



Appendix A

Curriculum Vitae

SAMUEL R. HENNING, B.Sc., P.E.

EDUCATION:

B.Sc. Civil Engineering, University of Colorado, Boulder, CO, 2012

EXPERIENCE:

Civil/Structural Forensic Engineering, Knott Laboratory, LLC, Centennial, Colorado, March 2017 to present
Production Enhancement Engineer, Halliburton, Colorado & Alaska, September 2012 through March 2017
Project Engineer, Shaw Construction, May 2012 through September 2012
Engineer Intern, City of Lafayette, Summer of 2011
Engineer Intern, City of Centennial, Summer-Winter 2010



FORENSIC ENGINEERING:

Mr. Henning has seven-years of experience conducting onsite forensic investigations. The investigations typically require additional calculations and analysis summarized in a comprehensive report. Typical investigations consist of damage including differential foundation movement, collapses/failures, fires, floods, hail, and moisture intrusion. Mr. Henning will also design structural repair plans to correct these deficiencies, if requested.

Mr. Henning has also been involved in multiple lab-tests of truss capacities, parapet wall capacities, and other job-specific testing requirements. This work involved designing and building the testing apparatus as well as performing the actual tests to the materials. After the testing, Mr. Henning has analyzed the results and provided summary reports of the findings.

Mr. Henning is the manager of Knott's Foundation Pro Engineering division which specializes in the investigation, design, and implementation of repairs of failed and damaged foundations. Mr. Henning has evaluated everything from residential foundations to commercial foundations. Mr. Henning has diagnosed the soil characteristic and performance factors of both expansive and collapsible soil that have induced foundation movement and damage. Mr. Henning is also the Engineering Manager of the Insurance Division and worked on many types of commercial and residential insurance investigations.

Additionally, Mr. Henning's work in the oil and gas sector has given him a unique perspective concerning plumbing, piping, heating/cooling systems, thermodynamics, and hydromechanics. Mr. Henning has conducted multiple analysis concerning freeze-loss type cases in which the interior temperature of a particular structure is modeled to determine the internal temperature change over time – this helps determine the circumstances surrounding pipe-bursts, mechanical equipment failures, etc.

ENGINEERING AND DESIGN:

Mr. Henning has experience designing foundation, framing, and roof framing plans for residential and light-commercial structures. Additionally, Mr. Henning has analyzed many structures with differential foundation movement and modeled the floor levels by using 3D equipment and software. Based on these surveys, Mr. Henning has sized remedial foundation installations such as micropiles, push piers, and helical piers. Additionally, Mr. Henning has designed micropile foundations for new construction. Mr. Henning has been involved in designing light-gauge and steel buildings for residential applications.

Mr. Henning has also designed multiple remedial repair plans with structures exhibiting fire, flood, wind, and snow damage. These types of designs require additional analysis and consideration of the most practical and economical method to fix a damaged structure. Similarly, he has been involved on several projects including damage to roofing and exterior cladding materials such as hardcoat and EIFS stucco siding.

MEMBERSHIPS AND PROFESSIONAL AFFILIATIONS:

Mr. Henning is a member of the Foundation Performance Association (FPA)

LICENSES AND CERTIFICATIONS:

Licensed Professional Civil Engineer, Colorado #57294

Licensed Professional Civil Engineer, Texas #137466

Licensed Professional Civil Engineer, Utah #13618458-2202

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PUBLICATIONS AND PRESENTATIONS:

PUBLICATIONS

1. Stanley Stoll, Samuel Henning, Aaron Bagley, Kyle Wieghaus, PhD. "Foundation Damage Assessments and Structural Repairs" Forensic Engineering 7th Congress 2022.

NOTABLE FORENSIC BUILDING INVESTIGATION SUMMARY:

Date	Project	Location	Client
Mar – 2024	Fire Damage Structural Investigation and Repair Plans for Municipal Building	Glenwood Springs, CO	CIRSA – City of Glenwood Springs
Jan – 2024	Freeze Loss Investigation at Multi-Family Unit. Fire Suppression System.	New Castle, CO	Poynter Law, LLC
Jan – 2024	Structural Metal Stairway Investigation, Report and Hearing Testimony	Copper Mountain, CO	Stuart D. Morse & Associates, LLC
Nov – 2023	Commercial Radon System Investigation and Compliance Report	Grand Junction, CO	Rocky Mounts
Jul – 2023	9-story Residential Tower Including Parking Structure. Facility Condition Assessment and Repairs	Grand Junction, CO	Horizon Towers HOA
Apr – 2023	Residential Foundation Movement Assessment Including Tiered Retaining Wall	Delta, CO	Tueller, Gibbs, Dye
Feb – 2023	Police Station Vehicle Impact Investigation and Repair Plans	Grand Junction, CO	Grand Junction Police Department
Jan – 2023	Early 1900 Stone and Masonry Building – Structural Foundation Design for Remodel	Montrose, CO	Rathbone Hotels
Aug – 2023	Early 1900 State Armory – Facility Condition Assessment, Foundation Repair, Structural Remodel	Delta, CO	Delta Police Department
Feb- 2022	Early 1900 Stone and Masonry Church - Facility Condition Assessment	Montrose, CO	Montrose Methodist Church
Sept- 2021	Foundation Assessment and Global Site Soil Stability	Rifle, CO	Rider & Quesenberry LLC
Apr-2021	Grand Junction High School, Facility Condition Assessment and subsequent Structural Repairs.	Grand Junction, CO	Colorado School District 51
Feb-2020	Grand Junction Regional Airport, Facilities Condition Assessment and subsequent Structural and Foundation Repairs	Grand Junction, CO	Grand Junction Regional Airport
Feb-2020	Post-litigation Foundation Damage Remediation – Single Family Residence	Grand Junction, CO	L. Knight
Jan-2020	Residential Design and Construction Assessment - Construction Defects	Grand Junction, CO	Griffiths Law PC
Sep-2019	3rd Story railing collapse and Fall	Colorado Springs, CO	Heuser and Heuser, LLP

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Aug-2019	Snowmass Village Rec Center Flood and Damage Assessment	Snowmass Village, CO	CIRSA
Jun-2019	Parapet Wall Structural Load Testing	Aspen, CO	Hanson Construction, Inc.
Jun-2019	4 plex multi-family Complex Fire Repairs	Fruita, CO	Monument HOA
May-2019	Residential Foundation Assessment - Construction Defects	Grand Junction, CO	Griffiths Law PC
Mar-2019	Residential Foundation Assessment - Post Real Estate Sale Disclosure	Grand Junction, CO	Hoskin, Farina, & Kampf, P.C.
Dec-2018	Residential Foundation Assessment - Construction Defects	Grand Junction, CO	Hoskin, Farina, & Kampf, P.C.
Oct 2018	Hurricane Damage Assessment - Wood Pellet Manufacturing Plant	Laurinburg, NC	CJW Insurance
Oct 2018	Hurricane Damage Assessment - 28 Building Multi-family Complex	Wilmington, NC	CJW Insurance
Jun-2018	Hail Damage Assessment SW Plains Dairy	Syracuse, KS	Brown Pruitt Wambsganss Ferrill & Dean, PC
June 2018	9 Multi-story Bldg. Post Construction Defect Remediation	Boulder, CO	The Village at Uptown Owners Association
Mar-2018	Foundation and Wall Collapse Evaluation - 1775 Sherman Street	Denver, CO	Boyle/Apelman, PC
Mar 2017	Five Building Early-Development Cracking and Foundation Movement Assessment -	Grand Junction, CO	Shaw Construction
Oct-2016	Post-Litigation Foundation Repairs - 2661 Lookout Lane	Grand Junction, CO	BluSky Restoration
Sep-2016	Industry facility Roof Collapse, Truss Load Testing and Repairs - 559 Sandhill lane	Grand Junction, CO	GJ Textiles