



CASE STUDY

# MAIN STREET ROSSLAND: A LANDSCAPE UPGRADE WITH A DIFFERENCE

Many Canadians would know and love the town of Rossland, BC. Nestled in the wooded mountains of the West Kootenay region, Rossland has been a charming ski resort and quiet mountain getaway for many generations of Canadian families. With a population of less than 3500 that fluctuates significantly according to the season, Rossland depends on tourist traffic to maintain its reputation as a mecca for enthusiasts of the outdoors.

Recently, efforts have been made in Rossland to protect its green infrastructure and natural ecosystems in order to allow healthy trees to thrive. A renovation project included a full revitalization of the area as a way to improve the city's streetscapes. The Citygreen® Stratacell™ system was chosen primarily by landscape architects for its low impact design qualities, by engineers for its excellence in strength, and by contractors for the ease of its installation process.

The installation of the StrataCell system took about five weeks, which included subgrade, base installation, top-soil delivery and placement, and geogrid installation.



Jeff Schurek, CSLA, Landscape Manager / Senior Landscape Architect of ISL Engineering and Land Services Ltd said, "The existing trees were about 10 to 15 years old and they hadn't grown due to the trees being installed in pits that were just a two-meter square. The trees were doing extremely poorly. This is not an acceptable way to grow trees. We reviewed a number of different products and decided to work with Citygreen."

Stacey Lightbourne, Planner/GIS Technician from the City of Rossland, said the Citygreen system was recommended by the landscape architect as an easier way for trees to grow, allow roots to expand without cracking the sidewalk, and make trees healthier.

Kevin Terness, Senior Project Engineer from ISL Engineering and Land Services, said the project's objective was to revitalize the aged city's downtown. "It had trees that were unhealthy, inconsistencies with the surface features and treatments including sidewalk widths and so on." One of the major problems they found, according to Terness, was that the existing trees were mature by age but not in appearance. "The reason was that in an effort to maximize the hard surface area for pedestrians, the trees had to sacrifice

topsoil volume," he said.

The goal was to provide a corridor of healthy mature trees while at the same time maximizing the usable public area. The solution they came up with was to use the Citygreen system, which provided the soil volumes needed whilst allowing for sidewalks over them so snow removal equipment could effectively complete their operations.

Terness said they had no issues with the installation as the support they got was great. Once the contractor understood the process, everything went smoothly.

"Citygreen was there throughout the various stages of the process in terms of technical review," said Schurek. "They were out onsite solving real issues to work with the contractor to come up with better solutions in the best way possible. Within 1.5 weeks, the StrataCell systems were installed on one side of the street (approximately four blocks). That was extremely fast. The contractor was so pleased at the rate. He had worked without this product in the past, but the process took much longer. Another selling point of using the StrataCell system is that the price is reasonable. We





were sold on using this product on the basis that it provides trees the room to grow. This is the most important thing for developing a healthy streetscape – healthy trees for the future.” The design for this project also required a drip-line irrigation system that was installed throughout the many linked tree pit systems. But due to the tree pits being enclosed, the ArborVent system was installed, which helps to provide oxygen as a permanent irrigation/aeration solution and to prevent soil stagnation. The tree root systems, being set in the Stratacells, allow for the tree roots to grow in the adequate and sufficient root volume which is necessary for healthy growth. This project also used the Stratacell system to provide for a storm water tree trench down the length of the street which bridged areas where there were existing utility lines.

“The Stratacell was incorporated beneath the hard-scaping for the length of the project,” said Allen Tower, Vice President of Sierra Landscaping, Ltd. and Director of the Rossland project. “They were installed 1000 mm deep, 1500 mm wide, and included Stratacell, geo textile, subgrade base gravels, and topsoil. Water harvesting for irrigation and electrical was also included within the StrataCell matrix.”

Now, 3 years post-installation, the streetscape has been transformed and is truly beautiful. Jim Markin, the Arborist on site reports that, “Tree uptake has been 100% successful, with the trees maturing quickly and establishing well.” Tower says he has been, “Impressed with the results, especially compared to a nearby installation where structural soils were employed, with very poor uptake and significant early failure rate in the young trees.”

Rosslund considers the cost of this streetscape a worthy investment, and now it’s easy to see why. Downtown Rossland will have a manageable and sustainable urban forest forming a living heart through its downtown core for generations to come.

## Contact us

### Citygreen Australia

821 Pacific Highway,  
Sydney, NSW 2067  
Phone: (+61) 1300 066 949  
Email: [info@citygreen.com](mailto:info@citygreen.com)

### Citygreen West

4611 Morris Rd NW  
Edmonton, AB T6B 2V9  
Phone: 1 780 462 5064  
Email: [info.wca@citygreen.com](mailto:info.wca@citygreen.com)