

Donald Carroll | Senior Associate



EDUCATION

- Clarkson University
 - Bachelor Science, Civil Engineering, 1996
- University of Colorado
 - Master of Science, Civil Engineering, 2003

PRACTICE AREAS

- Litigation Consulting
- Structural Analysis
- Repair and Rehabilitation
- Structural Design
- Foundations and Retaining Walls

REGISTRATIONS

- Professional Engineer in CO, FL, KS, LA, and MO

PROFESSIONAL AFFILIATIONS

- Florida Structural Engineers Association
- International Concrete Repair Institute
- National Council of Structural Engineers Association
- American Society of Civil Engineers

CONTACT

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EXPERIENCE

Donald Carroll's structural engineering practice includes forensic engineering, structural evaluations, strengthening and repair of distressed structures and foundations, as well as earth retention structures. Mr. Carroll's experience was developed through the design, repair, and remediation of new and existing commercial, residential, and industrial structures. He is experienced in the design, evaluation, and repair of structural systems including steel, wood, masonry, and mild-reinforced, prestressed, or post-tensioned concrete.

Prior to joining WJE in 2016, Mr. Carroll was a principal at J.R. Harris and Company, a structural engineering firm in Denver, Colorado.

REPRESENTATIVE PROJECTS

Litigation Consulting

- Four Seasons Vail - Vail, CO: Investigation of alleged structural construction defects in post-tensioned concrete building *
- Van Zandt Residence - Boulder, CO: Investigation of single-family residence for structural construction defects *
- 195 Bellevue Drive - Boulder, CO: Investigation of alleged design and construction defects on complex multisystem earth retention system for high-end custom residence *

Structural Analysis

- Atlantic 1 - Aventura, FL: Review of cracking in post-tensioned structural slab
- Lionshead Parking Structure - Vail, CO: Structural condition assessment of precast concrete parking structure and design of repairs for discovered deficiencies *
- Larimer County Fairgrounds - Loveland, CO: Evaluation of nontypical pre-engineered metal buildings that experienced failures during a snowfall *
- Expansive Soils - Front Range of CO: Evaluation of numerous residential and commercial structures with foundation movement due to expansive soils

Failure Analysis

- Ritz Carlton - Vail, CO: Collapse of retaining wall and subsequent monitoring of remaining temporary earth retention systems *
- Red Sky Ranch - Wolcott, CO: Collapse of wood-framed roof *
- Little Nell - Aspen, CO: Excessive movement in 35-foot-tall anchored retaining wall on the side of Aspen Mountain *

Repair and Rehabilitation

- Saint Michael's Church - Canon City, CO: Design of repairs to unstable wood-framed roof structure that allowed existing roof structure to remain, and minimizing visual impacts to the space *
- Williams Form - Golden, CO: Design and supervision of program to relevel multispans pre-engineered building frames suffering from more than twelve inches of differential foundation movement *

Structural Design

- AGTS Switch at Denver International Airport - CO: Installation of new crossover switch in terminal building requiring repurposing of precast prestressed elements, as well as new cast-in-place concrete, structural steel, and deep foundations *

Foundations and Retaining Walls

- 1601 Wewatta - Denver, CO: Design of forty-five-foot-deep secant pier cut-off foundation wall in dense urban environment *
- Cherokee - Pueblo, CO: Design of forty-five-foot-deep temporary anchored earth retention system immediately adjacent to active railroad line *

* Indicates with previous firm *