

CASE STUDY

EllisDon delivers successful museum expansion and renovation with timelapse visual data and job site analytics



About EllisDon Corporation:

EllisDon is an employee-owned global construction services and technology company with a purpose to redefine the construction industry. EllisDon is focused on innovation and sustainability while delivering the future of construction by empowering people to push beyond traditional construction boundaries. With thousands of salaried and hourly employees across fifteen national and international offices, EllisDon has become a leader in every sector and nearly every facet of the construction industry. For more information, visit ellisdon.com.

Location: Canada Client Since: January 2023

Firm Type:

Construction Services

Projects using Timescapes:

Primary Industry: Construction

Project Overview

EllisDon was named the general contractor for the \$115 million expansion and renovation of the Glenbow Museum in Calgary, Alberta, Canada, one of the city's most important landmarks. It was a complex project requiring renovation and expansion within and around the existing building structure.

Significant changes included replacement of the front facade, new mechanical and electrical systems on the interior, the reconfiguration of floor plates, and other modifications of the interior and exterior of the structure.

The client also required that the work meet their accessibility, community, and sustainability objectives while staying true to the timeline and the budget.

Solution

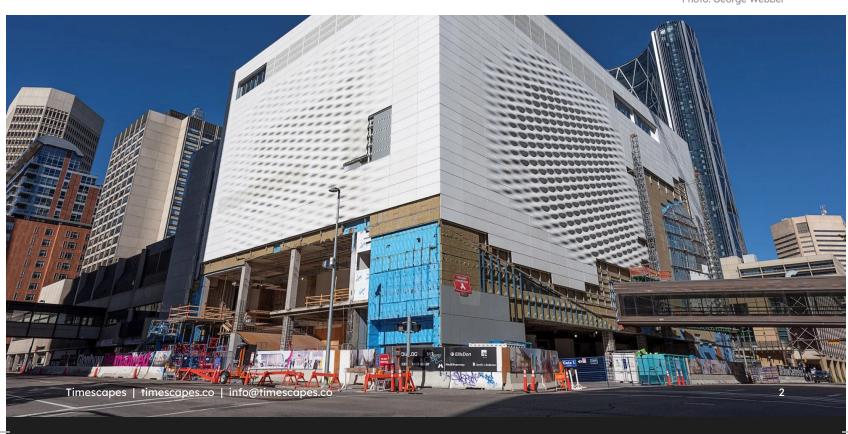
With such a complicated project, the client inquired whether or not cameras could be implemented to monitor progress and to share regular updates with the public.

The EllisDon team researched construction timelapse and visual data systems, selecting Timescapes to support the Glenbow project. The decision was based on the superior quality of the Timescapes cameras and the system's ability to generate and analyze visual data from across the project, providing real-time and historical insights into every stage of the work.

With Timescapes, the project benefited from:

- Superior visual and data analytics
- · Reliable, rugged, high-quality construction cameras
- · Ease of implementation and use
- · Speed to value

Photo: George Webber





Implementation

While a Timescapes technician was available to help manage the rollout, the EllisDon project team was pleasantly surprised at the ease of the implementation, with each camera installed and operational in under 30 minutes.

"It was a seamless set-up. The cameras are solar-powered and self-sufficient, so no connection is needed for power or data transfer," stated Joe Hrgovic, Senior Superintendent at EllisDon. "We simply accessed the roof, set them up, and walked away."

All urban settings present unique challenges such as limited sunlight, shade from neighboring buildings, and other

factors. Weather is another consideration with Calgary winters often dropping to -40°C and lower. Timescapes cameras have a well-established uptime rate of 99.3% in any conditions, unmatched by any other hardware provider. The images are consistently clear and detailed regardless of weather, time of day, or other factors.

The client also had access to the Timescapes system as needed. During the implementation, the museum decided to leverage the <u>visually engaging timelapse footage</u>, sharing it with the community via the museum website to keep everyone up to date on the status of the project.

Key Wins

1,400 hours

Time saved in project supervision (2 hours/day x 700 days)

\$84K

Cost of time saved in collecting and analyzing activities and job status

100K +

Job site images captured over the entire project



Outcomes

1. Easy Install and Footprint

The project site was located at a very tight intersection, requiring the precise positioning of cameras on adjacent buildings to accommodate such challenging angles.

The team easily gained permission from neighbouring buildings to setup cameras on their rooftops. While some neighbours were initially cautious about having cameras installed on their buildings, once they understood that the work was non-invasive and required no time on their part, they were very accommodating.

"Once the cameras were up and running, we simply logged into our account with immediate access to the data. It was a very seamless rollout, allowing us to begin work immediately."

Joe Hrgovic, Senior Superintendent, EllisDon

2. Site Visibility and Project Tracking

Site managers spend a lot of time monitoring the progress and overall status of projects to ensure the job remains on time and on budget. For many, this means endless walking tours of the site throughout the day.

By accessing the Timescapes system, each project milestone could be visually verified from any device, ensuring all scheduled work was accomplished. Progress was tracked throughout the day, the week, and the entire project. If the unexpected occurred, visual data was analyzed to determine the cause.

"I'm on the 8th floor of the building onsite so I can easily investigate any anomalies I may see on the cameras to ensure all is well. I can also track the timing of deliveries, for example concrete. If the vendor committed to a noon delivery and it's not there, then I can immediately phone the vendor to find out what's going on."

Joe Hrgovic, Senior Superintendent, EllisDon





3. Trust and Transparency with Project Stakeholders

With the Glenbow Museum team accessing the Timescapes system, EllisDon was able to establish a trust-based relationship with their client from the very start. The museum had access to the same visual data as the EllisDon team, allowing the client to independently verify the status of the project as needed.

Timelapse footage from the Timescapes system was also leveraged by the client for PR and community engagement, extending transparency to the museum's neighbours, patrons, and other people interested in the progress of the project.

"With Timescapes, the client shared the same view of the project as the EllisDon team, ensuring everyone was on the same page. By empowering community members with access to the current state of the build on the museum website, the client also reduced the amount of time they spent responding to enquiries by text and email."

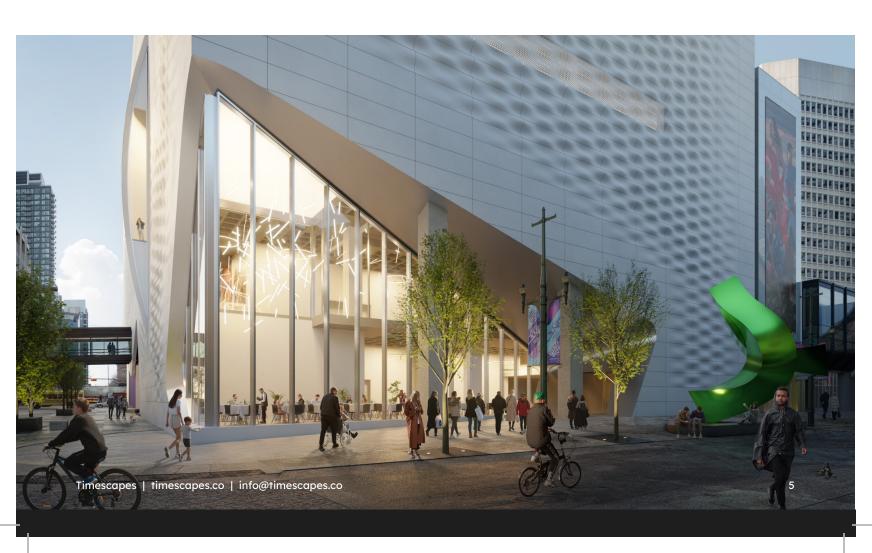
Joe Hrgovic, Senior Superintendent, EllisDon

4. Safety and Security

Real-time monitoring is essential to worksite safety and security. Regardless of the site manager being on or off-site, the Timescapes system enables immediate verification that health and safety protocols are in place and being followed.

"From a safety perspective, I can check the Timescapes feed and make sure workers are wearing hi-vis safety gear and that handrails are in place. If I need to stop at a certain spot on the way down at the end of the day, I can head right there to make sure everything is OK. It's the little things like this that make my life easier."

Joe Hrgovic, Senior Superintendent, EllisDon





What's next for EllisDon and Timescapes

Based on the success of the Glenbow Museum project, EllisDon has established a strategic partnership with Timescapes, implementing the technology on additional EllisDon projects.

"Glenbow was the first EllisDon project to use Timescapes," said Chester Boyes, CEO at Timescapes. "This type of pilot project provides everyone with a chance to test the solution and the relationship outside of the sales and marketing hype."

Timescapes supports the mandate of the EllisDon Digital and Data Engineering Division, to leverage new tools and technologies that encourage and enable digital transformation.

"The integration of AI and advanced analytics is not just a futuristic concept anymore; it's a reality we're embracing, exemplified by our use of Timescapes. The technology has given us the ability to not only generate beautiful project visuals and timelapses but also access to advanced analytics for activity on site. These insights allow our construction and project teams to review construction progress remotely while also being able to make more informed decisions about the project."

VP Innovation & Construction Technology, EllisDon

Experience Timescapes today

Timescapes' timelapse and job site analytics technology is quickly becoming the standard on all top construction sites globally. Over 100 leading construction companies on over 400 projects in New Zealand, Australia, and Canada are using Timescapes to make better-informed decisions to lower costs, reduce schedule delays, mitigate risk, and engage stakeholders across the construction project.

For more information about Timescapes' visual intelligence platform for remote construction monitoring visit timescapes.co.

