Built in 2001, the Museum Square condominium building is a 5-story structure clad in brick, limestone, cast stone, and fiber-cement siding. The original windows consisted of vinyl-clad wood frame casement units.

The Association reported that several window sashes had dislodged from their frames. The original window manufacturer had indicated that the frames at these locations had rotted causing the screws that attached the hinge hardware to disengage. Water leakage and window frame rotting were also reported within several units.

The Association requested BTC to perform a comprehensive evaluation of the windows. Our services included a survey of each window from the interior and exterior to establish the extent of window deterioration throughout the entire building. We also dismantled selected windows to evaluate causes of the deterioration. Based on the extent of observed deficiencies and deterioration of the vinyl-clad wood windows, BTC recommended replacement of the windows at the building with more durable windows.

BTC was subsequently retained to design the window replacement project. Design challenges included providing proper pan flashing, and jamb transition without removal of the existing masonry veneer. Factory-mulled replacement aluminum-clad wood windows were specified. The wood frames were also primed and painted in the factory, thus reducing time required within units. Due to the proximity of train tracks to the building, unit owners were provided the option to reduce sound transmission through the windows. This was accomplished by providing thicker panes of glass and a slightly larger air space between insulating glass panes.

BTC also provided bidding assistance and field observation services during the construction phase of the project.