Existing Building Small Project

4211 Yonge St.

Foundation Wall Leak Repair

Allied Professional:
RJC Engineers
Manufacturer:
DRE Industries Inc./Koster
Contractor:
Maxim Group General Contracting Limited

In November 2022, Maxim Group General Contracting Limited, RJC Engineers, DRE Industries Inc./ Koster addressed significant leakage at 4211 Yonge Street in Toronto. Their work proved crucial in preserving the building's value, improving occupant safety and comfort, and putting the sealant and waterproofing industry's talents on display.

The project involved the installation of a robust waterproofing and water management approach to address significant leakage through the building's west P2 Level foundation wall. As RJC Engineers explains: "The west portion of the P2 parking level was not an ideal parking location and was typically avoided by tenants due to continued through-wall leakage–an issue that pre-dated RJC Engineers's involvement at the property. The wetting of the foundation wall and high humidity that resulted throughout the level contributed to accelerated deterioration of the foundation wall, adjacent column bases, and the P1 level slab post-tensioning system."

Colliers initiated the project on behalf of the building's new owners, who were concerned about the significant ongoing leakage into and around an old through-wall drainage system installed near the foundation wall's middle and upper portions. And with plans for the garage to undergo a significant garage and post-tensioning system rehabilitation, the owners needed the troubled area to be a viable parking location for tenants. RJC Engineers was called in to design and implement a repair solution, leading to the installation of a Koster curtain injection waterproofing system supplied by DRE and installed by Maxim Group General Contracting. "The system allows blindside waterproofing installation from the interior of an existing structure, which provides significant value and effectiveness when combined with cementitious waterproofing installation at the interior," RJC Engineers explains.

Work included the installation of through wall drainage beneath the slab-on-grade with weeping tile catchment and drainage. It also included the removal of existing above slab through-wall piping and patching of the openings, installation of foundation wall curtain injection waterproofing, the application of cementitious waterproofing at the foundation wall interior, and robust efforts to mitigate the impact of the project. It concluded with cleaning and painting the affected area before it was returned to the owner in like new condition.

RJC is proud to report that the project is a resounding success. The garage interior is noticeably less humid, which bodes well for slower rates of ongoing garage deterioration.

"The project team worked together to provide exceptional value to the client by implementing industry best-practice existing building foundation wall waterproofing schemes," it adds, noting, "Maxim Group and DRE/Koster deserve substantial credit for bringing a state-of-the-industry design to reality with minimal tenant impact and a very happy client."

rjc Engineers

MAXIM GROUP

DRE INDUSTRIES INC.
WATERPROOFING PRODUCTS

KÖSTER
Waterproofing Systems