



Essex Centre of Research University of Windsor, ON

Innovation and best practices advance new research facility

As part of a Design Build Consortium led by Amico Affiliates (Constructors), NORR in association with Hariri Pontarini Architects (HPA), worked collaboratively to realize the University of Windsor’s vision of merging science and research into a collaborative, innovative space where industry and academia work together. The Essex Centre of Research (CORe) is a new three-story building unifying multi-functional research area into a comprehensive hub where ‘lab’ and ‘collab’ exist together to create the required synergy for scientific research. The dense work of science is displayed and set within a welcoming, collegiate and natural environment of the University. The Centre’s lab spaces were designed to feature large, highly functional and unobstructed floor plates to create flexible and open working areas.

From a structural engineering perspective, NORR designed a scheme for underpinning the foundations of an existing building to allow for safe excavation to install a new basement, which houses mechanical and electrical rooms. As well, design of a new utilities tunnel connected the new basement to an existing tunnel.

NORR’s design incorporated concrete slabs and beams for strength and serviceability requirements to mitigate vibrations to suit laboratory equipment.

Functional areas of the Centre include the Materials Chemistry Research Facility, Windsor Health Research Group (WHRG): Translational Research Lab, Molecular and Cellular Diagnosis Suite, Proteomics Suite, Imaging and Flow Cytometry Suite along with Wet Lab Suites and an Instrumentation Space, all dedicated to strengthening the University’s focus on health and research.

NORR and HPA partnership proved to be a success. Working closely, to understand the University’s vision along with the day-to-day requirements, procedures and needs was an exciting dialogue resulting in an exceptional facility advancing the University’s stature of a center of excellence in Science and Research.

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CLIENT	Amico Design Build and University of Windsor
PORTFOLIO	Science & Research
SIZE	46,000 SF (4,272 SM)
LOCATION	Windsor, ON
DATE	April 2018
SERVICES	Program & Lab Planning, MEP Engineering, Structural Engineering

AWARDS

- 2020 Ontario Architecture Association (OAA) Design Excellence Award
 - 2020 Ontario Architecture Association (OAA) People’s Choice Award
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Science & Research

Purpose-driven design of science and research structures is a specialty at NORR. We are uniquely positioned to provide our clients with fully-integrated design services from master planning to architecture and engineering for complex research and development parks and facilities, bio-incubators and state-of-the-art laboratories. This work spans the bioscience, pharmaceutical, nuclear, medical, education and commercial sectors.

Our Design Approach

Our approach to the design of Science and Research buildings is based on a clear understanding of the project brief from the beginning, together with making key decisions at the right time, at briefing stage through concept, detail, technical design and construction. We believe that key to the success of science facilities is the organization and inter-relationship of the elements of the building for their use in the short term and for their continued use over the long. We consider the lifecycle of buildings throughout their lifespan.

Evolving at the Pace of the Sector

NORR's work in the Science and Research sector has been continuous which has allowed us to keep pace with our client's evolving needs. We take our experience and lessons learned forward from one project to the next. In designing Science and Research projects, we manage every detail recognizing that these projects are complex structures that are:

- Highly serviced
- High energy users and can therefore be expensive to run
- Required to house delicate and expensive instruments
- Potentially hazardous work places
- Extremely liable to change and must therefore be flexible and adaptable

CONTACT

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