



Francis Searle Building provides space for Northwestern University's School of Communication's administrative offices as well as for research, education, and health services. Originally constructed in 1972, the building's exterior walls are clad with large, vertically fluted limestone panels.

Northwestern University retained BTC to perform an evaluation of limestone cladding condition at the building. Localized deterioration, cracking, and displacement of limestone panels were documented. The cracking and spalling was primarily attributed to corrosion of steel anchors used to secure the limestone panels. Additionally, sealant joints at the building were generally in poor condition, and had exceeded their useful life.

The limestone surfaces exhibited significant staining from years of exposure to environmental conditions. In conjunction with the facade evaluation, Northwestern University authorized BTC to implement a cleaning mock-up program to evaluate the effectiveness of alternative cleaning methods and materials.

Upon conclusion of limestone cladding evaluation and cleaning mock-up program, Northwestern University retained BTC to prepare bidding documents for an exterior facade repair project. Scope of work for repairs included replacement of deteriorated sealant joints, replacement of cracked limestone panels, localized dutchman and cementitious patch repairs, and resetting of displaced panels. Replacement limestone panels were custom fabricated to match the fluted geometry of the original 40-year-old panels. Limestone cleaning was performed using hot water applied at high pressure.

BTC also provided assistance during the bidding phase of the project, and performed construction phase services.

**Project Name:**

*Exterior Facade Repairs, Francis Searle Building, Northwestern University*

**Project Location:**

*2240 Campus Drive  
Evanston, Illinois*

**Client:**

*Northwestern University  
2020 Ridge Avenue  
Evanston, Illinois 60208*

**Approximate Construction Cost:**

*\$350,000*

**Year Completed:**

*2014*

**Nature of Services:**

*Evaluation of Limestone Cladding Condition, Limestone Cleaning Mock-ups, Design of Exterior Facade Repairs, Bidding Assistance, and Construction Phase Services*

