

EMERGENCY RENO AND EXPANSION

Renovations and expansion at St. Boniface Hospital's ED continue on schedule By James Peters

As many Winnipeggers are aware, the acclaimed St. Boniface Hospital (SBH) has been undergoing a welcome and long-awaited major expansion and renovation of its existing Emergency Department (ED). But it's a safe bet that most are unaware of how complex a task it's been. Renovating any existing institutional space is always complicated, but it's exponentially more difficult while maintaining a fully operational ED in the middle of the construction zone.

The ED's expansion and modernization got officially underway in early 2020, with construction beginning in April 2022. When completed, 18,600 sq. ft. of existing space will have been renovated and 86,200 sq. ft. of new construction added, tripling the size of the current emergency department.

"Developing an expanded Emergency Department to support the ED program in its primary function of delivering patient care required the dedication, thoughtful

consideration and time investment of many clinical and supporting team members," says Kim McCance, Senior Project Manager, Capital & Facilities Management, with Shared Health. "Key contributors from the ED program included many physicians and nurses, as well as the support and input of many other internal partners such as Emergency Response Services, Cardiac Sciences, Respiratory Therapy, Indigenous Health, Mental Health, Diagnostic Imaging, Laboratory

Photos courtesy of PCL Constructors Canada Inc.



SPECIAL FEATURES

A number of important features will improve patient care at the St. Boniface ED, including:

- An inclusive, barrier-free facility design.
- An expanded waiting room and triage area.
- An expanded central resuscitation area with direct access to computerized tomography (CT).
- ► A dedicated diagnostic imaging suite, with new CT scanner and X-ray machine.
- Private exam rooms in treatment areas.
- A dedicated mental health treatment area.
- A dedicated ambulance entrance and parking bay for 10 ambulances.
- A new direct elevator connection from the ambulance arrival area to the ED and second-floor Cardiac Intervention suites.
- A new covered south entrance to reduce congestion.
- ▶ A public-use outdoor garden space.
- ▶ A dedicated Stat Lab located in the ED.

Services, Pharmacy, Patient Registration, Allied Health, Nutrition Services, Housekeeping, Supplies, Digital Shared Services and Facilities Management. The project team also sought valuable input from external partners such as Winnipeg Fire Paramedic Service, Winnipeg Police, RCMP and MB Corrections."

The project was developed in consultation with the community and had several important goals: improve patient and staff experiences; ensure timelier access to care; maximize functionality and flexibility; and provide more space for the increased number of patients.

PCL's Adam Taferner, Senior Project Manager on site, says, "PCL has been involved since 2020, since the awarding of the [construction contract]. Our role [at the start of our work] was to provide constructability feedback during early design and perform the ancillary work. Construction in full force at the site started in May 2022."

A key "enabler project" to the overall construction project was the demolition of D Block, which stood in the footprint of the new ED. But within D Block were a dozen departments needing relocation to other areas in the hospital. "Relocating the occupants, combined with the necessary abatement and demolition, took a lot of time," Taferner adds. "Demolition required a sensitive approach, as [D Block] was adjacent

to the existing ED, diagnostic imaging, audiology, patient bed tower and cardiac centre."

As Taferner points out, the location of the new ED on the SBH site impacted several primary access and egress locations for the hospital. "Access to the ED goes right through the middle of the construction zone, and at some point this access would be lost," he emphasizes. "PCL worked with ft3,





the primary architect, and the city to develop a temporary corridor solution. These corridors, through the active construction zone, were built with full life safety measures. A typical job has one occupancy permit, but this job had five. The city has been great to work with — they fully understand the importance of the St. Boniface Hospital and what it provides to the community."

From an architectural standpoint, the renovated and expanded ED space will have improved staff and patient workflows and provide overall higher functionality. Some of the more notable design features include a barrier-free work space, private examination rooms and even a public-use outdoor garden. Also, given the recent experience with COVID-19 worldwide, the new ED will include a designated pandemic response system. It will allow for the immediate isolation of defined zones within the ED, as well as an increased number of individual isolation rooms.

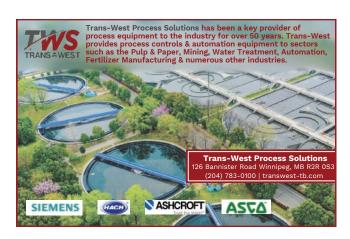
Attesting to the complexity, PCL has worked hand in hand with ft3, SMS Engineering, Crosier Kilgour Engineering, Sison Blackburn, Colliers Project Leaders, Shared Health, SBH and the Winnipeg Regional Health Authority (WRHA). Taferner says most of these companies and government agencies had representatives on site on a weekly basis.

"The project was a fresh slate – we wiped it clean and started from the ground up. But because we were tying into an existing facility, there wasn't as much freedom as you'd expect, like on a new build," he adds. "A stand-alone generator, dedicated to the new SBH ED, was installed at the west end of the campus. But to bring power from it required four conduits and 250 metres of careful and precise direction drilling under the hospital. Everything we do has some sort of effect or potential impact on the operations of the hospital at large."

Local architectural firm ft3 won the successful design bid for the expansion/ reno project. "With our experience on emergency departments, we were very pleased to have the chance to design the new SBH ED," says ft3 Principal Jerald Peters. "We knew SBH was an older hospital with lots of moving parts, but the key to the project's success was the collaborative atmosphere. You simply need that kind of collegiality to overcome obstacles as they present and move forward. During the initial design stage, we came up with some strategies on phasing – how things would remain open for patients and how ambulances would continue to access. As PCL got more involved on site, they came up with their own strategies and we merged our thinking with their thinking, found the best solution and moved forward."

"We started with the philosophy of how to go about improving the patient experience and never lost sight of that fundamental principle," Peters adds. "For example, virtually all of the patient







spaces will be private spaces – a very significant change that will provide the best outcomes. It's all about improving patient flow and getting patients to the right space for timely treatment in the quickest way."

Throughout all of the work so far – and with what continues – the St. Boniface Hospital Emergency Department remains open 24 hours. With well over a decade in the project management

business, Taferner says, "No question, it's been a challenging, but exhilarating, project. The various demands and complex phasing of this build have provided a logistical master class on how to sequence disruptive work without impacting a very busy, 24/7 operation."

The project is being delivered by the Government of Manitoba, in collaboration with the Winnipeg Regional Health Authority, St. Boniface Hospital and Shared Health. The project is also being supported by the St. Boniface Hospital Foundation. According to the province, the SBH ED received 48,000 visits in 2019, while the expanded facility is expected to accommodate 55,000 annual visits. And based on population growth and an aging population, those annual visits are projected to grow to an estimated 70,000 to 75,000 by 2039.







