

# Communications Security Establishment Canada



Americas

Defence

Government accommodation

The Government of Canada is working to safeguard critical infrastructure that is essential to national security.

The government decided to modernize its security and intelligence infrastructure by building the Communications Security Establishment Canada (CSEC) Long-Term Accommodation Project (LTAP) to house Canada's national cryptologic agency. People, culture, technology and an enabling facility all play a significant role in achieving CSEC's mission.

Project facts		
<b>Location</b> Ottawa, Ontario, Canada	<b>Client</b> Communications Security Establishment Canada	<b>Value (NPV)</b> C\$867 million
<b>Consortium</b> Plenary Properties	<b>Plenary Americas' role</b> Developer Equity investor Project sponsor Financial arranger	<b>Builder</b> PCL Constructors Canada
<b>Architect</b> HDR Architecture Associates, Inc/WZMH	<b>Services</b> Honeywell, HP	<b>Financial close date</b> January 2011
<b>Completion date</b> August 2014	<b>Contract term</b> 33.5 years, DBFM	<b>Awards</b> <ul style="list-style-type: none"> <li>• Silver Award for Project Finance, 2011 CCPPP</li> <li>• Project Award, 2011 Real Property Institute of Canada Partnership</li> <li>• Top 100 Projects, 2012-2014 ReNew Canada</li> <li>• LEED® Gold Certified</li> </ul>
<b>Project website</b> <a href="http://www.cse-cst.gc.ca/en">www.cse-cst.gc.ca/en</a>		

In order to meet CSEC’s program requirements, the facility comprises a mix of general office space, special purpose spaces and a data centre, as well as support infrastructure such as roads and parking at the site.

Plenary Properties designed, built, financed and will maintain the new 775,000 ft2 facility, as well as providing IT infrastructure. In addition to including provisions for the evolution of the IT infrastructure to ensure CSEC can continue to meet its mandate, the project is also innovative in its use of a public-private partnership model to transfer risk on IT service delivery over the 30 year contract.



## Design features

### Green features

LTAP is a modern, intelligent building that employs innovative design features to ensure that CSEC remains at the forefront of mechanical, electrical, security and information technology. It is designed to achieve LEED® Gold certification and meet BOMA BEST certification during the operating phase. The facility displays and demonstrates CSEC's commitment to stewardship of the environment by incorporating sustainable design principles and prudent use of natural resources.

Walls of windows fill the facility with natural light and reduce the building's electricity consumption. Rainwater collection ponds reduce the facility's consumption of water for irrigation. Natural landscaping elements such as grass, plants and trees cover the site, instead of asphalt and concrete. They reduce storm runoff through absorption and reduce the retention of heat that causes heat island effect. Solar panels create enough renewable energy to meet 35 % of the power requirements of the shipping and receiving building and further reduce the electricity needs of the entire facility. Indirect free-cooling has been harnessed to cool parts of the facility at a fraction of the cost and energy requirement of conventional cooling systems.

Through the application of this and other green building systems technologies, energy consumption is expected to be reduced by up to 40%, compared to the model national energy code for buildings – standard building practice.

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The choice of building materials for the new facility also encouraged re-use and recycling. For instance, there is an emphasis on choosing building materials which already incorporate recycled content.

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## Innovations

This project was the first DBFM in Canada to include IT services in-scope and required a 30 year technical solution and price commitment. An unprecedented requirement since standard IT service contracts are typically 5–7 years in length. Plenary, working tirelessly with HP, was able to provide a precedence-setting fully committed 30 year IT solution that was also compatible with the Project Agreement mechanisms for technological change and price benchmarking. This project contains many complexities – significant security requirements, presence of IT services, restrictions on ownership and acceptable debtholders – that could have presented obstacles to raising the required \$1 billion in debt financing. Plenary was able to devise a commercial and financial structure to overcome these challenges and achieved an A-level credit rating from S&P and DBRS, a precedence setting achievement in the Canadian PPP market.

## Local economic impacts

In addition to meeting government security and intelligence requirements, the new LTAP facility will be of substantial economic benefit to the community in terms of economic development. It is expected to generate over 4000 jobs for local workers during the construction phase alone.