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The Shire on Inverness

by **JESSICA KIRBY**

LOCATION
1016, 1018, and 1020 Inverness Rd. Saanich, B.C.

OWNER/DEVELOPER
Jim McLaren

ARCHITECT
Misra Architect Inc.

CONSTRUCTION MANAGER
Sargent Construction Ltd.

STRUCTURAL CONSULTANT
RJC Engineers

MECHANICAL CONSULTANT
Avalon Mechanical Consultants Ltd.

ELECTRICAL CONSULTANT
Triumph Electrical Consulting Engineering Ltd.

LANDSCAPE ARCHITECT
Lombard North Group (BC) Inc.

TOTAL SIZE
90,000 square feet

TOTAL COST
$23 million

Saanich, B.C. is picturesque and welcoming – the ideal location for a warm and contemporary Built Green condominium development offering stunning views of Rutledge Park and the Olympic Mountains. The Shire on Inverness is just that; a unit-mixed, three-building project housing 90 units in the heart of a beautiful, park-like setting. The two-acre site – naturally set but close to all amenities – offers many south-facing units and all residences overlook character landscapes highlighted by a water feature and a central trellis garden.

Building owner Jim McLaren says The Shire was envisioned as a 90-unit condo project, where the residents can take advantage of its central location with close access to downtown, Mayfair Mall and Uptown.

"We knew the site would have some excellent views of the Olympic Mountains and Rutledge Park, and the design and placement of the buildings maximized those sight lines," says McLaren.

The overarching vision of the project was to expand on the convenient living concept, while providing the residents a sense of community among the buildings.

"With the majority of parking placed beneath the three buildings, we were able to open up interior spaces between the buildings to incorporate a plaza feel to the development," says McLaren.

The project timeline from January 2016 until September 2017 presented a challenging time to build given the amount of construction activity in Greater Victoria. "The reality is all trades are extremely busy," says McLaren. "However, we were very fortunate to work with an excellent construction manager, and had a great team of trades that worked on the project."

Leading the construction team was Sargent Construction Ltd., which managed and co-ordinated all facets of the project, including consultant co-ordination, scheduling, and budget. Owner Lyall Sargent says the development comprises 120 stalls of concrete underground parking and three separate buildings. These wood-framed structures contain 90 units collectively, at five and six storeys, depending on the building.

All exterior cladding was a non-combustible combination of stone, Hardie panel, stucco and metal siding, says Sargent. "As much as it's esthetically pleasing, it's also very low maintenance going forward," he says.

Although the project's overall construction was fairly typical, it did involve some round concrete features that proved to be a challenge. "That included a round fountain with two semi-circle stairs, which requires highly skilled carpenters to pull off," says Sargent. "Anything round is difficult and expensive. Every piece of formwork is custom made and thrown away afterwards. We were very fortunate to have Bert Van Akker leading the formwork crew."

During the construction of the parkade, some steep banks required working from one side of the wall only for safety, he adds. "To form a wall, you need to work from both sides to assemble the formwork and pull it off again once it's poured," says Sargent. "To do it from one side takes creativity and time.

"We also had a small underground stream to contend with during the dig along with rock blasting and large patches of blue clay."

Despite a slight delay, the project came together without any major roadblocks. "The original timeline was 18 months and we finished in 21 months, which wasn't too bad considering the shortage of trades and manpower," says Sargent.

RJC Engineers was the structural engineer of record on the project, and was faced with the usual challenge with mid-rise wood-framed buildings in Victoria – high seismic loads.

"When we are dealing with taller, dimensional lumber wood-frame buildings the number one challenge is optimizing the shear wall system to minimize cost," says structural consultant with RJC, Leon Plett. "The most effective way we do that is by tuning the lengths of each segment to keep the building flexible yet strong, and reducing the number and size of shear wall hold-downs, which limits the loads on the concrete podium."

Aligning the shear resisting elements through the building, from the roof to the main floor, is also key to minimizing cost and improving building performance.

"Mid-rise wood framing is still relatively new in B.C.," says Plett. "It has only been available to us since the release of the last edition of the BC Building Code, and there is still a learning curve for some contractors and framers. We attend site regularly to assist with problem solving and to help reduce errors.

"As with all our mid-rise wood frame projects, we use specialized programs developed by RJC to optimize the shear wall layout. Given the high seismic loads on Vancouver Island, this can make the difference between an economical wood-frame projects, and a cost prohibitive one."

Once completed, the grounds at The Shire will be beautifully landscaped with multiple water feature located around the property. There will also be a central turnaround for visitor with a fountain water feature in the centre roundabout.

"The project has been, by all measures, a success," says McLaren. "We were very pleased to deliver these new homes to our buyers in September and turn over the management of the building to the strata council." **A**