

FOR IMMEDIATE RELEASE

For Further Information, Contact :
Tom Wilson, 416.588.6370
twilson@ventingroup.com

“Text excerpts edited from Daily Commercial News article published March 23, 2011, by Don Procter.”

March 23, 2011

The statue at the front of the 100-year-old St. Michael Catholic School in Belleville was restored along with the rest of the building. The contractor even found the original quarry site to match the limestone perfectly. The Algonquin Lakeshore Catholic District School Board is going the extra mile to restore its early 20th century limestone school, a landmark on the main street of Belleville.

Builders of the two-year project are taking a sometimes daunting approach that will see the exterior of St. Michael Catholic School restored to its appearance of 100 years ago, while neatly tucking a single-storey addition behind the heritage building. “The owners don’t have to do the extensive restorative process they have chosen to because the building doesn’t have a heritage designation, but they are committed to doing the right thing,” says Arran Brannigan, operations manager of the Limen Group Ltd., the masonry contractor for the job.

Over the years weather has taken its toll on the century-old school’s limestone. Freeze-thaw cycles have caused much of the stone to spall and crack and “unsympathetic mortar,” such as the high-strength Portland cement-based product applied decades ago, has added more damage to the soft limestone, says Brannigan. “The mortar used on historic buildings like this one should be weaker than the stone and be semi-permeable to allow water from the inside to pass out. The idea is to give the wall the ability to breathe,” he says.

+VG Architects, specified historic lime-based mortars for the 20,000 linear feet of replacement mortar. Prior to applying the mortar, Limen’s masonry crew has to rout out the existing mortar joints to a two-inch depth to achieve a sound substrate. Initially plans called for the replacement of about 300 damaged limestone blocks

+VG Architects - Century limestone landmark at St. Michael Catholic School in Belleville being restored

(900 square feet) with a similar but not identical limestone from the region; however, through careful research project conservator Trevor Gillingwater discovered where to get a “spot-on match” — the original limestone quarry at Crookston, north of Belleville.

Gillingwater convinced the property owner to reopen the long-closed quarry and the required limestone was mined and then shipped to Kingston for precise cutting to fit its new home. “We would have done a disservice to the building had we not used limestone from the original quarry,” says Brannigan, adding that prior to finding the Crookston quarry, Algonquin and/or Kingston limestone were considered for the job. Neither would have been the perfect match. Replacing some of the damaged stones was tricky — particularly the 10- to-11-foot-long window headers. Weighing more than 3,000 pounds, the headers were moved by crane, while the openings were temporarily shored.

It will take a few years of weathering for the new quarried stone to completely blend in with original. “The real trick to doing any heritage masonry work well is to be seamless. Finding the original quarry allows us to meet that end.” The Limen Group’s work also includes “pinning” fractured stone — a process of stabilizing damaged stone by passing a steel rod through a bored hole in stones and mortaring it into place. “Essentially we are stitching two pieces of stone together,” says Brannigan.

Dutchman repairs or “stone grafts” — removal of damaged stone with like material and a metal pin — also is required. A lime-based stone material was used for patching the odd spot on the old building, but no epoxies, chemicals or non-natural materials were used in the restoration, he points out. Brannigan says the school’s parapet cap stones were removed by crane for restoration off site and then reinstalled with anchors to fix new lead-coated copper flashing at the base of the stones. Several buttresses along with a major portion of the wall surface were also rebuilt.

The school’s statue, set in a cove above the main entrance, was repaired using various masonry conservation techniques. The two crenellated turrets flanking the statue, which rise above the roof line, were also replaced with new Crookston limestone versions, specially cut and dressed to match the originals.

