



Canadian Brownfields Case Study

featuring

JOHN STREET ROUNDHOUSE

PLE:865/PL8319: Brownfield Redevelopment W2025

Professor Christopher De Sousa

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JOHN STREET ROUNDHOUSE

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The Eternal Dance of Durability and Preservation

Chapter 7: The Subtle Science of Material Properties in the heart of the Enchanted Forest, where magic and reality intertwined seamlessly, Eric lived a quieter life as a master craftsman named Elowen. She was known throughout the land for her creations, which ranged from delicate scrolls studded with gemstones, each imbued with a touch of magic that would last for generations. Her workshop was a level of organized chaos lined with jars of mysterious powders and stacks of materials waiting its transformation into something extraordinary. To the untrained eye, her simple, more pieces waiting to be shaped. But Elowen knew better. She understood the subtle science behind each choice, the complexity and nuance that turned the ordinary into the magical.

The Eternal Dance of The Durability and Preservation

One day, a young apprentice named Eric arrived at Elowen's doorstep, seeking to learn the secrets of her craft. Eager and curious, Eric asked, "Master Elowen, how do you choose the right material for each creation?" Elowen smiled, sensing a kindred spirit in the boy. "Ah, Eric, that is both an art and a science. Let me show you. She led him to a table where various fibers lay in bundles. "The essence of materials begins with their raw ingredients. Some come from trees, some from minerals, and some from the earth itself. Each has its own unique properties and a history of its own. Let me show you a kindred spirit in the boy. For each creation, I choose the right material, how do you choose the right material for each creation?"

Elowen's door

Eric, that is both an art and a science. Let me show you. She led him to a table where various fibers lay in bundles. "The essence of materials begins with their raw ingredients. Some come from trees, some from minerals, and some from the earth itself. Each has its own unique properties and a history of its own. Let me show you a kindred spirit in the boy. For each creation, I choose the right material, how do you choose the right material for each creation?"

Silk and Steel

The weight of the silk and steel. Elowen picked up a bundle of silk fibers, their weight delicate and intricate. She then picked up a bundle of steel fibers, their weight heavy and sturdy. "The weight of the materials is crucial. It determines the strength and durability of the final creation. Each material has its own unique properties and a history of its own. Let me show you a kindred spirit in the boy. For each creation, I choose the right material, how do you choose the right material for each creation?"



Rendered by Orcel Manalang

ReActivate Lab



CHRISTOPHER DE SOUSA, MScPL, PhD, MCIP, RPP

RPP, Chris is a Professor in the School of Urban and Regional Planning at Toronto Metropolitan University. His research activities focus on various aspects of brownfield redevelopment and sustainability in Canada and the United States. He currently serves as Past President of the Canadian Brownfields Network, is a Steering Committee Member on the US Agency for Toxic Substances and Disease Registry (ATSDR) Brownfields/Land Reuse Health Initiative, and serves on the Executive Committee for TMU's (Ryerson) Centre for Urban Research and Land Development. Chris is the proud recipient of the 2018 Brownfielder of the Year award.

About the Author



ORCEL MANALANG

Orcel is an architecture graduate and aspiring urban planner with a passion for preserving history through design. Their work explores the interplay of Industrial Style and Brutalism, thoughtfully integrating heritage architecture to honor the unique identity of each place. Driven by a deep respect for cultural heritage, Orcel envisions a future as a Heritage Architect, dedicated to bridging the past and present through meaningful architecture.

Canadian Brownfields Case Study

JOHN STREET ROUNDHOUSE

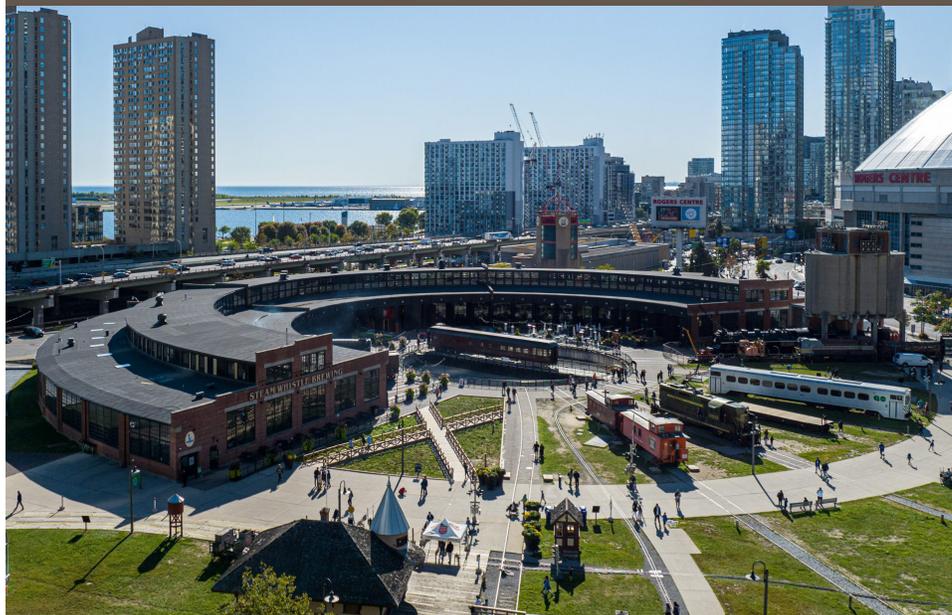


Image Source: State Building Group

Figure 1: The John Street Roundhouse, Toronto showcases preserved brick architecture from its railway heritage while serving contemporary uses such as the Steam Whistle Brewery, Toronto Railway Museum, and public green space within Roundhouse Park.

PROJECT SUMMARY

The John Street Roundhouse, constructed by the Canadian Pacific Railway in Toronto between 1929 and 1931, functioned as a 32-stall facility for servicing steam locomotives adjacent to Union Station. It was the first in Canada to feature a direct steaming system, enabling efficient, smokeless operations. The switch to diesel engines by 1960 reduced its use, leading to its closure in 1982.¹

Recognized as Canada’s best surviving roundhouse and designated a National Historic Site in 1990, the semi-circular brick structure has been preserved and adapted for contemporary use. The revitalization began in the early 1990s, with Stalls 1 to 11 partially dismantled to accommodate the construction of the Metro Toronto Convention Centre South Building. In 1997, the area east of the roundhouse was developed into the city-owned Roundhouse Park, enhancing public access. Steam Whistle Brewing subsequently opened its doors there in 2000, leasing Bays 1-11 (now occupies stalls 1-14). The adaptive reuse continued with the opening of the Toronto Railway Museum in 2010, occupying Stalls 13 to 15 (now in 15 -17), while the remaining Bays 16 to 32 were repurposed for commercial use, and now houses Cineplex’s RecRoom (on Bays 18 -32).²

This project has received several prestigious awards recognizing its exemplary heritage conservation and adaptive reuse. In 2009, Don Loucks, heritage architect with IBI Group, received the Canadian Association of Heritage Professionals (CAHP) award for his exceptional work in the adaptive reuse of the John St. Roundhouse.³ The project continued to gain recognition, earning a 2010 Brownie Award in Category 4 – Excellence in Project, celebrating its success in brownfield redevelopment.⁴ In 2011, Heritage Toronto honored the project with its Award of Excellence, acknowledging the adaptive reuse of the Roundhouse, its ancillary buildings, and the creation of Roundhouse Park. Most recently, in 2014, the Canadian Society of Landscape Architects (CSLA) presented a National Citation Award for Design, commending Roundhouse Park’s integration of railway history into a vibrant cultural landscape.⁵ These awards highlight the project’s success, achieved through the collaborative efforts of the City of Toronto, and the private sector partners, serving as an inspiring model for future heritage revitalization projects.

QUICK FACTS

LOCATION:

Roundhouse Park, Toronto

PROJECT ADDRESS:

255 Bremner Blvd, Toronto, ON M5V 3M9

PROJECT TYPE:

Brownfield Remediation, Heritage Revitalization and Adaptive Reuse

HISTORICAL USE:

Locomotive Repair and Maintenance Facility for Canadian Pacific Railway

CONTEMPORARY USE:

Recreational Entertainment Venues, Brewery, and Railway Museum

SITE SIZE:

9,300 sqm

LAND USES:

Mixed Use, Parks

NATIONAL HISTORIC SITE OF CANADA

Designation: 02-23-1990

ONTARIO HERITAGE ACT

Union Station Heritage Conservation District

KEYWORDS / SPECIAL FEATURES:

- Preserved 120-foot Turntable
- Original Brick Structure Facility and 32 Service Bays
- Heritage Structures like Don Station and Cabin D.

WEBSITE:

John Street Roundhouse (Canadian Pacific)
National Historic Site of Canada
[Link](#)

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Case studies were prepared as a course assignment by students enrolled in PLE865/PL3819: Brownfields & Sustainable Development, School of Urban and Regional Planning, Toronto Metropolitan University (Winter 2025). Information for the case studies was obtained from online sources, available reports, and, in some cases, site visits and direct communication with stakeholders.

If you are aware of any errors or updates to the case studies, please contact chris.desousa@torontomu.ca

The opinions expressed in this case study are those of the authors only and do not represent the opinions and views of either Toronto Metropolitan University, the School of Urban and Regional Planning, or the Canadian Brownfields Network.

HISTORY OF JOHN ST ROUNDHOUSE

The John St. Roundhouse in Toronto holds a rich history deeply intertwined with the city's railway evolution. The original CNR Spadina Roundhouse, built in 1928, and now where SkyDome and Rogers Centre⁶ take place became insufficient as larger steam locomotives were introduced. Recognizing the increasing size of locomotives and the need for improved facilities coupled with the elevation of the Union Station Rail Corridor during the 1920s, the Canadian Pacific Railway (CPR) seized the opportunity to replace the original structure. Constructed between 1929 and 1931 on landfill southeast of its predecessor, the new roundhouse inherited the John Street name despite the removal of the John Street bridge. This facility, built to service the steam locomotives that hauled more than 40 CPR trains a day into Union Station, served as the primary maintenance hub for locomotives servicing Toronto's Union Station, a vital transportation gateway, playing a critical role in the city's railway network. The 9,300-square meter facility boasted 32 stalls, several miles of track, and employed up to 150 workers around the clock. It featured Canada's first direct steaming system and a 120-foot turntable, the largest in the CPR system at the time. After CPR retired its steam engines in 1960, the roundhouse continued servicing diesel-electric locomotives for CPR and VIA Rail until its closure in 1986. Donated to the City of Toronto for a future railway museum, the site became home to Roundhouse Park in 1997. Today, the Toronto Railway Historical Association uses the roundhouse for exhibits, a miniature railway, and locomotive restoration, preserving its legacy as a key component of Toronto's railway heritage, and providing a living historical example of the city's railway past. This National Historic Site currently houses the Steam Whistle Brewery, The Rec Room, and the Toronto Railway Museum. The railway turntable, dating from 1929, has recently been restored.⁷

SITE CHARACTERISTIC

Designated a National Historic Site of Canada in 1990, the John Street

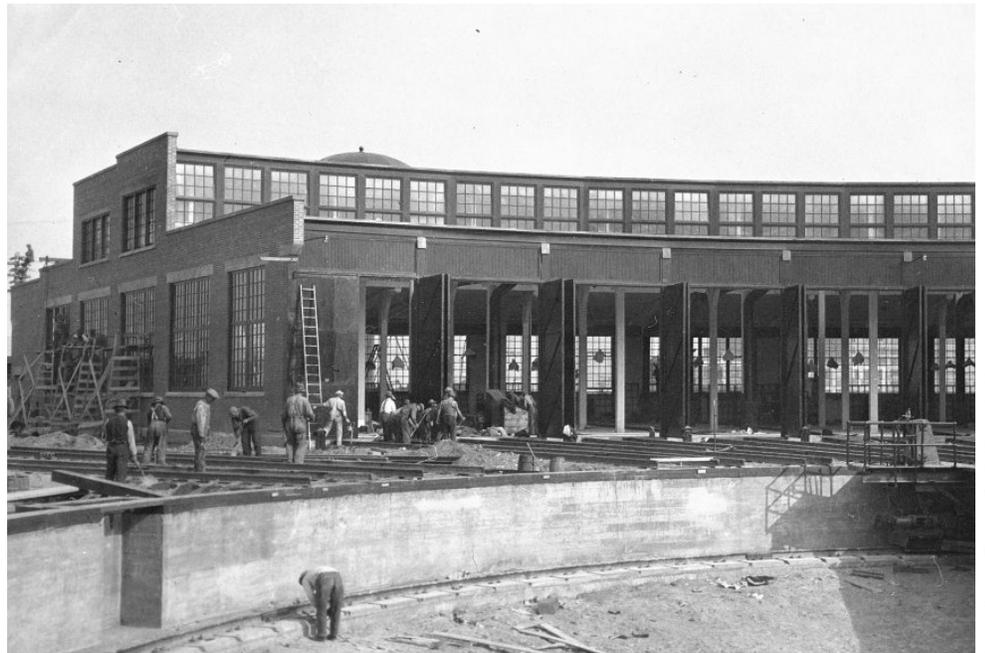


Figure 2: During the construction of CPR Roundhouse and Turntable. Toronto 1929. Toronto Public Library, Toronto Archives, Fonds 1266, Item 18043.

Roundhouse is recognized as the best surviving example of a roundhouse in the country. Its heritage value lies in its location on Toronto's former rail yards and its design by Chief Engineer J.M.R. Fairbairn of the CPR Engineering Department, with construction by Anglin-Norcross Ltd. of Montreal. Originally a 32-stall facility for the inspection, servicing, and repair of steam passenger locomotives, the roundhouse continued operations for CPR and VIA Rail Canada

until 1986. Rehabilitation efforts between 1994 and 1997 included the removal of the turntable, relocation of the coaling and sanding tower, and the disassembly and reconstruction of bays 1-11. Key heritage elements include its semi-circular footprint, industrial materials such as exposed concrete, brick, and factory-style metal windows, as well as functional features like bay doors, firewalls, post-and-beam construction, and the direct steam system.

Figure 3: View of John St. Roundhouse from harbour (Northeast) in the foreground, and the Royal York Hotel and Union Station at the background. Toronto 1930. Toronto Public Library, Toronto Archives





Figure 4: John St. Roundhouse and surrounding auxiliary buildings in the 1970's.



Figure 5: Soil Excavation of the Roundhouse Park

The site retains original hardware, tools, and machinery, reflecting its operational history from steam to diesel, with functional and spatial links between the roundhouse, machine shop annex, turntable, and water tower integral to its historical character.⁸

ENVIRONMENTAL ABATEMENT AND SITE REMEDIATION

One of the most pressing challenges in revitalizing the John Street Roundhouse was addressing the environmental contamination that had accumulated over its long history as a locomotive maintenance and repair facility. Beginning in the early 1990s, environmental due diligence efforts were initiated by TrizecHahn Development Corporation in anticipation of the Metro Toronto Convention Centre (MTCC) South Building expansion at 222 Bremner Boulevard. These efforts aligned with the Ontario Ministry of the Environment's Guidelines for

the Use at Contaminated Sites in Ontario (1996/1997), which provided a risk-based framework for site assessment and cleanup prior to the implementation of Ontario Regulation 153/04. The guideline outlined a four-step approach—background review, generic criteria screening, site-specific risk assessment, and remedial action planning—under the authority of Section 46 of the Environmental Protection Act.⁹

Environmental Assessment Contaminants Identified

The site harbored hazardous materials such as lead-based paint, heavy oils, and asbestos — common by-products of early 20th-century industrial operations.¹⁰

- **Lead Paint:** Found in a friable condition throughout the building's interior, the lead paint posed a significant health hazard.

Remediation involved carefully stripping the paint from structural elements, using either labor-intensive stripping methods or soft medium low-pressure air-driven abrasives. Waste materials were disposed of according to stringent environmental regulations.¹¹

- **Heavy Oils:** Noxious fumes from accumulated heavy oils in the pits created both a health risk and a fire hazard. The remediation process included surfactant treatment to break down the oils, with some areas requiring poulticing to draw out deeply embedded contaminants. Soil remediation was also conducted where necessary.¹²
- **Asbestos:** Asbestos transite fire guard panels and Asbestos Containing Materials (ACMs) were identified on the ceilings, and polychlorinated biphenyls (PCBs) in fluorescent light fixtures, were also documented within the structure, requiring Level 1 abatement procedures. Certified professionals handled the removal to ensure that airborne fibers were properly contained and eliminated, preventing exposure.¹³

REMEDICATION STRATEGIES (SPECULATION)

While detailed public documentation on the remediation activities at the John Street Roundhouse site remains limited, it is reasonable to infer that actions were guided by the Guidelines for the Use at Contaminated Sites in Ontario (MOE, 1996/1997), which were the prevailing provincial standards at the time of the Metro Toronto Convention Centre (MTCC) South Building expansion.

Surfactant Treatment and Poulticing: In zones where heavy oils had penetrated concrete surfaces, surfactant flushing and poulticing techniques may have been employed to extract residual contaminants embedded in the porous substrate.

Underground Storage Tank (UST) Management: Above- and below-grade storage tanks, along with associated piping systems, were presumably removed in accordance with the Gasoline Handling Act and Fuel Oil Code.

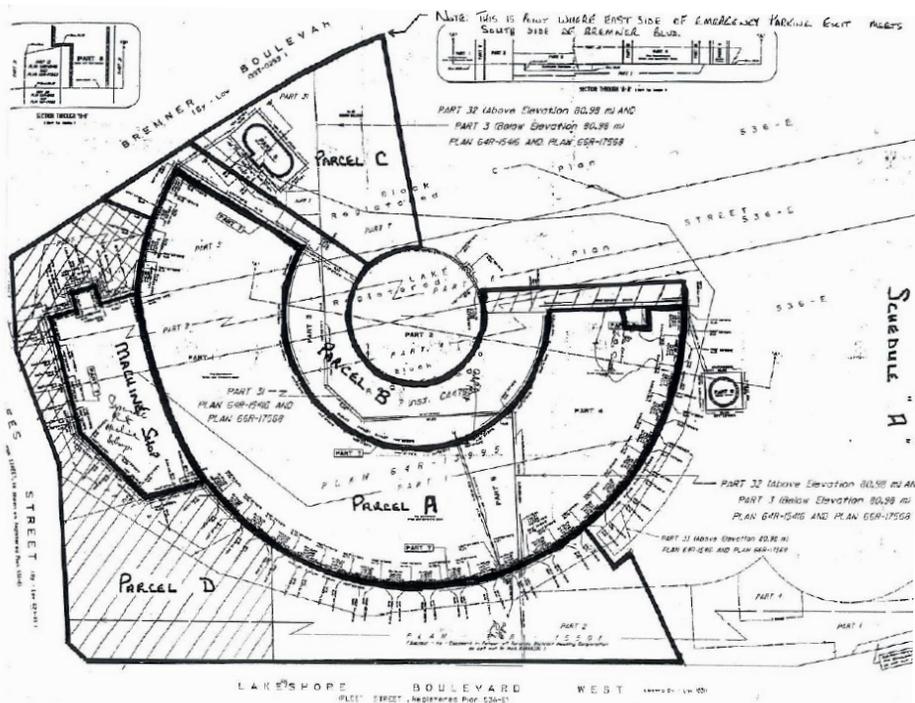


Figure 6: "Schedule A" a floor plan showcasing the division of the Parcels for Steam Whistle, Railway Museum and Leon's Furniture (RecRoom, 2025).

Hazardous Materials Abatement: Building materials containing asbestos and lead-based paint were likely remediated using regulated abatement protocols. This may have included Level 1 asbestos removal in sealed environments and low-pressure abrasive stripping of lead-based coatings, conducted by certified professionals under strict health and safety controls.

Dust and Emission Control: Standard dust suppression measures were likely implemented during remediation and demolition. These may have included spraying water on exposed soils and debris, and covering trucks transporting contaminated materials to prevent fugitive dust emissions and protect air quality.

Site Validation: Following the completion of remediation activities, environmental consultants would have conducted confirmatory soil and groundwater sampling to verify that residual contaminant concentrations complied with the MOE criteria for commercial or institutional land use (MOE, 1996).

While speculative, these remediation strategies reflect best practices under the MOE's 1996/1997 framework and

are consistent with environmental protocols typically employed in Ontario brownfield redevelopment projects prior to the implementation of O. Reg. 153/04.

Once the environmental abatement was complete, the redevelopment process unfolded in several phases.

Restoration, Phase 1

The city acquired the Roundhouse and nearly nine acres of former rail yards, while the Convention Centre was allowed to build an extension six stories below the Roundhouse, extending from the rail corridor to the Gardiner Expressway. In 1995, Hotson Bakker Architects conducted an inventory of the Roundhouse and provided disassembly and reassembly drawings for Bays 1-11 which were taken down, stored while the exhibition halls and parking structure were excavated, and later reassembled atop the completed structure. The Coal and Sand Tower and the Water Tower were relocated adjacent to the Roundhouse. The final task during this phase involved moving several small wooden buildings and the turntable bridge into the Roundhouse and restoring the exterior of the remaining 21 bays, which was completed by 1997. The building remained unoccupied until

Steam Whistle Brewing leased Bays 1-12 in 1999.¹⁴

Restoration, Phase 2

The City's commitment to preserving the Roundhouse and establishing a rail interpretive center prompted the Real Estate Division, led by Special Project Manager Glenn Garwood, to seek innovative ways to finance these objectives. The second phase of the clean-up began with the city entering into a head lease agreement with Barry Zagdanski's State Building Group. Developers recognized the site's "prime location" visible from the Gardiner Expressway, surrounded by condominiums, and adjacent to a significant national heritage building with new structured parking underneath. State approached Leon's Furniture with a proposal for a novel retail operation: a showroom set within a restored loft-like wooden building, surrounded by new condominiums. Terry Leon embraced the idea, envisioning the showroom as a space for testing new urban furniture products. With the head lease agreeing to pay their 60-year lease upfront, the City was able to fund the full rehabilitation of Roundhouse Park and the development of the Toronto Rail Heritage Centre within the Roundhouse. The master plan for Roundhouse Park extended the railway museum into the park, with tracks radiating from the turntable for the display of engines and rail cars. A community of four small wooden railway buildings was restored and grouped together, and the Coal Sanding Tower was stabilized and restored.¹⁵

Restoration, Phase 3

The third phase sought to strike a balance between preserving the building's heritage and accommodating Leon's showroom requirements. The goal was to transform the 80-year-old, unheated, and uninsulated train shed into an environmentally sustainable commercial space without compromising its historical character. The turntable, which had been stored within the Roundhouse, was restored and reinstalled in the turntable pit that had been reconstructed 12 years earlier, allowing for the movement of rolling stock that had been stored inside the building.

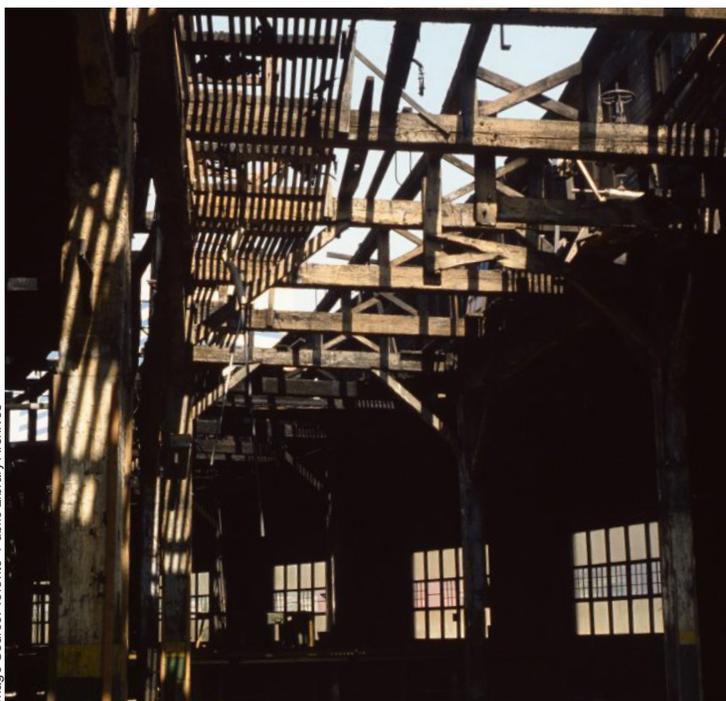


Figure 7: Unrenovated portion (Bays) of the Roundhouse. Toronto 1929. Toronto Public Library, Toronto Archives, Series 1465, Item 147

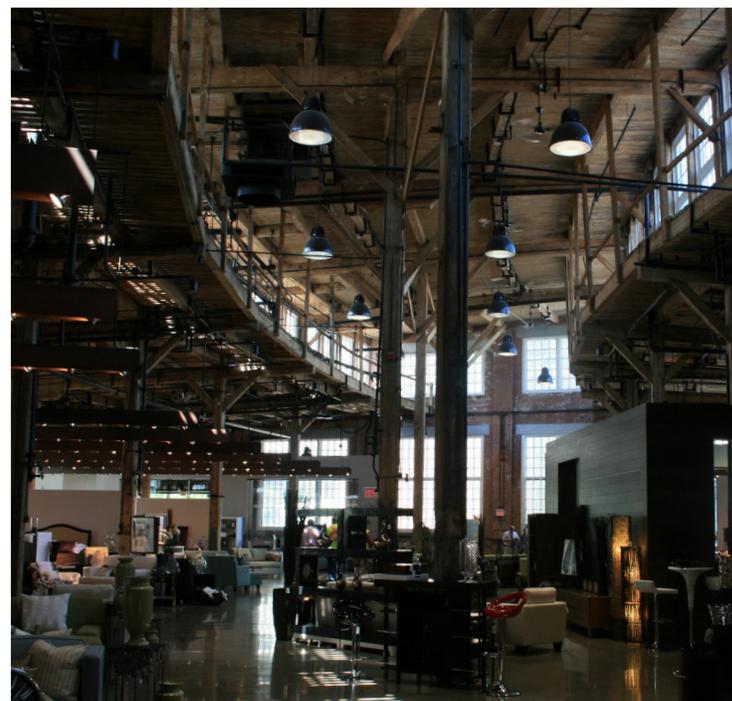


Figure 8: Leon's Furniture Showroom after Completion of Phase 3 Clean-up in 2009.

The original Douglas fir structural frame, in remarkably good condition, was preserved with steel braces installed where timber had begun to split and twist. Severe water damage had caused deterioration in several purlins and beams, necessitating their replacement. Missing cross bracing, railings, and walkways were also restored, with matching new or recycled timber sourced from across Canada and installed using traditional timber detailing methods, such as scarf and mortise and tenon joints. The interior was cleaned using a low-pressure soda wash process that minimized surface abrasion, removing paint and grime (including accumulated coal smoke and diesel residue) from the brick

walls, timber frame, and underside of the mill deck roof, thus preserving the building's historical patina.

Following a comprehensive inventory of stored artifacts, a preservation and protection plan was implemented. The 1950s-era concrete block partitions were removed and three new openings were created in the brick fire wall between Bays 22 and 23 to create an interconnected space for Leon's showroom. A total of 213 wood sash windows were repaired, restored, cleaned, and repainted, while 18 pairs of engine doors were restored and repainted. Fire exits were added and a new entry door and canopy were installed at the end wall of Bay 32,

facing Bremner Blvd. A loading dock and canopy were installed at the rear of Bay 22. To reduce heat loss, a curtain wall was placed behind all engine doors, and the roof membrane was replaced with insulation added throughout to eliminate leaks and reduce heat loss. The remaining seven engine pits were covered with removable steel decking, and a new 4-inch concrete floor slab was poured, incorporating electrical service for Leon's.

Heating and cooling equipment used district steam heat and deep-water cooling, representing a significant reduction in energy use over the building's operational life.



Figure 9: RecRoom's in 2025 showcasing how the space is being used for both Commercial, and Recreational Space in the Roundhouse.



Image Source: Orcoel Mantalang

Figure 10: RecRoom's Entrance, showcasing its rich preserved Industrial Heritage Architecture

The life-cycle energy savings achieved through the adaptive reuse of the industrial building was identified as the project's most sustainable aspect. The transition from base building work to Leon's tenant fit out was nearly seamless. The showroom included free-standing pavilions to demonstrate condominium layouts, mechanical mezzanine platforms, offices, washrooms, lighting, and service areas. The completed Leon's showroom was a dynamic, curving space that compels visitors to experience the full sweep of the 15 restored engine house bays. The turntable courtyard, with 32 sets of tracks reinstalled for the display of rolling stock as part of the museum's interpretive program, was paved with brick laid between the rails and encircled by a pipe railing around the turntable pit. The master plan for Roundhouse Park extended the railway museum into the park, with tracks radiating from the turntable for the display of engines and rail cars. A community of four small wooden railway buildings was restored and grouped together, and the Coal Sanding Tower was stabilized and restored.¹⁶

PLANNING CHALLENGES

The revitalization of the John Street Roundhouse presented a complex set of challenges, requiring a nuanced approach to address environmental remediation, heritage preservation, regulatory compliance, and stakeholder coordination. Each of these challenges shaped the project's evolution, underscoring the

delicate balance between preserving history and embracing modern urban development.

FUNDING

Securing sufficient funding posed a significant challenge. The project required substantial financial resources to cover environmental remediation, heritage restoration, and necessary infrastructure upgrades. While initial interest from potential tenants like Steam Whistle Brewing Limited Partnership (SWBLP) and Headline Sports highlighted the site's commercial appeal, financing the base building upgrades remained a critical hurdle. Negotiations with SWBLP revealed that the estimated \$1 million needed for upgrades would require contributions from the City, with SWBLP offering a \$250,000 loan contingent on favorable repayment terms.¹⁷ Additionally, efforts to secure funding from historical preservation bodies and corporate sponsors added complexity to the financing process.

TENANT RESPONSIBILITIES

Integrating new tenants into the historic structure introduced challenges related to tenant responsibilities and compliance. Ensuring proposed uses aligned with the preservation of the roundhouse's heritage required careful oversight. For instance, SWBLP's proposal to operate a brewpub and brewery raised concerns regarding

compliance with park requirements, access issues, and the costs associated with upgrading the base building.¹⁸ Negotiations had to clearly define responsibilities for maintenance and capital improvements to ensure the long-term sustainability of the site while balancing tenant needs and heritage conservation.

BALANCING HERITAGE PRESERVATION AND INFRASTRUCTURE DEVELOPMENT

The complexity of the project was not fully anticipated during its early planning stages, leading to unforeseen challenges. The interconnectedness of tenant and City work required adjustments in project execution, including rent deductions and accelerated construction schedules. The level of coordination needed between various stakeholders, such as City staff, tenants, and heritage organizations, was more extensive than initially expected.

The Roundhouse's dual function as both a commercial and cultural space presented planning difficulties. While private tenants, such as Steam Whistle Brewing, occupied significant portions of the building, the Roundhouse is also a designated heritage site intended for public benefit.¹⁹ Integrating commercial activity into a historically significant structure required careful planning to ensure economic viability did not overshadow heritage preservation.



Image Source: Orsel Mianalang

Figure 11: Steam Whistle's Kitchen (showcasing the interior of Bays 7 - 10 and how it is being used for commercial purposes.

REGULATORY AND STRUCTURAL CHALLENGES

Building code compliance required significant upgrades to the building envelope, exits, and fire protection systems to meet modern safety standards. Structural repairs were necessary to address deteriorated purlins and corroded steel columns, ensuring the building's integrity for future use. Securing adequate funding also proved challenging, with estimates for base building upgrades reaching approximately \$5 million.²⁰ Balancing modernization with heritage preservation added another layer of complexity, requiring careful planning to retain the site's historical character while making it suitable for contemporary use.

FUNDING OVERVIEW

The restoration of the John Street Roundhouse to base building standards, including ancillary facilities, was projected at approximately \$6.67 million, encompassing both commercial and heritage elements.²¹ Base building upgrades for the entire

site totaled over \$5.58 million, with specific allocations including: \$1.18 million for Bays 1-11 (commercial, 27,675 sq ft), covering upgrades like a new concrete slab and building services; \$635,500 for fire suppression in Bays 12-32; \$1.63 million for Bays 12-22 (commercial, 29,275 sq ft); and over \$2.13 million for Bays 22-32 (Railway Museum/Machine Shop).²² Additionally, the restoration of ancillary facilities, such as Cabin D and the historic Turntable, was estimated at \$1.09 million.²³

Initially, a Request for Expressions of Interest (REI) led to TrizecHahn as the proponent.²⁴ However, negotiations failed due to financial concerns. Subsequently, City Council opted for phased development with individual leases rather than issuing a new RFP/REI, particularly as Steam Whistle Brewing expressed immediate interest. TrizecHahn's initial estimate for base building upgrades was approximately \$5 million, or \$50 per square foot.²⁵

Funding strategies included commercial tenant income,

government funding, and corporate sponsorships. A crucial partnership was formed with Steam Whistle Brewing Limited Partnership (SWBLP), which leased Bays 1-11.²⁶ The estimated \$1 million in base building upgrades necessary for their occupancy was partially funded by a \$250,000 loan from SWBLP to the City, repaid through rent adjustments.²⁷ The success of Steam Whistle attracted further commercial interest, notably Headline Sports, which proposed investing \$3–4 million in leasehold improvements or approximately 30,000 square feet.²⁸

The City of Toronto allocated at least \$9.234 million as part of its capital budget for park improvements, the restoration of associated heritage buildings (including Don Station), and the development of the Rail Heritage Museum in partnership with the Toronto Railway Historical Association (TRHA).²⁹ This included \$2.55 million in 2009 to enhance public access to the site, with further funding anticipated.³⁰ through the Rail Heritage Reserve Fund for the 2010–2013 Capital Plan.





Image Source: Orca! Manalang

Figure 12: Roundhouse exterior across the turntable, showcasing the outdoor CPR train collection for historic education and entertainment purposes.

While the private sector, including Steam Whistle Brewery and Leon’s Furniture, took on the responsibility of restoring the Roundhouse structure itself and its ongoing maintenance, the exact financial contributions from these private partners were not publicly disclosed.³¹ However, estimates suggest that the overall cost of the Roundhouse rejuvenation totaled approximately \$25 million, combining public and private investments. The long-term funding strategy focused on phased development, leveraging commercial leases for incremental restoration, ensuring the site’s sustainability as a vibrant economic and cultural space.

BENEFITS OF REVITALIZATION AND ADAPTIVE REUSE

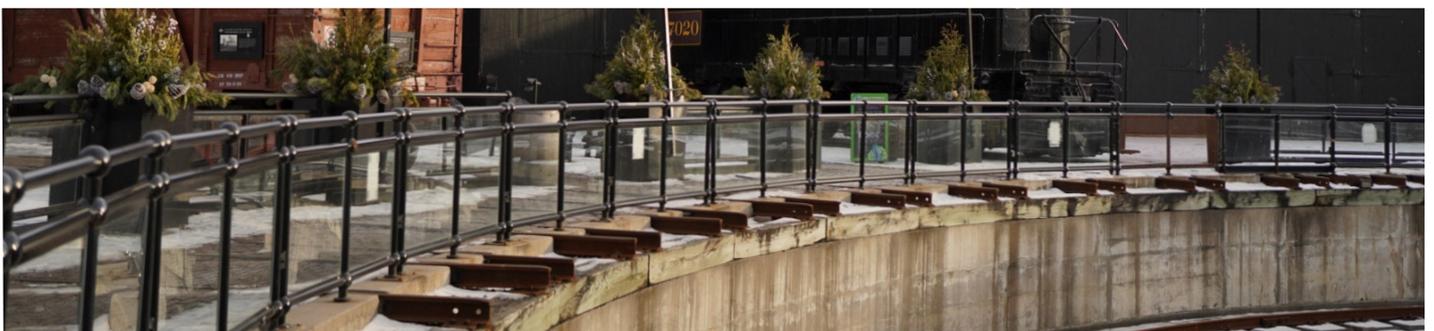
The revitalization of the John Street Roundhouse has yielded economic, cultural, and environmental benefits. Economically, the adaptive reuse of the site has stimulated business activity, with tenants such as Steam Whistle

Brewery and Cineplex’s Rec Room attracting both locals and tourists, showing how heritage preservation can enhance urban vibrancy. Culturally, the Roundhouse serves as a living museum, preserving Toronto’s railway heritage and providing a public space for education and recreation. The integration of the Toronto Railway Museum within Roundhouse Park fosters community engagement and awareness of the city’s industrial past. Environmentally, the project incorporates sustainable restoration practices, including the reuse of original materials, energy-efficient upgrades, and deep-water cooling systems, reducing the building’s carbon footprint. Overall, the project exemplifies successful brownfield redevelopment, demonstrating how thoughtful planning and collaboration can transform underutilized heritage sites into thriving urban assets.

LESSONS LEARNED

The revitalization of the John Street

Roundhouse offers key lessons in heritage preservation, adaptive reuse, and public-private partnerships. A major takeaway is the importance of balancing historical integrity with modern functionality. The project retained the site’s industrial character while accommodating commercial tenants, proving that heritage sites can be financially viable without compromising their historical value. The involvement of multiple stakeholders including government agencies, private businesses, and community organizations—highlights the need for clear communication and flexibility in project management. Planning challenges, such as infrastructure upgrades and access constraints, underscore the necessity of comprehensive early-stage assessments. Additionally, the project demonstrates the benefits of phased redevelopment, addressing financial and structural challenges progressively to ensure long-term sustainability.



ROUNDHOUSE

AUTHOR'S ENDNOTE
April, 2025



Exploring the John Street Roundhouse revitalization project has been an insightful journey that resonates deeply with my dual passions for architecture and urban planning. My background in architecture, with a core focus for cultural heritage instilled in me a profound respect for the narratives embodied within historic structures. Now, as I pursue urban planning, I find myself increasingly drawn to the challenge of preserving these narratives while shaping cities that respond to contemporary needs.

In a world that often prioritizes modernity, it can be easy to overlook the value and significance of our built heritage. Projects like the Roundhouse serve as poignant reminders that these spaces are not relics of the past, but living parts of our urban fabric, capable of evolving alongside the communities they serve. Witnessing the possibility of extending the lifespan of such a structure through thoughtful design and collaboration offers a sense of hope – hope that we can safeguard our cultural landmarks without compromising progress.

This case study reinforced my belief that architecture and urban planning are not solely about constructing new spaces but about creating meaningful dialogues between past and present. The Roundhouse stands as a testament to what can be achieved when preservation and innovation converge, and it inspires me to advocate for urban landscapes where heritage and modernity coexist harmoniously. As I continue my journey, I carry with me the lessons of this project, hopeful that our future cities will honor their past while embracing their potential.

Orcel

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PHOTOGRAPHS

Cover Page: Orcel Manalang, Roundhouse Compilation Photograph. February 05, 2025.

About the Team: Christopher De Sousa Retrieved from: <https://www.brownfieldsresearchlab.com> & Orcel Manalang

John Street Roundhouse Poster. Rendered by: Orcel Manalang.

Figure 1: 255 Bremner Blvd. State Building Group. Retrieved from: <https://statebuildinggroup.com/leasing/255-bremner-blvd/>

Figure 2: Toronto Public Library, Toronto Archives. During the Construction of CPR Roundhouse and Turntable Toronto 1929.

Figure 3: Toronto Public Library, Toronto Archives. View of John St. Roundhouse. As cited from; <https://www.torontojourney416.com/railway-museum-john-street-roundhouse-park/>

Figure 4: Helmut G. Osterman. An aerial photo showing the John Street Roundhouse and surrounding auxiliary buildings in the 1970's. as cited, <https://web.archive.org/web/20210523025256/https://www.trha.ca/trha/history/selected-articles/roundhouses-in-the-toronto-area/>

Figure 5: Eastern Construction. Soil Excavation Retrieved from: <https://www.easternconstruction.com/project-metro-toronto-convention-centre-south-hall>

Figure 6: Toronto Public Library, Toronto Archives. "Schedule A" Floor Plan for John St. Roundhouse.

Figure 7: Toronto Public Library, Toronto Archives. Unrenovated Bays of Roundhouse. Toronto 1929.

Figure 8: Jake Schabas, Checking in on the Roundhouse Renovation. June 22, 2009. Retrieved from: <https://spacing.ca/toronto/2009/06/23/checking-in-on-the-roundhouse-renovation/>

Figure 9: Orcel Manalang, RecRoom's Interior. February 05, 2025.

Figure 10: Orcel Manalang, RecRoom's Interior (Entrance) in February 05, 2025.

Figure 11: Orcel Manalang, Steam Whistle Kitchen's Interior in March 16, 2025.

Figure 12: Orcel Manalang, Roundhouse Exterior in March 16, 2025.

Author's Endnote: Orcel Manalang