



UAA College of Engineering
UNIVERSITY of ALASKA ANCHORAGE



UAA Professional Development Seminar Series

Gruening Middle School Earthquake Recovery Project

Presented by Ellen Hamel, PE, SE, Reid
Middleton, Inc

A magnitude 7.1 earthquake, centered approximately 9 miles north of Anchorage, occurred at 8:29 am on Friday, November 30, 2018. Per the request of the Anchorage School District (ASD), Reid Middleton engineers visited all ninety-one district facilities in the days and weeks following the earthquake. Gruening Middle School (GMS), located in Eagle River, sustained significant damage and was partially red-tagged. Most notably, a two-story CMU wall was dislodged from its attachment to the roof. The middle school was closed for 3 years following the earthquake due to damage incurred and to allow for design and construction of repairs and upgrades. The school just recently reopened to students in August, 2021.

This presentation will discuss the GMS Earthquake Recovery Project repair of earthquake-damaged areas and seismic upgrades recommended per ASCE 41-13. Structural repairs and upgrades included new attachments at the top of CMU walls, fabric reinforced cementitious matrix (FRCM) application on CMU walls, upgraded wood shear walls, and upgraded roof diaphragms.

Ellen Hamel, PE, SE, has 15 years' experience in the structural design of a variety of structures, including government and academic buildings, docks, oil and gas facilities, and pedestrian and vehicular bridges. She is fluent in a range of design codes and engineering software. In addition to structural design, she has a strong background in construction administration and field coordination. Ellen obtained a Bachelor of Science in Civil Engineering from Tufts University and a Master of Science in Structural Engineering from the University of Colorado. She has lived in Alaska since 2011.

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Friday, November 5, 2021

11:45 am-12:45 pm

Online Via [YouTube Live](#)