

EDUCATION

- 2008 **Master of Science, Civil Engineering (Structural Engineering & Structural Composite Materials)**
Washington State University, Pullman, WA
- 2005 **Masters of Architecture**
Washington State University, Pullman, WA
- 2003 **Bachelor of Science, Architecture**
Washington State University, Pullman, WA

EXPERIENCE

- May 2021
to Present **Engineering Design & Testing Corp.**
Seattle-Tacoma, Washington
Consulting Engineer

For commercial, industrial, and residential structures: assessment of hail and/or wind damage to roof coverings; scope of structural damage due to tornado, wind, fire, vehicle impacts, tree impacts; cause of moisture intrusions through roof coverings, exterior veneers, windows, foundations; scope of foundation damage due to involuntary discharges of water, settlement, ground subsidence; evaluation of construction defects and building code compliance; failure analysis involving concrete, masonry, steel and wood structures.
- May 2011
to May 2021 **Casper, Phillips & Associates**
Tacoma, Washington
Design Engineer – Structures

Assisted in the development and design of multiple custom material handling, personnel cranes, and industrial equipment for the Boeing Company. Produced construction drawings using AutoCAD and AutoCAD 3D to a shop-level detail for mechanical and structural components. Developed construction specifications for the projects in the bidder and construction phase. Conducted weekly construction meetings with owner representatives, manufacturers/contractors, and sub-consultants, where updates and issues could be discussed and acted upon. Performed site visits to the fabricator's site throughout construction, to provide on-site resolutions or clarifications, along with producing Quality Assurance reports. Managed the Construction Administration of a complex construction contract, including daily project meetings, submittals, RFI's and project correspondence. Worked on the Owner's behalf in mitigating construction deviations and finding solutions that met project specifications and budget restraints. Assigned company personnel with daily, weekly, and monthly tasks, assuring project deadlines and project specifications were met.

June 2008
to July 2009

PCS Structural Solutions
Tacoma, Washington

EIT Designer - Structures

Designed structural systems for buildings and auxiliary installations using wood, steel, and concrete. Performed lateral analysis of multi-story buildings and detailed the corresponding structure per building codes (IBC) and ASCE standards. Designed structural members and connection details both by hand and computer calculations. Primary Engineer on multiple complex art installations (Las Vegas, NV) and one high-end custom residence (Mercer Island, WA). Managed multiple projects simultaneously during the various stages of the construction process and coordinated with architects and contractors.

May 2006
to June 2008

Washington State University
Pullman, Washington

Research Assistant

Competent in the handling of raw bulk material, production in an industrial setting and laboratory testing protocol. Performed structural, thermal, and serviceability tests on wood-plastic composites based on ASTM-D standards. Based on the test results, the composites were optimized for mixture content and production specifications, to attain optimal structural properties. The results of the tests were published in a scientific journal, Polymer Engineering & Science journal, Wood-Thermoplastic Composites Manufactured Using Beetle-Killed Spruce from Alaska.

REGISTRATIONS and CERTIFICATIONS

Registered Professional Engineer in Idaho (#20454)
Registered Professional Engineer in Montana (#73593)
Registered Professional Engineer in Washington (#54309)
Registered Professional Engineer in Oregon (#97639PE)
Registered Professional Engineer in Utah (#13308253-2202)
Registered Professional Engineer in Nevada (#031287)
Registered Professional Engineer in Arizona (#81016)
Registered Professional Engineer in Alaska (#213451)
Registered Professional Engineer in Minnesota (#63587)
Registered Professional Engineer in Texas (#156703)