



ARTSCAPE WYCHWOOD BARNs

Overview

Artscape has transformed the historic Wychwood TTC streetcar repair barns located in Toronto's St. Clair and Christie neighbourhood into the **Artscape Wychwood Barns** – a 60,000 sq. ft. multifaceted community centre where arts and culture, environmental leadership, heritage preservation, urban agriculture and affordable housing are brought together to foster a strong sense of community. The Artscape Wychwood Barns is surrounded by a 127,000 sq. ft. new City park. Construction began in March 2007 and was completed in October 2008, with the Official Public Opening taking place on November 20, 2008.

Since 2001, Artscape has been working in partnership with the City of Toronto and The Stop Community Food Centre to create the Artscape Wychwood Barns. The vision for the reuse of the repair barns was developed through a rigorous examination of precedents from other communities in the UK, Europe and North America, an extensive process of community consultations and Artscape's own experience in creative community building.

Highlights of Artscape Wychwood Barns:

Arts and Cultural Connectivity

The Barns anchor arts organizations, professional artists and their families in the community with affordable live/work, studio, office and rehearsal spaces. The Artscape Wychwood Barns houses 13 not-for-profit organizations, 15 artist studios and 26 artist live/work spaces. A community gallery also provides public access to arts and culture.

Heritage Preservation

The Barns have restored a unique architectural gem in Toronto's landscape. With the oldest surviving car barn dating back to 1913, the former streetcar barns were originally built for the Toronto Civic Railway which later became the TTC. The Barns are an integral part of Toronto's transit history and the surrounding neighbourhood.

Environmental Leadership

The Barns are the first heritage building redevelopment project in Canada to seek Leadership in Energy and Environmental Design (LEED) Canada Certification. The redevelopment process integrates construction elements that demonstrate a commitment to sustainability and superior performance standards in environmental responsibility and energy efficiency.

Educational Programming

The Barns are a creative place where new and innovative ideas flourish. Interpretive displays illustrating site heritage and environmental technologies educate community members. A sustainable food systems education centre run by The Stop Community Food Centre is a central feature of the site. Various not-for-profit organizations housed in the barns provide educational programming focused on arts and the environment.

Community Partnership

Reflect the vision of a community who wanted a local resource that would foster a strong sense of belonging and inclusiveness. The Artscape Wychwood Barns offers year-round space for community festivals and special events and acts as a meeting place for the local neighbourhood.

About Artscape

Artscape is a not-for-profit enterprise dedicated to culture-led regeneration and city-building through the arts. Artscape's work includes developing and managing creative buildings, building creative neighbourhoods, and designing strategies and tools to advance creative cities.

As Canada's leading practitioner in multi-tenant space development for the arts and culture sector, Artscape has transformed a portfolio of underutilized buildings across Toronto into dynamic community assets. Artscape projects provide work and live/work spaces for hundreds of artists, designer/makers, galleries, theatres, and not-for-profit organizations.

These projects have been catalysts for regeneration and have helped stimulate some of the city's most vibrant and creative neighbourhoods including: West Queen West, Liberty Village, Parkdale, the Distillery and Toronto Islands. New generations of projects are designed as cross-sectoral platforms for collaboration and are being realized through a range of innovative partnerships. Today, Artscape has more than a dozen new projects in some stage of development. Through these efforts, Artscape is helping Toronto build the infrastructure for creativity with greater purpose and conviction than any other city in the world.

Artscape Wychwood Barns History

An excellent example of early 20th century industrial architecture, the Wychwood TTC streetcar repair barns are located on a 4.3 acre site between Wychwood Avenue and Christie Street, south of St. Clair Avenue West along Benson Avenue. The original facility consisted of five attached brick buildings ranging from 198 to 326 feet long and 38 to 44 feet wide. Built between 1913 and 1921, the barns were the hub of the Toronto Civic Railway. From 1921 to 1978 it was one of seven streetcar houses operated by the TTC.

At their peak, the barns serviced ten routes and 167 streetcars. During the 1980s, the Wychwood TTC streetcar repair barns served as a testing and development facility for new streetcars and for the retrofitted Scarborough rapid transit trains. Upon completion of the retrofit in the mid-1980s, the barns were left vacant.

In January 2004, Artscape was selected by the City of Toronto to redevelop the site. Artscape's vision for the reuse of the barns was developed through an extensive process of community consultations and a feasibility study published in May of 2002. The project began as a collaboration between Artscape and The Stop Community Food Centre supported by a lead donation from the George Cedric Metcalf Charitable Foundation. Since then, the partnership has continued to grow with the help of the community and the unwavering support and determination of local champion and City Councillor Joe Mihevc.

History of the Wychwood TTC streetcar repair barns

- The Wychwood TTC streetcar repair barns were one of the more important properties in the TTC system, rivalling Russell, Roncesvalles and Eglinton in terms of its capacity and operations.
- The Wychwood TTC streetcar repair barns date from 1913, about eight years before the Toronto Transportation Commission came into being. It is the only property still standing today retaining some of its streetcar heritage that was constructed by the Toronto Civic Railways to house its streetcars.
- Historically, the complex is associated with the expansion of transportation services in Toronto and innovations in transit equipment.
- Three routes were initially built of which the St. Clair route, at 3.1 miles, was the longest.
- By 1928, St Clair was the base for ten routes that required 167 cars to operate during rush hour.
- The street railway has been a part of Toronto since the early 1860's, and streetcars continue to provide public transportation in certain parts of the city today. The streetcar is arguably an important part of the heritage of this city.
- At the turn of the 20th century, Toronto was expanding rapidly and streetcars played a significant role in that expansion. Between 1891 and 1912 the city doubled its physical size by annexing several outlying areas.

History of the Wychwood Neighbourhood

- The Wychwood Neighbourhood is bounded by St. Clair Avenue on the north, Bathurst Street on the east, the CPR lines north of Dupont on the south, and Oakwood Avenue and Dovercourt Road on the west.
- Wychwood Park was founded by Marmaduke Matthews, a landscape painter who purchased land here in the 1870's with the hope of establishing an artist colony at Wychwood Park. Matthews named Wychwood Park after Wychwood Forest, located near his childhood home in Oxfordshire, England. Wychwood Park is a neighbourhood enclave and former gated community in Toronto, Canada. The small community is located north of Davenport Road and just west of Bathurst Street. It is considered part of the overall "Wychwood" official neighbourhood as designated by the City of Toronto.
- The St. Clair streetcar line and the development of the Wychwood car barn site illustrates the direct impact of this civic improvement on the development of the neighbouring community. Prior to 1913, when the St. Clair streetcar line started operation, development along St. Clair was sparse. The street car was a vital means of transportation, as automobile development was in its infancy.
- Residential development in the Wychwood area, as well as other neighbourhoods along St. Clair, generally began construction after 1913, and in greater numbers following W.W.I. The 1921 car barn additions, constructed by the newly formed Toronto Transit Commission, were a direct result of the new civic order and a growing population.
- The Artscape Wychwood Barns is situated in Toronto City Councillor Joe Mihevc's riding.

Amazing Facts

- Artscape Wychwood Barns provides a variety of rehearsal and performance spaces, gathering places and galleries for creative minds to come together, collaborate and infuse the community with culture, joy and possibility.
- Under one common roof, there are 26 units of social housing, 15 affordable studio spaces, 13 non-profit organizations and a year-round temperate greenhouse, sheltered garden, outdoor bake oven and compost demonstration site.
- The Barns redevelopment costs were \$21.2 million.
- The Barns are a celebration of what can be achieved when partners from the arts, architecture and social housing – along with environmental leaders and community builders – come together with a common purpose. Artscape has created a space where artists and the surrounding community can thrive.
- The Barns demonstrate the understanding that creative space is more than bricks and mortar; often, it becomes a living breathing entity, a partner in the creative process. However, finding affordable space is a constant challenge for many artists.
- The Barns are the first heritage building redevelopment project in Canada seeking a Leadership in Energy and Environmental Design (LEED) Canada Certification – the standard for environmentally sustainable construction.
- LEED features at the Barns include: geo-thermal heating; ventilation and air conditioning systems; a storm water harvesting and reuse system for all non-potable water use (i.e. greenhouse, landscaping, toilets); energy efficient lighting and appliances; and water conserving plumbing fixtures.
- Through careful waste management, 75% of all construction waste was diverted from landfill – almost unheard of in the construction industry. In addition, 30% percent of the building materials used were extracted and manufactured locally.
- On the sustainability front, the Barns feature a year-round temperate greenhouse, sheltered garden, outdoor bake oven and compost demonstration site run by The Stop Community Food Centre. The Stop will also host weekly farmer's markets on the site and education programs for children.
- The Artscape Wychwood Barns has been thoughtfully maintained largely in their original form. The Toronto Historical Board concluded that the Barns are the oldest surviving carhouse built for the Toronto Civic Railway. There are very few remaining car barns dating back to the early days of the TTC or before.
- The Barns are a collaborative project aimed at addressing challenges brought on by the lack of access to community and public space, which has been identified as one of the reasons for the decline of neighbourhoods, limiting cultural and skill-building activities for community members, particularly youth.
- Major achievements on the road to building the Barns included:
 1. Securing a \$3 million contribution from the Province of Ontario and an additional \$750K (for a total of \$2.25 million) from the Department of Canadian Heritage
 2. Navigating a labour strike and terrible weather conditions during construction
 3. Development of the Wychwood Barns Community Association
 4. Securing \$6 million in private financing for the project

Awards

The Artscape Wychwood Barns was been honoured with the 2008 Canadian Urban Institute Brownie Award for Excellence in Project Development: Neighbourhood Scale, 2009 The Congress for the New Urbanism Charter Award, 2009 Ontario Association of Architects Award for Design Excellence, and 2009 Finalist Green Toronto Awards in the Green Design Award category.

Barn by Barn

The Artscape Wychwood Barns is one of a new generation of functionally diverse multi-tenant centres designed to promote synergy and collaboration. Unlike a traditional community centre, the Barns operate on a self-sustaining model, without requiring ongoing operating subsidy after the initial capital investment. Tenants of Artscape Wychwood Barns pay affordable rents and contribute to the programming of the building and site.

Artscape Wychwood Barns is comprised of four programmed components: the Studio Barn, the Covered Street Barn, the Community Barn and The Stop Community Food Centre's Green Barn.

The **Studio Barn** provides 26 live/work studios and 15 work-only studios to professional artists as well as host a Community Gallery. The Studio Barn provides an alternative to traditional housing and creates a sense of community where artists can live, work and interconnect with their neighbourhood. The Community Gallery component features the work of artists living and working in the Barns and artists from the local community as well as international artists.

The **Covered Street Barn** provides affordable community use space, including year-round access for community events, exhibitions, festivals, etc. The Covered Street Barn provides an area for vendors to create a hub of economic activity in the neighbourhood while the artist studios and community groups in the adjacent barns have their entrances open onto the space.

The **Community Barn** provides affordable programming, rehearsal, office and meeting space to not-for-profit community arts and environmental organizations. Access to affordable, long-term and appropriate space is a key capacity issue for not-for-profit organizations. The Community Barn enhances the capacity of not-for-profit arts and environmental organizations.

The **Stop Community Food Centre's Green Barn** is operated by The Stop Community Food Centre and houses a year-round temperate greenhouse, sustainable food education centre, sheltered garden, outdoor bake oven and compost demonstration site.

As a leader in sustainable food systems education, The Stop Community Food Centre brings hands-on programming to the Green Barn component of the Artscape Wychwood Barns. Children and community members of all ages will learn about ecological growing practices and healthy eating through classroom visits, workshops, community kitchens and volunteering in the year round temperate greenhouse and sheltered gardens. It is a place where people of all ages and backgrounds can grow, eat, celebrate and learn about healthy, sustainable food.

Wychwood Barns Community Association

The Wychwood Barns Community Association is the independent, not-for-profit community organization formed in 2008 to manage the Gallery and community use of the Covered Street Barn in the Artscape Wychwood Barns complex. The Wychwood Barns Community Association has a volunteer board of directors dedicated to serving the needs and interests of the surrounding community and connecting the community with the live/work and organizational tenants of the Barns complex. Among the current members of the board are artists, community organizers, a lawyer and noted local architect. Working with local residents and the Barns' tenants, the Wychwood Barns Community Association will build a shared vision of arts, culture and the environment to be reflected in the programming in the Barns' community spaces.

The Park

City of Toronto Parks, Forestry and Recreation has developed the 127,000 sq. ft (11,684 sq. m.) park area that surrounds the Barns on three sides. Park features include a children's play area, an open sports field with a natural ice rink in winter, a fenced in off-leash dog area, a beach volleyball court and picnic tables. In addition, approximately 150 trees, 1,500 shrubs and 900 perennials and grasses will be planted.

The layout and uses of the project are intended to complement each other and create as few barriers as possible, both physical and conceptual, between tenants and the community, between the park and the buildings and between indoor and outdoor environments.

Environmental Sustainability

Artscape Wychwood Barns enhances the traditional concept of a park as “pleasure ground” by combining heritage preservation with current best practices in green technologies and environmental management. The Artscape Wychwood Barns project embraces environmentally sustainable design by responding imaginatively to the issues of brownfield redevelopment, water/energy conservation and the reduction of greenhouse gas emissions. It is also the first designated heritage site in Canada to seek LEED (Leadership in Energy & Environmental Design) Canada certification.

Some of the Artscape Wychwood Barns’ LEED features include a geo-thermal heating, ventilation and air conditioning system with ground source heat pumps; a storm water harvesting and reuse system; energy efficient lighting and appliances and water-conserving plumbing fixtures.

Through the use of green energy and energy efficient resources, Artscape Wychwood Barns is an environmental quality improvement project that provides significant and positive contributions toward improving the environment in the community, helping to improve air quality and championing clean water initiatives. Not-for-profit environmental organizations with new homes in the Artscape Wychwood Barns will provide thousands of schoolchildren, adults and area residents with environmental programming, such as naturalization and monitoring projects.

Artscape Wychwood Barns LEED Features

Stormwater Harvesting

Underneath the floor in Barn 2 is a 90 cubic metre cistern. This cistern collects rainwater which is captured from the building roof. The water collected is used for flushing the site’s 40 water closets, and for park irrigation. By reusing stored rainwater in combination with low flow fixtures and waterless urinals, the site will reduce the consumption of municipal potable water compared to a typical building of the same size by 67%. It is estimated that the building will save a total of 7,745.90 litres per day or a yearly volume of 2.8 million litres. These water use reductions help protect the natural water cycle and save water resources for future generations.

Potable Water Use Reduction

Canadians currently use approximately 340 litres of fresh water per person per day. Out of the total amount of treated potable water that is distributed to all buildings, only about 3% is used for human consumption. By implementing ultra low-flush water closets that work at 3 litres per flush instead of the conventional 6 litres per flush, and by using waterless urinals in place of urinals that typically use 3.8 litres per flush, the Artscape Wychwood Barns will substantially reduce the site’s overall water consumption. Low-flush water closets also reduce the amount of waste water entering the City’s sewage treatment facility, thus decreasing the impact on the facility and reducing energy consumption required to treat the sewage.

White Roof

The Artscape Wychwood Barns roof system is a single ply, highly reflective, white PVC membrane covering approximately 28,000 square feet. This roofing system helps reduce the heat island effect and the cooling load of the site during the summer months. The term heat island effect describes urban developed areas that are hotter than adjacent rural areas as a result of solar retention on constructed surfaces, such as concrete, asphalt and buildings. Heat islands can affect communities by increasing summertime peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions, heat-related illness and mortality, and water quality. White roofing systems can reduce the heat island effect by reflecting solar heat rather than absorbing and transferring it to the building. It is estimated that the white roof system installed on the Artscape Wychwood Barns should reduce the indoor temperature during the summer months by up to 3 C.

Indoor Air Quality

Canadians spend an average of 90% of their time indoors, where levels of pollutants may be two to five times higher than outdoor levels. Many of these pollutants are from compounds in the paints, adhesives, sealants and cleaning products used on site.

These compounds (volatile organic compounds or VOCs) contribute to smog generation and air pollution indoors as well as outdoors. These VOCs can have an adverse effect on the health of the building occupants, causing respiratory irritation, asthma, and/or chronic health problems to individuals who are exposed to them over a long period of time. The products and installation methods used on the Artscape Wychwood Barns all meet the low-VOC levels specified by the Canadian Green Building Council (CaGBC).

Ground Source Heating/Cooling

Canadian commercial and institutional buildings are responsible for approximately 37% of Canada's primary energy consumption. The extraction and burning of fossil fuels used to create this energy has helped increase the amount of green house gases released. The ground source energy system, located under the park land on the west side of the site, consists of 48 bore holes, each running 120 meters (400 feet) deep. This system accounts for a substantial reduction in the amount of energy that would have been consumed if the site had used conventional heating/cooling methods.

The system works by utilizing the ground as both a source and sink for energy. During cooling seasons compressors are energized in the heat pumps creating cooling for the occupants but also creating heat from the compressors which must be rejected. This heat energy is transferred from the compressors to the ground via the ground loop system. Alternatively during winter season, the stored energy in the ground is absorbed into the ground loop and used by the heat pumps to warm the spaces. This system only requires the burning of fossil fuel when the loop temperatures drop to a point where the compressors require supplemental heat into the loop. In the conventional or baseline system, fossil fuel would be burned throughout the heating season to heat the spaces.

Siding

The siding panels that run along Benson Ave. are made of 100% recycled plastic. The plastic supply comes from industrial runoff from Kingston, ON and is manufactured into polyboard in Toronto, ON. This polyboard is waterproof, UV resistant and contains no asbestos, fiberglass or toxic resins. The 93 sheets used on the Artscape Wychwood Barns diverted 8,556 pds of plastic from landfill.

Tenant Mix

26 units of social housing for artists and their families

15 affordable studio spaces for artists' work

12 non-profit organizations, including:

- Association for Native Development in the Performing and Visual Arts – ANDPVA is the country's leading Aboriginal arts service organization, representing over 300 of the country's active artists.
- B Current – a multi-disciplinary performing arts company focusing on African-Canadian work.
- Latin American Canadian Art Projects – LACAP is an umbrella organization formed to implement professional cultural art projects by Latin American cultural workers and artists across Canada.
- LEAF – Local Enhancement & Appreciation of Forests – a group that organizes tree-focused workshops and community tree planting projects.
- New Adventures in Sound Art – is a non-profit organization that produces performances and installations spanning the entire spectrum of electroacoustic and experimental sound art.

- The Stop Community Food Centre - The Stop Community Food Centre strives to increase access to healthy food in a manner that maintains dignity, builds community and challenges inequality. The Stop has been fighting hunger and poverty in Toronto for over 30 years.
- The Storytellers School of Toronto – a well-established storytelling organization with events throughout the year and an annual festival.
- Theatre Direct Canada – a large youth-oriented theatre company that engages young people through inventive theatre, with a focus on the development, production and presentation of Canadian plays.
- The Helene Comay Nursery – an arts oriented nursery program and a pioneer in play-based learning.

Access to space is a key capacity issue for not-for-profit organizations. The Community Barn enhances the capacity of not-for-profit arts and environmental organizations with affordable and long-term programming, rehearsal, office and meeting space.

Partners

- Developer and Operator: Artscape
- Lead Consultant and Architect: Joe Lobko at du Toit Architects Ltd.
- Construction Manager: The Dalton Company Ltd.
- Structural Consultant: Blackwell Bowick Partnership Ltd.
- Mechanical, Electrical & Sustainability Consultant: Stantec Consulting Ltd.
- Landscape Architect: The Planning Partnership
- Heritage Architect: E.R.A. Architects Inc.
- Co-developer and Operator of the Green Barn: The Stop Community Food Centre
- Wayfinding and Site Interpretation: Gottschalk + Ash International

Lead Consultant and Architect Joe Lobko at du Toit Architects Ltd. whose work has been focused on the community and non-profit sector as well as urban design. As a principal of du Toit Allsopp Hillier/du Toit Architects, a multi-disciplinary firm of architects, landscape architects and urban designers, he is responsible for leading a broad range of projects including the award-winning L'Arche Dayspring Chapel.

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Development Supporters

- City of Toronto, Government of Canada
- Canadian Heritage – Cultural Spaces Canada
- Canada Ontario Affordable Housing Program
- Ontario Ministry of Culture
- George Cedric Metcalf Charitable Foundation
- Hamilton Community Foundation – The Young Fund
- TD Bank Financial Group
- City of Toronto – Culture Division,
- Federation of Canadian Municipalities' Green Municipal Fund
- Ontario Trillium Foundation
- McCarthy Tétrault
- The McLean Foundation
- Toronto Atmospheric Fund

- Toronto and Region Conservation Authority
- ING Direct
- Canada Mortgage & Housing Corporation
- Toronto Hydro Corporation
- Charles H. Ivey Foundation