# WJE

## Rocky Mountain Metropolitan Airport

Landslide Investigation and Best Value Alternate Analysis | Broomfield, CO



### CLIENT

First Industrial Realty and Rocky Mountain Metropolitan Airport

#### BACKGROUND

Rocky Mountain Metropolitan Airport is a public-use airport in northern Colorado. A landslide developed near the east end of the Rocky Mountain Metropolitan Airport safety area in the spring of 2014. Michael W. West & Associates, Inc. (MWWAI)—now joined with WJE contracted with both the airport authority and the adjacent property owner to investigate the landslide, analyze repair alternatives, and design stabilization measures.





#### SOLUTION

In February 2015, borings were drilled, instruments were installed, a lab testing program was implemented, and slope stability analyses were conducted. Alternatives for repair were identified in a report prepared during the spring of 2015. An alternative selection workshop was held, cost estimates were developed, and a preferred alternative was selected based on the best value. The preferred alternative included excavation of the slide mass and installation of a groundwater interceptor drain. Contract documents and grading plans were prepared by a third-party engineer and put out for bids in late 2015. The contract was awarded and construction occurred during the summer of 2016.

Construction services by MWWAI in the summer of 2016 included verification of ground conditions and recommended adjustments to the grading plan to assure substantial removal of the slide mass. Additionally, the vertical and horizontal alignments of the interceptor drain were adjusted based on actual groundwater conditions encountered. Despite the need for multiple changes to contract quantities and design details, the project was completed on time and within budget.



ENGINEERS Architects Materials Scientists