

Postsecondary Education



Our Corporate Numbers

Founded In
1955

100%
Employee Owned

Projects Completed in Over
75
Countries

80%
Business from Repeat Clients

100%
Canadian

Who We Are

As a Platinum Club member of Canada's Best Managed Companies, J.L. Richards provides high-quality, fully integrated engineering, architecture, planning, and project management services to clients in the private and public sectors throughout Canada and internationally. Proudly 100% employee owned and completely Canadian, J.L. Richards has six offices across Ontario supporting a wide variety of projects across seven key markets.

J.L. Richards stands out in the industry due to our uniquely collaborative approach. All of our offices are staffed with a diverse multidisciplinary expertise and we work as a team on every project to ensure that our clients receive the best quality, service, and value in the field. J.L. Richards is a leader in design innovation and delivery of successful projects.

J.L. Richards recognizes and puts high value on diversity and inclusion in educational settings. These values necessitate a custom approach to the design of spaces to facilitate experiential and collaborative classroom learning.

This is the foundation of J.L. Richards' educational design philosophy in a postsecondary setting.



Extensive Postsecondary Experience

For the past decade, J.L. Richards has designed a number of educational and training facilities across Ontario. We have worked closely with universities, colleges, and other institutions which require both rigorous financial reporting and strict adherence to ministry and educational guidelines. Due to our experience in the educational sector and our in-depth understanding of the unique needs of post-secondary projects, our team has delivered a variety of projects which have exceeded our clients' expectations.

J.L. Richards' clients, along with the students and educators they represent, deserve superior designs that reflect their evolving demands, needs and goals. Our award-winning team is dedicated to developing designs that ensure the longevity and integrity of constructed projects and that provide both functionality and aesthetic appeal.

Cover & 1. Vale Living with Lakes Centre – Sudbury, ON

2. Canadore College Parry Sound Campus – Parry Sound, ON

3. University of Guelph Building 046, College of Social & Applied Human Sciences – Guelph, ON

4. Northern College Integrated Emergency Services Complex – Timmins, ON



Integrated Emergency Services Complex

Northern College
Timmins, Ontario

J.L. Richards was retained as Prime Consultant to develop Northern College's Integrated Emergency Services Building Complex (IESC) located on the Timmins campus. Our services included architectural and engineering design to plan and realize a 45,000ft² complex that houses emergency service students and professionals. The IESC is a state-of-the-art, postdisaster facility that supports local fire and emergency medical service (EMS) professionals while providing working and learning spaces to students enrolled in Northern College's firefighting, EMS, and police programs.

The IESC is the first facility in Ontario to integrate professional emergency response personnel with students, and this created a unique challenge for J.L. Richards' team. We needed to consider the crucial needs of emergency service personnel, ensuring they had the necessary tools to keep their community safe while creating a dynamic educational environment.

The IESC is divided into two wings. The larger wing houses educational spaces such as classrooms, garages, training labs, and scenario rooms. The smaller wing houses professional spaces such as Fire Department and EMS garage bays, lounges, offices, and a meeting hall. A large integration atrium is centrally located in the IESC to facilitate interaction between the EMS professionals and the students. Adjacent to the atrium, a safe learning bay allows students to watch and learn as professionals respond to real emergencies.

Through our collaboration with Northern College, we were able to create a dynamic and flexible facility that maintains the secure requirements of an emergency service facility, provides a healthy work environment for firefighters, paramedics, administration, and faculty, and supports a nurturing learning environment for future emergency response personnel.



Fireside Lounge Renovation

Cambrian College
Sudbury, Ontario

Cambrian College retained J.L. Richards to provide architectural structural, mechanical, and electrical engineering services to renovate their Fireside Lounge. Cambrian wanted to combine the existing lounge with two underutilized meeting rooms to create a larger space where students can relax, study, socialize, and host a variety of events. Within a short timeframe, our team worked diligently to provide design, cost estimates, construction documentation, and contract administration services, resulting in a space that allows students to recharge, connect, and grow.

The lounge is bright, welcoming, and private, with interior aluminium-glazed screens to separate it from the adjacent event space while allowing light to pass through. The lounge is acoustically separated from the adjacent space to provide a quiet space for students to study or relax. Large doors were incorporated in the design to allow for large equipment to be brought into the space for events and maintenance.

Cambrian wanted the lounge's furniture to be bright and multicoloured, so we worked with their furniture consultant to create a complementary and cohesive design. We offset the bright and eye-catching colours with neutral finishes to create a calming and inviting space. We replaced the existing track lighting with large circular lights to brighten the space and accentuate the furniture.

The use of darker colours around the perimeter provides a quiet place to study and focus while the bright lighting at the centre of the lounge is designed to encourage socializing. A large circular fireplace serves as the lounge's focal point and the surrounding tile is designed to create feelings of warmth.





Building 046 Renovations

University of Guelph, College of Social & Applied Human Sciences
Guelph, Ontario

J.L. Richards was the Prime Consultant for the University of Guelph's College of Social & Applied Human Sciences' (CSAHS) renovation to Building 046. Originally built in 1963 as a research facility, Building 046 required renovations and upgrades to house both the CSAHS and the Ontario Veterinary College. J.L. Richards provided engineering, architectural, and planning services to modernize the facility and create a welcoming environment for students, faculty, staff, and patients.

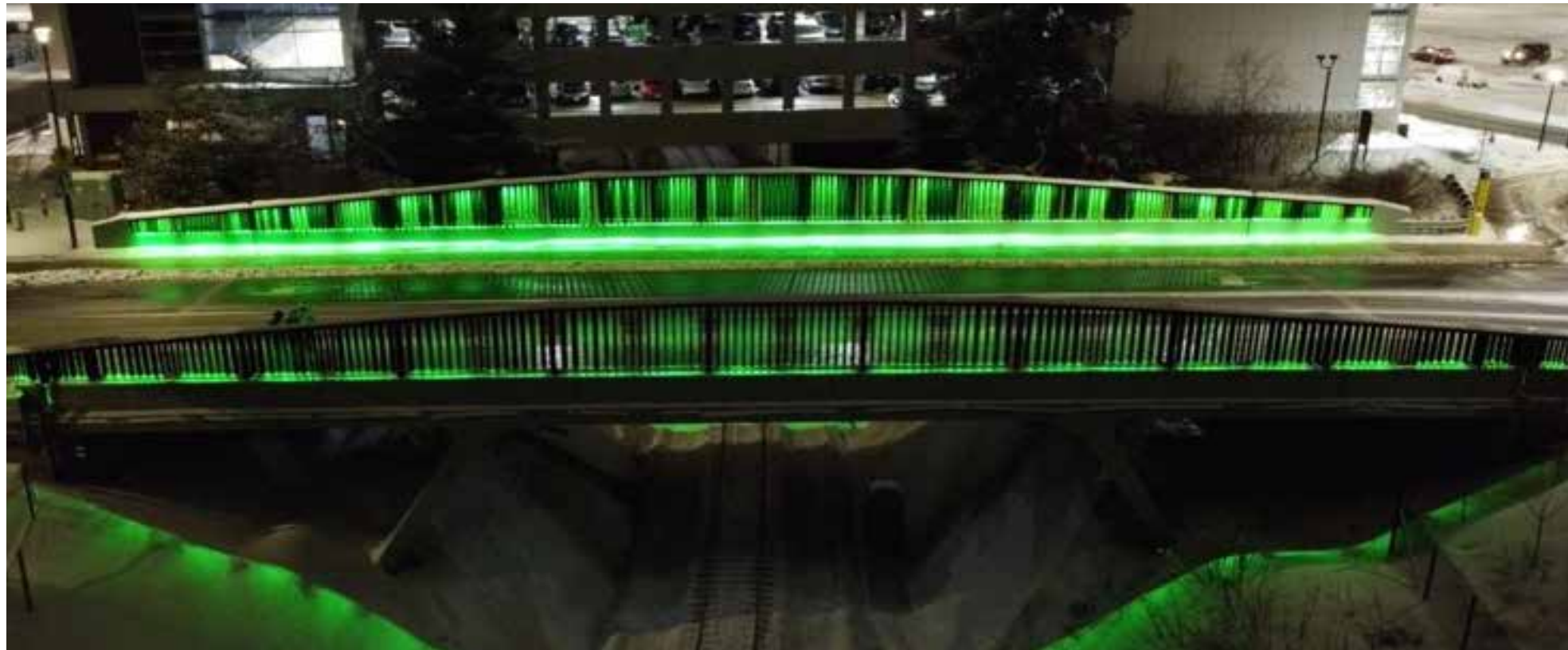
With the CSAHS moving into Wing B and the Ontario Veterinary College moving into Wing C, both needed extensive renovations to accommodate the unique needs of each department. All windows and roofing were replaced and insulation was added to the exterior walls. Building 046 required major upgrades to its mechanical, electrical, and IT systems to provide the expected technological elements of a modern healthcare facility. The upgrades made the facility a fully integrated electronic work environment with wireless access throughout, keyless entry, video capturing systems, and panic buttons.

Building 046 was designed to be a warm, bright, and inviting environment that encourages collaboration between the CSAHS's Psychological Services & Couples and Family Therapy.

Approximately 32,000 ft² of Building 046 underwent renovations which involved an abatement process to remove asbestos-containing material, PCBs, and mercury. Other upgrades were undertaken to improve the facilities building systems energy efficiency and increase accessibility for students, staff, public clients, and visitors.

Building 046 is now a modern facility for the CSAHS and the Ontario Veterinary College. It is a welcoming healthcare centre that is equipped to treat the patients of today and research new ways to treat the patients of tomorrow.





O-Train Campus Bridge Renewal

Carleton University
Ottawa, Ontario

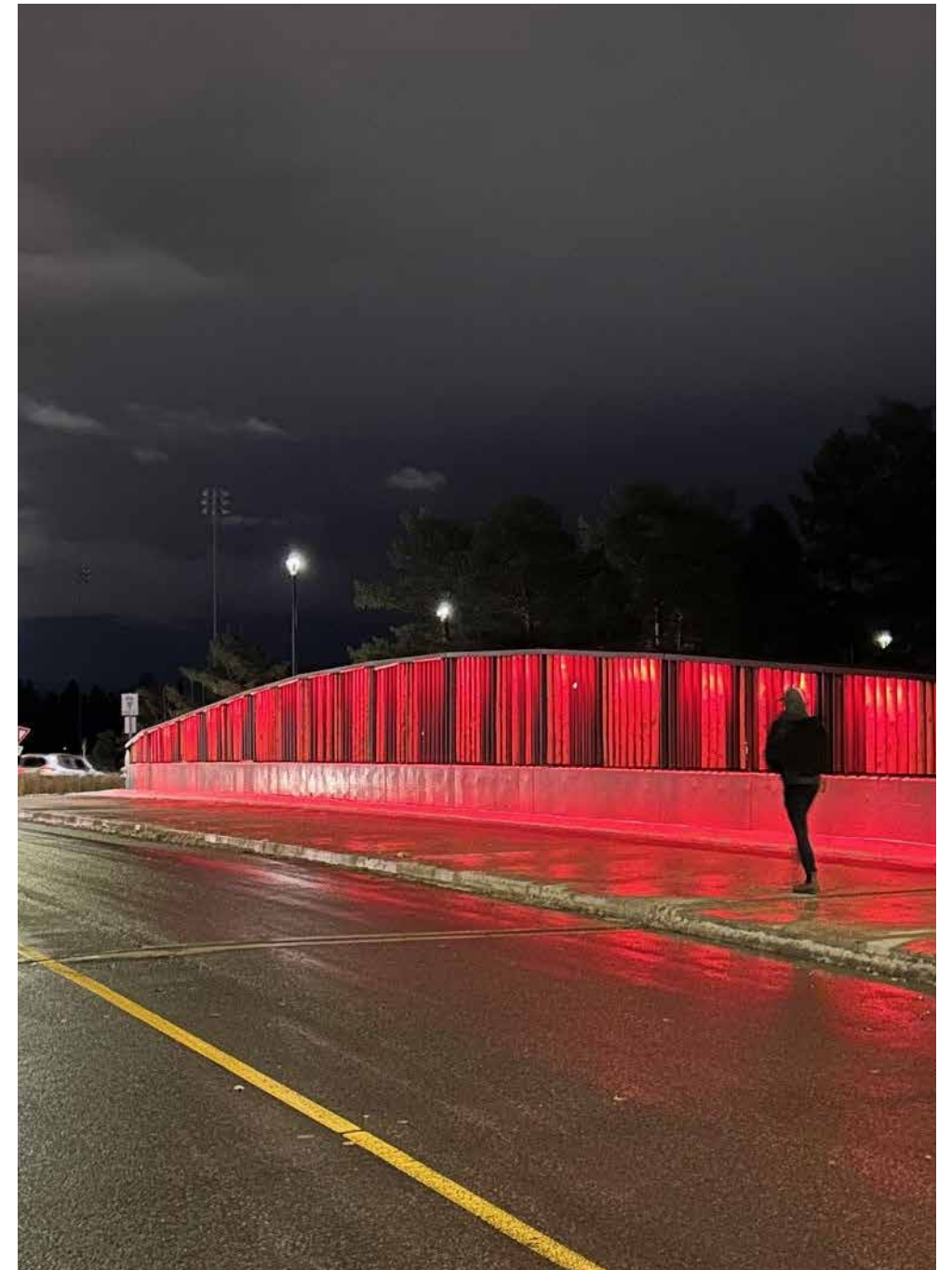
Carleton University retained J.L. Richards' multidisciplinary services to rehabilitate the O-Train Campus Bridge. Built in 1968, the bridge carries two lanes of traffic, a shared cyclist path, and a pedestrian path. In 2020, it was determined that a renewal was required to address deterioration. J.L. Richards was also tasked with designing a pedestrian fence to flank both sides of the bridge.

Through a conditions assessment, J.L. Richards discovered that barriers were not code compliant, expansion joints were failing, previous repairs on the soffit were delaminating, and there were large areas of delamination on the slope protection. A structural analysis was conducted to ensure the bridge's load capacity was up to standard.

Our design solution included replacement of overhangs and traffic barriers and removal of the concrete median. We added a multi-use pathway and modified the traffic flow from the existing two-lane, one-way configuration to a two-way configuration.

During the design process, Carleton requested a new pedestrian fence be included. The fence was to be evocative and animative whether one crosses the bridge by foot or by car. J.L. Richards' multidisciplinary team worked together to fulfill the University's vision. The fence was designed to resemble planted trees and accentuate the sense of motion through alternating sections of painted steel and wood. Negative vertical space creates rhythm and visual dynamism for those crossing. Concealed and colour changing lights draw attention to the fence structure and makes the bridge a beacon at night.

Through collaboration with Carleton, J.L. Richards was able to design and complete the bridge's rehabilitation along with the additional pedestrian fence. The work ensured the bridge was brought back up to a modern standard and included important design features that the university requested. The rehabilitated O-Train Campus Bridge is now a striking welcome for pedestrians and drivers.





Health and Performance Centre

University of Guelph
Guelph, Ontario

J.L. Richards was retained as Prime Consultant to complete a renovation and expansion of the Gryphon's Performance Centre located inside the University of Guelph's Alumni Stadium. The Performance Centre was originally an open gym that was gradually repurposed to become a dedicated strength and conditioning space. The Performance Centre had not been upgraded or renovated in many years and J.L. Richards revitalized the space to become a state-of-the-art strength and conditioning facility for University of Guelph's varsity athletes.

The renovation involved a one-storey building expansion to increase the number of weightlifting racks and strength and conditioning equipment. The expansion allowed a new artificial turf surface to be added to the Performance Centre to accommodate speed and agility training. The facility was also upgraded with new finishings, new custom-branded Guelph Gryphons weightlifting racks provided by Sorinex, and a rubberized flooring system.

In addition to the strength and conditioning upgrades and expansion, the Performance Centre's roofing was replaced and new structural steel was put in place to support the expansion. The facility was given new lighting, a custom audio visual system, upgraded electrical distribution to support the building upgrades, and new HVAC and fire protections. The renovation also included upgrades to improve accessibility throughout the Performance Centre and field.

The renovations were completed through close and careful collaboration between J.L. Richards, the University of Guelph Physical Resources and Athletics Department, Harbridge + Cross Ltd, and crucial subtraders and suppliers. Together with the University of Guelph and benefactors of the athletic program, J.L. Richards was able to transform the Gryphon's Performance Centre into a modern, state-of-the-art strength and conditioning facility that is now one of the leading strength and conditioning facilities in Canada.





University Centre Food Court Renovation

University of Guelph
Guelph, Ontario

- The University of Guelph retained J.L. Richards to provide architectural and multidisciplinary engineering services to complete a three-phase renovation to the University Centre Food Court.
- Phase 1 included renovations to the existing food stations and reconfiguration of the food court area to improve flow. Millwork was upgraded and new tile flooring was installed in the University Centre atrium. The project followed a detailed staging plan, allowing portions of the food court to remain open during construction. Phase 1 was complete before students returned in September.
- Much of Phase 2's scope had to be deferred to Phase 3 due to the onset of the pandemic, however, minor upgrades were made to ensure continued progress. Phase 3 saw the completion of planned Phase 2 upgrades and food station upgrades and a floor slab renewal at one of the building entrances, which was required due to corrosion caused by chloride infiltration. Active galvanic anodes were installed in the slab to reduce the potential for corrosion and prolong the life of the slab without requiring intensive reconstruction. Additionally, during selective removals of the concrete topping in the food court area, it was discovered that the extent of the topping was compromised, resulting in an entire removal and repour. New electrical panels, revitalized power distribution equipment and upgrades were made to the power, lighting, fire alarm, and communications systems throughout. J.L. Richards also reviewed and made alterations to exit and emergency lighting systems. Mechanical upgrades included retrofitted HVAC and plumbing in the food preparation areas.
- J.L. Richards worked closely with students and the hospitality staff throughout the project to ensure their current and future needs were met and to provide a space to meet the changing needs of students, faculty, and staff.



Residence Complex Low Carbon HVAC Feasibility Study, Energy Assessment & Design Options

Algonquin College
Ottawa, Ontario

J.L. Richards was retained by Algonquin College to complete a condition assessment of mechanical systems at the Algonquin College Residence Complex. The Residence was built between 2000 and 2003 and comprises 517 units and 33,000m² of gross floor area. The conditions assessment informed energy modelling and retrofit options to reduce energy consumption and greenhouse gas (GHG) emissions.

J.L. Richards assessed all heating, ventilation, and air conditioning equipment to develop a capital renewal plan. It was determined that the majority of the mechanical equipment was either at or approaching end of life. A subsequent energy analysis was conducted to review energy usage, determine costs, and explore GHG reduction options.

Historic energy consumption data provided a baseline reference of the existing building and helped develop an energy model to quantify the benefits of various energy efficiency measures. An energy use breakdown and benchmark of the building relative to similar buildings was established through a review of current energy consumption and GHG emissions.

J.L. Richards developed three retrofit scenarios with options to either modernize existing equipment, use an air-source heat pump, or use a centralized ground source heat pump. Each scenario included rooftop solar options along with control and thermal energy efficiency measures.

We estimated the cumulative savings each retrofit could achieve and presented their respective accumulating and net impact on energy and GHG emissions. A 50-year lifecycle cost analysis was developed with estimates of the capital and operating costs, and we presented the projected net present value and return on investment for each scenario. J.L. Richards' most aggressive scenario reduced GHG emissions by 59% and reduced utility operation costs by 25%.



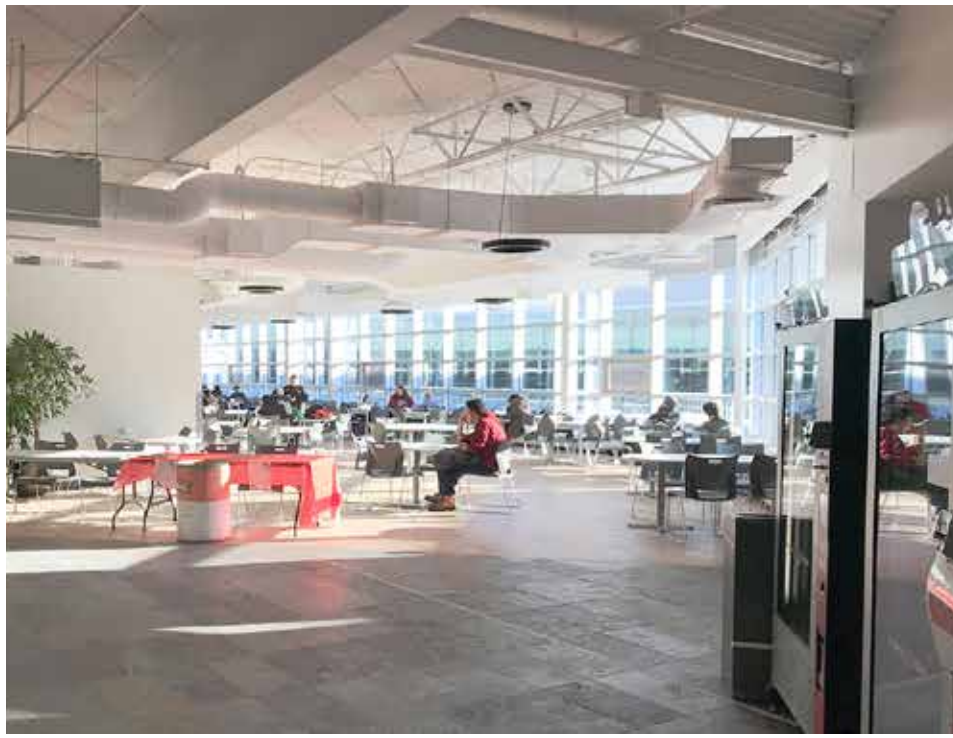
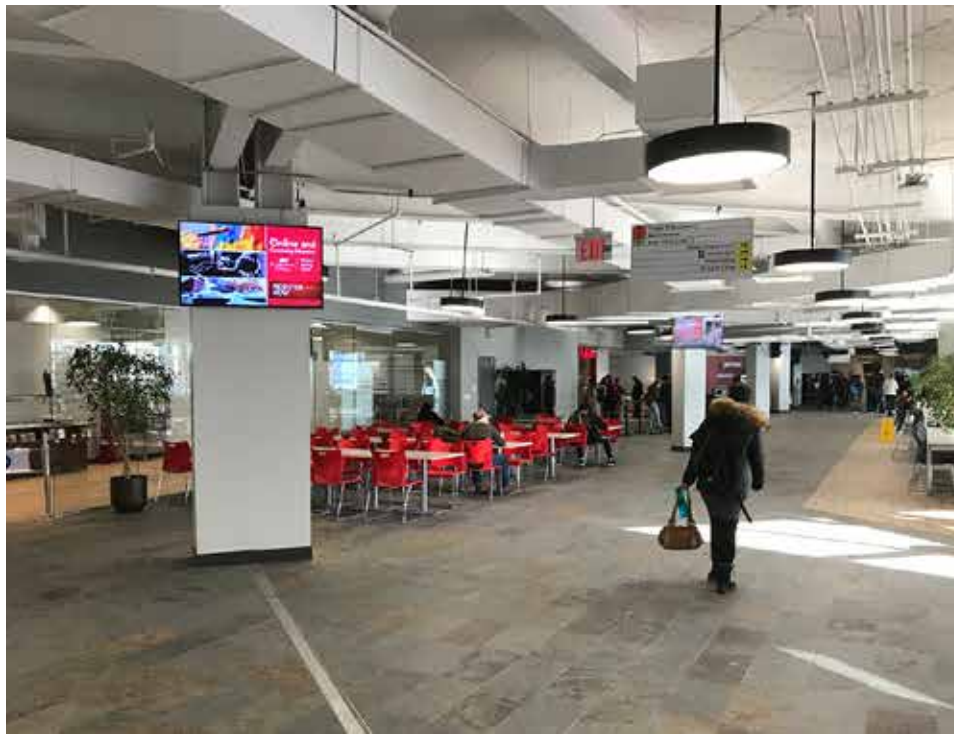
Showcase Chemistry Lab

Cambrian College
Sudbury, Ontario

Cambrian College retained J.L. Richards' architectural, mechanical, and electrical engineering services to renovate an existing wood shop into a new chemistry lab. The laboratory design scope included a laboratory layout, new interior finishes including ceiling and lighting, new laboratory casework, and two new windows in the corridor wall. In accordance with code requirements, an emergency shower and eyewash station and an exhaust fan were added to the room.

The lab's design also incorporated numerous pieces of equipment, which elevates the space to a state-of-the-art showcase piece for the college. The lab was designed to incorporate: triple-stage quadrupole mass spectrometer; ultra-high performance liquid chromatography system; high-pressure ion chromatography system; inductively coupled plasma spectrometer; atomic absorption spectrometer; mass selective detector; autosampler; fume hood; and gas canisters.

Construction was completed in March 2021 after multiple delays caused by the pandemic, the presence of asbestos flooring, and modifications to the scope of work. Through J.L. Richards' ingenuity, flexibility, and navigation of these project challenges, we were able to meet the College's needs and design their new showcase chemistry lab.



Cafeteria Renovation

St. Lawrence College
Kingston, Ontario

J.L. Richards' multidisciplinary engineering, architecture, and planning services were retained by St. Lawrence College (SLC) to provide a design for the renovation of their 20,000 ft² public cafeteria. The cafeteria's original layout caused congestion and an uncomfortable level of noise at peak hours. J.L. Richards worked with SLC to create a design that would lower noise levels and make navigation easier and more efficient.

We were tasked with designing a space that allowed students to dine, collaborate, study, and socialize more comfortably. Based on current and future needs, we assessed the cafeteria's dining and server areas, operational, acoustic, accessibility, and safety and egress issues to inform our approach to design. Our design also needed to allow the cafeteria to remain operational throughout the construction process. Based on our findings, we proposed two layout options that maximized seating capacity, improved flow through the cafeteria, and addressed the excess noise. We also ensured our design was accommodating to allow people requiring mobility aids to easily navigate the space.

We added ceiling applied and suspended acoustic baffle systems to reduce noise levels and made significant changes to the layout to reduce discomfort during peak hours. Corridors were widened and new circulation patterns were defined with contrasting floor finishes.

By upgrading interior floor finishes, fixtures, and equipment, J.L. Richards was able to improve the atmosphere and student experience in the cafeteria.

Talk To Us Today



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