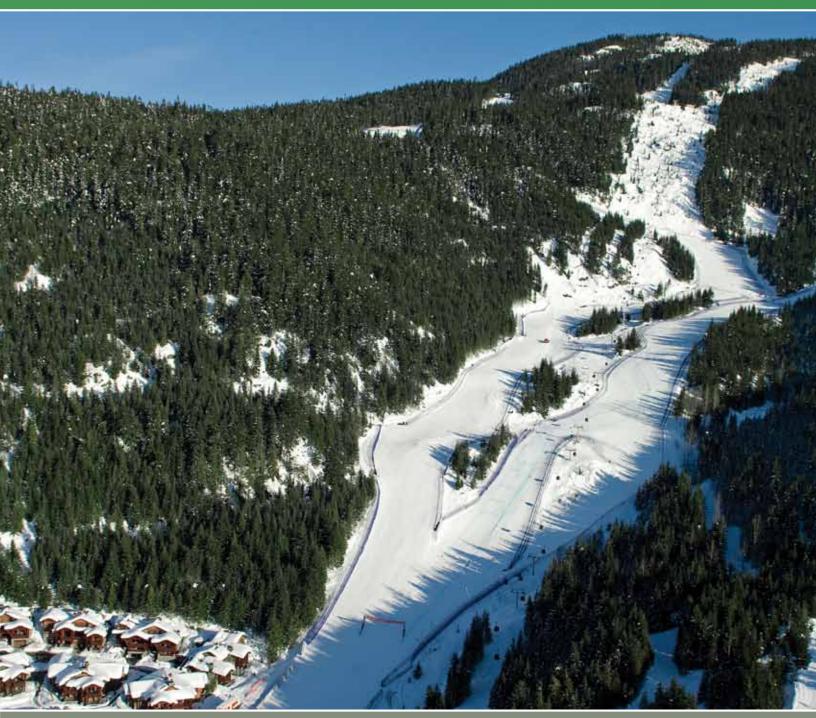
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The purpose of *Sitelines* is to provide an open forum for the exchange of ideas and information pertaining to the profession of landscape architecture. Individual opinions expressed are those of the writers and not necessarily of those of the BCSLA.

## Editor's Note By Brett Hitchins

This February, as Canada plays host nation of the 2010 Olympic and Paralympic Winter Games, images of Vancouver, Whistler, and British Columbia will be cast around the world. As with any modern Olympics, the opportunity of hosting the world's best athletes has come with an abundance of new development. The transformative power of the Games has spurred the development of South East False Creek, the overhaul of the Sea-to-Sky Highway, the construction of the Richmond Oval, and much more. Nearly every venue that Olympians, media, and visitors will attend has been built or renovated specifically for 27-days of Olympic and Paralympic competition.

In building these venues, landscape architects and our allied professionals have dedicated an incredible amount of effort to ensure these places will be dynamic and exhilarating backdrops for international rivalries to unfold. At the same time though, there has been a unique emphasis on leaving a practical legacy behind. Much of this issue of Sitelines is devoted to providing a snapshot of each venue. The intention is to provide insight into the physical results and legacies of the Olympic development.

The opportunities and pressures of this building frenzy may have been daunting at times. In the end, however, the legacy for Vancouver and Whistler as host cities to the 2010 Olympic and Paralympic Games will no doubt be the new urban landmarks and sporting venues that so appropriately reflect our province's diverse culture, and will become part of its rich history. For landscape architects, like with all valuable learning experiences, the construction that has lead up to the Olympics will resonate as new precedents in local design, and award winning landscapes that will be remembered for many years to come. The Games are finally here. 5L

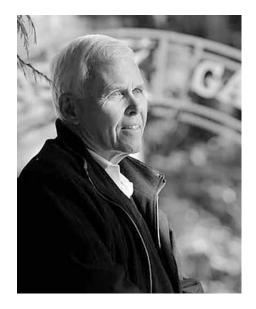
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Cover Image: © VANOC/COVAN

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## ARTHUR ROBERT COWIE, MCIP, FCSLA

September 17, 1934 – November 21, 2009

By Michael Geller, MAIBC, FCIP

A renaissance man. Persistent. Publicly spirited. Passionate. Visionary. Stubborn. Sweet. A great British Columbian.

These are just a few of the words spoken by friends, colleagues, and the Premier of British Columbia upon learning of the sudden passing of Arthur Robert Cowie on Saturday November 21 at the age of 75.

Art was born in Halifax and served as a Commissioned Officer in the Royal Canadian Navy prior to obtaining a degree from the University of New Brunswick and Certificate in landscape architecture from London England.

After moving to Vancouver in the late '60s, Art took an interest in community affairs and politics. He was elected a member of the Park Board and then a City Alderman as a member of TEAM.

As founder of Eikos Planning Inc., Art was an early proponent of environmental planning. He worked on a wide range of land-use, environmental and urban design assignments throughout British Columbia and in England, Scotland, Australia, and Nigeria.

Art was widely revered as an ideas person who was interested in a broad range of activities including innovative landscapes, alternative forms of affordable housing, integration of transit and development and memorial park planning and design.

His company prepared over 35 official regional, community and neighbourhood area plans and worked with many regional districts, municipalities, and provincial agencies on a variety of land use planning and landscape design assignments.

For over two decades, Eikos acted as the planner for a number of smaller municipalities including White Rock, Port Moody, Oak Bay, Lillooet, Prince Rupert, and others. At one point, Eikos had branch offices in Kelowna and Edmonton and undertook a considerable range of planning and landscape consulting assignments.

In 1984, Art accepted an offer to work as consultant and Director of Planning for the Municipality of Delta. His major assignments were to prepare an Official Community Plan for the municipality and restructure the planning department. During this period he introduced me to George Spetifore resulting in a relationship that ultimately led to the longest Public Hearing in Canadian history-lasting 24 nights!

Art left Delta in 1988 to return to private practice and was elected to the Vancouver Park Board. He served as Chair until 1991 when he was elected as a BC Liberal Member of the Provincial Legislature, representing Vancouver-Quilchena. He served as Caucus Chair and Official Critic of Municipal Affairs, Housing and Transportation. In 1993, Art stepped aside to ensure that Gordon Campbell, the Leader of the BC Liberal Party, could be elected. After a couple of years working and advising the BC Liberal Party, Art returned again to private practice and re-established Eikos mainly as an advisory planning service to government, corporate, and private clients.

After developing a number of small successful housing projects over the years, in 2004 Art decided it was time to get involved with the design and development of fee-simple row housing in Vancouver.

It took him a while to find the right site and obtain approvals but eventually he began a demonstration project on Cambie Street at West 33rd Avenue. His development comprised three rowhouses, each with a laneway suite over the garage. He and his wife Cathy were preparing to move into one of the homes early in the new year.

Art's ideas were vital, his interests many and diverse and his persistence admirable. He was motivated entirely by a desire to do good deeds, to be innovative and to serve, because he cared about this place we call our community.

Art leaves behind his wife Cathy, daughters Lisa and Sharon, step-daughter Corrie, and their families.

Donations in Art's memory can be made to The ALS Society of Canada. www.als.ca/ donations/. Online condolences may be offered to the family at www.kearneyfs.com.

An avid communicator, Art's ideas and influence were shared through his website, www.remembernow.com. Thanks Art. We will remember. SL

This article was originally published in Planning West by the Planning Institute of British Columbia, Volume 51, Number 4, December, 2009, and is reprinted here with permission.

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## VANCOUVER INTERNATIONAL AIRPORT

## A Gateway Landscape By Mike Enns, MBCSLA and Randy Sharp, FCSLA, LEED AP



With its location as a major travel hub at the edge of one of the most liveable regions in the world, Vancouver International Airport (YVR) is by nature a gateway into BC, North America, and the Asia-Pacific Rim. Anticipating continual increases in traffic volumes, the Vancouver Airport Authority turned to Sharp and Diamond Landscape Architecture over a decade ago to come up with an overall public open space and landscape vision for the entire Sea Island corridor. Not only did the Vancouver Airport Authority seek to improve its services and infrastructure; it was vitally important that the Airport enhance its identity, both inside the terminals, and outside, in the public realm. Preliminary ideas began in 1999, and in 2006, the YVR / Sea Island Landscape Master Plan was



approved, based on three strong and interrelated themes: enhancing place identity, promoting sustainability, and strengthening the YVR brand. Collectively, the goal was to establish a reinvigorated recreational and outdoor experience on Sea Island for travelers, employees, and residents. John Lenahan, Director of Engineering for the Vancouver

Images:

Top: YVR Gateway, Photo: Mike Enns

Bottom left: Green Wall, Photo: Randy Sharp

Bottom right: YVR Interchange, Photo: Mike Enns

Airport Authority, explains: "As the first and last impression of the city, the province and the country, YVR was in the unique position to provide travelers passing through the airport with a unique sense of place - one that reflects British Columbia and Vancouver's unique natural beauty and distinctive terrain".

Over the last four years, Sea Island and the Grant McConachie Way parkway corridor leading up to the terminal has been drastically transformed. Bold planting beds and large tree terraces, mimicking the arcing curves of flight paths, paint broad strokes on a green canvas visible from the air. In place of concrete abutments, massive swaths of hardy shrubs enhance the four seasons of color on the West Coast. To frame views to the north shore mountains, evergreen islands now stand firm against the winds. Closer to the ground, thousands of ornamental grasses mimic the wind-swept grasslands of the Fraser River estuary. "The landscape enhancement program", Lenahan reflects, "successfully provides a thematic visual experience, representative of our regional landscape".

From a sustainability perspective, one of the main objectives of the Master Plan, Lenahan adds, "was to advance our green business practices and ecological design". Working with the Airport, Sharp and Diamond began by initiating nursery procurement to ensure large canopy trees, supply of recycled growing media, and a heavy dose of native plant species to minimize irrigation and maintenance. Low-wattage LED lighting became the norm for landscape lighting, both for the Olympic Rings and for the Airport signage program. But perhaps the greatest achievement of visible green building practices can be found at the entrance to YVR's International Terminal Building, where North America's largest living wall (a 17m high vertical wall planted with over 27,000 native groundcover plugs) introduces visitors to BC's coastal landscape.

Similarly, the YVR logo and colors represent Land, Sea, and Sky, to show users that all forms of transportation can co-exist with the natural environment. This was a central theme that the Vancouver Airport Authority wanted to transcend beyond the terminal buildings and into the landscapes throughout Sea Island. A gateway sign program using the YVR logo was developed early in the planning process, with key entrances welcoming travelers to Sea Island from Vancouver and Richmond identified. Today, the first of these entry signs sits at the west end of Arthur Laing Bridge, at the entrance to the parkway corridor leading to the main terminal. Mr. Lenahan discusses the impact of this: "This landscape integration has not only allowed for greater exposure of the YVR brand, but also highlights the Airport Authority's commitment to sustainability".

As the Olympics approach, it's safe to say the folks at YVR are excited about the evolution of not only the terminal buildings, but also the larger Sea Island landscape. Place identity, sustainability, and the YVR brand have all been strengthened and improved in a way that the public experience throughout Sea Island will be forever enriched. The notion of a transportation hub transformed into a gateway landscape is now a reality. SL

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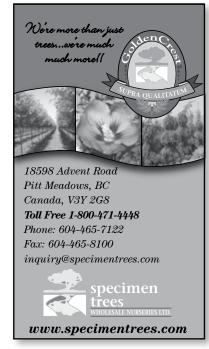
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### **COMPETITION VENUES**

#### **RICHMOND OVAL**

Olympic Events: Speed Skating

Venue Capacity: 8,000

**Elevation:** Sea level

**Investment:** \$178 million

**Post Games Use:** Venue for various sport and community functions

Landscape Architects: Phillips Farevaag Smallenberg

#### **Text by Lucas Nightingale**

On the north arm of the Fraser stands a building that appears to ripple along with the river. The Richmond Oval, newly constructed for the 2010 Olympics, opened on time and on budget December 12, 2008. But not without its challenges. Situated on the silty banks of Lulu Island, several million dollars went into the geotechnical pre-infrastructure alone, with over 100,000 cubic metres of sand placed on site for stability. The building's unique appearance is owed in part to its wood wave roof, constructed using pine-beetle kill from devastated BC forests. The curved support members, at just under 100 meters in length, are some of the longest clear-span wood beams in the world. These characteristic curves were inspired by the wing feathers of the indigenous blue heron and, fittingly, by the position of a speed-skater's arm used for balance during a turn or peel. Featuring unique details, the symbolic use of water, and beautiful concrete formwork, the landscape component of the Oval is well executed. Together, building and landscape, have transformed this waterfront site into a dynamic community space.

#### CYPRESS MOUNTAIN

Olympic Events: Freestyle Skiing, Snowboarding

Venue Capacity: 12,000

**Elevation:** 930m

**Investment:** \$16.7 million

**Post Games Use:** Improved recreational and competitive skiing and

snowboarding

Venue upgrades include modifications to existing runs, a new in-ground halfpipe, a snowmaking system and water reservoir, lighting, a new freestyle site for aerials and moguls, and a re-graded parallel giant slalom course. Construction began in May 2006, following a comprehensive environmental review. Venue improvements were completed by fall 2007. In November 2006, the freestyle venue became the first 2010 Winter Games site to be ready for competition. Cypress Mountain is one of the most popular skiing areas in British Columbia, attracting hundreds of thousands of visitors each year. The 2010 Winter Games upgrades will enhance the Cypress experience for both recreational and competitive users.





#### Image Credits:

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Surrey Games Facility: Jacqueline Lowe Vancouver Olympic Village: Randy Sharp

#### **SURREY GAMES PREPARATION FACILITY**

Olympic Events: Volunteer Training

Venue Capacity: NA

Elevation: 85m

**Investment:** \$ 12.75 million

**Post Games Use:** To become the Chuck Bailey Recreation Centre

**Landscape Architects:** van der Zalm + associates Inc.

#### Text by Jacqueline Lowe, BCSLA Intern Member

Surrey's City Centre neighbourhood has crowned a new landmark building. Amidst an area in transition, a 12 meter solid glass cube stands as an icon of invitation, spirit, and community. The cube serves as atrium to welcome visitors into a new full sized gymnasium and multi-purpose facility now known as the Chuck Bailey Recreation Centre. Originally named the Surrey Games Preparation Centre; this building was used to train Olympic volunteers and is Surrey's only Olympic venue. The facility is encapsulated by two reflective ponds and large welcoming plaza. The plaza features solid granite seating elements and paving patterns play on the forms of the cube and spirit of the games and were custom designed by the landscape architects. During the Games the high-resolution urban artwork will be projected onto the side of the building for some 30,000 Skytrain users to view. The use of a high powered projector to show full wall length artwork is part of the City's initiative to be part of the Glocal Project; an urban screen project movement that has been popular across Europe and is now making its way to North America.



#### WHISTLER OLYMPIC/PARALYMPIC PARK

Olympic Events: Olympic Biathlon, Cross-country Skiing,

Nordic Combined, Ski Jumping; Paralympic Biathlon,

Cross-country Skiing

Venue Capacity: 12,000 (Olympic); 6,000 (Paralympic)

Elevation: 850-910m

**Investment:** \$119.7 million

**Post Games Use:** Serve as a recreational and performance venue for local

residents and visitors

Landscape Architects: Tom Barratt Landscape Architects (Graphics and Mapping)

The Whistler Olympic and Paralympic Park is making history. For the first time in games' history, all Nordic sports will be held at the same venue, including Olympic and Paralympic biathlon and cross-country skiing, as well as Olympic Nordic combined and ski jumping. But this venue is making history in other ways too. Keeping with the core value of sustainability at the Vancouver 2010 Olympic and Paralympic Games, at the heart of the venue stands the 11,000 sq. foot day lodge featuring an impressive wastewater treatment plant that employs tertiary membrane filtration and ultraviolet disinfection.

The entire Olympic site, which will host 30 per cent of Olympic events and 50 percent of Paralympic events, was built on previously forested land and improved upon of ski trail networks that were already in use. Additional sustainable initiatives include water efficient landscaping and reuse or recycling of over 75 per cent of construction wastes to avoid deposition in landfill.

#### THE WHISTLER SLIDING CENTRE

Olympic Events: Bobsleigh, Luge, Skeleton

Venue Capacity: 12,000

**Elevation:** 935m (top); 785m (bottom)

**Investment:** \$104.9 million

**Post Games Use:** Serve as a facility for the introduction of sliding sports

to Whistler visitors

Known to Squamish First Nations people as Wild Spirit Place, the serene Fitzsimmons valley on the southeast side of Blackcomb Mountain will aptly host some the wildest events that the Vancouver 2010 Olympic and Paralymic Games have to offer—the sliding sports. The Whistler Sliding Centre's 1,450 m concrete, energy-efficient ammonia refrigerated track is the competition venue for bobsleigh, luge and skeleton. One of only 15 sliding tracks in the world, and two in Canada, the new facility is the fastest and most challenging to date. With 16 corners and vertical drop of 152 m, the track required 100 km of refrigeration piping and 12,000 m of steel conduit. Heat waste from the refrigeration plant will be captured and reused

Architectural services for this site were provided by Stantec Architecture Inc. and the track itself was designed by Udo Gurgel of IBG Designs, Germany. Following the games, the sliding centre will promote sliding sports to locals and visitors alike, offering facility tours, demonstrations and certification programs.







#### VANCOUVER OLYMPIC/PARALYMPIC CENTRE

Olympic Events: Olympic Curling; Paralympic Wheelchair Curling

Venue Capacity: 6,000

Elevation: 74m

**Investment:** \$40 million

**Post Games Use:** Multi-purpose community recreation centre

Landscape Architects: PWL Partnership Landscape Architects Inc.

The Vancouver Olympic/Paralympic Centre will play host to the Olympic Curling and Paralympic Wheelchair Curling events of the games. The 9,290 m2 rink situated in the Riley-Hillcrest community of Vancouver, near Queen Elizabeth Park, is surrounded by green space, offers stunning views the North Shore Mountains, and as part of the Vancouver 2010 Venues Aboriginal Arts Program, will feature aborliginal art from across Canada.

The venue is part of new multi-purpose recreation complex expected to draw people from the entire city following the games. With expected completion in Spring 2011, in addition to curling facilities, the complex will feature an aquatic centre with indoor and outdoor pools, fitness facilities, public library branch, and more.

Architects, Hughes Condon Marler, and landscape architects, PWL Partnership, are aiming for LEED\* Gold certification. Replacing the existing community centre, there has been no loss of green space and trees that needed to be removed from the site have been replaced elsewhere in the park. Other features include a sustainably resourced wood roof and heating for the curing rink and adjacent aquatic centre provided by excess heat created from cooling the rink's ice surface.



#### **UBC THUNDERBIRD ARENA**

Olympic Events: Olympic Ice Hockey; Paralympic Ice Sledge Hockey

Venue Capacity: 7,200

**Elevation:** 

Investment:

-

Post Games Use: multi-sport recreational facility

90m

**Landscape Architects:** Sharp & Diamond Landscape Architects

\$47.8 Million

The UBC Thunderbird Arena is a competition winning design/build project for the 2010 Winter Olympics and Paralympics Winter Games. The preservation of large trees and use of native plant material establishes a strong Pacific Northwest character. Project objectives included: the use of strong simple local materials, reflect the campus surroundings and improve pedestrian connectivity. Project accommodated existing rink operations while under construction and was delivered 3 months ahead of schedule and on budget. The integrated design build team evaluated options to improve project, long term operations, accessibility, and earthworks, throughout design and construction process. In partnership with Museum of Anthropology, the venue showcases (7) pieces of Aboriginal Artwork representing the Musqueum Band. Following the 2010 Winter Games, the venue will become a community recreational and high performance multi-sport legacy facility. The project targeted LEED<sup>116</sup> Silver.

#### **PACIFIC COLISEUM**

**Olympic Events:** Figure skating; Short Track Speed Skating

Venue Capacity: 16,000

Elevation: 26m

**Investment:** \$20.4 million

**Post Games Use:** Continued use as a multi-purpose event venue

#### **Text by Lucas Nightingale**

The Pacific Coliseum will be the oldest sporting venue at the Vancouver Olympics, and this history offers a look into Vancouver's sporting tradition. Built in 1968, the arena was home to the Vancouver Canucks for two seasons until they joined the NHL in 1970. The Canucks have since moved to GM Place (Canada Hockey Place) with the Coliseum becoming home base for the WHL's Vancouver Giants. While the Coliseum is perhaps most remembered for hosting the 2006 World Junior Hockey Championships and game four of the 1972 Summit Series, it has been a venue for a variety of sports including the North American Soccer League and Roller Hockey International. The facility has undergone a significant facelift over the past two years in preparation for the Games; improvements include the replacement of its nearly 16,000 seats, an upgraded HVAC system, expansion of the ice surface to international size, and revitalization of the main entrance plaza.



#### WHISTLER CREEKSIDE

Olympic Events: Olympic and Paralympic Alpine Skiing

Venue Capacity: 7,600 (Olympic); 6,000 (Paralympic)

Elevation: 810m

**Investment:** \$27.6 million

**Post Games Use:** Continued use for recreational skiers and host to

international competitions

Come February Whister Creekside will host the alpine skiing events for the 2010 Winter Olympic and Paralympic games, where spectators – up to 7,600 of them – can witness athletes negotiate the steep terrain at speeds exceeding 130 km/hr. Like many of the 2010 Winter Games venues, Whister Creekside is no stranger to hosting world-class competition. Located approximately 10 minutes south of the main Whistler Village, much of the infrastructure for the alpine ski events was already in existence and required only minimal upgrades.

Among the modifications were reshaping of the pre-existing ski courses, installation of energy-efficient snowmaking equipment, and construction of skier underpasses that will enable recreational skiing to continue throughout the games. All modifications were designed to minimize disturbances to vegetation and, during construction, special care was taken to preserve wildlife and aquaculture, including an intensive tadpole and frog relocation program. The men's events will take place on the second largest downhill course in the world, the Dave Murray Downhill, while women's events will take place on Franz's run.



### **NON-COMPETITION VENUES**

#### VANCOUVER OLYMPIC/PARALYMPIC VILLAGE

Elevation: 5m

Olympic Capacity: 2,730

**Investment:** \$1,075 Million (Estimated)

**Post Games Use:** Housing for 16,000 people, community centre,

elementary school, three child care centres, public

plaza, community garden and more

**Landscape Architects:** PWL Partnership Landscape Architects Inc.

Durante Kreuk Ltd.

Phillips Farevaag Smallenberg

#### WHISTLER OLYMPIC/PARALYMPIC VILLAGE

Elevation: 625m Olympic Capacity: 2,850

Investment: \$120 Million (Estimated)

**Post Games Use:** Employee housing in a new neighbourhood that will

be a model of sustainable living

Landscape Architects: Tom Barratt and Crosland Doak

Brent Harley and Eldon Beck Senga Landscape Architecture Inc.

#### MAIN MEDIA CENTRE

Media Capacity: 7,000

**Elevation:** Sea level

**Investment:** \$883 Million

**Post Games Use:** Continued use as an expanded Conference Centre

**Landscape Architects:** PWL Partnership Landscape Architects Inc.

#### **BC PLACE STADIUM**

Olympic Events: Paralympic Opening Ceremony here –

Closing at Whistler

Some medal Ceremonies for Paralympics will take

place at the venue following competition.

Venue Capacity: 60,000

Elevation: 8m

**Investment:** None

**Post Games Use:** Continued home to the BC Lions and host to

concerts and events









## INUVIK, NORTHWEST TERRITORIES



Figure 1



Figure 2



Figure

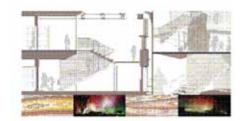


Figure 4



Figure 5

All Images except figure 7 on page 15: Pin/Taylor Architects

# Integrating Design with a Climate of Extremes, a Fragile Ecology, and Cultural Complexities

By Cornelia Hahn Oberlander, FCSLA, FASLA, Elisabeth Whitelaw, BCSLA, and Beryl Allen, MBCSLA

Pin/Taylor Architects, Yellowknife, and Cornelia Hahn Oberlander Landscape Architect, Vancouver, initiated the design process in 2007 for a new school facility for the community of Inuvik in the Northwest Territories. Inuvik is located on the Mackenzie River Delta, two degrees above the Arctic Circle on a gently sloping wooded plateau (figure 3). The design concept for the building and landscape was to create an environment that would be a catalyst for social, intellectual and physical development not only for the students but for the community of Inuvik as whole. Three of the unique conditions of context and experience of place which informed the design development for the new school facility are briefly summarized.

#### A Climate of Extremes

The extreme climactic conditions of blowing snow, snow accumulation, low sun angles, the widely varying amounts of daylight hours throughout the year and the fragile nature of the permafrost presented challenges to the design team.

Winter winds from the southwest bring small amounts of fine snow to Inuvik (figure 5). Winds from the north and northwest cause the snow to drift (figure 6). A number of models were built, each with a different building shape and proposed location on the site to determine the optimal massing, shape and positioning of the building to minimize snow drifting while at the same time remaining optimal for sun exposure. The building which is on pylons and does not rest on the permafrost, requires a vegetative barrier to screen yet allow for air movement under the building. A shelter belt of mature trees with

understorey vegetation is also needed to protect the building from blowing snow and possible vandalism. This seemingly simple requirement is complicated by the overall design philosophy to maintain a high the degree of transparency and continuity between the interior spaces of the school, the immediately adjacent landscape and the image of the school from the Town of Inuvik.

The team also developed design responses that would help the outdoor areas to function during the harsh winter as environments for learning and recreation. Thoughtful sculpting of the land will create small hills for winter sliding and areas for gathering that receive maximum solar exposure. Main pathways will be constructed of concrete, the composition of which has been developed for the ground and climatic conditions. The restricted mobility of students with bulky winter clothing creates an additional challenge to the design of play and other landscape structures. The bitter cold during the winter months precludes the use of metal connections on any play equipment. Structures manufactured by local artisans using large logs salvaged from the Mackenzie River will form regional and culturally meaningful play structures.

Creative, well researched, and collaborative thought resulted in a design that addresses the challenging climatic conditions of context while staying true to the overall design concept.

#### **Cultural Uniqueness**

Design development embraced community participation, involving the three indigenous populations (Gwich'in, Inuvialuit, Dene) and non-indigenous residents. Initial meetings included the architects, landscape architects, community elders, local government officials, school board members and teachers.

Plant material important to the indigenous cultures will be integrated into the landscape design. This design intervention will offer educational learning opportunities and is hoped to encourage a greater connection to the landscape by students and the local community. The selection of culturally important plant material required research into the history of the indigenous populations, community consultation and was also informed by ecological considerations.

It is hoped that a design which responds to Inuvik's cultural richness and also thoughtfully considers its cultural challenges will provide a landscape for learning and a gathering place that the community will embrace.

#### **Fragile Ecology**

The site for the new Inuvik school has an existing sloping treed area to the north which will be maintained for a shelterbelt, cultural activities and sledding. Because there are no plant nurseries in the extreme north, the model that was developed by Cornelia Oberlander for the Legislative Assembly Building in Yellowknife in 1997 was adapted for the school in Inuvik. Plant and seed collectors will take cuttings and collect seed from selected shrubs and groundcovers in the summers of 2009 and 2010 for material to be grown at Nat's Nursery in Langley, B.C. and then returned to the north for planting when the building is complete in 2012. Because the material is genetically true to the north the plants will flourish in the harsh climate. These plants include those for wetland areas for stormwater/snow meltwater drainage channels as well as plants im0portant for food production by the indigenous peoples of Inuvik. To create outdoor spaces that are engaging and multifunctional the choice of plant material encourages learning and is aesthetically pleasing.

To meet the requirements for wind/snow/ vandalism buffers without impairing visual connectivity between the building interior and the landscape, a unique tree grid was developed for the placement of trees. The result will be the seemingly randomly spaced but pleasing composition of trees from all angles. With careful specifications written together with Norm Hol, Arborist, mature specimens primarily of birch, spruce, larch and pine will be cautiously extracted from their fragile local ecosystem and transplanted to designated areas on the site. As with the landscape of the Legislative Assembly Building in Yellowknife, it is expected that the landscape of the Inuvik school will in less than ten years look as though it has always been part of a beautiful, healthy, native environment surrounding the pride of the community, the new school.

In summary, the fragile ecology, rich culture and climate of extremes in Inuvik, Northwest Territories. provided both design challenges and unique opportunities for creativity during the design of the landscape for the new Inuvik school facility. Integral to the design process was the awareness by all of the participants in the process that the factors addressed in this paper are far from static. Climatic change is ongoing and it's effect on the ecology, climate and cultural attributes of the region are unknown. It is hoped that by engaging the students of Inuvik and their families in an appreciation and understanding of the greater landscape of their region, the community will gain an enhanced awareness of the value of the many unique qualities of their environment and culture. SL



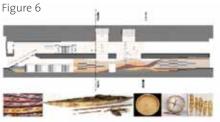


Figure 8

Figure 7 Cornelia Hahn Oberlander Landscape Architect, FASLA, FCSLA

Plan showing the Shelter Belt Tree Grid: the placement of the trees is in an irregular pattern to give maximum protection to building and children.







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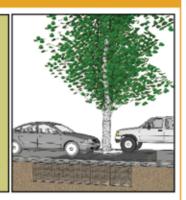
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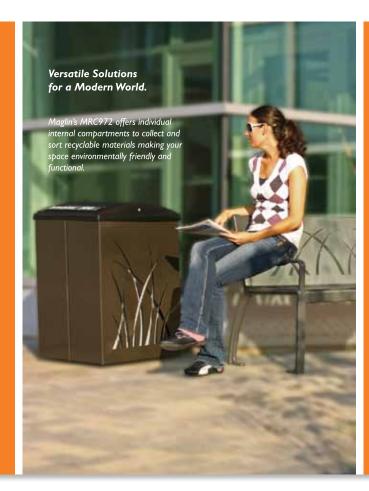
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