



## JOSHUA HUNT, P.E. PROFESSIONAL BIOGRAPHICAL OUTLINE

### EDUCATION

1991–1995: The Pennsylvania State University, University Park, PA, B.S., Civil Engineering

### PROFESSIONAL EXPERIENCE

#### November 2008 – Present | Capstone Structural Engineering and Consulting, P.C. | Sr. Staff Engineer

- Structural design of residential, commercial, institutional and industrial structures
  - Alliance Coal, Tunnel Ridge Facility: design of a 550 foot steel truss-supported coal feed conveyor (including foundations), two steel-framed stacking tube headhouses and a 250 foot gallery truss transfer conveyor
  - Arcelor Mittal (Mid-Vol): design of a 125 foot tall stair tower and conveyor tail/counterweight support structure, design of a 260 foot long feed conveyor
  - Mirant Mid-Atlantic, LLC, Morgantown Blending Facility: design of two steel-framed stacking tube headhouses with an interconnecting transfer conveyor with an operable tripper capable of travelling between the two headhouses
  - Mirant Mid-Atlantic, LLC – Gypsum Barge Loading Facility: design of a steel-framed tripper/stacker conveyor
  - E.ON U.S., Trimble County Generating Station: Design of an explosion relief venting system for three coal handling/storage buildings
  - Bear Run Coal Company, Bear Run Preparation Facility: design of a steel-framed 300 ton truck dump structure (including foundation), design of a steel-framed 300 ton refuse bin structure (including foundation), design of a steel-framed 400 ton stoker bin structure (including foundation), design of four steel-framed stacking tube headhouse structures, steel truss-supported feed and transfer conveyors and a steel tube-truss supported transfer conveyor
  - United States Steel, Granite City Works: design of three steel truss-supported coke transfer conveyors (including foundations), design of a radial stacker and design of a 300 ton coke storage bin (including foundation)
  - Blairsville Municipal Authority Sewage Treatment Plant: design of several concrete water retention and storage tanks in addition to concrete wastewater treatment structures
  - Independence Township Municipal Building: design of a light-gage steel-framed municipal building partially utilizing and existing foundation system
  - Multiple Residential Structures for local builders and architects, including:
    - Desmone and Associates Architects
    - RLS Associates Architects
    - Primrose Homes, Inc.
    - W.R. Minton & Sons
    - Jerry Horn Construction, Inc.
    - Maxem Properties, Inc.

- Performing forensic investigations and reports
  - Determining cause and extents of water intrusion and suspected mold growth
  - Determining cause of structural failures
  - Assessment of building code compliance
  - Assessment of damage caused by wind, weather and fire events
  - Assessment of damages caused by vehicle and tree impacts
  - Assessment of salvagability of damaged structures
  - Roof collapse investigations due to snow load
  - Determination of new vs. pre-existing damages
  - Construction damage claims
- Expert witness testimony
- Residential structural inspections
- Project management, coordination and oversight

#### **2006 – October 2008 | Gartner Storage & Sorter Systems | Project Manager**

- Responsible for coordinating the design and implementation of overhead garment conveyor systems
- Consistently delivered successful projects on schedule and within budget constraints

#### **1999 – 2006 | Whitney, Bailey, Cox & Magnani | Structural Engineer**

- Design and drafting of steel, concrete, masonry, and wood structures
- Foundation design
- Representative projects:
  - Penn State School of Architecture and Landscape Architecture - State College, PA.: four story Steel classroom/office structure on caisson foundations using composite floor construction. Included many unique architectural features including a 150 foot, 3 story cantilevered section
  - East Side Development – East Liberty, PA: three steel-framed, composite floor office/retail structures, a steel-framed post-tensioned concrete parking deck and a 30 foot high soldier pile retaining wall. Foundations were a mixture of caissons/grade-beams and spread footings.
  - California University Student Housing, California, PA: four-story wood structure on caisson/grade-beam Foundations
  - Southside Works Cinema, Pittsburgh, PA: two-story steel framed building with composite floors on spread footings. Included design of a steel-framed marquis
  - Wright Hummer, Wexford, PA: one-story steel and masonry building with composite floors. Included 3 large, arching steel frames and a full basement for the service department
  - High Pointe at Indian Springs, Indiana, PA: multi-story steel framed commercial office building with a brick and glass curtainwall veneer
  - American Textile Headquarters, Duquesne, PA: two-story, steel framed office space attached to a pre-engineered warehouse. Was also responsible for the design of the foundations of the warehouse portion
  - Londonbury Homes, Inc.: design and analysis of floor framing, beams, basement walls and foundations for a variety of single-family homes



- Castaway Bay Waterpark, Sandusky, OH: glu-lam and masonry indoor water park on a caisson/grade beam foundation system
- The Watson Institute, Sewickley, PA: one-story steel school structure on spread footings. Included the renovation of a timber post-and-beam barn structure into office space
- Hillcrest Elementary School, Norwin, PA: masonry classroom/gymnasium structure on caisson/grade beam foundations. Included the renovation of the existing classroom building which required removal of most load-bearing wall systems to create more open space.
- Fox Chapel High School Additions, Fox Chapel, PA: masonry classroom/gymnasium structure on caisson and grade beam foundations

### **1998 – 1999 | Baker & Associates | Design Engineer**

Structural design and drafting of commercial and military structures

- Steel, Concrete and Masonry Design
- Foundation Design
- Structural Detailing

### **1995 – 1998 | Industrial Construction Enterprise | Design Engineer**

Structural design and drafting

- Designed a wide variety of steel structures and buildings primarily for the steel industry
- Concrete and Foundation Design
- Surveyed overhead Crane Runways, performed condition assessments and suggested repairs as required

## **PROFESSIONAL AFFILIATIONS**

- Professional Structural Engineer – Registered in Pennsylvania in February 2001, License #PE056789E
- Professional Structural Engineer – Registered in Ohio in February 2012, License #76342
- Professional Structural Engineer – Registered in West Virginia in February 2012, License #19543

## **SOFTWARE EXPERIENCE**

- AutoCAD 2010
- 3-D Analysis Software: Staad-III; RISA 3-D
- MathCad
- Enercalc
- L-Pile