



Constructed in early 1900s, Buildings B and C at Highland Park High School are solid masonry structures with a combination of various interior framing systems. Water-related damage to interior finishes on exterior walls has been an ongoing problem at the building. Township High School District 113 retained BTC to provide an opinion regarding the overall existing condition of the exterior building facades, and the viability of repairing the building envelopes. The findings of BTC's evaluation were used by the School District to make informed decisions regarding future use of the buildings.

BTC's evaluation was performed over a 3-week period. The evaluation consisted of interior reviews, an up-close visual review of the exterior facade and roofs, calibrated spray rack water testing, calibrated spray nozzle water testing, ASTM C1601 chamber water testing, and RILEM tube testing.

BTC also directed a masonry restoration contractor in making and repairing exploratory openings at the interior and exterior of the buildings to evaluate the extent, significance, and cause of observed deterioration. Hidden deficiencies which allow water penetration were uncovered during exploratory openings.

Field observations and test results were analyzed to evaluate the overall condition of the exterior facades and roofs, and the extent of repair work required to return the facades and roofs to a serviceable condition. BTC developed repair option recommendations, and provided order-of-magnitude cost estimates for each repair option. A life-cycle cost analysis was then performed to properly compare financial ramifications of each repair option. BTC provided a comprehensive report to the School District to assist in long-term planning. BTC's report received an award from RCI Inc. in 2013.

Project Name:
Exterior Facade Evaluation of Buildings B and C, Highland Park High School

Project Location:
Highland Park, Illinois

Client:
Township High School District 113
1040 Park Avenue West
Highland Park, Illinois 60035

Approximate Construction Cost:
Not Available

Year Completed:
2012

Nature of Services:
Evaluation of Exterior Building Facade and Roofs, Water Testing, Life-Cycle Cost Analysis

