



The retrofit of the Dell call centre into the headquarters for Servus Credit Union was a cost saving initiative that has created a better work environment. Recladding resulted in the building going from R10-R12 to R30, while the glazed windows went from R1 to R8. Energy consumption has been reduced more than 35 percent and water use is down over 50 percent.

Manasc Isaac added in a light well through the centre of the building to bring sunlight into the area.

# Re-IMAGINED

**E**dmonton and Calgary are both among the top 18 cities in North America, in terms of the number of highrise buildings we have, according to skyscraperpage.com. Alberta has the opportunity to become the leader in North America in the upgrading of these highrises, to create greener and more beautiful cities. After four decades, a major modernization of the building envelopes as well as the building systems is imminent. Out of necessity, the idea of reimagine was born.

In Chicago, the Willis Tower, formerly the Sears Tower, is being reimaged. This iconic tower—the tallest in the Western Hemisphere—had 800,000 square feet of vacant space... the landmark was becoming unpopular, inefficient and uncomfortable. Owners as well as people working in the tower were determined to improve the performance of the building, improve daylight, add green building features, and fill the building.

As part of the “reimagine summit series” in April, Sara Beardsley spoke in Edmonton and Calgary about the innovations in re-skinning that tower, and the benefits to the City of Chicago. She is a senior architect with Adrian Smith + Gordon Gill Architects and member of the team that designed the modernization and greening of the Willis Tower.

Sara Beardsley of Chicago



The reimagine initiative was created in response to aging and failing exterior building envelope systems across Alberta and around North America. It draws attention to the opportunity to renew this province’s existing building stock, protect and enhance the investments and assets of building owners, reduce energy use and greenhouse gas emissions, and enhance the working environment for occupants. Recently referred to as “one of the hottest environmental architectural specialists in the country”, Manasc Isaac is a leader in developing Canadian expertise in the reimaging, with a special focus on towers built in the 1970s and 1980s.

Somewhat like the benefits of a facelift, a building of a “certain age” can be made to look youthful and energetic, with a little cosmetic surgery. This kind of surgery is far more than cosmetic, though. First, reducing energy use is an economic and environmental opportunity. Existing buildings account for more than 30 percent of Canada’s energy use, and by re-skinning these buildings, savings of over 50 percent can be realized. Realpac, the Real Property Association of Canada, recently challenged its members to achieve “20 by 15”—having all commercial buildings use only 20 ekWh\*/square foot by 2015. Upgrading or replacing of the building envelope can help to achieve this goal. With increasing environmental awareness among tenants, the reduction in energy use in buildings of this vintage appeals to many.

Then there’s the urban environment: Many 1970s buildings are unattractive, especially at street level. These buildings, with their Brutalist precast concrete cladding and dark glass, present an unfriendly face to the street. New

skins would make the city a more vibrant and attractive place.

And finally, the interior environment: A new skin offers better comfort for those working in the buildings. Well-insulated exterior walls enable people to sit closer to the windows, and operable windows improve people’s control of their workplace environment.

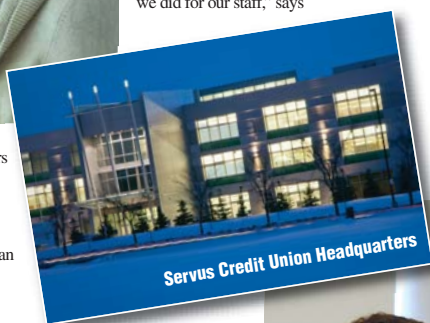
The former Dell Call Centre building, in Edmonton’s Research Park, is now a new corporate centre for the Servus Credit Union. Manasc Isaac recently completed its reimaging. The majority of the original building envelope, which also serves as the exterior structure, was comprised of durable and proven building materials such as brick, concrete and steel. The detailing of these materials, however, resulted in significant building envelope deficiencies, evident from the frost build-up on interior steel beams, and suggesting extensive heat-leaking gaps between insulation materials. A refurbished building envelope—

including new high-performance windows, sunshades on the south face, and a new insulation and cladding layer on the walls—creates a revitalized structure. Servus Corporate Centre is an ecologically responsible, flexible showpiece facility that acts as a welcoming and exemplary work environment, a place for members, and a learning environment. The building promotes Servus Credit Union’s service driven philosophy and core values and, as such, is recognized as a training facility, as well as an office building. A LEED Silver certification is in progress for this building. “The operable windows are the best thing we did for our staff,” says



and an upgraded mechanical and electrical system, to reduce energy consumption by over 50 percent.

Architects, using an integrated approach to design and construction, can help enhance appearance, performance and the quality of the work environment in these tired buildings. Edmonton and Calgary are well-positioned to be the leading cities in the world, showcasing the best ways to reimagine existing buildings. Future summits are planned to provide information sessions and inspirational case studies of similar initiatives around the world. ✓



Servus Credit Union Headquarters

Eric Dillon, COO of Servus.

Currently, Edmonton’s Associated Engineering Plaza is being reimaged. Located at the prominent intersection of 109th Street and Jasper Avenue, this 1970s building was recently acquired by Procura, with a view to enhancing its effectiveness, appearance and performance. The Manasc Isaac team is working closely with the new owners to develop an attractive and sustainable replacement skin,



Architect Vivian Manasc discusses the new Servus headquarters with Paul Evans of Calgary at the reimagine summit.

\* ekWh is a term meaning “equivalent kilowatt hour” that is used to give comparative values