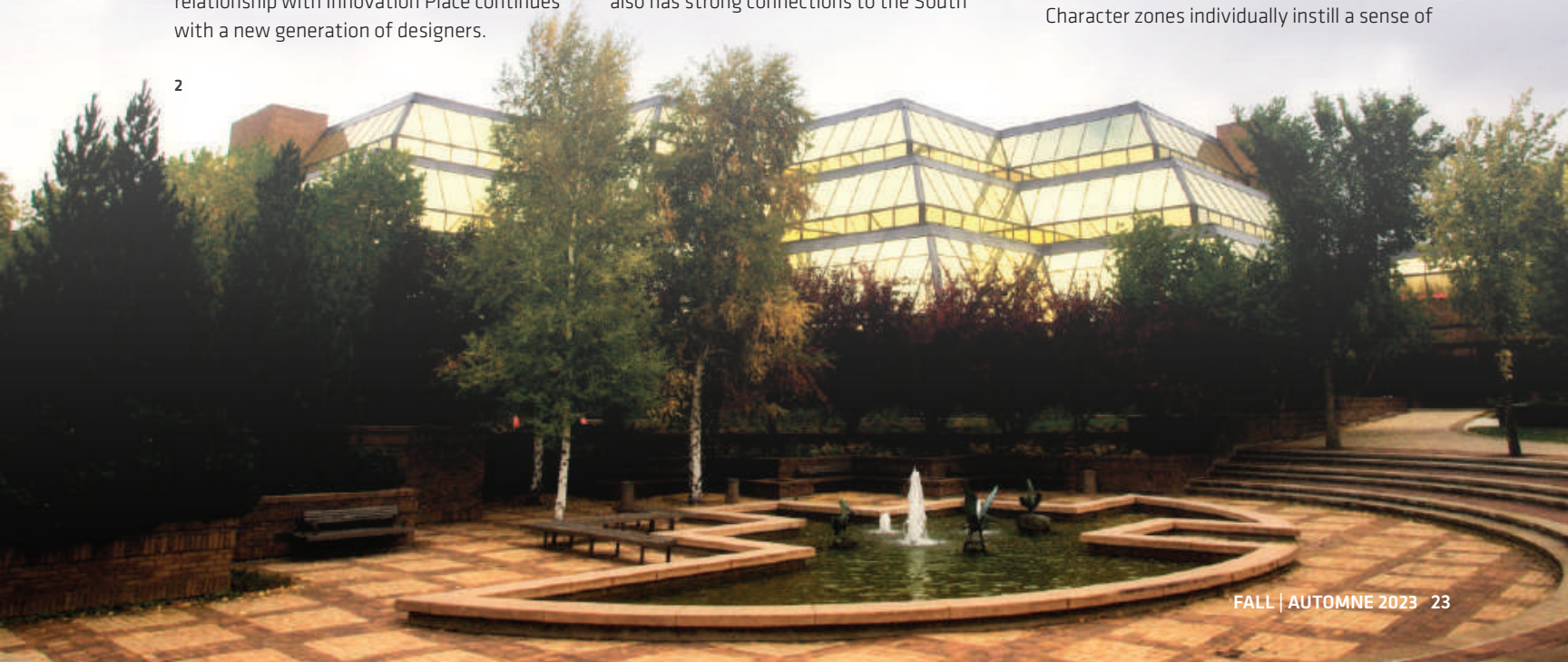
Innovation Place is a carefully maintained, high-quality landscape that benefits the technology and research groups on campus. Because it is publicly accessible and integrated with the landscapes and trail networks of the river valley, university and city, it also provides unique public amenities.

The research and technology campus also has strong connections to the South

Saskatchewan River, including the Meewasin Valley trail network. Saskatoon boasts a vibrant and healthy river valley, primarily because of proactive leadership and resource management by the Meewasin Valley Authority (MVA). The Innovation Place campus endeavors to further the mandate of Meewasin where it interacts with areas managed by MVA, seeking balance between human use and development and river valley conservation.

The campus itself celebrates the Province of Saskatchewan: embedded into the fabric of the campus are four character zones, each highlighting a unique Saskatchewan ecoregion. Aspen Parkland, Boreal Forest, Agricultural, and Urban character zones each have their own unique identities within campus, and River and Wetland character zones are planned for future expansion areas. Character zones individually instill a sense of

2





3

place within each zone, and together celebrate the diversity of landscapes in the province.

Interior co-working and collaborative spaces are mirrored by exterior areas and feature landscapes that provide high-quality amenity spaces for tenant enjoyment and interaction opportunities. These areas also

provide some of the most effective public landscape spaces of Saskatoon, supporting community well-being and eliciting positive experiential responses.

Boffins Garden is a horticultural treasure in the centre of the campus. Designed in a style inspired by the Arts & Crafts movement, and developed in collaboration with Saskatchewan horticulture pioneer Dieter Martin, this space fulfills the role of a public botanical garden for Saskatoon. The microclimate created by the large central pond, surrounding landforms and adjacent buildings, coupled with careful maintenance and management, allows unique-to-Saskatoon and marginally hardy species to thrive. In the summer the open spaces, patios and gazebo make this one of the most popular landscapes to explore, to relax and to use for family gatherings and celebrations. In the winter the pond is cleared and remains open for skating.

Boreal Plaza is a tenant amenity space enclosed by mature coniferous species endemic to the Northern Boreal forest; Downey Court is an urban plaza within the

Agricultural character zone. Orchard Park is a linear transition landscape that celebrates the horticultural and agricultural culture of Saskatchewan, including fruit bearing species free for public consumption. Finally, the Bowl is an urban plaza that grounds the Galleria, the flagship building near the centre of campus. These feature landscapes accentuate the unique features of the character zones in which they sit, and enrich the social and economic situation for tenants of Innovation Place. **LP**

William Hrycan, SALA, CSLA, raised and educated on the Prairies (except for his MLArch from Scotland), William's experience is characterized by astute and broad-based knowledge of site and landscape development. In addition to his responsibilities as a Principal Landscape Architect in the Saskatoon office of Crosby Hanna & Associates, William is Horticultural Editor for *The Gardener*, a magazine for cool climate gardeners. Rob Crosby is a landscape architect and former principal of Crosby Hanna & Associates.

1 BOREAL PLAZA. 2 THE BOWL. 3 BOFFINS GARDEN.
PHOTOS 1 STEPHANIE KLYNE 2,3 IMAGERY PHOTOGRAPHY

Free CIP membership now available for all students, any program, anywhere!

- ✓ Free digital subscription to *Plan Canada* magazine
- ✓ Discounts for our National Conference
- ✓ Access to national job and internship opportunities

CIP works on behalf of over 8,000 planning professionals and has served as the voice of Canada's planning community since 1919.

CIP-ICU.ca/Students-2023



CIP-ICU
Canadian Institute of Planners
Institut canadien des urbanistes



IRONSMITH

Leadership by design

Paver-Grate®

More than meets the eye.

IRONSMITH's Paver-Grate® suspended paver system lets you design over —instead of around— tree areas for optimized planting, tree health and pedestrian comfort. An excellent choice for urban areas, the Paver-Grate® system seamlessly provides root space without impeding on pedestrian walk areas. Paver-Grate® tree grates can be specified in standard or custom sizes with or without opening's. Trim rings and integrated tree grates available in multiple styles.



For more information about all IRONSMITH products visit us online at, www.ironsmith.biz or call, 760-776-5077.

LIAT MARGOLIS + ELDER WHABAGOON + AGATA MROZOWSKI

WORKING TOGETHER: DECOLONIZING CAMPUS LANDSCAPES

> FR_LP+ TRAVAILLER ENSEMBLE : DÉCOLONISER LES PAYSAGES DES CAMPUS

Nous avons commencé la journée à l'aube. Les jeunes se sont rassemblés sous le *Wiisagi-Mitigominh* géant (chêne rouge). L'été durant, les jeunes ont préparé l'accueil du *Zhingwaak* (pin blanc d'Amérique) au sein de la communauté végétale de la cour de New College.

WE STARTED THE day at dawn, the youth huddled together underneath the giant *Wiisagi-Mitigominh*, Northern Red Oak. For an entire summer, the youth have been imagining the welcoming of *Zhingwaak*, Great Eastern White Pine, into the New College courtyard plant community. With songs ringing out in the cool and rainy Fall

air, Elder Whabagoon asked permission of the land to be disturbed and dug. Arborist Tomas Cohen and his crew were preparing to transplant the four-meter youngling. We invited them to join our small circle and partake in protocols rooted in deeply respectful and loving relations with land, soil and the sacred life of all creation. This was not a commemoration ceremony or a legacy naming. This was an acknowledgment of kinship, a deep gratitude to ancestral land and a grounded sense of healing.

Healing is at the core of the *Nikibii Dawadinna Giigwag* (NDG) Indigenous youth program at the University of Toronto. Named by the youth and translated into Anishinaabemowin by

Elders from Gananoque, ON, the program's name means "Flooded Valley Healing." The youth spoke about the healing of the land and waterways and the healing of themselves. As the rain subsided, a circle of mentors gathered to realize the youth's vision. This was the youth's response to the University of Toronto's (UofT) Truth and Reconciliation (TRC) Call to Action to create Indigenous spaces and opportunities to connect with the land on campus grounds.

The youth shared teachings and stories about *Zhingwaak*'s medicinal gifts and ethical teachings. Elder Whabagoon shared stories from her home territory, *Obishikokaang*, meaning "narrows abundant with White Pine," Lac Seul First Nation. She smudged the excavated hole with *Bashkode*, Sage, then invited each guest to place *Asemaa*, tobacco, along with a prayer, before *Zhingwaak* was planted. The youth then untied the tree and Elder Whabagoon poured *Mushkiki Nibi*, sacred medicine water, around the base. The circle was then closed with singing, drumming and feasting of smoked duck, wild rice, saskatoon berry pies and sweetgrass soda from the Pow Wow Café and Chef Sean Adler.

The tree selection was inspired by the story shared by Mary Sissip Geniusz of how abundant *Zhingwaak* was in the region of Southern Ontario that "a squirrel could have run from Lake Erie to the prairies in Minnesota on the tops of white pines without once having to come to ground" and how "in the old days there were reports of white pines 150 to 200 feet tall and 5 to 7 feet in diameter,





2

Healing is at the core of the *Nikibii Dawadinna Giigwag* (NDG) Indigenous youth program at the University of Toronto. ... the program's name means "Flooded Valley Healing." The youth spoke about the healing of the land and waterways and the healing of themselves.

1 ELDER WHABAGOON ACKNOWLEDGING NEWLY PLANTED TREES IN NEW COLLEGE.
2 DRUMMING CEREMONY WELCOMING ZHINGWAAK TO NEW COLLEGE.
PHOTOS 1,2 TARA MABON, CITY OF TORONTO

some four hundred years old." The youth acknowledged the massive loss of the white pine across the Great Lakes region and strongly advocated for re-telling this history and the planting of native coniferous species. They also wanted to share the story of the Great Tree of Peace, which underlies the Haudenosaunee confederacy and constitution. They were drawn to the message that peace can grow by coming together as one to respect and give gratitude for All Our Relations.

The NDG Program

Responding to the 34 Calls to Action outlined in the UofT's 2017 TRC document, *Wecheehetowin*, which means "working together" in Cree, the NDG program is collaboratively led by Ojibwe Elder Whabagoon and Israeli-born Landscape Architecture Professor Liat Margolis. The program provides youth with a culturally grounded summer employment as well as a high school co-op placement credit to support pathways to postsecondary education and careers in fields related to

design and the environment. Each summer, 10 high school youth are employed at the university as landscape architecture research assistants to engage in the design and realization of projects across the campus, including medicine gardens, urban agriculture, restoration of disturbed sites, seed keeping, food forests, foraging and cooking.

These practices connect youth to a broad range of mentors, including Elders, Knowledge Keepers, land defenders, healers, architects, biologists, ecologists, gardeners, foragers, chefs and artists to strengthen the youth's connection to Indigenous ways of knowing and doing. At the same time, they critically explore frameworks for TRC in a range of fields, including landscape architecture, Indigenous and environmental studies, traditional and urban food systems, regenerative ecology, and urban forestry.

The presence of the mentorship circle provides the web of relations, safety and support for the youth to learn on, and



3

from, the land. Through this practice, we created a teaching and learning model for landscape design and implementation that intentionally trespasses academic boundaries to weave together a community in pursuit of decolonizing the institution. This includes the forging of cross-disciplinary partnerships and navigating around institutional barriers to recognize and elevate the knowledge, wisdom and lived experience of grounds and operations staff, community foragers, Indigenous Knowledge Keepers and Elders that are often excluded from the academy.

This inclusive and non-bounded thinking challenges the ways in which Indigenous spaces on campus are conceived and perceived. The university's TRC document calls for the creation of designated spaces that are named and identified as cultural gathering spaces. The reclaiming of spaces and representation through naming and design is undoubtedly important within the university, which up until very recently had none. At the same time, if we are acknowledging that the university stands and operates on traditional territory, we must be bolder, and establish that TRC and Indigenous leadership and stewardship should be foundational principles to landscape planning across the entire campus.

This reframing strives for a decolonized approach that is embedded and systemic, not simply isolated to confined sites. In doing so, cultural teachings, traditional protocols and practices, environmental stewardship and caretaking of All Our Relations would be integrated with teaching, research, university planning and grounds management. This would necessitate the establishment of permanent, non-casual employment positions, and meaningful efforts to recognize systemic racism and tokenism. It would also designate campus landscapes as living landscapes to be engaged with by faculty, staff, students and community –

not just to look at and pass through. It would restructure the conventional, top-down processes of landscape planning, design, procurement, planting and maintenance to allow for partnerships with instructors, researchers, students and community.

Food Forest Project

NDG's model in practice is exemplified through the program's long-standing relationship with New College, located on St. George campus. Since the program's inception, former New College Principal, Professor Bonnie McElhinny, and Professor Ron Vander Kraats, Chief Administrative Officer, have been avid supporters. They have provided youth with access to land, worked with the youth on a series of landscape projects to decolonize the courtyard, sponsored youth lunches at their cafeteria, and supplemented funds for the realization of youth designs – all of which are concrete examples of allyship.

As NDG's relationship with New College strengthened, further design opportunities and proposals evolved. The idea to create a multi-strata food forest within the courtyard is inspired by the work NDG stewarded at the UofT Scarborough campus in partnership with the UTSC



4

3 MENTOR, ISAAC CROSBY AT THE UTSC FARM.
4 YOUTH BRAIDING SWEETGRASS. 5 NDG PLANTING
AT WAAKEBINESS INSTITUTE 6 WAAKEBINESS
EDIBLE AND MEDICINAL PLANTS.
PHOTOS 3-6 L MARGOLIS



5

Farm, Seed Library, Grounds, and Culnaria Research Centre. For the past two years, NDG has helped to strengthen and make new introductions of Indigenous food sovereignty practices among these entities – ranging from foraging, cooking, seed keeping, and the revitalization of traditional staples, such as the Pawpaw.

This work has complemented related conversations taking place at New College about building community through food vis-a-vis the Equity Studies program, the library's largest collections of urban agricultural literature, and ongoing investments into their cafeteria. The design of a food forest provided the opportunity to introduce understory and groundcover species – such as Bloodroot, Canadian Anemone, Wild Ginger, Witch Hazel, Striped Maple, Serviceberry, Spicebush and more – and invite conversations about medicinal properties, edible uses for humans and nonhuman, foraging, and harvesting practices as part of curriculum and decolonial landscape practices. Inspired by NDG, New College is currently considering renaming the floors within their residence after the trees in the courtyard.

In the spring of 2023, the first phase of the food forest project was realized thanks to the City of Toronto's Urban Forestry Community Planting and Stewardship grant and financial support from New College and UofT Grounds. The university

required a licensed professional to produce drawings and manage the construction, which opened an opportunity to engage NDG's mentor, Terence Radford, a Métis landscape architect and the principal of the Indigenous-owned firm Trophic Design. This also permitted Trophic to become a preferred vendor with the university's newly established Social Procurement Program that focuses on supporting BIPOC-owned businesses. Another emerging outcome of the work of NDG is the capacity to advocate and support all the Indigenous mentors, businesses and entrepreneurs within its web of relations.

This past summer, NDG youth revisited the planting completed in fall 2021 in partnership with the UofT Waakebiness Institute for Indigenous Health to add a layer of groundcovers, including *Wiingashk*, Sweetgrass. They have also begun a new collaboration with Public Work, along with UTSC Planning, Grounds, and the Office of Indigenous Initiatives to design the planting around the forthcoming Indigenous House Gathering Circle. Albeit a minuscule effort compared to the scale of the institution, the collaborative and decolonial work that NDG has initiated at two of the UofT campuses offers a new paradigm that transcends institutional jurisdictions and divides across disciplines, links together Truth and Reconciliation



6

with teaching and grounds management, and cultivates a deep sense of community, reciprocity and healing.

Acknowledgments

The NDG program has been made possible through the Access Programs University Fund, City of Toronto Community Planting and Stewardship Grant, City of Toronto Climate Action Fund, PEAL, and NSERC PromoScience Program. We are grateful for the support, collaborations and financial contributions of many generous partners and mentors. Special thanks to Stefan Herda for his design guidance and youth mentorship.

@nikibii_dawadinna_giigwag LP

PIERRE-LUC TRANCLÉ-ARMAND

CAMPUS UNIVERSITAIRES : SAVOIR RÉPONDRE À PLUSIEURS BESOINS

> **EN_LP+** BALANCING THE NEEDS OF
MULTIPLE USES AND USERS ON
A UNIVERSITY CAMPUS

**Autrefois étudiant,
aujourd'hui employé.**

Mon regard sur les aménagements des campus de l'Université de Montréal a considérablement changé depuis l'époque où je courrais entre les cours pour arriver à l'heure.

Mon passage du côté professionnel m'a permis de comprendre que pour devenir des leaders en enseignement et en recherche (qui sont les mandats premiers de ces institutions de renom), les universités ont l'obligation d'être supportées par des espaces intérieurs et extérieurs qui répondent aux besoins de la communauté, en plus d'être invitants, accessibles, confortables et esthétiques.

C'est pourquoi la Direction des immeubles s'est dotée en 2021 d'un expert à l'interne en architecture de paysage. Cette arrivée est le résultat d'une série d'événements clés : une intervention mesurée pour commenter la conception de la nouvelle station Édouard-Montpetit du Réseau Express Métropolitain (REM), un changement de gouvernance, une nouvelle planification stratégique en développement durable et l'adoption imminente d'un nouveau plan directeur des aménagements.

Mon rôle : maintenir la stratégie de la prise de décision aux actions terrains. Bref, assurer une vision 360 sur toutes les interventions extérieures.

1 SENTIERS PIÉTONS À TRAVERS LES BOISÉS.

2 PASSERELLE-BEAUMONT L'AMÉNAGEMENT EN 2019 D'UNE PASSERELLE PIÉTONNE QUI ASSURE UN LIEN DE MOBILITÉ ENTRE DEUX QUARTIERS AUTREFOIS MOINS ACCESSIBLES. **3** JARDINS-ÉPHEMÈRES : L'AMÉNAGEMENT TEMPORAIRE D'UNE ZONE JARDIN DÉDIÉE À L'AGRICULTURE URBAINE POUVANT ACCUEILLIR DEPUIS 2015, PLUSIEURS PARTENAIRES LOCAUX. **4** CHEMIN-CEINTURE : EN COLLABORATION AVEC LA VILLE DE MONTRÉAL, L'AMÉNAGEMENT EN 2014 D'UN CHEMIN D'ACCÈS PIÉTON SUR LE TERRAIN DE L'UNIVERSITÉ VERS LE PARC TIOHTIÀ:KE OTSIRA'KÉHNE, SITUÉ SUR LE FLANC NORD DU MONT-ROYAL.

PHOTOS 1-3 AMÉLIE PHILIBERT **4** PIERRE-LUC TRANCLÉ-ARMAND



2

L'Université de Montréal possède plusieurs campus. En termes d'espaces verts, les trois principaux sont le campus principal sur le flanc nord du Mont-Royal, le nouveau campus MIL à Outremont et celui de Saint-Hyacinthe, où la médecine vétérinaire y est enseignée. Après deux ans dans mes nouvelles fonctions, voici quelques particularités très propres à l'aménagement des campus universitaires que j'ai constatées à la suite d'observations sur les types d'utilisateurs.

Usagers externes

Les campus sont des paysages bien particuliers. Il s'agit d'un ensemble de terrains et d'immeubles dont la fonction première est de remplir la mission d'enseignement et de recherche auprès des étudiants, des enseignants et du personnel administratif. Les campus s'intègrent fréquemment au tissu urbain et doivent être attentifs aux besoins des usagers externes qui les fréquentent.

4



3

Sans s'y restreindre, l'Université de Montréal a participé à des projets d'aménagement qui permettent de décroquer les terrains de l'Université au bénéfice des collectivités environnantes. En plus, ces aménagements répondent souvent à un besoin de lier divers espaces publics existants.

Les espaces publics des campus de l'Université de Montréal sont accessibles en tout temps et relativement calmes en raison du caractère privé de la clientèle et du secteur où ils sont implantés. Ainsi, de nombreux usagers externes peuvent les utiliser à des fins récréatives ou pour toute autre activité. L'accès aux routes escarpées du campus sur le Mont-Royal, utilisées quotidiennement par des cyclistes chevronnés, en est un exemple frappant. Autre exemple, les grandes pelouses qui accueillent les enfants des écoles et des Centres de la petite enfance (CPE) environnants pour jouer et profiter de la nature. Pour être appréciés à leur juste valeur, les campus et leurs aménagements doivent s'intégrer à leur contexte.

Ainsi, de nombreux usagers extérieurs s'approprient ces espaces, leur conférant d'emblée une acceptabilité sociale.

Usagers internes

Qu'en est-il des usagers internes? Comment ces campus sont-ils appréciés, perçus et utilisés par ceux-ci? Les usagers sont multiples mais pourraient se regrouper en deux catégories.

La première, ce sont les employés actifs de l'université qui ont une expertise en aménagement. Cette catégorie comprend plusieurs groupes, mais réunit principalement les membres de la Direction des immeubles, dont l'un des principaux mandats est d'offrir et d'aménager des espaces conviviaux, ainsi que le corps enseignant, dont l'expertise est reliée de près ou de loin à l'environnement extérieur, notamment l'aménagement et la biologie.

Pour le groupe de la Direction des immeubles, les campus universitaires, avec leur superficie considérable, apparaissent comme des immenses terrains de jeu pour réaliser des aménagements durables ou pour implanter de nouvelles pratiques d'entretien qui respectent la réglementation.

Pour les enseignants, les espaces extérieurs d'un campus sont d'excellents lieux de transmission du savoir, ils sont une source d'inspiration pour l'enseignement et la recherche.

La seconde catégorie est la communauté pour laquelle nous travaillons, c'est-à-dire celle qui en bénéficie. Cette catégorie comprend plusieurs utilisateurs et intervient sur les espaces de manière plutôt passive. Ils profitent des espaces davantage comme des lieux de passage lors des transits, de repos lors des pauses ou encore de célébration lors d'événements.

Il ne fait aucun doute que l'aménagement extérieur d'un campus est un élément très important dans la vie quotidienne de la communauté universitaire et favorise l'émergence d'un sentiment d'appartenance. Ce sentiment se transforme graduellement au fil des longues heures passées sur le campus au cours des sessions. Le point de vue se modifie lentement, jusqu'à ce que l'université devienne une extension de son domicile. Tranquillement, les détails de chaque élément de l'aménagement deviennent de plus en plus intéressants : le confort et la convivialité des espaces, la facilité d'accès, la tranquillité, les paysages, l'offre alimentaire, l'agriculture urbaine, la présence de la nature, etc.

Les espaces extérieurs des campus ont une valeur inestimable pour la communauté. Ils doivent répondre à divers besoins et intégrer les meilleures pratiques de conception. Il convient également de noter que les utilisateurs d'aujourd'hui sont de plus en plus sensibilisés aux questions environnementales et qu'ils s'attendent à ce qu'une université soit à l'avant-garde. Ils estiment qu'elle a le devoir de montrer l'exemple et d'adopter les meilleures pratiques. C'est dans cette logique qu'il est important de faire connaître nos initiatives afin de sensibiliser en permanence la communauté.



PLAN DIRECTEUR D'AMÉNAGEMENT DU CAMPUS DE LA MONTAGNE

VERSION FINALE | DÉCEMBRE 2020

RÉVISION 10 SEPTEMBRE 2021

 Université de Montréal
 lemay

9

L'importance d'un plan d'ensemble

Il est indéniable qu'un campus a de nombreux utilisateurs et un grand potentiel. L'environnement est complexe et ressemble beaucoup à une « mini-ville à l'intérieur de la ville ». Une question se pose alors : comment maintenir une ligne directrice cohérente lors des interventions? Je soutiens qu'un excellent point de départ consiste à reconnaître l'importance d'un plan directeur. Cet outil de planification facilite grandement le travail quotidien en permettant de concentrer les efforts là où les bénéfices sont les plus importants.

Comme mentionné, l'Université de Montréal a adopté en janvier 2022 un nouveau plan directeur d'aménagement, qui n'avait jamais été mis à jour depuis 1995, pour son campus principal. L'université se dote enfin d'une vision innovante et ambitieuse. Ce plan trace la voie à plusieurs principes d'aménagement, notamment la gestion de l'eau, la signature du mobilier urbain, la stratégie de signalisation, l'éclairage, les revêtements de surface et la circulation, tout en mettant en valeur les caractéristiques des éléments paysagers et bâtis. Conformément à ces éléments, le plan propose trois approches conceptuelles afin de répondre à différentes réalités : le développement durable, la conservation du patrimoine et la reconnaissance autochtone.

Le défi est grand et beaucoup reste à faire. L'essentiel de mon travail consiste à mettre en œuvre le plan directeur en tirant parti de toutes les occasions, qu'elles soient petites ou grandes, pour le mener à bien. J'agis comme « gardien » des orientations adoptées et je communique assidûment cette vision d'ensemble à mes collaborateurs.

5 ROBOT-TONDEUR L'INTÉGRATION DE NOUVELLES TECHNOLOGIES, TELLES QUE DES ROBOTS-TONDEURS, POUR FACILITER LES OPÉRATIONS D'ENTRETIEN DES SURFACES GAZONNÉES. **6** TOITS-VERTS-MIL INSTALLATION D'ÉQUIPEMENTS SUR L'UN DES TOITS VERTS DU COMPLEXE DES SCIENCES AU CAMPUS MIL POUR SURVEILLER LA QUALITÉ DE L'AIR ET LES CONDITIONS MÉTÉOROLOGIQUES. **7** STATIONNEMENT À VÉLO EN FAÇADE. **8** ENROCHEMENTS. **9** PAGE COUVERTURE DU PLAN DIRECTEUR D'AMÉNAGEMENT. **10** ACTIVITÉ DE PLANTATION EN COLLABORATION AVEC SOVERDI

PHOTOS 1-3, 5, 6, 8 AMÉLIE PHILIBERT 4 PIERRE-LUC TRANCLÉ-ARMAND 7 UDEM-UDD 9 LEMAY 10 PLTA

Pour respecter les intentions de ce plan visionnaire, deux grands chantiers occupent particulièrement mon temps : le premier demeure la consolidation de la « Coulée verte », qui pourrait se définir comme une zone de conservation provenant du milieu naturel du Mont-Royal et qui traverse le campus. Les actions mises de l'avant sont notamment la plantation massive d'arbres, la gestion différenciée et le contrôle des espèces envahissantes. Mon deuxième chantier est la conservation des acquis, notamment la surveillance étroite de l'entretien des espaces, végétal et minéral, pour conserver le patrimoine naturel et paysager du campus principal.

Défis et possibilités

Les campus font face à de nombreux défis : le sous-financement et la gestion de l'information.

Bien que ces défis soient importants et partagés par plusieurs organisations, ils peuvent être surmontés assez rapidement lorsqu'on tient compte des possibilités uniques que les campus présentent : un large éventail d'expertise disponible dans les nombreux programmes d'enseignement et de recherche, une culture de l'innovation, et une recherche constante de décisions les plus susceptibles de conduire aux normes les plus élevées en matière de durabilité. **LP**



10

BHAVANA BONDE

UNIVERSITY COLLEGE OF THE NORTH THOMPSON CAMPUS

REFLECTING INDIGENOUS VALUES AND BELIEFS

> **FR_LP+** CAMPUS DE L'UNIVERSITY COLLEGE OF THE NORTH À THOMPSON – REFLET DES VALEURS ET DES CROYANCES AUTOCHTONES

ESTABLISHED IN 2004, University College of the North (UCN) in Thompson, MB, is a unique post-secondary institution offering trades, adult education, certificate, diploma and university degree granting programs. UCN is an institution devoted to the northern community and development, and it reflects the Indigenous cultural diversity of northern Manitoba.

Thompson is located in a region with abundant natural resources, beautiful lakes, rivers, forests and minerals, serving as gateway to northern communities steeped in Indigenous cultures and traditions. Since Indigenous youth are the fastest growing demographic in Canada, the lack of access to good education is a major problem facing First Nations. The UCN Thompson campus aims to be an inviting destination that inspires and connects the community.

In 2009, Architecture49 worked to prepare a conceptual plan for the main

UCN campus in Thompson. The project included a new facility of over 8000m² (nearly 90,000q.ft), built in conjunction with renovations to the existing Thompson Regional Community Centre (TRCC) on the site, to create a “Hub” for the community. The existing amenities on the site included two baseball diamonds, track and field, a gravel parking lot (approx. 800 spaces) and a high school. The goal was to create a campus that complemented the institution's mission: “to ensure northern communities and people will have the opportunities, knowledge and skills to contribute to an economically



and culturally healthy society inclusive and respectful of diverse Northern and Indigenous values and beliefs.”

The design process involved numerous integrated design sessions with project stakeholders, including community elders. The intent was to express the community's values through the campus as well as through architectural design – not only the material palette, but also through the design and construction processes themselves.

Through the stakeholder consultation process, a vision statement and project charter were created as a “North Star” to guide design development. We identified seven guiding principles, which coincidentally matched with the seven sacred teachings of Indigenous Peoples:

- 1) Functional Learner Centered - Wisdom
- 2) Unique Image (Signature Design)
 - Courage
- 3) Safe & Welcoming Environment
 - Respect
- 4) Sustainability - Humility
- 5) Reflective of Northern & Aboriginal Culture - Truth
- 6) Community Focuses - Love
- 7) Flexibility - Honesty



2

1 CHILDCARE GARDEN. 2 UCN ILLUSTRATIVE PLAN.
3 WOOD-CARVED ART WORK AT THE ENTRANCE.
PHOTOS 1, 2 A49 3 TOM ARBAN



3



4

The campus plan identified many other goals that have not traditionally been part of a university's mandate, such as creating a sense of place and rejuvenating a natural site impacted by mine waste backfill. The new campus is both a place for traditional and advanced learning, but also an attempt to reach out to those who have not previously felt welcome in a university/college environment. The desire is to change that paradigm by opening the university college to everyone who wants

to learn, or just wants to sit in the space and enjoy the feeling of a community or village.

"Connection to nature" was a key to developing a UCN campus that respects northern values and beliefs. At the funding application stage, the building location was proposed closer to the Burntwood River within the riparian corridor. After A49 was awarded the project, during the master planning stage, a "spine" connecting the entrance of the site to the River was established, with the new UCN building

becoming part of a series of nodes along the Spine, and a link to the Burntwood River was essential to the campus but also protecting the riparian corridor – "the Land."

"Giving back to the land" is an integral part of Indigenous cultures and traditions. Planning the new building on the existing parking lot impacted by mine waste backfill not only created an opportunity to restore a large gravel parking lot into a native woodland, but also protect a riparian corridor. The location of the building created an opportunity to connect with the TRCC, encouraging the shared use of the spaces with the library, meeting rooms, café, daycare of UCN and the arena, gym and indoor play area of the TRCC.

Student experience on the campus is about maintaining a safe and welcoming environment, with easy way-finding and orientation, as well as an abundance of natural light and exterior views. The building form responds to the site. It gently curves and grows from the land, embracing the entry plaza and protecting it from northern winds. The orientation of the building with the maximum southern light exposure created an opportunity to develop a central atrium-like "Interior street" that orients and guides students through the building, connecting to the Community Centre. Connections to nature were reinforced through designing a building having multiple access points at different levels connecting to outdoor campus amenities. An exterior green trellis wall leads to the west entrance connecting to the residential side of the campus, while an accessible exterior ramp, providing access to the green roof, connects to the Interior Street at the second level.

The region has an abundant supply of granite stockpiled just minutes from the site, which provided an opportunity to reinforce the connection of the building with the landscape. The concept of utilizing architectural Gabion™ wire cages for the accessible ramp wall construction was the perfect solution to create this material connection, while also providing an economic benefit to the local population. Regional labourers were hired to help with stacking the granite rocks into the wire baskets for the finished exterior wall system



5

The design intent was to express the community's values through the campus as well as through architectural design.

4 EXISTING, PROPOSED AND BUILT.
5 CHILDCARE PLAY AREA. 6 GREEN ROOF.
PHOTOS 4, 5 A49 6 TOM ARBAN



6

to strengthen the sense of community buy-in and ownership of this project.

Flowing directly off the childcare space is an outdoor play area, secured by additional gabion feature walls. The south-facing daycare garden ensures maximum use of the outdoor play area, particularly in the winter months. This outdoor space is designed as a "natural" playground with features to promote discovery and learning. Play items include a sand pit, log steppers, culvert planters for gardening, grass berms, pathway loops and plantings of local species with different colours, smells, textures, sounds and seasonal change.

To reintroduce the woodland ecosystem, a modular planting plan with a mixture of native species was developed, creating a regenerative landscape where growing conditions dictate how each module evolves. Through prudent plant and soil selection, the green roofs (Intensive and extensive) have also flourished, even in the northern climate (Plant Hardiness Zone 2). Green roofs, sloping up from grade level, provide a natural outdoor environment for students and staff, giving the appearance that the building grows out of the land.

From planning through to construction completion in 2014, the landscape architect played a key role delivering the campus vision. Sequential tendering and the remote location demanded a detail-oriented and

hands-on approach to construction management. In an area with a lack of experienced gardeners, post-construction visits and the creation of a simple maintenance manual have helped UCN staff.

Green roofs, a green wall, woodland restoration, bio-swales, use of local materials and native plants have all contributed to setting the standard for sustainable design in Northern Manitoba, and the campus achieved a LEED Gold Certification. The integration of building and landscape within Thompson's northern boreal context provides a sacred connection to nature for the community.

On either side of the main entrance, two beautiful wood-carved panels, meticulously handcrafted by local Indigenous artists, create an impactful entrance to the main building. The artwork features animals, people and spirits significant to the artist's culture and folklore. The wood contrasts against the glass and stone material dominant in the building, drawing attention to its innate warmth and texture. The carvings offer passers-by a reminder of the richness, beauty and cultural heritage of northern Indigenous peoples that continues to enrich and inform the program and mission of UCN. **LP**

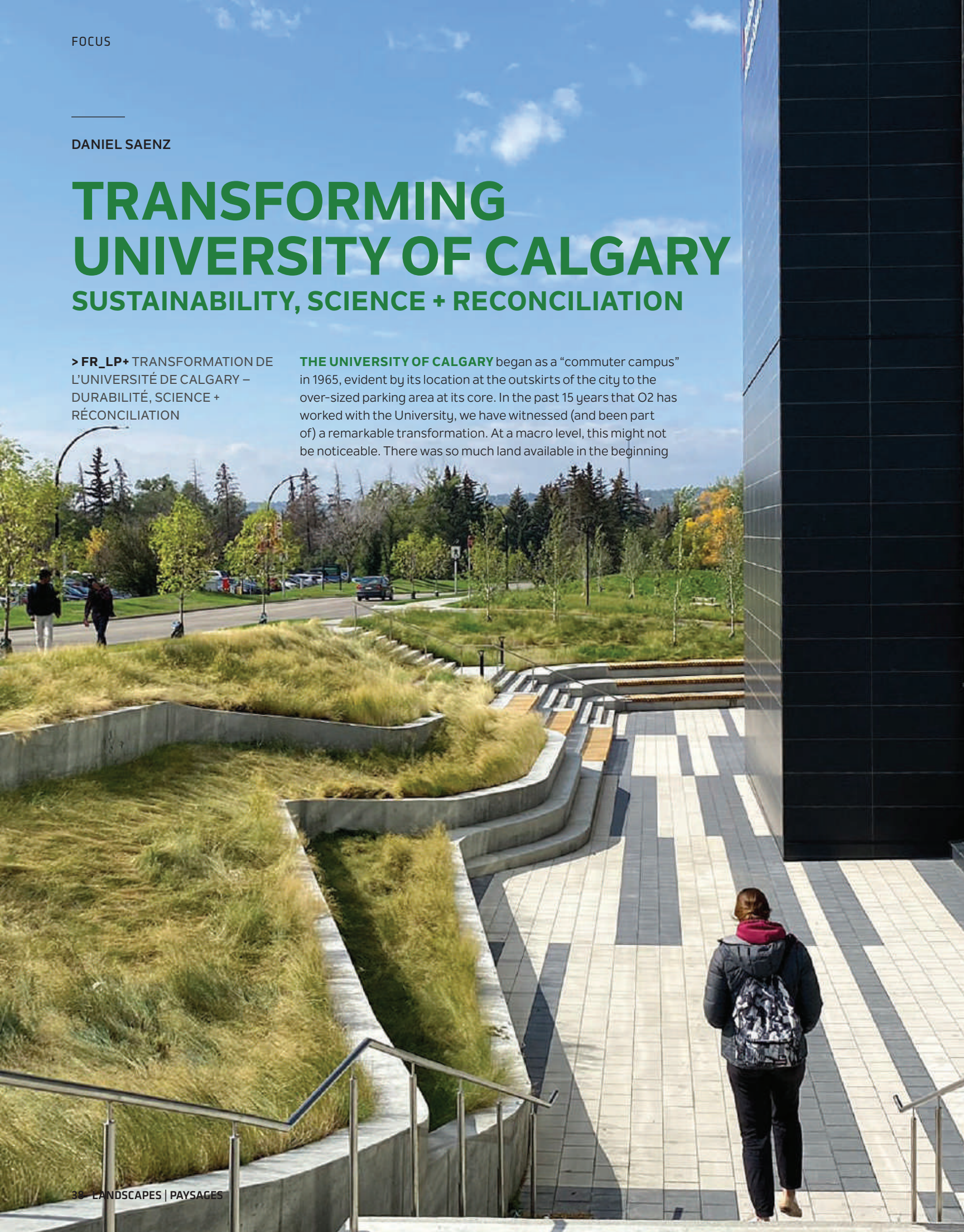
DANIEL SAENZ

TRANSFORMING UNIVERSITY OF CALGARY

SUSTAINABILITY, SCIENCE + RECONCILIATION

> **FR_LP+** TRANSFORMATION DE
L'UNIVERSITÉ DE CALGARY –
DURABILITÉ, SCIENCE +
RÉCONCILIATION

THE UNIVERSITY OF CALGARY began as a “commuter campus” in 1965, evident by its location at the outskirts of the city to the over-sized parking area at its core. In the past 15 years that O2 has worked with the University, we have witnessed (and been part of) a remarkable transformation. At a macro level, this might not be noticeable. There was so much land available in the beginning





2

that most buildings were low-rise, some even based on designs for the University of Alberta to the north. Unlike students living in the Edmonton campus, the ones in Calgary were more likely to own a car since the university's location was remote, similar to many in North America, and had few on-site amenities.

Many decades have passed, and thousands of students and academics from different backgrounds have walked this land. Like a quilt, many hands and minds have shaped this place, little by little, into its current iteration. Even at O2 this has been a collective effort, years in the making.

Raising the Bar on Sustainability – Digital Library + Quad

In 2007, O2 was retained to work on the Taylor Family Digital Library and Quad. By that point, the University was evolving beyond “reduce, reuse and recycle” in its understanding of sustainability. Later that year, it opened the first LEED™ Platinum project in Alberta – the Child Development

Centre – confirming the university's commitment to healthy, efficient, carbon and cost-saving major capital projects.

The Taylor Family Digital Library and Quad was unique in its complexity. Physical and digital worlds had to integrate seamlessly within the library; the same applied to the interface between the landscape and the building (by Kasian Architecture). The Quad became a programmatic extension of the new library, providing students with the opportunity to gather outside in flexible, well-defined spaces, while also looking at something much more ambitious: to capitalize on its central location to become the new heart of the campus.

For this to work, one key design aspect was at play: scale. New pathways had to accommodate significant foot traffic while remaining perceptually (and visually) small. Here is where the digital age influenced the Quad's landscape design. Our team used satellite imagery of regional fields for the proportions and patterns of the new precast paving stones. The underlying paving pattern along the pathways, accompanied by rows of trees, creates a scale that is approachable and inviting.

Over the years, the influence of this paving pattern has been significant. It celebrates regionalism and the evolving identity of the campus, infusing a new character into the ground. Since then, every single one of our projects (and those by others) uses a similar pattern. It is now embedded into the very fabric of the campus, bringing character and spatial continuity to the outdoor environment.

Amongst the many landscape features of this project, the stormwater management pond and rain garden are worth highlighting. This feature contributed to the LEED™ Gold Certification with its ability to reduce and cleanse run off and its central placement; creating an intersection of design beauty and infrastructure amenities including a new outdoor deck area space for students, faculty, visitors and staff to enjoy.

Science on Display – EEEL Centre + Schulich School of Engineering Expansion

By 2010, every project at the university had incredibly high sustainability targets, and the landscape played a critical role in achieving LEED™ certification. The Energy Environmental Experiential Learning

1 NORTH COURTYARD AT MATHISON HALL. 2 EXTENSION OF ENTRY PLAZA AT THE ENERGY ENVIRONMENTAL EXPERIENTIAL LEARNING (EEEL) CENTRE.

PHOTOS 1 O2 2 TOM ARBAN

(EEEL) Centre was the perfect opportunity to explore what *else* a landscape could do.

One of the critical moves for EEEL was creating a pedestrian-friendly gateway at ground level. An adjacent parking area became an extension of the entry plaza, with a 45-metre raised pedestrian crossing allowing for better integration between building and campus.

Regionalism once again had a role, as we looked to the broader Alberta landscape for inspiration and created a series of geology-informed elements, such as stylized eskers, glacial deposits and anticlines. By design, this landscape looks even better in the winter than the summer. Most students attend the university during the colder months and by the time the snow arrives, the rock strata on the different elements rising gently from the ground are accentuated by the uniform blanket of white, celebrating our location and climate.

Beyond these features and design elements, an almost imperceptible aspect of the landscape makes it unique: its experiential learning opportunities. There are areas where students can experiment with native grasses and forbs that reduce maintenance and water use. There was a significant reduction in overall runoff by infiltrating stormwater *in situ* within plant beds, including a 91 per cent reduction in total suspended solids. Large touchscreens at the south entrance and on each floor display the building sustainability metrics, showcasing how forward-looking design, both inside and out, can have a tangible impact.

The large-scale renovation and expansion of the existing Schulich School of Engineering complex allowed us to expand design and research under the framework of the experiential learning landscape. The project incorporates elements from various engineering disciplines, all included in the landscape design, a true testament of engineering on display. Geomatic monuments throughout the landscape act as focal points for students to test their skills in capturing geographic data. Stormwater and flow monitoring devices along the extensive bioswales and infiltration beds provide meaningful opportunities for professors within the Faculty of Engineering to engage with the landscape as an educational tool.

A Path to Reconciliation – Mathison Hall + Swann Mall

Our most recent experience at the University is Mathison Hall, a new academic building for the Haskayne School of Business. Between the completion of the EEEL project and the inception of Mathison Hall, it became evident the paradigm was shifting from science on display to reconciliation of the land as reflected in our design approach and workflow.

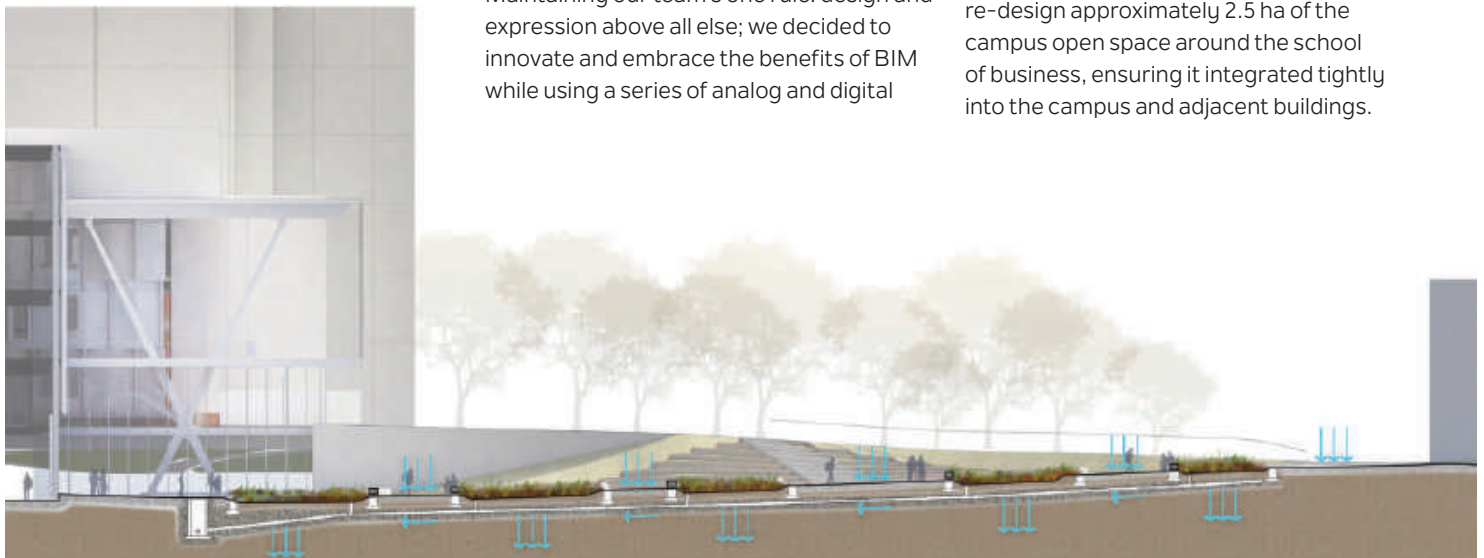
In the same way Building Information Modelling (BIM) reshaped the way the architecture team was working, it was also a requirement for the landscape architecture team to adapt to this integrated, cloud-based model. The tangible benefits of working in a BIM environment is real-time collaboration, however, available tools in this environment were restrictive to our design process. Maintaining our team's one rule: design and expression above all else; we decided to innovate and embrace the benefits of BIM while using a series of analog and digital

tools to adapt to our design approach and evolve our workflow.

Beyond technology, something else had changed. Something much more profound. In 2015 the Truth and Reconciliation Commission gathered in Ottawa to present its executive summary, *The 94* calls to action to further reconciliation between Canadians and Indigenous Peoples had effects at every level, and two years later, the University of Calgary released its own Indigenous Strategy, *ii' taa'poh'to'p*. The strategy was soon followed with a Main Campus Landscape Plan, developed after extensive consultation with Indigenous and campus communities. We were fortunate to participate as an external partner. The resulting conversations and campus plan were profoundly inspiring to our team.

Jane Ferrabee, who was the university architect at the time, led the campus landscape planning process. Through her tenure there was a deliberate attempt at developing a unique sense of place on campus, including a more naturalized landscape. Swann Mall is a great example of this plan. As one of the most cherished open spaces on campus, this space was reconfigured under the MacKimmie Library repurposing project. It was a challenging project led by one of our colleagues at DIALOG, Doug Carlye. He and his team boldly reintroduced native prairie species back into the campus, strengthening environmental resiliency while engaging with Indigenous Traditional Knowledge Keepers on the benefits of re-establishing the prairie landscape.

Swann Mall influenced our approach to Mathison Hall. Our project was to re-design approximately 2.5 ha of the campus open space around the school of business, ensuring it integrated tightly into the campus and adjacent buildings.





4

To support the goals of the University's Indigenous Strategy the design embraced the vision of finding "Ways of Connecting" – the creation of different typologies of gathering spaces for students and academics, as well as an appreciation on how the land's natural cycles guide the way people move through, occupy and are affected by the seasonal changes. With winter being a constant during much of the academic year, much of the circulation closely follows the building, borrowing

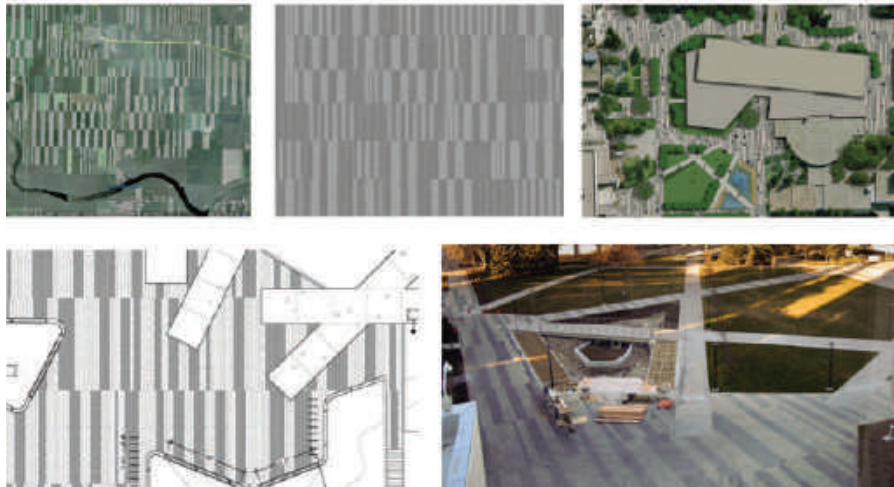
the visual warmth that flows from within through lighting and activity. Responding to campus activity throughout the year, the open spaces around Mathison Hall are designed to accommodate activities tied to university life as both priorities and the calendar change.

The planting design and layout coincides with seasonal variation in activity. When certain places are active, plants respond with seasonal

interest. We used native and adaptive plant species and communities known to the regions for the planting design and, in consultation, species that hold Indigenous significance. Appropriate use of these plant communities and planting methods helped create a self-sustaining landscape, resulting in low maintenance requirements while increasing biodiversity and ecological function. In turn the site expresses a narrative of the local and regional landscape.

As we gathered on a cold and snowy evening in January for the official unveiling of Mathison Hall to the academic community, a blanket of snow covered most of the dormant and emergent landscape. Our excitement was not for what our eyes could see, but in our confidence in the natural cycles that are part of a landscape and the seasons to come – much like us and much like the University of Calgary campus – in a continuous process of renewal and transformation. **LP**

TFDL PATTERN PROCESS



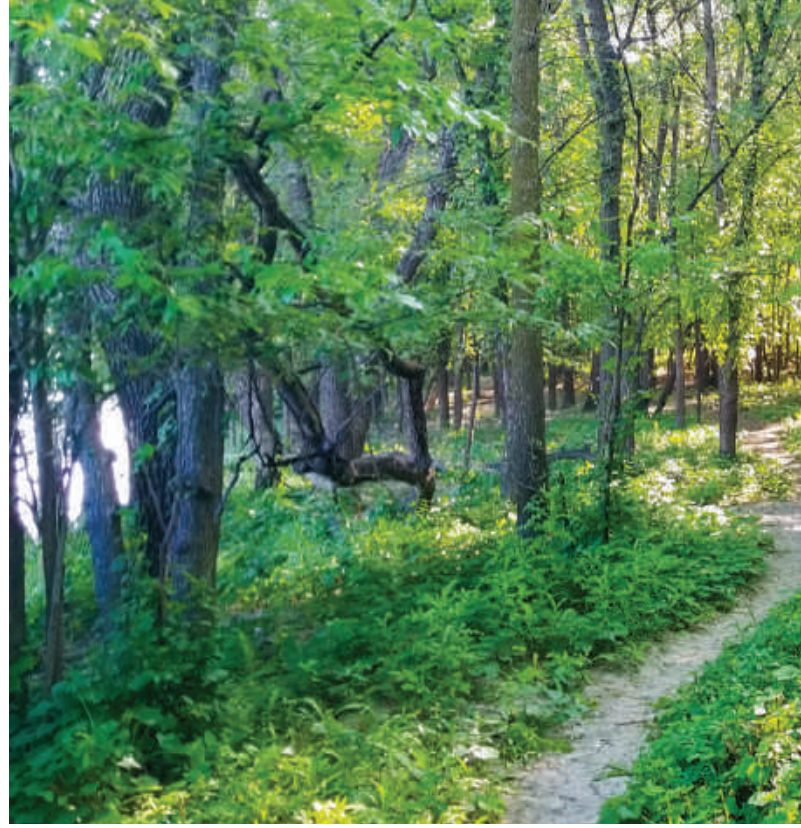
5

3 STORMWATER INFILTRATION PROCESS AT SCHULICH SCHOOL OF ENGINEERING. **4** TAYLOR FAMILY DIGITAL LIBRARY AND QUAD. **5** TFDL PAVING PROCESS.
PHOTOS 3-5 02

IAN YOUNG + BRUNO PIERRE ARPIN +
CHRIS ROBAK + CHERYL OAKDEN

UNIVERSITY OF MANITOBA RIVERBANK MANAGEMENT STUDY

LOOKING BEYOND THE BUILT – INTEGRATING FOREST HEALTH AND GREEN INFRASTRUCTURE INTO TRADITIONAL RISK MITIGATION AND ASSET MANAGEMENT



1

> **FR_LP+** ÉTUDE SUR LA GESTION DES BERGES DE L'UNIVERSITÉ DU MANITOBA :

Intégrer la santé forestière et les infrastructures vertes aux méthodes traditionnelles de gestion des actifs et d'atténuation des risques

THE UNIVERSITY OF Manitoba (UM) Fort Garry campus in Winnipeg is linked inherently to the Red River, with nearly four kilometres of shoreline. Due to the value of this shoreline under stress from both natural processes and climate change, UM recognized the need to perform a comprehensive study to review the current riverbank condition, threats and risks to existing infrastructure and future developments, and provide recommendations for stabilization and erosion control to manage those risks. UM strives to be a leader in sustainability – ecologically, socially and economically – and requires that all recommendations and design solutions consider ongoing campus initiatives, favour the restoration of the riparian corridor, and seek naturalized solutions wherever possible.

UM Architectural & Engineering Services, led by Project Manager and Landscape Architect Vanessa Jukes Strutt, understood that diverse expertise and a multi-disciplinary team was needed to optimize the riverbank stabilization, while also improving riparian forest health. KGS Group Consulting Engineers (KGS Group) led by Bruno Pierre Arpin (P.Eng) and Scatliff+Miller+Murray (SMM) led by Cheryl Oakden (FCSLA) assembled a project team that included engineers, scientists, landscape architects and technical support staff for this exciting engagement. As lead consulting landscape architect, Cheryl worked with Vanessa and the project team to maintain the holistic approach set forth by UM and to capture a plan grounded in science, sustainability and placemaking.

THE CAMPUS "CITY"

UM has called the Fort Garry campus home for over 100 years. The daily influx of students and staff makes the university one of the largest "cities" in Manitoba with an enrollment of 29,000 students and a staff complement of over 9,000. The setting of the university within an oxbow of the Red River defines this campus as uniquely

"green," with access to quality open spaces and natural areas for all those who study, work and live at or near the institution. There are five distinct reaches within the study area based on land use as shown in Image 3.

The proximity of the shoreline means that riverbank stability is linked fundamentally to long-term performance of the infrastructure on campus. Given that UM strives to promote a healthier, more active campus while reducing environmental impact, the health and long-term function of the riparian forest and shoreline environments was an integral aspect of the overall study. In developed urban settings such as the Fort Garry campus, geotechnical solutions must function collaboratively with riparian forests to ensure their mutual long-term performance provides protection to nearby infrastructure.

The project team collaborated to develop a plan to manage risk to infrastructure, which focused on geotechnical solutions that bring riparian health to the forefront and concurrently promote an active lifestyle for the campus community.



2

Why is a Healthy Riparian Forest Important?

Rivers and their riparian communities are complex and dynamic ecosystems that provide unique and productive habitat and serve as important corridors for migratory species as well as conduits for the movement and spread of plant species. Riparian vegetation including trees, shrubs,

vines and herbaceous species contribute to the mechanical stability of soils. In fact, this effect helps to explain why shallow slope failures in areas with riverbottom forest do not occur at the same time as larger deep-seated slope movements that have historically threatened campus infrastructure. This stabilizing effect has factored into the design of slope

stabilization works that have already been installed on campus.

In effect, a healthy riparian corridor qualitatively benefits shallow slope stability, and, on that basis, forest health improvement initiatives should be pursued at the earliest opportunity. However, in a developed urban setting with nearby at-risk infrastructure, even a completely healthy riparian corridor cannot function as the only means of erosion control and slope stabilization and must be completed in concert with geotechnical solutions (Image 6). KGS Group and SMM aimed to integrate creative geotechnical and riparian solutions to develop a sustainable riverbank asset management plan for the Fort Garry campus.

INFRASTRUCTURE RISK ASSESSMENT

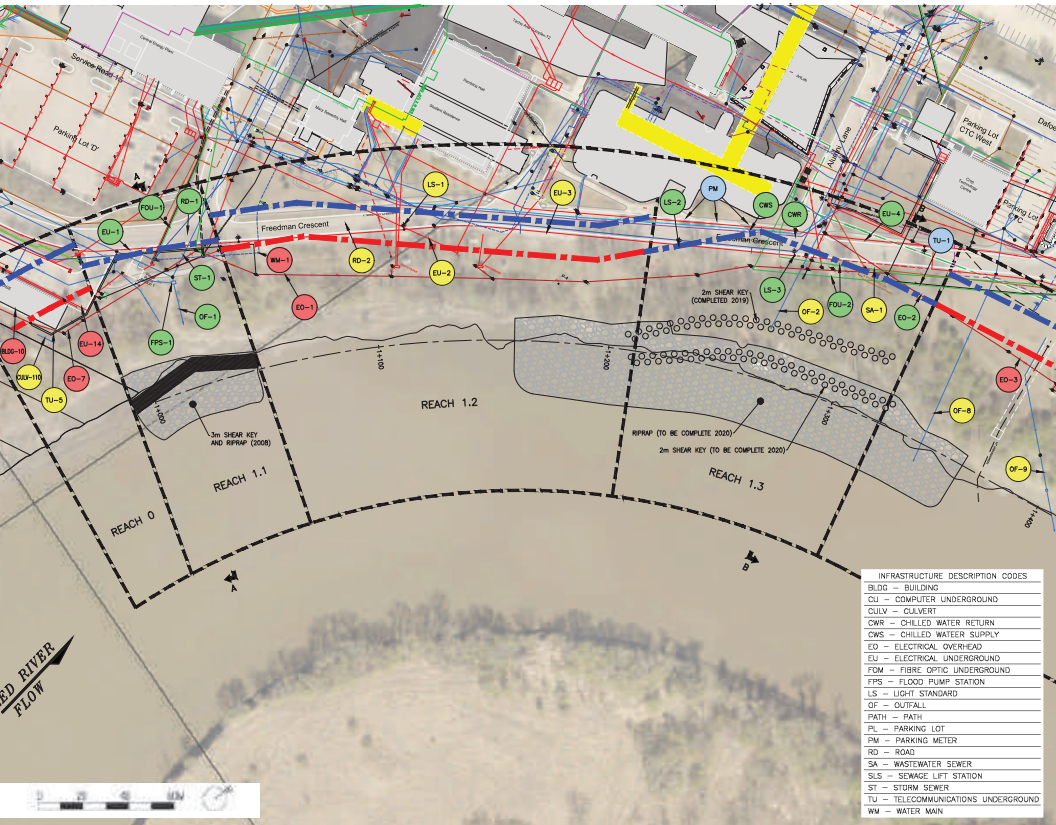
Forest Health and Biodiversity Threats

The UM Biodiversity Baseline Study and Assessment identified several current and near-future risks to forest health and biodiversity. The riparian forest on the Fort Garry campus is typically very narrow and often discontinuous, with gaps in the canopy occurring sporadically throughout the area. Where gaps have developed, the vegetation is typically composed of non-native and invasive plant species. Additionally, forest pests and disease are already present, and the recent confirmation of Emerald Ash Borer in Winnipeg was noted as a near-future, high-level threat to forest health.



3

1 IMAGE OF HEALTHY RIPARIAN FOREST ON CAMPUS. 2 AERIAL VIEW OF FORT GARRY CAMPUS. 3 FIGURE 1: CAMPUS MAP WITH RIVER REACH LABELS. PHOTOS 1 KGS GROUP 2 SOURCE UNIVERSITY OF MANITOBA IMAGE 3 SMM



4



5

4 FIGURE 3: POTENTIALLY AT-RISK INFRASTRUCTURE AND STABILIZATION WORKS IN REACH 1.1, 1.2, AND 1.3. **5** WORKS IN PROGRESS. **6** FIGURE 2: TYPICAL STABILIZED RIPARIAN FOREST SECTION.
PHOTOS 4-6 KGS GROUP

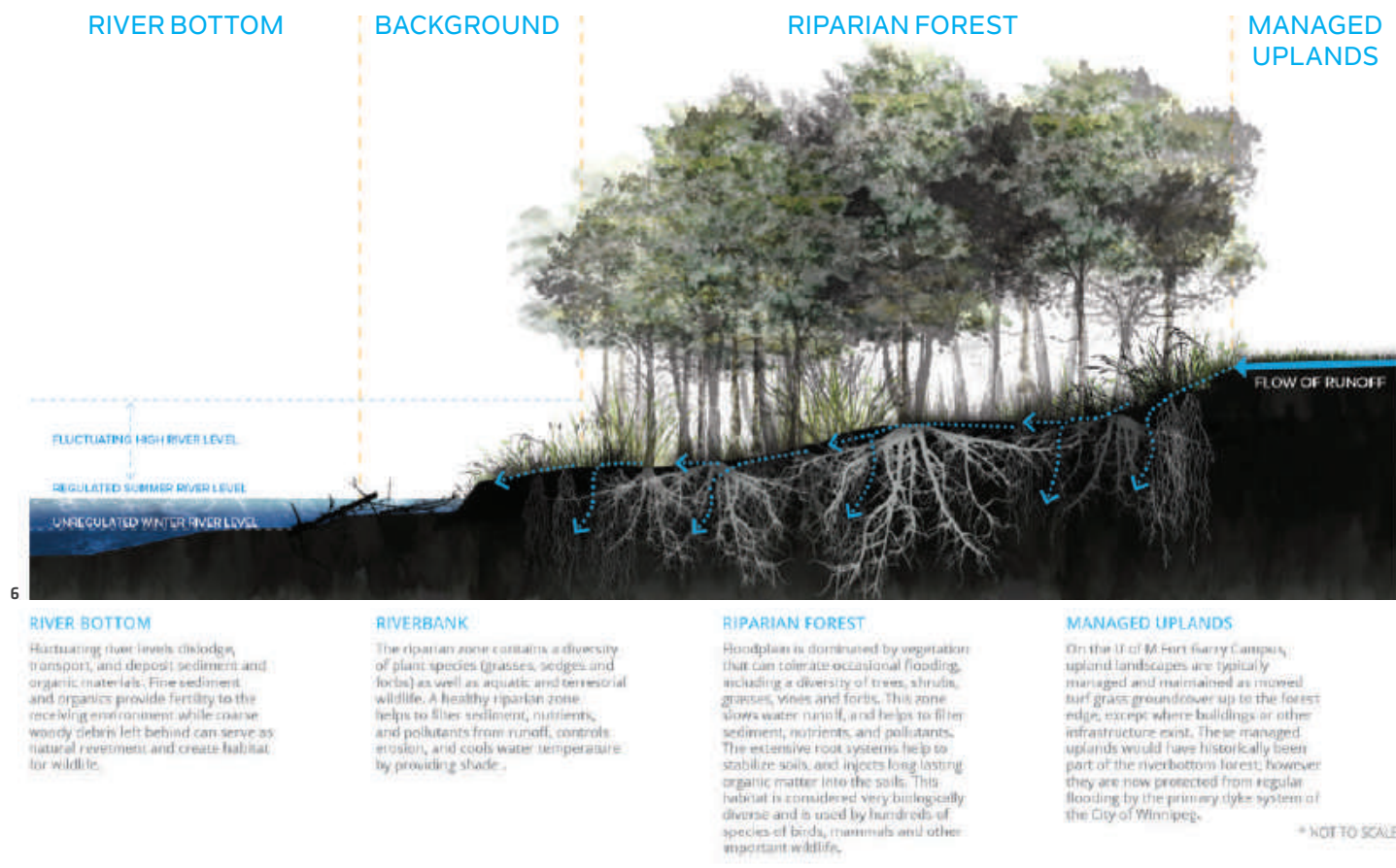
Future Campus Development Considerations

UM's Visionary (re)Generation Master Plan and the Pedestrian and Cycling Plan have identified campus developments that were considered in preparation of the riverbank study. This included several potential river corridor infill developments, including potential building sites for a new National Centre for Truth and Reconciliation, ongoing road and infrastructure renewal programs, including the 15-year program for bicycle and pedestrian infrastructure projects, and other future campus developments.

Slope Stability and Infrastructure Risk Assessment

A preliminary slope stability assessment included consideration of existing infrastructure and future development opportunities. The study area was divided into discrete sub-reaches with common terrain, geotechnical, biodiversity and risk characteristics to facilitate the prioritization of the riverbank asset management plan.

KGS Group catalogued all campus infrastructure near the river into a Project Risk Register and assessed their risk of being adversely impacted by ongoing retrogressive slope movements. The Core Campus North and South reaches have a high concentration of UM built assets (buildings and roads), buried and overhead utilities (public and private), land drainage structures (flood pump stations and outfalls), plus the City of Winnipeg's primary dike to protect against flooding. Other reaches are



relatively undeveloped at this time, although future development may incorporate medium to high density residential/ commercial spaces and the new National Centre for Truth and Reconciliation.

Each piece of infrastructure was assigned a risk rating based on the likelihood and the magnitude of impact resulting from riverbank instability and movement. Image 4 shows the risk rating assignments in sub-reaches 1.1 – 1.3. Each circle indicates a piece of infrastructure and is given a colour to indicate its risk rating score (red is highest, blue is lowest).

RIVERBANK ASSET MANAGEMENT PLAN

The riverbank asset management plan was inspired by similar initiatives, such as the City of Winnipeg Riverbank Asset Management System, but with an expanded the scope to prioritize riparian health initiatives and public-use opportunities. Benefits of green infrastructure are qualitatively known, but a knowledge gap exists when trying to incorporate their effects accurately, quantifiably and predictively on a site-specific basis. Our team used a blended approach of sustainable naturalization and geotechnical knowledge to evaluate the measurable impact of green infrastructure.

In many cases, the optimal time to implement campus development initiatives may be when stabilization projects in proximity to the shoreline are occurring. The riverbank asset management plan identifies these opportunities in the context of the recommended risk mitigation strategy in four timeframe categories: immediate (completion recommended within one year), short term (completion recommended within three years), medium term (completion recommended within five years) and long-term (completion recommended within 15 years). The three recommended actions identified are: Campus Infrastructure, Forest Health, or Public Use Initiatives.

Mitigation Strategies

Healthy riparian forests will impart many benefits to slope stability, including limiting surface erosion, increasing stability of shallow slope failures and reducing the level of riverbank saturation at a given time through tree root uptake. Coupled with pro-active erosion protection, a bolstered riparian forest can function as an effective preventative maintenance strategy to decrease the odds that conditions conducive to slope failures develop in the future.

Strategies considered to mitigate infrastructure risk included:

- observe and respond based on a geotechnical monitoring program
- proactive erosion protection with a geotechnical monitoring program
- proactive slope stabilization and erosion protection

All stabilization works are integrated with green initiatives to ensure that work done to protect campus infrastructure does not inadvertently increase risks to forest health and biodiversity. The Fort Garry campus' riparian forest is an asset in and of itself that requires active management to continue to provide environmental and geotechnical benefits.

The Riverbank Management Plan mirrors the dynamic nature of the riverbank, allowing for updates over time to reflect changes to the riverbank and the campus itself. A blended approach of sustainable naturalization and geotechnical knowledge led to a comprehensive and cost-effective model and toolset that uses both geotechnical and nature-based solutions. This asset management tool provides phased geotechnical and riparian solutions to effectively manage risks in alignment with UM's sustainability principles as well as future development and recreational opportunities. **LP**

COREY DAWSON

DALHOUSIE'S AGRICULTURAL CAMPUS

HISTORIC BEAUTY, EDUCATIONAL VALUE AND COMMUNITY ENGAGEMENT

> **FR_LP+** CAMPUS AGRICOLE DE DALHOUSIE : BEAUTÉ HISTORIQUE, VALEUR ÉDUCATIVE ET MOBILISATION COMMUNAUTAIRE

CAMPUS LANDSCAPES ARE not only green spaces for admiration and congregation; they are living laboratories and can be testing grounds for new plant research, landscape design and installation techniques. When designed creatively and maintained with care, these landscapes enhance active learning, encourage a sense of community, and provide users with all the benefits of ecosystem services. Dalhousie University's Agricultural Campus, formally the Nova Scotia Agricultural College, is a showcase for vibrant landscapes with several gardens strategically planned for unique purposes and developed through a rich history of educational design. The campus, re-named the Bicentennial Botanical Garden in 2018, consists of 11 hectares of extensive plant collections including a repository of over 3000 types of trees, shrubs, and plants.

A Brief History of the Campus Landscape and Alumni Gardens

Established in 1888, the Agricultural Campus has a tradition of embracing nature's beauty and harnessing its potential for teaching and learning. Over the years, the campus has witnessed the development of a variety of garden types, from vegetables to ornamental shrubs, to small orchards providing apples, pears, plums and cherries. In 1928, Dr. Loran DeWolfe initiated a project with the Rural Science Program and the Nova Scotia Department of Education to beautify the campus grounds. This project set the stage for the Rural Beautification Project in 1944, encouraging community involvement in landscape aesthetics, leading to the first annual meeting of garden clubs and horticultural societies 10 years later.

The culmination of historical landscape developments was the formation of the Friends of the Garden in 1999, coordinated by Bernard S. Jackson. The Friends of the Garden consists of a dedicated volunteer team that works with the ground staff to support the beautification of our campus landscapes and complements the teaching aspects of gardens. The hands-on approach to teaching is an excellent way to gain a deep understanding of landscape forms and functions and has been a core active-learning strategy on campus for



2

most of its history. As a new faculty hire, I am only scratching the surface of what the campus has to offer, but the landscape was a significant pull factor for my initial interest in the Landscape Architecture program and certainly worth further investigation into the origins of garden types developed through the years.

The establishment of the Alumni Gardens space can be traced back to 1974, formerly a research nursery where plant species evaluation trials were completed to test the performance and winter hardiness under local conditions. The mature trees and shrubs that thrive in the gardens are remnants of early collections from this research



1

1 CAMPUS VIEW IN 1913. 2 JOHN HIGGINS GARDEN IN ALUMNI GARDENS. 3 STUDENT-BUILT PATIO AREA. PHOTOS 1 FROM MACRAE LIBRARY, HISTORICAL ARCHIVES 2, 3 BY COREY DAWSON



and, as time passed, the site's transition to ornamental gardens is recognized as a strategic progression of horticultural research and landscape design. The official opening of the Alumni Gardens took place on July 26, 1986, marking the beginning of its identity as a beloved destination for visitors, a source of knowledge about ornamental plants and trees and a picturesque setting for special occasions. The landscape has evolved further over the years, with several collaborative projects such as the perennial gardens, rose gardens and the John Higgins Memorial Garden, installed by Landscape Horticulture students to enhance the beauty and hands-on learning opportunities.





4



5

Additional landscape projects included the gazebo platform, which was built by students in the Engineering Technician program, adding a defining architectural feature to the landscape. The Herb Garden, maintained by the Friends of The Garden, was designed by Carol Goodwin and was student-built in 1994, showcasing a traditional four-quarter layout with a combination of plants for medicinal, culinary and cosmetic purposes.

The most recent addition to the garden is a water feature, crafted from local stone and installed in the lower garden. This memorial installation serves as a place for contemplation and reflection, paying tribute to the 22 lives lost in the April 2020 mass shooting tragedy that deeply affected Nova Scotia as a whole. By incorporating this meaningful element, the landscape now holds even greater significance within the community. The features have been strategically designed to enhance the garden's aesthetic appeal and serve as a testament to the ongoing collaboration between various stakeholders. Its origin, development and value exemplify the power of partnerships, the beauty of nature and the everlasting impact of a shared vision.

The Rock Garden: A Center for Diversity, Conservation and Learning

The Rock Garden is an extraordinary landscape I discovered during my first tour of the campus, located at the heart of the University. This well-maintained space and house an extremely diverse variety of plant species and visually appealing

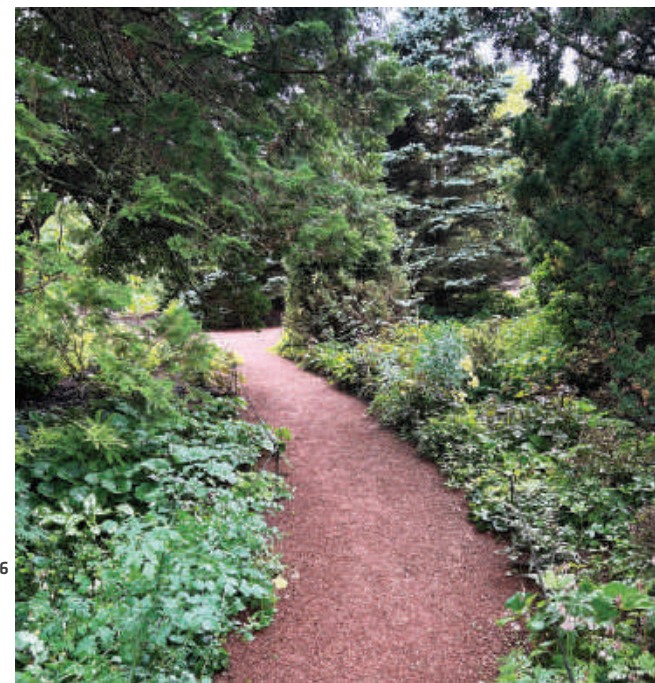
stone structures and as luck would have it, this garden is now the backdrop I see every time I leave my office. Situated on a south-facing slope, the Rock Garden covers half an acre of diverse habitats and offers excellent educational and leisure opportunities for students, faculty and visitors. The landscape comprises a rock face, dry streams, a gravel scree bed and a "damp" area, each carefully designed to support a variety of plant species, many of which were new to me as a former Ontario resident.

The credit for this spectacular landscape design is given to Bernard S. Jackson. His background in naturalism and horticulture inspired him to create a Botanical Garden and Nature Reserve for Memorial University of Newfoundland in 1971. While Bernard kept much of the design in his head, Carol Goodwin, Randy Ross and Darwin Carr were all involved in the planning and development of the Rock Garden and the formation of its features. Many of the landscape components were installed by students, including limestone patios and several cedar bridges, in addition to on-going planting installations.

The garden has grown through the years, establishing itself as one of the largest rock gardens in the Atlantic region and a significant feature of the maritime provinces. With its large crevices, the rock face is home to plants that spill and cascade over the rocks, creating a visually stunning display of hard surfaces draped with soft foliage. The dry streams mimic eroded gullies and provide a suitable

habitat for sprawling plants. Stream channels control the flow of rainwater runoff as a nature-based design solution to stormwater management. The gravel scree bed, containing 450 tonnes of locally donated red granite, replicates natural areas formed through weathering of cliff faces and provides habitat conditions in which plants suited to dry conditions can thrive. In contrast, the damp area collects runoff flow and supports plants requiring moist soil and full sun.

These areas contribute to the rich variety of habitats that make the Rock Garden an exceptional location for botanical study. The locally donated stone from Colchester County highlights the region's natural resources and adds to its aesthetic appeal. There is an extensive collection of fully



6



7

labelled plants including dwarf conifers, alpine species and saxatile (low growing, spreading) plants. The garden is a valuable resource for teaching construction and installation techniques, providing an outdoor classroom enabling students to gain hands-on experience with uncommon plant varieties and horticultural practices. Coming from a design/build background, I believe the applied teaching and learning opportunities are extremely valuable for making a physical connection between design and installation. From my personal experience, there is an added sense of satisfaction that comes with being involved with a project from conceptualization and design to installation, particularly when you can watch plants mature toward their intended design goals.

Beyond serving as unconventional classroom settings, these gardens offer opportunities for interdisciplinary studies, scientific observation and

artistic inspiration. They allow students and faculty to evaluate topics such as biodiversity, ecological restoration, habitat conservation, sustainable gardening practices and landscape architecture design. The Rock Garden stands as a testament to the combined value of nature, art and history, representing a harmonious coexistence between human interaction and natural process-form relationships.

The Rock Garden's growing stature has positioned it as a significant horticultural feature in Eastern Canada and was recognized with the Frank Cabot Award when the campus hosted the North American Rock Garden Society Conference in June 2023. The award recognizes exceptional gardens that promote the design, knowledge-sharing and public outreach of plant exploration.

Campus gardens, including the Alumni and Rock Gardens, have the power

to bring together individuals from diverse backgrounds, fostering a sense of belonging and community pride. Community members can participate in shared experiences, strengthening bonds between the campus and its surrounding community. Dalhousie's Agricultural Campus is a local attraction; the landscapes appeal to tourists beyond the Truro/Bible Hill area, with engaging gardens contributing to the region's rich horticultural heritage. Through active participation, community members develop a sense of stewardship and enjoyment in their campus landscapes, fostering a collective responsibility for its preservation and enhancement for the future. **LP**

4 DRY STREAM, ROCK FACES AND DIVERSE PLANTINGS. **5** STEPPINGSTONES AND DWARF CONIFERS. **6** RICH VARIETY OF PLANTS AND HABITATS. **7** HERB GARDEN.
PHOTOS 4-7 BY COREY DAWSON

GERRY ECKFORD

SIMON FRASER UNIVERSITY:

RENEWAL OF A CONTEMPORARY CLASSIC

1

> **FR_LP+** UNIVERSITÉ SIMON FRASER :
RENOUVELLEMENT D'UN CLASSIQUE
CONTEMPORAIN

EMERGING FROM THE forest into a meadow atop Burnaby Mountain, Canadian architect and urban planner Arthur Erickson was inspired to establish the guiding principles of his winning 1963 design competition submission for Simon Fraser University.

This climbing narrative presented a metaphor – striving for and attaining a higher education – that can be sensed throughout the Erickson Massey original

design. By breaking from the competition brief that called for a traditional decentralized campus, Erickson Massey Architects presented a radical vision of a university as an architectural expression of universal knowledge. It allowed for the creation of an academic community where interactions between students of all faculties replaced the fragmentation of departments, which is more typical of western universities. Opening in 1965, when the only people with flip phones were on the Starship Enterprise, the original campus was remarkable. Not only was it the firm's first commission outside of single-family homes, but the campus was designed and constructed in just two years, establishing Erickson Massey as an emerging force in West Coast Modern design.

The original layout begins at the Transportation Centre, rises through the arrival portal, proceeds along the central organizing spine through a sequence of stepped terraces including the communal Convocation Mall, finally reaching the contemplative Academic Quadrangle and philosophers walk at the summit. This powerful axial circulation system is the central organizing element of the SFU design and became a central tenet in all of Arthur Erickson's later projects.

In 2017, Public Architecture and ETA Landscape Architecture were engaged to work with SFU to replace the failing waterproofing system below the spine and to reinforce the original open space concepts in response to changes in the overall campus structure. Changes included a 10-fold increase in student population (to 20,000), numerous new buildings and resulting altered circulation patterns. The scope of work included technical upgrades and furnishing updates along the full length of the main axial campus spine in response to advancements in the delivery of education.

Due to budget limitations, the original paving system for the axis was brick tile thickset over a rubber membrane. Paving along the main processional sequence has now been upgraded to a randomized composition of granite pavers in a variety of colours and textures over a Romex permeable paving layer laid over a new waterproof membrane. While the technical upgrades were essential, and the new paving provides a powerful graphic clarity and unity to the central campus spine, the project more importantly provided a unique opportunity to respond to the way the delivery of education has changed since 1965.

2



Located between the student housing and sports facilities at the west end of the campus and the Academic Quadrangle at the east, Erickson and Massey established the central terraces as spaces where important campus social functions would occur. Convocation Mall, with its glazed space-frame, is the central gathering space and social heart of the campus. Building functions including the library, theatre and pub are located on either side of this space in recognition of how many memorable university experiences occur outside the classroom: in libraries and study halls, cafeterias, hallways, lounges, pubs and,

importantly, in exterior spaces. Even before the disruption of the COVID-19 Pandemic, education delivery was transforming through technology. Beyond the classroom, education can now occur online, on campus, at home and outdoors. Research occurs virtually anywhere. Providing more humane, functional and habitable spaces outdoors advances the original aspirations of communal learning.

To facilitate this transformation, contemporary, durable, adaptable, accessible and moveable chairs, tables and larger bench and planter elements have been introduced. These pieces can be reorganized to accommodate special events such as concerts, ceremonies and convocations held throughout the main social spaces. Seating nodes with raised tabletops accommodate laptop work, and lightweight and colourful bistro tables and chairs provide flexibility in seating opportunities. Connections to more recent buildings located along the spine have been clarified and reinforced.

Erickson's strong Japanese design sensibility, particularly in landscape design and chiefly his preference for balance over symmetry, is clear at SFU. He introduced sculptural landforms similar to those used in traditional and contemporary Japanese landscape design, particularly in the Academic Quadrangle and Philosophers Walk terrace at the top of the campus. In this contemplative zone, calm replaces the more communal activities provided in the central terraces. Additional seating areas, both flexible and fixed, have been placed along the perimeter to allow for quiet reflection.



3

Updates to the planting design maintain the original Japanese-inspired palate, but now place more emphasis on mass plantings of native plant material that are better suited to the mountaintop microclimate.

UniverCity, a new mixed-use residential primary community to the east of the campus spine, provides stronger linkages and convenient public access to the campus and its facilities. A new upper bus loop aligned with the axis provided an opportunity to create a new sculpture court and plaza space to the east of the Academic Quadrangle, establishing an alternate arrival and egress point from the campus. With its seating opportunities, sculpture plinths and steel planters whose form references the mountain forms in the Academic Quadrangle, this space provides an important extension of the ceremonial axis and provides an essential link to the UniverCity community.

This project has not only refreshed SFU's building systems – the updates are a direct extension of the original project goals that prioritized on-campus communal and reflective spaces that reinforce the idea of universal education and the creation of a community of higher learning. **LP**

1 CUSTOM FURNISHING – FREEDOM SQUARE
2 STRAND HALL PLAZA **3,4** CUSTOM FURNISHING – CONVOCATION MALL
ALL PHOTOS BRETT HITCHENS

ANDREW WILSON

A TALE OF THREE CAMPUSES

1

> FR_LP+ LE RÉCIT DE TROIS CAMPUS

THE PRIMARY PURPOSE of a university or college campus is to provide a physical place for teaching, learning and research. Historically, such places were described as beautiful, idyllic and harmonious (Image 1). We may continue to use such words aesthetically while expanding their meaning to encompass socio-cultural and ecological dimensions in support of comprehensive ideas such as completeness. Large Canadian campuses, such as UBC (400 ha) and York University (185 ha) have purposely evolved into more complete communities. In the development of a UBC Landscape Plan (2001) in keeping with UBC planning policy, the campus landscape was described not only in visual terms but in relation to its ecology, built environment and human experience. The goal was to manage the campus landscape not just objectively as a place of learning but to facilitate landscape use for learning – a participatory place that encouraged and supported human-environment interaction. (Image 4)

UBC

The responsibility in this is the necessity for general campus management and more specific landscape-based projects involving faculty and students directly to demonstrate best practices at least and lead practice at best. That means an associated landscape architect should be willing and able to participate and lead accordingly. UBC, as with many other universities, has and benefits from landscape architecture, planning and architecture faculty and students that participate in campus planning, not to mention progressive private sector landscape architects and practices.

In 1998, I was hired by UBC's Land and Building Services to be the campus Urban Designer/Landscape Architect. It was a new position created in response to an internal review of the state of the campus resulting from years of deferred maintenance and increasing development pressures. The review resulted in "A Legacy and a Promise: Physical Planning at UBC" (1999), essentially eight principles reiterating and reinforcing the 1992 "Main Campus Plan" (DTAH, N.D. Lea Assoc., Gabriel/Design) to... "provide guidance in shaping UBC's physical form, character and image, according to the renewed vision of UBC as a more complete community or University city." Related to

1 DUNINGTON-GRUBB ROSE GARDEN, YORK U'S GLENDON CAMPUS. 2 UBC'S LIU INSTITUTE. 3 TUNING FORK, UBC. 4 UBC STUDENT ART USING FOUND ROCK CORES. 5,6 YORK ARBORETUM POND RD CONCEPT. PHOTOS 1-6 ANDREW WILSON

2



that approach and associated thinking, UBC had established the Campus Sustainability Office in 1998. Its staff were allies in the management, planning and design of UBC's main campus.

Those working in such institutional settings know the importance of staff and faculty alliances. For example, one of my first tasks was to organize the restoration and re-installation of Gerhard Class' (1968) sculpture, "Tuning Fork". (Image 3) That was so appreciated by the Fine Arts Dean, I was appointed to the President's Committee for University Art he chaired. That led to the development of policy for placing sculpture in the landscape and a collaboration with artist, Rodney Graham (2003), on the siting of "Millennial Time Machine."

Speaking about the siting of things: Imagine climbing about a pile of concrete fragments from a building demolition while landscape architect, Cornelia Oberlander and architect, Arthur Erickson, direct you in flagging some for use in the landscape of UBC's Liu Institute. (Image 2)

This speaks to the reality of my role at UBC and probably that of campus landscape architects generally: one's practice offers diversity with attendant opportunity unlike more prescribed practices. Greater responsibility too, like being sworn to secrecy over a visit to campus by Queen Elizabeth and Prince Phillip.

York U

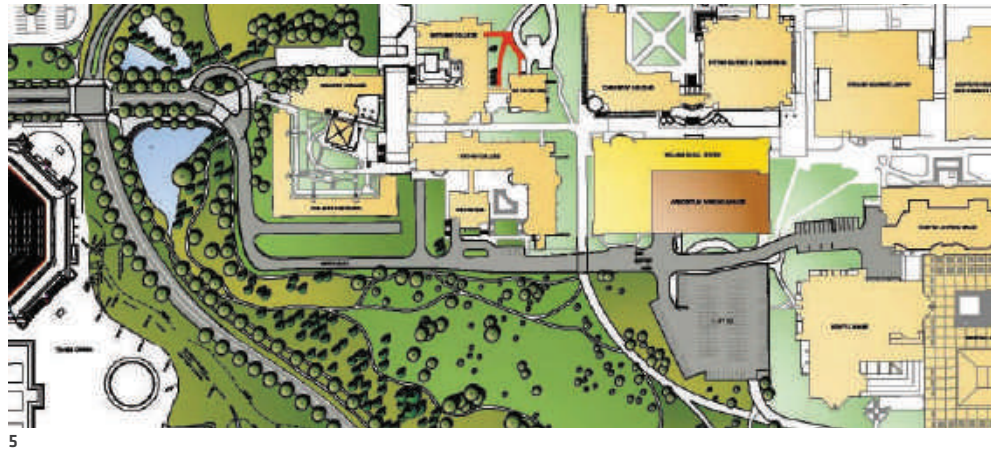
York University has an environmental studies faculty and students, some of whom were very interested in campus management and what I was doing, as the Campus Planner from 2003-2007.



3



4

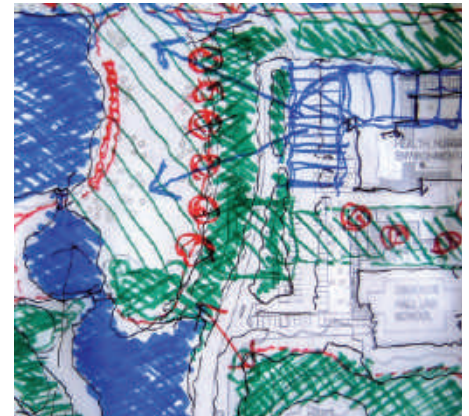


5

Like UBC, York embraced sustainability. Whereas UBC's sustainability office was part of the operational side of the university, York's sustainability leadership was affiliated with the academic Institute for Research and Innovation in Sustainability (IRIS), headed by a biologist in my time and including multi-faculty representation. I was appointed to the institute because of my mandated campus activity and advocacy for sustainable design and practices. A landscape architect working for a university or college can seek to advance practice in a place one would hope is more conducive to innovative and creative thinking and doing.

At York, impetus and support for sustainability came from law and business faculty, as well as from students studying and advocating for social justice. It was that way with the environmental studies faculty as well, though with more attention paid to physical planning. The result was a multi-dimensional awareness and understanding of sustainability within the university population requiring consideration in campus planning.

While campus visual quality was important as it always has been and will continue to be,



6

personal safety and well-being associated with the broad range of York's and Glendon's (York's campus on the Don River) physical qualities led to my appointment as Chair of the Campus Safety Committee made up of students, staff and faculty. Being labeled Campus Planner rather than Landscape Architect meant an expanded scope of responsibility and expectation. I was responsible for overseeing landscape management by the grounds department and designing, reviewing and implementing landscape plans; however, I was also required to describe and defend an idea and reality of the academic campus as a distinctive place to York's development group. My primary mission could have been characterized as eco-logical whereas theirs was economic.

I had a similar role at UBC. A major difference between the two places was the municipal planning environment: UBC is not part of Vancouver, it's governed loosely by the regional authority; York is in the City of Toronto and was subject to more restrictive planning policy. Both places occupy Indigenous lands now acknowledged to a far greater degree than during my time on the campuses: Coast Salish peoples' at UBC and Anishinabek Nation, Haudenosaunee Confederacy and Huron-Wendat at York.



STUDENT RESIDENCE COURT



NE PEDESTRIAN ACCESS



7

ECOLOGICAL LAND MANAGEMENT



FANSHAWE MEANS TEMPLE IN THE WOODS

Fanshawe College

For the last 16 years I've been faculty in the School of Design at Ontario's Fanshawe College. I coordinate the Environmental Design and Planning program, a progressive honours degree with a strong landscape architectural foundation. Unlike UBC and York, campus planning at Fanshawe is less comprehensive and less inclusive of faculty and students. My colleagues and I strive to influence Fanshawe's campus planning culture mainly through students who are dedicated to bringing about positive change in their college and their communities through their planning and design activity.

Fanshawe has adopted sustainability initiatives related primarily to energy and waste management. It has conducted planning processes for the 42-hectare main campus with a focus on enrolment, programs and buildings as characterizes 'space planning' exercises generally. In the last year, the college initiated a more comprehensive campus planning process conducted by a planning and design firm. The impetus for that is coincident with a provincial government policy requiring a plan in support of capital funding requests. Oddly, the planning and design firm was not told the campus is recognized as a botanical garden (for which there is no plan). As a result, the draft campus plan shared with the college community made no mention of that; nor a geothermal system started in Spring 2023 resulting in the removal of many trees due to excavation. College administrators attend to sustainability, physical planning and design, however, there is no campus planner/designer on

staff. Action is incremental with little if any public review and discussion related to a comprehensive campus plan or sense of place as would be understood, developed, communicated and implemented by campus planners/landscape architects.

Responsibility to Lead the Way

Campus planning and design is always of its time and place: UBC's 1914 Grand Plan reflected City Beautiful and Garden City ideas; York's mid-20th century plan implemented the suburban campus idea of a pedestrian core surrounded by vehicle infrastructure as did Fanshawe, though the latter's core being interconnected buildings.

How campuses evolve varies considerably of course. Funding is critical but persons more so. "Landscape" in my title may have signaled a particular interest, but I was no more passionate for the campus landscapes for which I had some responsibility than the other professionals with whom I worked directly, let alone some of the scholars and students.

At UBC I met regularly to discuss what I was doing with a group of three Professors Emeriti who between them had over a century of campus experience. My time associated with education campuses as a post-secondary student, campus planner/landscape architect and now faculty is about a third of that. I've been privileged in this certainly.

The attraction of universities and colleges for me is a purpose-designed place to question, explore, share and advance ideas and initiatives for a better society. While

associated with their wider communities, universities and colleges may exacerbate a person's sense of exclusion. That has been and is still inherent to formal education and beyond the purview of campus planners and designers. What can be done in this regard, though, is to make the physical campus more open to general use through integration with its wider context.

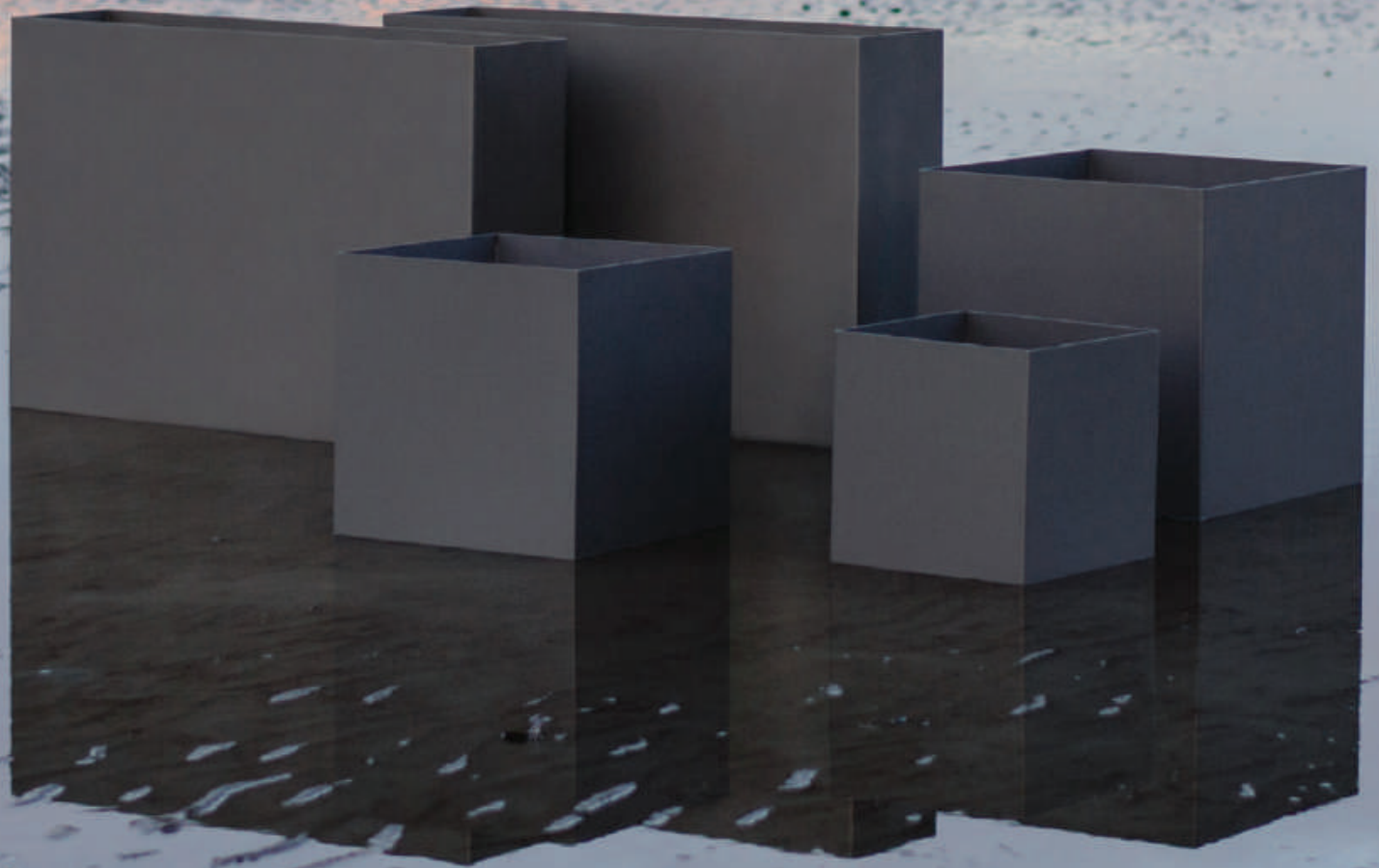
That was Toronto planners' goal with York's main campus as the city around it evolved. Being at the end of a peninsula, UBC is restricted in its physical connection to Vancouver. It had enough land area, however, to turn itself into a more complete, sustainable, inclusive community through non-academic residential and commercial development. Fanshawe will remain an educational campus exclusively given its scale; nevertheless, it, too, has a public realm that could be improved to the benefit of the campus and city populations.

What's common to campuses and their wider communities is the imperative to address through performative, inclusive design, concerns such as: infrastructure renewal, climate change, social justice, public health/safety/well-being, universal accessibility, storm-water management, biodiversity and resilience. What's unique to campus planners and designers is a heightened opportunity and responsibility to lead the way in those areas because of the distinctive physical, socio-cultural and economic context of universities and colleges. **LP**

7 FANSHAWE BEDP STUDENTS' CAMPUS IDEAS
IMAGE 7 ANDREW WILSON

Planters suitable for any environment

Marine grade aluminum paired with super durable powder coating for unparalleled longevity.



NEW Single Post 'Quad' shade pyramids

– all this shade supported by just a single column!

For cool comfort and protection from the sun's harmful U.V. rays

– perfect for seating areas at pools and waterparks!



Shade 
systems™

1.800.609.6066
shadesystemsinc.com/single-post-quad



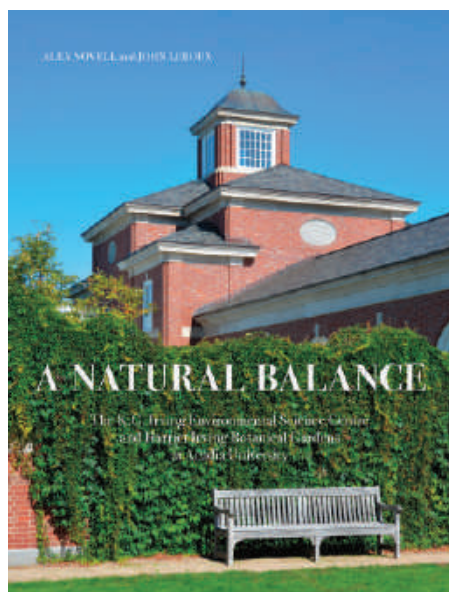
RESHAPING THE IDEA OF LANDSCAPE DESIGN

The Belden Brick Company is excited to bring you the evolution of clay pavers with our unmistakable hardscape products. Discover our many colors, sizes, textures, and shapes at www.beldenbrick.com

COMMERCIAL | RESIDENTIAL | PAVING

NETAPP WICHITA: Permeable Series Pavers in Carbon Black, Landmark, and Lighthouse
www.beldenbrick.com | 330-456-0031 | *The Standard of Comparison Since 1885*

BELDEN
CLAY PAVERS



REVIEWED BY ED VERSTEEG

A Natural Balance:
The K.C. Irving Environmental
Science Centre and Harriet Irving
Botanical Gardens at
Acadia University

Novell, A., & Leroux, J. (2021)
 Wolfville, NS: The K.C. Irving
 Environmental Science Centre
 and Harriet Irving Botanical
 Gardens at Acadia University.
 176 pp. \$45
 (9½" x 11" hardcover).

Project Design Credits

Landscape Architecture: Alex Novell,
 Novell Tullett Landscape Architects,
 Bristol, UK. Peter Richards project
 landscape architect.

Architecture: Robert A. M. Stern
Architects: Robert A. M. Stern,
 Preston Gumberich, Jennifer L. Stone,
 and Graham Wyatt.

CELEBRATING ACADIA'S BOTANICAL GARDENS

A NATURAL BALANCE celebrates the 20th anniversary of the Irving Environmental Science Centre and Botanical Gardens at Acadia University, Wolfville, NS. The Centre and Gardens are a gift of the Arthur Irving family and named for the industrialist K.C. Irving and Harriet Irving.

"K.C., as anyone in the Maritimes knows, was deeply interested in trees..." (*A Natural Balance*, p. 51). The Irvings own 3.2 million acres of forestland in New Brunswick and manage a further 2.6 million acres of Crown land, totalling nearly 32 per cent of the entire province's land area. Along with their oil and shipbuilding enterprises, the Irvings have backed some outstanding landscape projects in the region including the Irving Eco-Centre: La Dune de Bouctouche (BDA Landscape Architects) and the restoration of the Loyalist Burial Ground in Saint John.

K.C. Irving and his three sons all studied at Acadia. Arthur (the second son) served as university chancellor from 1996 to 2010. Early in his tenure, he sparked the vision for the complex with the primary motive to create a place for students and to support university teaching and research. He also put forward the suggestion that the botanical garden reflect local plant communities – the Acadian Forest Region – a transitional zone between the boreal and deciduous forests.

The Irving Centre overlooks the UNESCO-designated Landscapes of Grand Pré in Nova Scotia's Annapolis Valley. Acadia is a small, predominantly undergraduate university (3,500 students) in the heart of Wolfville, a town of 5,000. The project site is a six-acre block of land within view of University Hall, the campus focus. Old student residences were cleared to make way for the building and gardens.

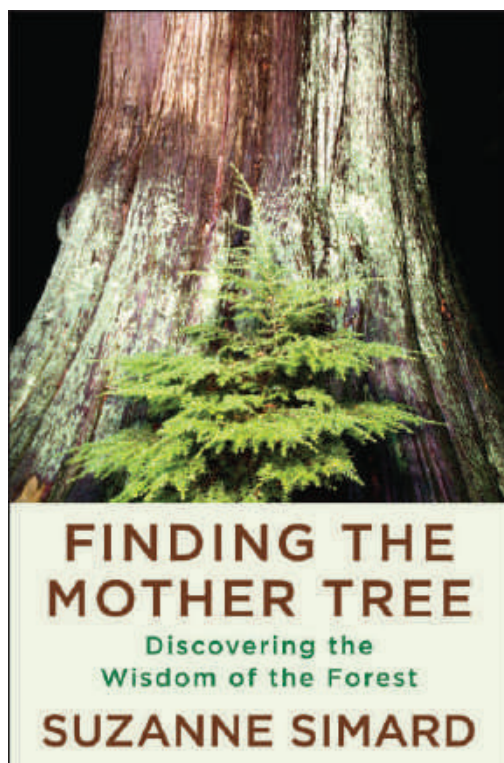
The first design moves were set out by landscape architect Alex Novell to create a plan "led by landscape." The site selection and building placement respond to the campus fabric and the potential for views over the Grand Pré dykelands. The botanical gardens take-up much of the project site, up-slope from the Environment Centre that houses a student common, meeting, teaching, research, herbarium spaces and greenhouse.

The upper half of the garden recreates a series of six Acadian plant communities in an organic plan. Each was built on the substrate required to sustain the plants. In places, large blocks of soil and plants were imported to maintain the relationships between soils, microorganisms and plant communities. The hydrology of the site has been manipulated to create appropriate moisture and nutrient regimes for each area. The lower half of the garden, near the student common and greenhouse, is laid out in a very formal manner, although the plantings remain native plant selections. A who's who of botanical garden experts, native plant experts, horticulturalists and plant propagators from the region contributed the planting design, propagation, collection and installation.

After the conceptual design for the site was set out, Robert A. M. Stern Architects were engaged to design the 65,000 square foot Environment Centre. The building design fits with the traditional red brick architecture predominant on campus and was based upon precedent research in England and the USA. The position, character, quality and openness of the building make it an outstanding contribution to the campus and the community. The grandeur of the architecture may be a fitting and necessary complement to the subtlety of the native landscape.

In *A Natural Balance*, Novell and Leroux provide a concise, accessible and attractive volume retelling the development of the K.C. Irving Environmental Science Centre and Harriet Irving Botanical Gardens that invites the non-expert to consider the design challenges and ecological understanding required to implement the project and sustain it for the past 21 years. The book is written from a designer and horticulturalists' point of view; the text highlights the challenges of creating a facility that fosters campus life, research, instruction and a working botanical garden. The narrative is well supported with design studies, preliminary plans, maquettes, illustrations, photos and plant lists that should make it instructive for young designers and a useful reference for the experienced. **LP**

Ed Versteeg, MLA, APALA, FSCLA is a senior instructor in landscape architecture at Dalhousie University in Truro, Nova Scotia.



REVIEWED BY HEIDI REDMAN

***Finding the Mother Tree:
Discovering the Wisdom of the Forest***
Suzanne Simard

Penguin Canada, 2021

“This is not a book about how we can save the trees. This is a book about how the trees might save us.”

SUZANNE SIMARD'S *FINDING the Mother Tree* unfolds chronologically, tracing the author's early roots in the Monashee Mountains of BC, where she was born into a logging family that had for generations made a living cutting down forests. Early in her career, as one of few women of her generation to work in the logging industry, she became intimately familiar with the varied forests of western Canada and vast landscapes cleared of trees. As a young forester working for a logging company,

PROFILING THE FOREST DETECTIVE

the plantations of seedlings she assessed and plots she tested with herbicides were a long way from the landscapes her ancestors logged with a lighter touch. Why were so many reforestation sites failing? Were trees really competitive, or altruistic? Informed by her observation and questioning of the forest ecosystem, these early experiences led her to become a sort of “forest detective,” seeking answers about how to heal the natural world.

Simard takes us through the evolution of her career and scientific discoveries, and how her own life events shaped the ideas for her research. The story is interwoven with threads of scientific revelation and personal discovery. The writing style is honest, insightful and full of passion. Through poignant anecdotes of place, memory and exploration, she reminds us of the sheer awe that comes from studying the natural world.

We follow Simard's journey as a young forester, budding researcher and professor, but also her personal growth as a daughter, sister and mother. Despite the increasing demands on her time, throughout her life she always finds pause to spend time in the forests she studies – steep hikes through the Monashees, finding shade under a Douglas Fir or walking through ancient cedars in Stanley Park. She reminds us of the power of spending time in the places we study.

Simard's discoveries are rooted in her powers of observation – spending time on the land, returning to places and questioning. Her work explores the complex relationships that underpin the natural phenomena of our time – pine beetle outbreaks, forest fires and reforestation.

Simard would go on to revolutionize the way we think about plants and fungi. Her research on tree communication will be familiar to readers of Peter Wohlleben's *The Hidden Life of Trees*; one of the central characters in Richard Powers' Pulitzer Prize-winning book *The Overstory* (reviewed by Doug Carlyle in the L/P Winter 2020 trees issue) was heavily inspired by Simard's life and work in forest ecology.

For landscape architects, her research is instructive, profound and hopeful. Some of her findings are so remarkable they seem

to stray into the world of fantasy. Some of these include:

- The major dynamic among plant life in forests is cooperation and interdependence.
- Trees share resources to keep their community whole.
- Trees communicate through a complex underground network of mycorrhizal fungi (the “wood wide web”).
- Mycorrhizal networks have the signature of intelligence.
- Mother trees are central hubs of the forest, helping to coordinate a powerful underground network that heals, feeds and sustains other members of the forest.

Her research challenges some of our most ingrained assumptions. Is our desire to manage forests justified, or would it be better to just get out of the way? Is our treatment of trees reflective of our treatment of societies?

Finding the Mother Tree is an important read for any individual seeking to improve communities and the land on which we live. The book leaves you awed by the wisdom of the natural world. At times, inspired by Simard's conviction and determination in conveying messages that people don't always want to hear.

Why is the book important for landscape architects? As stewards of the land and forests, Simard's research is both an urgent call to action, and an empowering message that confirms the notion of a forest's ability to heal and achieve an exquisite balance.

As Simard's discoveries continue to unfold, her mantra stays the same: “I still have lots of questions.” Encouraging us to put our hands in the soil and pay more attention the next time we enjoy a walk in the woods.

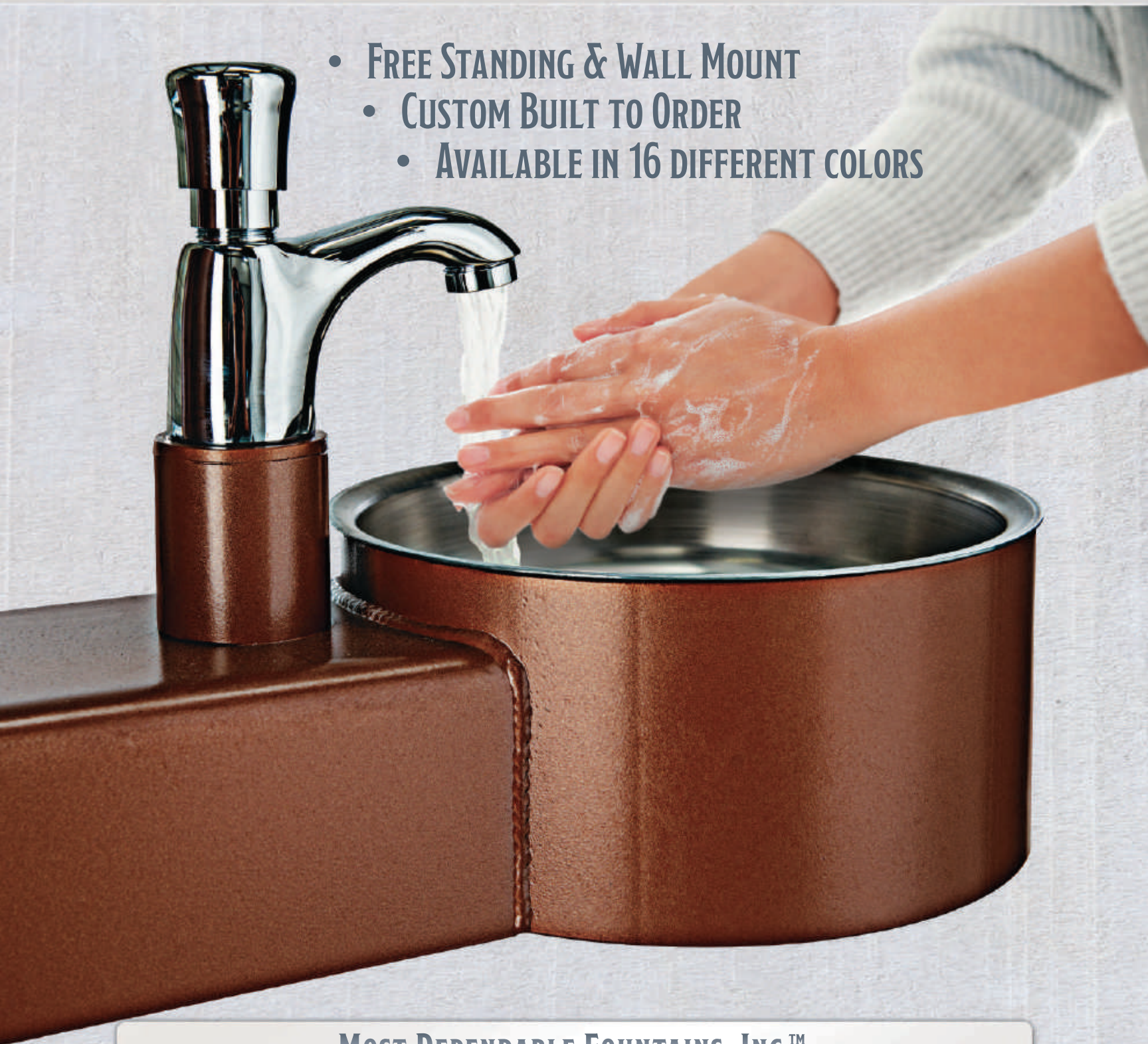
For more information about both Suzanne Simard and her book, visit <https://suzannesimard.com>. **LP**

Heidi Redman, BCSLA, AALA, NuALA, CSLA is a principal and landscape architect with LEES+Associates. Based in Whitehorse, she leads the firm's northern landscape practice. She loves hiking and enjoys exploring the boreal and temperate rainforests of northern and western Canada with her family. Heidi is a member of the L/P editorial board.

HAND WASH STATIONS

BROUGHT TO YOU BY MOST DEPENDABLE FOUNTAINS, INC.

- FREE STANDING & WALL MOUNT
- CUSTOM BUILT TO ORDER
- AVAILABLE IN 16 DIFFERENT COLORS



MOST DEPENDABLE FOUNTAINS, INC.™

CROZIER ENTERPRISES, LTD. LANDMARK BY CROZIER • SALES@CROZIER.CA 866-624-9722

TESSIER RECREO PARC (QUEBEC) • RECREO-PARC@TESSIER-RP.COM 800-838-8591

WWW.MOSTDEPENDABLE.COM

WE'VE MADE YOUR TREES OUR BUSINESS.

EXPERT TREE CARE FOR 116 YEARS — AND GROWING.

Acer saccharum, better known as Sugar Maple, is just one of the thousands of species we specialize in. For 116 years, our family-owned company has brought a rare mix of groundbreaking science, award-winning safety practices, and global resources to every tree and shrub care task at hand. And at the heart of our success are our people — experts who know and champion every tree, no matter the species. Discover how our passion is inspiring one beautiful property after another.

Call **877 BARTLETT** or visit **bartlett.com**

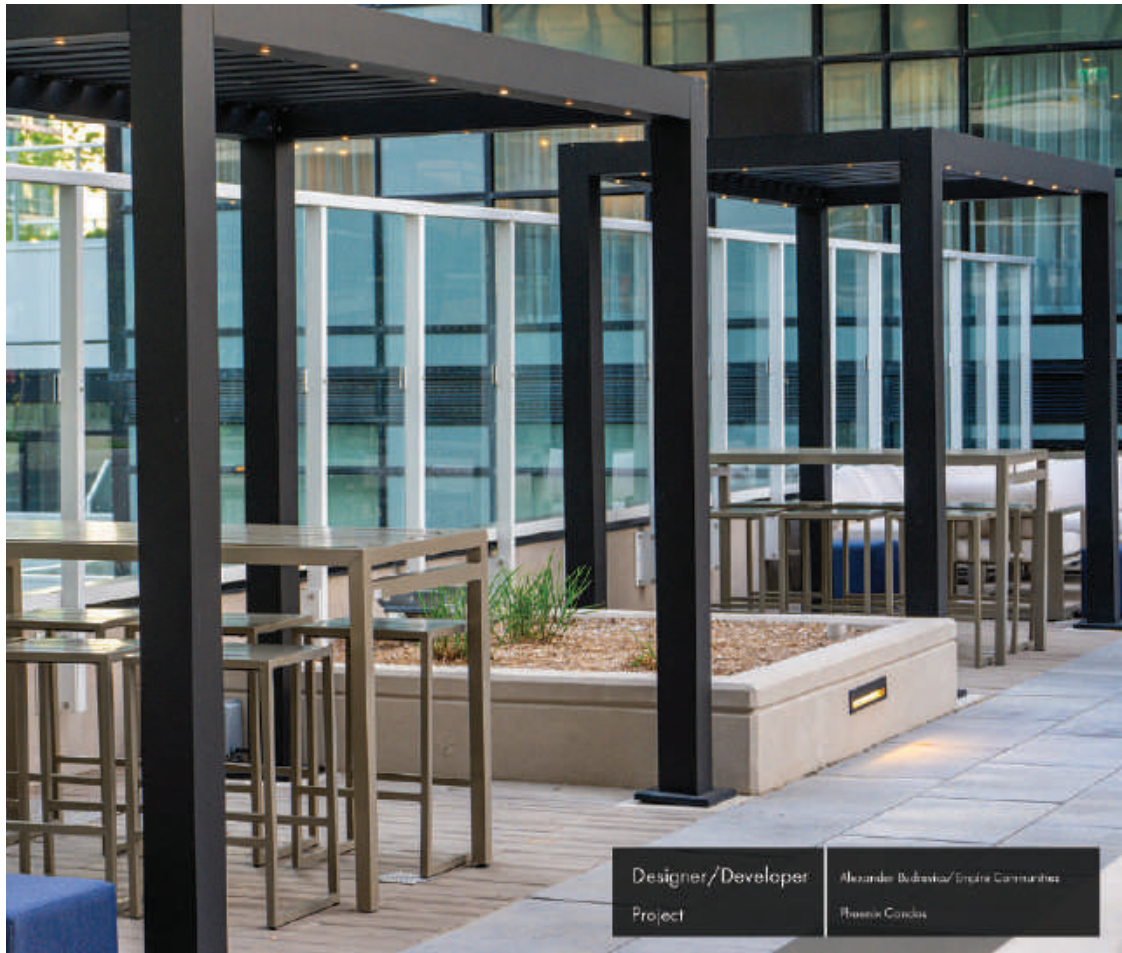
PRUNING | FERTILIZATION | CABLING & BRACING
INSECT & DISEASE MANAGEMENT | TREE INSPECTIONS
STORM DAMAGE | LIGHTNING PROTECTION | REMOVALS

The F.A. Bartlett Tree Expert Company



BARTLETT
TREE EXPERTS

SCIENTIFIC TREE CARE SINCE 1907



Designer/Developer
Project

Alexander Bubacka/Enclave Communities
Phyllis Cordas

SHADE REIMAGINED

- Integrated Ambience Lighting
- Professionally Engineered Designs
- Custom Shapes & Sizes
- Optional Charging and Heating
- All Aluminum Construction

800-268-7328
sales@hausersite.com



Linear drainage for urban applications

ACO DRAIN

New online design aid tools:

- Trench hydraulics
- Grate hydraulics
- Grate Visualizer
- Run layout design

www.askaco.ca

All ACO Drain products
comply with
CAN/CSA B79-8-2022

(604) 554-0688 | info@acocan.ca | www.acocan.ca

ACO. we care for water



Beaver Valley Stone
LIMITED
FAMILY OWNED AND OPERATED SINCE 1989



**A WIDE SELECTION OF
NATURAL STONE
AND PRECAST CONCRETE PRODUCTS**

- Flagstone
- Interlocking
- In-Lite LED Lights
- Bulk/bag road salt
- Accessories
- Masonry products
- Cultured stone
- Aggregates
- Retaining walls
- Kichler LED Lights

www.beavervalleystone.com
t: 905-886-5787 or t: 416-222-2424

Main Office & Yard: 8081 Woodbine Ave. SE Corner Woodbine/407
Office & Yard: 125 Langstaff Rd E., SE Corner Yonge/Hwy 7-407
Manufacturing Plant: 12350 Keele St., Maple

We Deliver! Follow us on @BVSLimited beavervalleystone

**RESHAPING THE IDEA OF
LANDSCAPE DESIGN**





COMMERCIAL | RESIDENTIAL | PAVING

From the smooth lines of extruded pavers to molded pavers' distinctive characteristics, our brick's geometric perfection is a simple yet powerful asset to your paving design!

Visit our website for a wide range of clay pavers.

BELDEN
CLAY PAVERS

beldenbrick.com | 330-456-0031

LONGSHADOW.COM
Hand Crafted by Classic Garden Ornaments, Ltd.
Fine Planters & Garden Ornaments



New - Bermuda Urn 38, LS 9885
38" high, 26" diameter, 11" diameter base
For Inquiries 618 893 4831

ROMA Sun Shade
Perforated to perfection.



MAGLIN
Site Furniture
800.716.5506 | www.maglin.com

HUB International
Landscape Architects

**PROFESSIONAL LIABILITY
INSURANCE PROGRAM**

We Offer:

- Contract Review Services
- Loss Prevention Assistance
- Seminars
- Complete Commercial Insurance Programs

Christopher D. Greer, BA, CAIB, CRM
Vice President, Professional Liability
O: 416-597-4650
M: 416-569-4417
christopher.greer@hubinternational.com

HUB International Ontario Limited
595 Bay Street, Suite 900
Toronto, ON M5G 2E3
hubinternational.com

HUB

**THE STELLA OF SUNNE™
COLLECTION**
LA COLLECTION STELLA
OF SUNNE™

*Built to withstand
the forces of wind, rain
and changing tastes.*

*Une conception qui résiste aux
intempéries et aux modes passagères.*



VICTOR STANLEY™
Create a timeless moment.®
Créateur de moments inoubliables.™
VICTORSTANLEY.COM

ACCESS COVERS/COUVERTURES D'ACCÈS

Streetlife Design & Products BV 17
www.streetlifeamerica.com

Wundercovers 65
www.wundercovers.com

**ARCHITECTURAL WATER FOUNTAINS/
LES FONTAINES ARCHITECTURALES D'EAU**

Most Dependable Fountains, Inc. 60
www.mostdependable.com

**CONCRETE PRODUCTS/
PRODUITS EN BÉTON**

Central Precast Inc. 65
www.centralprecast.com

CONSULTANTS/CONSEILLERS

Aco Systems Ltd. 62
www.acocan.ca

**FENCING PRODUCTS/
PRODUITS POUR CLÔTURES**

Carl Stahl DecorCable 64
www.decorcable.com

**FIBREGLASS PLANTERS/INDOOR -
OUTDOOR/JARDINIÈRES EN FIBRE DE
VERRE INTÉRIEURES/EXTÉRIEURES**

Green Theory Design 55
www.greentheorydesign.com

**GARDEN SCULPTURES & ACCESSORIES/
SCULPTURES DE JARDIN ET ACCESSOIRES**

Classic Garden Ornaments, Ltd. -
LONGSHADOW Planters 5, 63
www.longshadow.com

**INSURANCE BROKERS/
COURTIERS D'ASSURANCE**

Pro-Form Sinclair Professional 63
www.proformsinclair.ca

**INTERLOCKING PAVERS/
PAVÉS AUTOBLOQUANTS**

Unilock Limited 10
www.unilock.com

**OUTDOOR KITCHENS/
CUISINES EXTERIEURES**

Danver 16
www.danver.com

**PAVER PRODUCTS/EQUIPMENT/
PRODUITS/MATÉRIEL POUR PAVÉS**

Invisible Structures, Inc. 64
https://www.invisiblestructures.com

The Belden Brick Company 57, 63
https://www.beldenbrick.com

PAVER-GRATE/PAVERS-GRILLES

IRONSMITH 25
https://ironsmith.cc

**PAVING STONES/RETAINING WALLS/
PAVÉS/MURS DE SOUTÈNEMENT**

Beaver Valley Stone Ltd. 63
www.beavervalleystone.com

GRASSPAVE²

GRAVELPAVE²

There Is No Equal

Strength

- The Strongest Porous Pavers Available
- Over 15,940 psi Compression Strength
- Exceeds H25 Loading

Performance

- Performs in Severe Weather Events
- Most Rapid Drainage Available
- Fastest and Easiest to Install
- Lasts a Lifetime

Trusted

- The Best Customer Service
- Over 100 Million sq ft Installed
- America's Favorite Paver Since 1982

INVISIBLE STRUCTURES

Invisiblestructures.com/why
(303) 233-8383

decorcable.com

Carl Stahl DECORCABLE

Learn More At
decorcable.com

Creative Solutions with stainless steel cable and mesh systems
Carl Stahl DecorCable | 312.474.1100 | sales@decorcable.com

**PLAYGROUND & RECREATION EQUIPMENT/
ÉQUIPEMENT POUR ESPACES RÉCRÉATIFS
ET TERRAINS DE JEUX**

APE Studio Inc. 11
www.apeoriginal.com

**PLAYGROUND EQUIPMENT/
MATÉRIEL POUR TERRAINS DE JEUX**

Landscape Structures Inc. 15
www.playlsi.com

**SECURITY/PERIMETER FENCING /
CLÔTURES DE SÉCURITÉ/DE PÉRIMÈTRE**

Central Precast Inc. 65
www.centralprecast.com

**SHADE UMBRELLAS/
OMBRAGER PARAPLUIES**

Shade Systems Inc. 56
<https://shadesystemsinc.com>

**SITE FURNISHINGS/
MOBILIERS EXTÉRIEUR**

Central Precast Inc. 65
www.centralprecast.com

DuMor Inc. 14
www.dumor.com

Equiparc 4
https://equiparc.com/?utm_source=Website&utm_medium=Banner&utm_campaign=AALA_Banner_720x90_2021

Hauser Industries Inc. 62
www.hausersite.com

Landscape Forms Inc. 3
www.landscapeforms.com

Maglin Site
Furniture Inc. 63, Outside Back Cover
www.maglin.com

Victor Stanley Inc. 63, Inside Front Cover
www.victorstanley.com

Wishbone Site
Furnishings Inside Back Cover
<https://www.wishboneltd.com>

TREE CARE/ENTRETIEN DES ARBRES

Bartlett Tree Experts 61
<https://www.bartlett.com>

TREE GRATES/GRILLES D'ARBRES

IRONSMITH 25
<https://ironsmith.cc>



BELLITALIA®

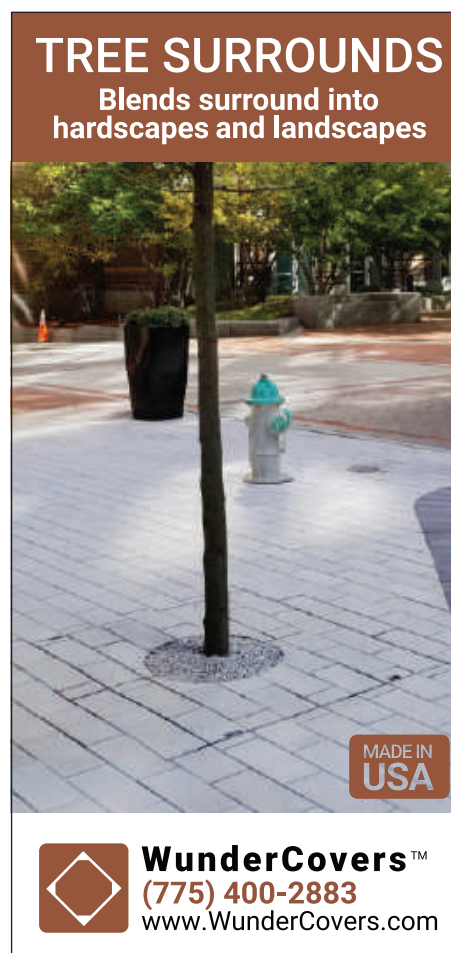
SOLD IN CANADA
EXCLUSIVELY BY

65 YEARS
CENTRAL
PRECAST

**CONTACT US TO
LEARN MORE**

613.225.9510
or
sales@centralprecast.com

centralprecast.com



TREE SURROUNDS

Blends surround into
hardscapes and landscapes

**MADE IN
USA**

WunderCovers™
(775) 400-2883
www.WunderCovers.com

SUCCESS REQUIRES OTHERS TO GUIDE YOU ALONG THE WAY

FAYE LANGMAID, SALA, FCSLA/FAAPC, MCIP

AS THE CSLA prepares to mark its 90th anniversary in 2024, we are starting a new recurring column in *Landscapes | Paysages* magazine that reflects on the profession of landscape architecture, both where it has been and where it is going. We cherish our mentors and the guidance they have provided us in our careers and our lives. This new column provides a forum for landscape architects to share mentorship stories – we want to hear what you have learned from your colleagues in the profession and acknowledge the impact of their tutelage. Whether at the start of a career or with many years of experience, mentorship goes in both directions and we can always develop new skills and abilities with help from others.

If you have a mentorship moment, *L|P* wants to hear from you! These should be shorter pieces (from one meme-style quote to a maximum of 500 words) with an accompanying image that helps relate the knowledge imparted. Send your moments to lp@csla-aapc.ca.

Dieter Martin, Lessons on the Profession

The layout of the City of Saskatoon is credited to Thomas Mawson (1911). His plan's boulevard streets, riverbank parks and downtown core nestled in the elbow of the South Saskatchewan River gave Saskatoon its tagline "The Paris of the Prairies." However, the University of Saskatchewan campus, a design by Brown and Vallance of Montreal is offset from the grid of Mawson's plan, with a more naturalistic flow using curvilinear roads and at the core an open lawn space, named "The Bowl."

Dieter Martin, the head groundskeeper at UofS from 1957 to 1976, was responsible for ensuring the campus took the shape envisioned in its formative years. In his first year, Dieter had a \$4,000 budget and spent all of it bringing renowned landscape architect Clive Justice (FCSLA, FASLA) from Vancouver to prepare drawings, meet with and present to the University's Board of Governors. Although Dieter knew how to draft plans, he wanted a professional's advice.

Later, Dieter would work with Cameron Man (FCSLA, FASLA) of Man, Taylor, Muret, Lantzius Associates, who were responsible for the Master Plan update of 1969 (which incorporated \$120 million of new capital building projects). In addition to hiring design professionals, Dieter hired landscape architecture students from the University of Manitoba as summer interns for his grounds staff.

In 1985, Dieter was made an honorary member of the CSLA and SALA for his years of guidance of both the campus and fledgling architects.

While I was living and working in Saskatoon, Dieter provided consulting advice on plant materials, maintenance and management techniques to many LAs. It is in Dieter's nature to take you under his wing and teach you about native plant materials – not through study but by on-site "show and tell" visits. In addition, Dieter has always had an innate sense of when I was being pressured, worn down and in jeopardy of "caving" into something I knew was not an appropriate solution. At those moments, Dieter would show up in my office and take me for a drive. We would talk and he would show me what works and what fails. He would bolster my confidence, urging me to be bold, fight for "natives" (they survive better) and hold fast to fundamental design principles.

The CSLA Congress 2023 provided me with the opportunity to reconnect with Dieter, who is now 92 years young and still a kid at heart. I learned many things from Dieter and wanted to thank him for his guidance; in retrospect the most important "learnings" were to trust myself and to involve the maintenance staff in the design process. Both lessons served me well in my 40+ year career as a public practitioner.

Dieter's impact on the profession will continue to grow, because in addition to all those that he has mentored and influenced, namely most of the landscape architects who worked in the prairie provinces, his grandson is also a landscape architect. Dieter's influence and the legacy of his lessons will live on.

If you would like some of your own lessons from Dieter Martin, I recommend watching this video, *Landscaping at the U of S - A Storied History*, which explains his role in shaping the campus and landscape architects on the prairies: <https://youtu.be/pbbC9tjZ1bM>. **LP**





HANDCRAFTED IN CANADA BY SPECIALISTS LIKE DAVE



OUR MODENA BENCH IS EXPERTLY CRAFTED BY A TEAM OF OVER 30 SPECIALISTS THAT BRING A WEALTH OF EXPERIENCE TO THE MANUFACTURING PROCESS. AMONG THEM IS DAVE, WHO HAS BEEN WITH OUR FOUNDRY IN PARKSVILLE, BC FOR OVER 4 YEARS. CHOOSE WISHBONE TO APPLY THIS LEVEL OF QUALITY MANUFACTURING TO YOUR NEXT PROJECT.

Wishbone
site furnishings

WISHBONELTD.COM | (866) 626-0476



With 40 years of experience and expertise, Maglin Site Furniture designs and manufactures contemporary outdoor amenities that transform spaces into experiences.

Contact us for samples, product information and Lunch & Learns.
800.716.5506 | www.maglin.com



MAGLIN®
Site Furniture