**TAMMY L. ST. CLAIR, M.S., P.E.**
Post Office Box 454
Hurricane, West Virginia 25526
Telephone: (304) 380-3438
tstclair@stclairengineering.com

## EDUCATION:

| | |
|---|---|
| 2000 | **Master of Science**, Civil Engineering<br>University of Tennessee<br>Emphases: Steel/Concrete Structures and Construction Management |
| 1998 | **Bachelor of Science**, Civil Engineering<br>West Virginia Institute of Technology |

## EXPERIENCE:

April 2016 to present — **St. Clair Engineering, LLC**
**Hurricane, West Virginia**

Owner and Engineer. Consultations related to the condition, construction, damage, and performance of residential, commercial, institutional and industrial structures and civil sites.

May 2009 to March 2016 — **Engineering Design & Testing Corp.**
**Charleston, West Virginia**

Consulting Engineer. Analysis of residential, commercial, institutional, and industrial structures, including the evaluation of roofs, foundations, storm-related damage, blasting, construction vibrations, moisture intrusion, code compliance, and post-fire structural assessment. Analyses include photographic study, damage assessment, root cause, repair and/or replacement cost estimate, and competency/code compliance.

February 2008 to May 2009 — **American Home Inspectors & Engineering Assessments, Inc.**
**Hurricane, West Virginia**

Civil/Structural Engineer. Civil/structural engineering analysis and condition assessment of residential and commercial structures.

July 2003 to February 2008 — **Engineering Design & Testing Corp.**
**Columbia, South Carolina**

Consulting Engineer. Analysis of residential, commercial, institutional, and industrial structures, including the evaluation of roofs, foundations, storm-related damage, blasting, construction vibrations, moisture intrusion, code compliance, and post-fire assessment. Analyses include photographic study, damage assessment, root cause, repair and/or replacement cost estimate, and competency/code compliance.

September 1999 to June 2003 — **Ferro Products Corp. and Icon Construction, Inc.**
**Charleston, West Virginia**

Structural Engineer. Design, analysis, and evaluation for new conventional structural steel buildings and existing steel and concrete buildings, including commercial, institutional, and industrial facilities. Designs and analyses considered BOCA codes, Standard Building Code, and International Building Code and were completed using both Allowable Stress Design and Load Resistance Factored Design for steel/joist roofs and floors, steel/concrete composite floors, vertical support and lateral force resistance systems, member connections, trusses, stairs/landings, and mechanical platforms. Completed the design of shallow concrete foundations for columns and masonry walls, as well as the design of concrete masonry unit retaining walls.

Project Manager. Estimating and quoting of labor for steel erection crews, including the development of new spreadsheet support and updated unit item rates. Coordinated with general contractors, materials suppliers, and field superintendent on job scheduling. Addressed structural concerns related to design, fabrication, and existing condition inconsistencies. Developed with the field superintendent, general contractor, architect, owner, and engineer-of-record efficient solutions to minimize construction costs.

August 1998 to August 1999 — **Engineering Fundamentals Department, University of Tennessee**
**Knoxville, Tennessee**

Graduate Teaching Fellow. Assisted in the development of freshman engineering curriculum. Instructed freshman engineering courses and laboratories in Statics, Dynamics, Computer Graphics, Computer Programming, and Engineering Orientation. Served as advisor and mentor to freshman engineering students.

May 1994 to July 1998 **United States Army Corps of Engineers**
**Huntington, West Virginia**

Student Trainee/CO-OP/Engineer. Assisted in the development of the Residential Floodproofing Program, including completing inspections and evaluations of existing residential structures, writing scopes of work, completing site, demolition and details drawings, and estimating materials quantities.

## PROFESSIONAL ORGANIZATIONS:

American Society of Civil Engineers (ASCE)
Structural Engineering Institute of ASCE (SEI)
International Code Council (ICC)
American Institute of Steel Construction (AISC)
American Concrete Institute (ACI)

## REGISTRATIONS:

Registered Professional Engineer in West Virginia (#15444)
Registered Professional Engineer in South Carolina (#23035)
Registered Professional Engineer in North Carolina (#029274)
Registered Professional Engineer in Tennessee (#00109878)
Registered Professional Engineer in California (#C 68823)
Registered Professional Engineer in Mississippi (#17002)
Registered Professional Engineer in Louisiana (#32036)
Registered Professional Engineer in Kentucky (#25128)
Registered Professional Engineer in Ohio (#74154)
Registered Professional Engineer in Virginia (#0402046767)
Registered Professional Engineer in Pennsylvania (#PE 077405)
Registered Professional Engineer in Maryland (#38582)
Registered Professional Engineer in Indiana (#PE11012093)
Registered Professional Engineer in Florida (# 73621)
Registered Professional Engineer in New York (# 094786)

National Council of Examiners for Engineering and Surveying (Record #23813)

## CONTINUING EDUCATION:

- *The Construction Site and Conflict…The Standard of Care*; Engineering Design & Testing Corp., 2014
- *Shaking Things Up a Bit*; Engineering Design & Testing Corp., 2014

- *Changes in the Wind Provisions of the ASCE 7 Standard*; Engineering Design & Testing Corp., 2013
- *Metal Roofing: Composition and Damage Assessment*; Engineering Design & Testing Corp., 2013
- *Retaining Wall Design and Slope Stabilization Techniques*; HalfMoon LLC, 2012
- *Construction Defect Investigations*; Engineering Design & Testing Corp., 2012
- *Hydrology – A Look at Stormwater, Drainage, and Flooding*; Engineering Design & Testing Corp., 2012
- *Wood Decay vs. Termite Damage*; Engineering Design & Testing Corp., 2010
- *Tile Flooring Installation and Inspection*; Engineering Design & Testing Corp., 2010
- *High Wall Stability*; CTL Engineering, 2010
- *Segmented Retaining Wall Course*; Rhodes Brick and Block, 2008
- *Fundamentals of Ground Anchors and Anchored Structures*; Terratech, LLC, 2008
- *Soils Basics for Engineers;* Auburn University, 2007
- *Concrete Petrography*; Engineering Design & Testing Corp., 2007
- *Post-Toasting – Post Fire Structural Surveys and Investigations*; Engineering Design & Testing Corp., 2007
- *Lean On Me – Temporary Construction Bracing*; Engineering Design & Testing Corp., 2007
- *Hurricane Damage Evaluation Procedures*; Engineering Design & Testing Corp., 2006
- *Hail Testing of Residential Roofing Materials;* Engineering Design & Testing Corp., 2006
- *Making Weather Work for You;* Weather Data, 2006
- *An Introduction to Infrared Thermography;* Engineering Design & Testing Corp., 2005
- *Windows: Performance and Testing;* Engineering Design & Testing, Corp., 2005
- *Confined Space Compliance;* Safety and Health Council of North Carolina, 2004

## PRESENTATIONS:

- *Earthquakes - Key Components to Aid in Damage Evaluation*; Engineering Design & Testing Corp. Engineers' Meeting, San Antonio, Texas, 2011
- *Vibration Damage: Is It All It's Cracked-Up to Be?*; Bluegrass Claims Association, Lexington, Kentucky, 2010
- *Basement Foundation Walls*; Engineering Design & Testing Corp. Engineers' Meeting, Columbia, South Carolina, 2010
- *When Roofs Go To Hail*; Engineering Design & Testing Corp. Spring-Ed, Charlotte, North Carolina, 2006
- *Moisture Intrusion: Damages, Causes, Cures*; 9th Annual RJMW Catastrophe Conference, Charlotte, North Carolina, 2006
- *Variations Between the Florida Building Code and the International Building Code;* Engineering Design & Testing Corp. Engineers' Meeting, Ashville, North Carolina, 2005

## PUBLICATIONS:

- "The Basics of Blasting"; *The Stress Point*; Volume 25, Number 2; June 2012
- "Seismic Design for the Metropolis"; *The Stress Point*; Volume 24, Number 1; March 2011

- "Some Concepts in Seismic Design"; *The Stress Point*; Volume 23, Number 4; December 2010
- "Keeping the Cold Outside"; *The Stress Point*; Volume 22, Number 4; December 2009
- "Deck Attachments – How Do They Stack Up?"; *The Stress Point*; Volume 19, Number 2; July 2006
- "A Mighty Wind"; *The Stress Point*; Volume 18, Number 3; September 2005
- "Which Building Code Applies?"; *The Stress Point*; Volume 17, Number 2; May 2004