



PROJECT PROFILE

Matanuska-Susitna Borough

Earthquake Damage Assessment | Houston, AK



CLIENT

McLarens

BACKGROUND

On November 30, 2018, a magnitude 7.1 earthquake struck southeast Alaska, with an epicenter approximately ten miles north of Anchorage.

McLarens assembled a team of adjusters and structural engineers, including WJE, to perform rapid assessments of damage at several school buildings owned by the Matanuska-Susitna Borough. The most substantial damage was observed at Houston Middle School, a two-story structure constructed in the 1980s with masonry, steel, concrete, and wood structural elements. Damage was observed at masonry walls and roof diaphragm connections.

SOLUTION

Applying decades of experience evaluating building damage following natural disasters and implementing repair designs for their restoration, WJE documented conditions and review concerns identified by the Borough and its experts over the course of several site visits. The team's practical approach to damage reporting and repair scope development included written reports and conceptual repair drawings to aid building consultants and cost estimators.

Engineers hired by the school district proposed extensive retrofits and even demolition and reconstruction. Through building code analysis, WJE engineers were able to demonstrate that targeted localized repairs met the intent of code compliance to restore the building to its predamaged state. WJE's solution offered a technically sound and safe alternative that provided significant monetary savings and a path to reopen the school much sooner.

