



## PERSONNEL QUALIFICATIONS

### Emma L. Bradford | Associate III



#### EDUCATION

- Missouri University of Science and Technology
  - Bachelor of Science, Geological Engineering, 2014
- Colorado School of Mines
  - Master of Science, Geological Engineering, 2016

#### PRACTICE AREAS

- Geotechnical Engineering
- Subsurface Investigation
- Slope Stability Monitoring and Modelling
- Geological Hazards
- Earth Retaining Structures
- Foundation Evaluation
- Surveying

#### PROFESSIONAL AFFILIATIONS

- Colorado Association of Geotechnical Engineers (CAGE)
- Engineers Without Borders - Rocky Mountain Professional Chapter

#### CONTACT

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#### EXPERIENCE

Emma Bradford is skilled in performing geotechnical engineering analyses related to subsurface conditions, slope stability, geological hazards (namely expansive/collapsible soils and debris flows), earth retaining structures, foundation design and performance, and relative elevation surveys. She is also proficient in preparing geological and engineering reports, design drawings, and specifications.

Prior to joining WJE, Ms. Bradford worked at Michael W. West and Associates, Inc., where she was responsible for performing site reconnaissance, and overseeing and observing geotechnical drilling investigations involving soil sampling and rock coring. She also oversaw and observed excavation and sampling of test pits, and developed laboratory testing programs for evaluating material properties.

#### REPRESENTATIVE PROJECTS

##### Subsurface Investigation

- Federal Deposit Insurance Corporation Building - San Francisco, CA: On-site observation of installation of cutter soil mixing panels next to FDIC building
- Heritage at Vista Ridge - Erie, CO: Drilling program observation followed by future potential heave estimation using the net partial wetting factor method\*

##### Slope Stability Monitoring and Modelling

- Upper Highline Dam - Loma, CO: Continuing monitoring and analysis of downstream embankment slope movement, groundwater levels, and foundation drains
- Samilpamba - Cotopaxi, Equator: Slope stability hazard assessment with respect to new water distribution system

#### Geological Hazards

- Latitude at Vista Ridge - Erie, CO: Condition assessment of homes affected by expansive soils
- Red Rocks Centre - Morrison, CO: Geological hazards site reconnaissance for future residential development\*

#### Earth Retaining Structures

- Soil Nail Wall: Inspection of large-scale pull-out test program performed on soil nail wall
- Pecan Lakes - Fort Bend, TX: Tiered Redi-Rock and sheet pile retaining wall failure analysis

#### Foundation Evaluation

- Aransas County Airport - Rockport, TX: Evaluation of distress after Hurricane Harvey to pre-tensioned hangar slab foundations

*\*Indicates with previous firms*