

Sonja Hinish | Senior Associate



EDUCATION

- The Pennsylvania State University
 - Bachelor of Architectural Engineering, Structures Option, 2009
 - Master of Architectural Engineering, Structures Option, 2009
 - Minor of Architectural Studies, 2009

PRACTICE AREAS

- Failure/Damage Investigations
- Bridges and Civil Infrastructure
- Repair and Rehabilitation
- Instrumentation/Monitoring/Load Testing
- Nondestructive Evaluation
- Structural Analysis
- Wood Structure Assessment
- Historic Preservation

REGISTRATIONS

- Professional Engineer in VA

PROFESSIONAL AFFILIATIONS

- American Concrete Institute
- American Society of Civil Engineers, vice president - National Capital Section Young Members Forum

CONTACT

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EXPERIENCE

Sonja Hinish has broad-based experience in structural evaluation of steel and post-tensioned concrete structures, concrete repair, masonry facade repair, retrofit of existing structures, and evaluation of Parallam wood members. She has experience installing instrumentation and performing nondestructive testing techniques such as ground penetrating radar, ultrasonic, and half-cell potential. Ms. Hinish is also experienced working on and operating aerial lifts and performing facade investigations using difficult access techniques by utilizing industrial rope access.

While attending the Pennsylvania State University, Ms. Hinish worked at the Pennsylvania State University Office of Physical Plant, and Simpson Gumpertz and Heger of Washington, D.C.

REPRESENTATIVE PROJECTS

Failure/Damage Investigations

- Washington National Cathedral - Washington, D.C.: Post-earthquake evaluation of facade using difficult access techniques
- Miller Coors Brewery - Elkton, VA: Evaluation of collapsed spent grain tank and structural review of in-service grain tank; ultrasonic testing on tank walls
- Watergate Complex - Washington, D.C.: Parking garage collapse investigation
- Northrop Grumman Parking Garage - McLean, VA: Fire damage assessment

Bridges and Civil Infrastructure

- Minnesota Department of Transportation: Ground penetrating radar and structural evaluation of post-tensioned box girders; installation of corrosion monitoring sensors in tendon ducts
- Oklahoma Department of Transportation: Ground penetrating radar and structural evaluation of post-tensioned box girders

Repair and Rehabilitation

- Montgomery College Takoma Park/Silver Spring Campus - MD: Investigation of transite panel cracking and repair design

- Elizabeth Condominium - Chevy Chase, MD: Preparation of repair contract documents; observation of through-wall flashing repairs and shelf-angle replacement

Instrumentation/Monitoring/Load Testing

- Chesapeake Bay Foundation - Annapolis, MD: Load monitoring of hydraulic jacking at existing concrete and new steel beams
- Hyatt Regency Crystal City - Arlington, VA: Load testing and monitoring of a glass handrail assembly

Nondestructive Evaluation

- Mass Transit Aerial Rail Structure - Washington, D.C.: Infrared thermography on external post-tensioned box girders
- Concrete Structure, Silver Spring, MD.: Ground penetrating radar on structural concrete elements to determine as-built reinforcing layout

Structural Analysis

- Springfield Town Center - VA: Structural analysis and repair design of structural retrofits for steel joists.
- University of Virginia, Brooks Hall - Charlottesville: Evaluation of fire escape structure and design of structural retrofits

Wood Structure Assessment

- Chesapeake Bay Foundation - Annapolis, MD: Structural condition assessment of Parallam wood members
- Barnes and Bushy Park Houses - Prince William County, VA: Structural condition assessment of historic wood structures, design of structural upgrades, and preparation of repair contract documents
- St. Elizabeths Campus Adaptive Reuse - Washington, D.C.: Roofing rehabilitation and design; design of wood timber truss structural retrofits

Historic Preservation

- USS Maine Memorial - Arlington National Cemetery - VA: Restoration of ship mast and structure
- Hotel Monaco - Washington, D.C: Marble facade condition assessment and repair design; design of structural upgrades for skylight framing