udges and jurors. Prosecutors and prisoners. Clerks and complainants. Barristers and bailiffs. Day in and day out, thousands of people move through the striking Calgary Courts Centre. This technologically advanced building sets a new standard for operational and energy efficiency. And an Endura IP video security system from Pelco plays a key role in the smooth administration of justice there.

From the Ground Up With one million square feet of space, the gleaming glass skyscraper is the largest judicial facility in North America, and the second largest in the world. Long a dream of the Government of Alberta, successful completion of the Courts Centre represents an unprecedented level of planning, coordination, and cooperation amongst a large number of stakeholders, including: the Government of Alberta, prime consultant Kasian Architecture Interior Design and Planning, design consultants NORR and Carlos Ott, structural consultant Stantec, mechanical consultant Hemisphere Engineering, developer GWL Realty Advisors, designbuild contractor CANA Construction. electrical contractor Custom Electric, systems integrator Convergint Technologies, and security consultant Weaymouth & Associates Inc., and facilities manager SNC-Lavalin ProFac.

"We wanted a robust, completely reliable end-to-end solution, and with Endura, that's what we got." – Ken Fulton, SNC-Lavalin ProFac

> With the project kicking off in the busy Calgary development boom, a rapid schedule was set for design and construction. Building began in Summer 2003. Fast-track construction required tight coordination between all the different



SETTING A NEW PRECEDENT

BY DAVID A. AUS, MARKETING COMMUNICATIONS WRITER





contractors and the building trades. New upper floors were being poured and built, even before lower floors were complete. The aggressive schedule took the project from ground breaking to occupancy in under four years.

System Design Planning began in earnest in 2001, figuring out how to bring two courts systems - the Court of Queen's Bench and the Provincial Court from five different buildings in Calgary all under one roof. Key to the planning for security is Ken Fulton, Manager, Security Services, SNC-Lavalin ProFac for the Courts Centre. As a long-time former Government of Alberta security professional, Fulton has been in on the planning since the beginning. "Calgary Courts Centre is the most up-to-date and secure court facility in North America," he says. With long experience in all aspects of security, Fulton knew the court's highsecurity mission called for round-the-clock



reliability from proven, reliable vendors who would be trusted partners along the way.

And with the requirement that the system last for 30 years, the Courts Centre needed a solution that would provide flexibility and adaptability for the future. Weaymouth & Associates drew on previous experience in prison security in specifying the security requirements for the Courts Centre. Along the way, a key group of security stakeholders and users met weekly to refine system requirements.

The Alberta Solicitor General's team and security consultant Weaymouth & Associates were sold on a Pelco solution, knowing Pelco's reputation for quality and service. Convergint Technologies was selected as the security system integrator, based on its strong track record and its ability to provide immediate, local support for the aggressive construction cycle.

Security In Action Security

begins at the perimeter, where Pelco Spectra dome positioning systems monitor the exterior, while bollards and wedges provide additional physical protection all around. To ensure the high level of security, everyone and everything entering the Courts Centre is monitored. All visitors enter via an airport-style portal with metal detectors and scanners to sniff out drugs and explosives. All incoming mail is x-rayed and scanned and opened in a secure environment.

Throughout the building, 900 duress alarms enable judges and clerks to signal security operators of potential incidents. Each courtroom floor has a security desk, with an Endura decoder and monitors linked to duress alarms on the floor. Pelco PTZ and fixed cameras located in each of the 73 courtrooms begin recording in case of a duress incident. In all, more than 800 Pelco fixed and PTZ cameras capture the video that is recorded and managed on the Endura system. There are two control rooms, each with five control stations. Given the high-security mission, the court required a redundant network, with failover between the two control centers. "Convergint is using HP ProCurve 5400 Series switches on the Endura network," explains Carel Seyffert, Convergint Technologies Project Manager, "because they can handle the 10 GB trunk connections required for the redundant network. HP, Convergint and Pelco worked together to validate these switches for the application at the court." To manage storage demands for those 800 cameras, Endura's unique EnduraStor allows the court to record everything in full-motion, fullresolution video, and then prune the video after a user-defined interval.

Many Systems - One Screen

The lower level control room has primary

responsibility for overseeing the basement detention center, where prisoners come in and are held while awaiting their hearings for the day. This center is operated by Alberta Solicitor General officers, who ensure the safe and secure movement of prisoners to and from courtrooms. The detention center is a busy area, handling the movement of 50 prisoners on a typical day, though on particularly busy days as many as 150 prisoners move through the detention facility while awaiting their hearings or transport back to their correctional institutions.

For extra security, the elevators that deliver inmates to and from detention areas lack control buttons. Instead, the integration of elevators, cameras and intercoms allows guards to communicate while transporting prisoners, with access and movement all managed through the central control station.

FACING PAGE & THIS PAGE: The Endura system at Calgary Courts Centre watches over entrances, elevators, courtrooms, and more.

Obviously in this kind of environment there is little margin for error. That means the physical security system must be intuitive and easy to use. The Court's physical security systems are all integrated through a single touch screen: Endura IP Video Security, Lenel OnGuard Access Control, Intercom, and Alarm Intrusion/Duress Monitoring. New officers can master the system in just a few hours – a boon for security and operational efficiency.

"The Calgary Courts Centre was a watershed opportunity for us to design, install and manage a multi-million dollar project," notes Roy Best of Convergint Technologies. "With perseverance and outstanding teamwork, we were able to deliver successfully for the court." Ken Fulton agrees, adding, "The teamwork in bringing this system online was phenomenal. Endura is definitely living up to our expectations. It works great, and that's why we picked it."

> BELOW: Roy Best of Convergint, Ken Fulton of SNC-Lavalin ProFac, and Carel Seyffert of Convergint (left to right)







